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Acknowledgements

This book has been conceived to honour and celebrate the 75th anniversary of the establishment of the Graduate Institute of International Studies in Geneva, an academic institution that since its conception, in 1927, was willing and even eager to face the outside world and see it through a multi-disciplinary telescope. Perhaps, in this spirit, while on my sabbatical at the Hong Kong University of Science and Technology, I realized how strong an interest there was in East Asia in Europe, its economy, history, politics and the role it played in globalization. It was there and then that I narrowed down the subject and the form of this book.

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Introduction

Henryk Kierzkowski

The reader who expects this book to offer blanket condemnation of Europe's role in globalization, or, to the contrary, shameless praise for Europe, is wasting time and money. This is not that kind of book.

The reader will find instead essays by scholars from fields that normally do not interact, as strange as it sounds to laymen: economics, political science, international law and history. What brings these scholars together is a conviction that globalization is multi- rather than single-faceted. Though diverse in background, all scholars were asked the following central question: what did Europe do for globalization in the past and what is globalization doing for Europe today? Our basic goal is to understand this complex process and Europe's complex role in it.

Globalization has provoked passionate debate and street demonstrations reminiscent of the May 1968 revolution that saw students in such locales as Paris, London, New York and Berkeley mount barricades and topple governments worldwide. For some, globalization represents a panacea for the world's problems and an ultimate triumph of technology, while for others it represents a sinister force impoverishing the poor, enriching the rich, destroying the environment, vulgarizing and Americanizing culture.

The most contentiously debated subject within globalization is global income inequality. There is something profoundly reassuring about this; it means that people, and particularly young people, care about the welfare of their fellow human beings. If I had to draw one comforting lesson from the intellectual turmoil, this would be the one. However, deepest care combined with ignorance can produce an uncontrollable and undesirable substance. Public debates contain falsehoods, unsupported claims and unchecked hypotheses. Fallacies spring from fallacies.

When a leading newspaper in the world prints an editorial damning globalization and holding it responsible for an explosive increase in the world's income inequality, people pay attention. However, if that editorial contains five fundamental fallacies, errors and unsupported claims, the record must be set

straight. This was a task undertaken by Professor Xavier Sala-i-Martin, one of the intellectual leaders of the convergence theory that explores the degree and conditions under which the income gap between countries narrows over time.

In Chapter 1, 'The Myth of Exploding Income Inequality in Europe and the World', the author shows that trends in global income inequality are best understood when distinguishing between inequality *within* a country and inequality *across* countries. The two types of inequality must not be confused, and both must be incorporated into the analysis. Furthermore, measurements of global inequality must take into account the size of individual nations.

Let me demonstrate the last point to whet the reader's appetite. Imagine a scatter diagram showing per capita income across the world, with a single black dot representing an individual country. (The income variable is represented along the horizontal axis, while the vertical axis denotes some measure of income inequality.) Focus now your attention on the dot denoting China; to the right is a dot for a tiny island in the Pacific where per capita income is 10 per cent higher than in China. The two countries have the same degree of income inequality.

Suppose China's per capita income increased by 10 per cent, the Pacific island's decreased by 10 per cent, and income inequality within each country remained unchanged. What would you see in the scattered diagram? One dot would take the place of the other and since all the dots are of the same colour, nothing would change. Nothing would change? Surely, a fair-minded person could not accept such a conclusion. The welfare of 1.2 billion Chinese is not so unimportant!

Chapter 1 traces the behaviour of global inequality over the last 30 years and against this backdrop investigates the behaviour of income inequality within the European Union. It is reassuring that Western Europe, at least, seems to have less inequality now.

Europe, which is the main focus of this book, arrived at its privileged position through a very complex historical process. Some of these complexities are analysed in Chapter 2 and Chapter 3.

When does 'Europe', or at least 'Western Europe', begin? This is the question posed by Professor Ronald Findlay. In Chapter 2 he follows the thesis of the great historian Henri Pirenne, linking Charlemagne, the 'founding father' of Europe, with Mohammed, the founder of Islam. Because of this link, Findlay argues, 'we surely cannot consider "Europe" to be a wholly autonomous cultural, political and economic entity independent of developments beyond its geographic limits'.

To understand the origin of Europe's strength, one must travel even further back in time. At the dawn of the first millennium, the European economy lagged behind the Byzantine Empire, the Islamic world, and China. Improvements in agriculture led to rising incomes, regional specialization, and the expansion of commerce. Cities began to emerge, especially in Italy. Such maritime city-states as Venice, Genoa and Pisa thrived on an organized network of trade flows. By the late thirteenth century, a genuine world-economy emerged. But soon, by historical standards, the new economic, political and cultural entity, spanning vast territories and containing a large fraction of the world population, was threatened by the Mongols.

The Mongol threat can be seen by the economist as an external shock to the system. However, it was not the only shock experienced by Europe in the Middle Ages. With the emergence of the global economy, diseases spread and death rates were horrific. External shocks of the magnitude of the Black Death disturbed the 'equilibrium'. Findlay uses simple general equilibrium models to trace the specific economic consequences of the outside disturbances.

The analytical power of the basic trade models is demonstrated again in the context of the discovery of America and, subsequently, in the context of the Industrial Revolution. By taking the reader on the fast track of a millennium of world history, Findlay hints that those who talk about globalization as a recent phenomenon should take a step back. In short: it's happened before. Europe has repeatedly played an important role in the emergence of the 'global economy', and never could its role be reduced to a simple 'causality arrow' pointing in one direction. Two-way horizontal connections between alternative economic systems have always existed.

In Chapter 3, Kevin O'Rourke explores some of the links over the last two centuries in greater detail. He argues the world economy achieved an unprecedented plateau of economic integration between 1870 and the outbreak of the First World War. The integration of markets can be measured by an array of indices related to commodity and factor markets. Integration of commodity markets can be measured by price differentials for homogeneous commodities in various geographic locations. Cloves, coffee and black pepper are good examples of homogeneous commodities. Substantial price convergence in many commodities traded between Amsterdam and South East Asia, Liverpool and Bombay, and London and New York did not occur until the second half of the nineteenth century.

Interestingly enough, it cannot be claimed that commodity markets were completely integrated by the late twentieth century. Nor could it be asserted that price differentials disappeared in a linear fashion. Professor O'Rourke shows that capital markets were highly integrated in the late nineteenth century, reached a peak by 1913, disintegrated between the two world wars, and only now are nearing the pre-First World War levels.

The real kicker comes when considering migration. One number tells all: about 60 million Europeans migrated to the New World from 1820–1914. In order to get comparable numbers for more recent historical periods, one would have to adjust for the population increase.

All in all, greater progress towards integration of the world economy was achieved in the nineteenth century than in the twentieth. One must consider forces driving globalization during the two episodes. O'Rourke documents the impact of technology in transportation – on land and by sea – that resulted in dramatic cuts in the cost of exporting and importing goods. The introduction of the telegraph had an enormous impact on the functioning of the goods and capital markets. An obvious analogy can be drawn with the Internet today. Of course, politics and economic policy also contributed to the waxing and waning of globalization.

Europe has played a significant role, both positive and negative, in shaping globalization over the last 200 years. It has been a source of many technological advances, but also a source of political turmoil and protectionist policies and practices. Although not economically as powerful as before, Europe, and especially the European Union, can currently offer its rich experience in diplomacy for future globalization.

For the economist, globalization is recognized in the convergence of commodity prices, interest rates, or wages. For the lawyer, a tell-tale sign of globalization is standardization of law. In Chapter 4, Marcelo Kohen assesses legal 'globalization' and Europe's contribution to it. His historical sweep is as broad as Ronald Findlay's.

Roman law has had exceptional geographic reach and resiliency. As the Roman Empire expanded, so did its legal system. Under the Holy Roman Empire cities had their own legislation and followed local customs. Yet a set of rules based on Roman law, the *ius commune*, emerged across Europe without destroying the local diversity. The influence of Roman law is still felt in many countries today.

The concept of the modern state, one that is *sovereign* and hence not subject to any superior power, is profoundly European. As Europe grew, the model of a sovereign state was exported to other countries. It turned out to have a lasting impact; contemporary international law has European imprints all over it.

Professor Kohen shows that Europe was a leader in the standardization of law. The Treaty of Rome was a stepping stone in this process. The standardization initially covered just a few countries (six to be exact); subsequent enlargements widened the process significantly. Standardization of European law did not start with the EC/EU integration. The Council of Europe legally standardized more countries than the European Union (or its predecessors).

Europe has influenced legal systems in many ways. But during the last half of the twentieth century she found herself more on the receiving end. America has formed legal concepts, established rules, techniques and institutions in such important areas as business, banking and finance, telecommunications, insurance and so forth. The standardization of law has been forwarded by America and by the work of many international organizations. In addition, the private sector is hastening the legal regulation of areas the non-specialist is tempted to call 'uncharted territory'. Professor Kohen points to the Internet as one of several significant examples of this trend.

Europe has both given and received as far as the standardization of the law is concerned. The pendulum has swung – the balance was more favourable to the Old Continent in the past. Europe still heavily influences global standards in some important areas, though. The protection of human rights, for example.

Through its long history Europe has learned a thing or two about institutions. While Professor Kohen analyses the comparative advantage of its legal code, Professor André Liebich, in Chapter 5, assesses its comparative advantage regarding the creation of the nation-state. The latter author cuts to the chase: 'The paradigm of the nation-state has been Europe's most successful export product. Indeed, the European model of the nation-state has acquired a worldwide monopolistic position as the sole legitimate form of political organization.' The empire created the nation-state, at home as well as abroad. It was not necessarily European powers' design to create nation-states in the conquered territories. It came about, shall we say, as a byproduct of colonial subjection. The death of the colonial system actually injected new life into the concept of the nation-state. The emerging elites in the Third World had good reason to support the system that had been imposed on them by the colonial powers and which they had struggled so hard against.

The nation-state is a great invention when there is a nation. In its absence, serious concerns arise regarding cultural and religious tolerance and the treatment of minorities. In the best of circumstances, however, the integrative capacity of the nation-state has its limits; in the worst of circumstances the coercive desire of the state may produce horrific results. When, in the summer of 2001, I discussed with André Liebich his contribution to this volume he gave me his punchline: 'The nation-state was Europe's best export but the rest of the world got short-changed.'

One great advantage to mixing specialists from different fields is that they give concepts such as 'exports' somewhat different meanings. For the economist, the word export practically rhymes with goods and services. A lawyer discusses the export of legal institutions and principles organizing the system of justice. Not to be outdone, a historian discusses in depth the organization of the state as an exportable commodity (or service?).

In Chapter 6, Vinod Aggarwal and Cédric Dupont inquire whether Europe has been a leader in institutional design. They hypothesize that governance of trade and monetary relations have been Europe's comparative advantage. Their evidence could persuade even a sceptical jury: the concept of trade liberalization as applied by Britain across the globe in the nineteenth century was certainly innovative, and so was the idea of a customs union applied so successfully in

Europe in recent decades. In finance, Europe gave the world the idea of the gold standard. The list could go on and on. Some categorization is in order.

Professors Aggarwal and Dupont look separately at trade and monetary arrangements during the nineteenth and twentieth centuries. They classify the existing international arrangements into unilateral, bilateral, regional, and multilateral agreements. There is no quick way to summarize their rich findings, but what emerges from the analysis is that Europe, rather than being a follower in institutional design, has been a leader through much of its modern history.

One may wonder where Europe's comparative advantage in institutional design comes from. One possible explanation: constantly changing political and economic circumstances sharpen the skills required to create new institutional arrangements. Even with long-term commitments to general principles, one must possess a great deal of flexibility with the ground constantly shifting under one's feet. And of course, thinking about good solutions and getting them accepted by others is not the same thing. Europe did not always get her way.

Comparing Europe and the United States in globalization is quite natural. The two have been greatly implicated in the process, their mutual relationships alternately involving rivalry and partnership. This is seen clearly in the financial markets.

In Chapter 7 of this volume, Alfred Steinherr analyses the role played by Europe, and especially London, as a financial centre. That London constituted, prior to the outbreak of the First World War, the very core of an intricate financial network covering the entire globe is generally understood. However, consensus would likely hold that Europe and London now play a second fiddle to the United States and New York in global finances. Even for those familiar with international finances, Professor Steinherr demonstrates that the study of globalization contains surprises.

Relative to all the banks in the United States, all the banks in London hold twice the share of the external asset position (in all currencies). But this is not all. If the comparison involves assets held in foreign currencies, the United States is trumped by the United Kingdom, Switzerland, France, Germany, and others.

This surprising finding calls for a precise clarification as to what is being compared with what. American banks that come to London, or set up affiliates in London to do business there, are classified as UK-based banks. They presumably move from New York or Chicago or San Francisco to plunge into global finance. Of course for international transactions a bank needs foreign currencies. The banks that remain in the United States engage in domestic operations for which holding assets in the local currency is clearly preferable.

As Europe progressed from the European Payments Union to the European Monetary Union, its significance and expertise in global finance expanded. Alfred Steinherr considers the birth and rapid development of the Euro capital market as Europe's most significant achievement. Not without US voluntary or involuntary assistance, a key platform for global investors and borrowers has been created outside North America.

Multinational corporations (MNCs) are key players in the process of globalization. They have shaped the global economy but also have, in turn, been influenced by it. In Chapter 8 Professors John Cantwell and Lucia Piscitello describe some of the trends regarding MNCs, distinguishing between the internationalization and globalization of business. The former term denotes a dispersal of activities across countries or even continents, while the latter describes the emergence of internationally interdependent structures for the purpose of coordinating previous independent production and R&D activities.

Interestingly enough, European firms, especially Dutch and Swiss, led the way in the internalization of production and technology. However, at an early stage subsidiaries operated in segmented markets with limited horizontal interactions. Globalization has forced reorganization and restructuring of European MNCs. As the authors observe: 'large MNCs have increasingly extended or diversified their fields of technological competence through their use of internationally integrated networks for technological development. In each location in such a network MNCs tap into specialized sources of local expertise, and so differentiate their technological capability, by exploiting geographically separate and hence distinct streams of innovative potential.' Europe has pioneered local technological specialization. Individual centres of excellence interact with one another and all of them benefit from international or global supporting frameworks. These intensive knowledge flows can have spin-off effects for other firms within a region or a country. This may be one of the reasons why the European economy is increasingly becoming knowledge intensive.

The very use of the word Europe implies to some extent a common factor, a unifying force, or a homogenized continent. Of course, nothing could be further from the truth. While we see differentiation and inequality on the global scale, one observes similar phenomena on the continent. Worldwide centres and peripheries have equivalent European centres and peripheries. The world economic landscape doesn't necessarily follow the rules of fractal geometry, but we see peripheries and centres at various levels of aggregation.

The EU peripheries – Greece, Spain, Portugal and Ireland – are the subject of Professor Frank Barry's analysis in Chapter 9. Professor Barry investigates whether there has been income and structural convergence between the peripheries and the core since 1960. Initially, Greece, Spain and Portugal enjoyed varying levels of success, catching up with 'rich Europe' while Ireland lagged behind. The 1990s witnessed a spectacular reversal – Ireland charged ahead while the three peripheries stagnated. Professor Barry shows that saying a country is for globalization does not necessarily put it on the fast track. R&D activities, education, infrastructure, macroeconomic stability and sound competition policy are all part of the equation.

There is much to learn from the Irish experience and success. Frances Ruane and Julie Sutherland look at small guys – local companies rather than big MNCs – and ask how they have been affected by globalization. One of many interesting findings offered in Chapter 10 is that while Europe has greatly expanded trade and foreign direct investment, a large part of this increase is attributable to Europeanization, not globalization. Trade and investment flows occur primarily within Europe rather than in and out of Europe.

Micro data for the Irish economy show that small companies use the outside world through trade rather than investment channels. Small companies look increasingly beyond the domestic market, even beyond the traditional UK market, and into the large EU pool. And the EU pool has more and more countries swimming in it. The so-called Eastern Enlargement of the European Union poses new challenges for the small Irish companies.

The Eastern Enlargement is the subject of Chapter 11, entitled: 'Central Europe – A la recherche du temps perdu'. Ten countries to the East of the European Union may join it as early as 2004. These countries, 'les élèves modèles' of the transition, have abandoned planning and voted for markets and democracy. They have opened to an astonishing amount, flatly rejecting autarchy and accepting trade. The opening of Central Europe has, however, been selective – oriented in the direction of Brussels.

One may legitimately question whether Central Europe has been successful in closing the income gap since the collapse of the *ancien régime*. Unfortunately, it has not been the case. The freefall of these countries' GDPs in the beginning of the transition and the longevity of the ensuing depression meant that the CE/EU income gap has widened.

On the other hand, an institutional convergence is fast taking place. Increasingly, the organization of the Central European economies, their structural characteristics, such as the relative size of the private sector and the rules of the game, resemble those in the European Union. As we have seen with Ireland, it may take a long time before a rapid development process takes off. Building blocks must first be securely in place.

While one may argue that more 'globalization' for Central Europe would be beneficial, the particular regional approach has a number of advantages. Apart from additional trade gains and support for agriculture, the European Union offers an 'institutional anchor'. It sets standards in many areas and prevents governments from making 'unwise' decisions.

Globalization means, by many definitions, a deeper and wider integration of markets which, in turn, implies increased competition at the world level. Some countries fear the following cost of globalization: if remaining competitive requires staying lean, would it not be necessary to abolish or at least scale down some of the social institutions the countries have created and are proud of? One of these venerable institutions is the European welfare state. In Chapter 12, Sir Tony Atkinson looks at this system and threats posed to it by globalization. It is worth pointing out, as he does, that globalization during 1870–1914 ushered in the modern welfare state. Unemployment insurance, in the United Kingdom and elsewhere in Europe, was considered a great social advancement and a positive by-product of globalization. Today, the association between globalization and welfare state is a negative one.

Sir Tony points out that there are three building blocks to the issue here: globalization (or internationalization), the welfare state, and economic performance. The causality arrows do not run in just one direction between a pair of these blocks. With three variables mutually interdependent, there is no categorical answer to the basic question: is globalization rendering the European welfare state unsustainable? Sir Tony, like Professor Ronald Findlay in Chapter 2, effectively uses simple general equilibrium trade models to help cut through the issues.

Globalization not only increases competition between private agents, but also among governments. This latter competition is the subject of Professors Breton's and Ursprung's contribution in Chapter 13. As factor mobility increases, capital, consumers and labour can vote, sometimes literally, with their feet.

As a consequence, governments compete more vigorously for mobile factors and tax bases. This mechanism is still rather weak in most parts of the world, but in Europe government competition has, over the last decades, become a prevalent and noticeable phenomenon. Contrary to an oft-stated opinion, competition between political-economic systems did not come to an end with the demise of communist regimes in Eastern Europe. Globalization of the Western European economies in the second half of the last century paved the way for an era of unprecedented competition among European nation-states.

Until recently governments, and especially European governments, were not supposed to compete among themselves. It is a different ball game now. As we have seen in Sir Tony Atkinson's analysis, there is a fear that governmental competition can be detrimental to social welfare. And if globalization were to mean the death of the benevolent welfare state, perhaps harmonization and centralization would bring unruly competition under control. What kind of constitution does Europe need? This chapter is not the end of the constitutional debate in Europe. It is not even the beginning of the end. But it is certainly a beginning of the beginning.

In the concluding Chapter 14, written by Professor David Sylvan, we come full circle to a starting point: what does globalization really mean and how can we define it? There is no question that the term, though evocative, lacks the precision to satisfy a demanding researcher. I agree and in fact, plead guilty.

This book, by bringing together scholars from various fields, has broadened the concept of globalization and hence made it more difficult to define. A small group of specialists in the international trade of foreign direct investment would likely produce a satisfactory, at least to them, definition. But when you gather economists, political scientists, historians and legal scholars to debate globalization under one roof, the task of creating a definition satisfactory *to them all* is a tall order indeed. We should not put our efforts into the pursuit of something that, for now, is an intellectual cul-de-sac. The richness of the phenomenon and the manifold nature of its manifestations can be perhaps better understood without a straitjacket of a definition.

As stated in the Acknowledgements, a primary reason for gathering a varied group of scholars was to celebrate the 75th anniversary of the establishment of the Graduate Institute of International Studies, an institution of higher learning *par excellence* international and *par excellence* interdisciplinary. The centennial anniversary is not far away. If somebody is looking for a research programme, then Professor Sylvan's contribution is it. So get cracking. I may be around to check out your progress in 2027.

1 The Myth of Exploding Income Inequality in Europe and the World

Xavier Sala-i-Martin*

The dramatic advance of globalization and neoliberalism ... has been accompanied by an explosive growth in inequality and a return of mass poverty and unemployment. The very opposite of everything which the modern state and modern citizenship is supposed to stand for.

The net result is a massive growth in inequality. The United States, which is the richest country in the world, has more than 60 million poor. The world's foremost trading power, the European Union, has over 50 million. In the United States, 1 per cent of the population owns 39 per cent of the country's wealth. Taking the planet as a whole, the combined wealth of the 358 richest people (all of them dollar billionaires) is greater than the total annual income of 45 per cent of the world's poorest inhabitants, that is, 2.6 billion people.

Ignacio Ramonet, Le Monde Diplomatique, May 1998

I. Introduction

This quote from one of the leaders of the 'anti-globalization' movement, Ignacio Ramonet, reflects five interesting issues. First, it shows that planetary inequalities are large. Very large. After all, 'the combined wealth of the 358 richest people (all of them dollar billionaires) is greater than the total annual income of 45 per cent of the world's poorest inhabitants, that is, 2.6 billion people'.

Second, Ramonet's research shows a 'well known' trend in the world: income inequalities are rising or even '*exploding*'. Thus, not only do we live on a planet where inequalities are large but where they are also growing. The rich are getting

richer and the poor are getting poorer. This fact is so widely accepted and so often repeated that it has come to be accepted as the unambiguous truth.

Third, to prove that inequalities have 'exploded', Ramonet cites some poverty numbers as well as some inequality numbers for the United States and Europe: 'The United States, which is the richest country in the world, has more than 60 million poor. The world's foremost trading power, the European Union, has over 50 million.'

Fourth, Ramonet 'shows' that these increases in inequality are due to the '*dramatic advance of globalization and neoliberalism*'. Although the statement reproduced above is taken from the editorial page of *Le Monde Diplomatique*, similar proclamations are made every day by hundreds of activists from all over the world. Again, by repeating it time and again, it has come to be accepted as an undeniable fact.

And finally, and perhaps most importantly, Ramonet's statement shows what is wrong with the anti-globalization movement: it tends to propagate ideas that are fundamentally flawed and it tends to perpetuate myths for which the evidence is mixed or weak. For example, the statement 'presumably' shows that inequalities are large, and it does so by comparing the stock of 'wealth' of the 358 richest with the flow of 'income' of the 2.6 billion poorest. Any undergraduate student of economics knows that stocks and flows cannot be compared. Any undergraduate student knows that if you want to make comparisons, you need to relate the annual income of the top income people (which, for the years 2000 and 2001 may include the flow-losses of wealth due to the negative capitalgains that resulted from the stock market collapse) with the annual income of the poor. Or you need to relate the stock of wealth of the very rich to the stock of wealth of the very poor (which includes cattle, land and houses). But what you should never do is to compare the stock of wealth of the rich to the flow of income of the poor. And if you do make such comparisons, they are meaningless. Any undergraduate student that makes this mistake would fail to pass the principles class. Yet the leader of the anti-globalization movement makes this flagrant error, and the movement repeats it as if it made economic sense.

Another example: Ramonet talks about massive and growing income inequality, but he gives examples of poverty rates in the United States. Confusing 'poverty' with income 'inequality' is an unacceptable error. From a welfare point of view, it could persuasively be argued that we should be more concerned with 'poverty rates' than with 'inequality'. After all, if a rich person's income increases more proportionally than the income of a poor person, most measures of inequality will rise, but we should conclude that this situation is better than an alternative situation in which the income of the rich declines by more than the income of the poor (which leads to more poverty ... but more equality).

However, the fact that poverty rates are interesting does not mean that the analysis of inequality and the 'convergence of incomes' is not important. For example, after the terrorist attacks of September 11, some analysts were quick

to blame the large and growing degree of inequality for the anger of millions of people all over the world. And this anger, it was said, was the ultimate justification for the terrorist attacks. I will not even begin to analyse such an (unsubstantiated) claim, but I will take it as a given that inequality matters above and beyond poverty, as it may help explain the increase in social tensions. The key point, however, is that we should keep in mind that inequality and poverty are distinct concepts related to different issues and that we should not confuse them.

The assertion on the 'explosion' of planetary income inequalities is not logically absurd. But on what empirical evidence is it based? Ramonet uses inequality data for the United States and Europe and extrapolates them to the whole world. In doing so, he makes three errors. The first is a fallacy of composition: what is true for the United States or Europe may not be true for the entire globe. The second error is that it mentions one data point for Europe ('The world's foremost trading power, the European Union, has over 50 million poor') as evidence of 'massive growth in inequality'. It should be obvious that one data point cannot provide evidence on the trend of anything, but this does not stop Ramonet from mentioning the number of poor in Europe at a single point in time to show that the 'explosion in income inequality' exists. Moreover, he mentions the fact that Europe is 'the world's foremost trading power' to suggest that the cause of such an explosion is 'globalization', trade and 'neoliberalism'. Of course all these claims are unsubstantiated. In fact, one of the goals of this chapter is to estimate the evolution of world income inequality. We will see whether the strong claims of exploding inequality turn out to be true. The third error is perhaps more important: it confuses 'within country inequality' with 'global inequality'. The difference between these two concepts relates to acrosscountry differences in income. Many anti-globalists justify the dramatic claims of exploding inequality using the ratio of per capita GDP of the richest five countries to the poorest five nations. For example, they say that in 1965, the ratio of the average per capita GDP of the five top countries to the average per capita GDP of the bottom five countries was 20. The number was 35 in 1995. Conclusion: income inequality 'grew massively' during this period. Of course this kind of evidence is flawed and means little for a variety of reasons. First, the five poorest countries in 1965 were not the same countries as in 1995. Second, the number of people who live in the poorest five countries could be very small so, even though the ratio increases, the ratio of the income of, say, the top decile to the bottom decile of the world distribution has declined. Third, the analysis of the ratio of 'top' to 'bottom' says nothing about the evolution of the middle of the distribution.

Although it is quite common that anti-globalists use faulty empirical evidence to justify their boycott of globalization, sometimes they base their claims on more serious empirical studies that show that income inequalities have increased

over time. However, the studies cited tend to use market exchange rates to compare incomes of people who live in different countries and do not adjust for Purchasing Power Parity (PPP). Examples of such studies are Korzeniewicz and Moran (1997) and the work that is most widely cited by the anti-globalization people, the United Nations Development Project, UNDP (1999). It is well known that not adjusting for PPP introduces a bias towards finding more inequality than there actually is because traded goods tend to be cheaper in poorer countries. Thus, not correcting for PPP tends to make the poor look poorer.¹

The rest of the chapter is organized as follows. Section II discusses the related literature. Section III proposes a theoretical decomposition of global inequality into within-country and across-country inequality. Section IV presents the data and discusses the practical construction of our inequality measures. Section V presents the main results on global income inequality and its decomposition. Section VI discusses various potential sources of bias. Section VII discusses the evolution of income inequality in Europe. Section VIII concludes.

II. Related literature

The recent economic growth literature has dealt very often with the question of 'income convergence' (see Barro and Sala-i-Martin 1998, Chapters 10, 11 and 12 for a survey). This literature used the evidence on convergence (or the lack thereof) as a 'test' of economic growth theories. The idea was quite simple: theories, like the neoclassical growth model, that base economic growth on capital accumulation and a production function subject to diminishing returns will tend to make the prediction that the growth rate declines as the economy gets richer (because the marginal product of capital declines with the stock of capital). From here, the prediction of some form of 'convergence' can be derived: if an economy's growth rate declines as it gets richer, if we compare poor economies with rich economies, the prediction should be that the poor economies grow faster and, as a result, income disparities are reduced over time.²

The growth literature distinguishes the concepts of β -convergence (poor countries grow faster than rich) and σ -convergence (reductions in inequality across countries as measured by the variance of log of GDP per capita). It can be shown that the two concepts are related although they are not exactly the same. In fact, β -convergence is a necessary condition for σ -convergence, but it is not sufficient. The economic growth literature has dealt with the relation between income convergence and the evolution of inequality.

For the purposes of 'testing theories', it may be argued that the appropriate 'unit' of analysis is a country or a region that enjoys similar technologies, production functions, aggregate policies or other institutions that are excluded from the model. And it is clear that if we use countries as 'units', we arrive at a dramatic conclusion: *inequality in per capita income across countries rose unam*- *biguously between 1965 and 1998.* Figure 1.1, for example, computes the variance of per capita GDP (using PPP adjusted Summers and Heston data) over time. The result is not ambiguous: inequality across countries has risen. As Lant Pritchet (1997) put it: 'there has been "Divergence Big Time"'. Many researchers have extrapolated these results and have claimed that global personal income inequality has risen over time.

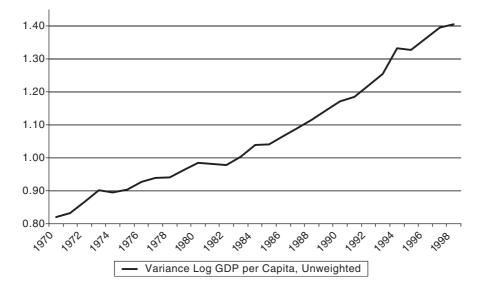


Figure 1.1 Variance of Log Per Capita Income: 108 Countries, 1970–98

Although it may be the right thing to do when it comes to testing theories, the use of countries as 'units' of analysis does not fully reflect the evolution of personal income inequality across the globe. In other words, observing Figure 1.1 and concluding that personal inequality has risen is a mistake. In fact, it is two mistakes. The first mistake is that it implicitly assumes that all countries have the same number of people. Empirical evidence suggests that Lesotho has far fewer inhabitants than China (in 1998, Lesotho's population was about 2 million whereas China's was 1200 million). If we treat Lesotho and China as two data points, an increase in Lesotho's GDP per capita by 1 per cent leads to the same reduction in world inequality as an increase in China's GDP per capita by 1 per cent. However, an increase in China's per capita GDP affects 600 times more people than an increase in Lesotho's and, as a result, a correct measure of inequality should be impacted more by a 1 per cent growth in Chinese per capita GDP than by a corresponding growth rate in a small country.

The second big mistake is that it implicitly assumes that all individuals in a country get exactly the same level of income. That is, it ignores the evolution

of within-country inequality. Clearly, this is another potential error both because inequality within countries exists and because the growth process may lead to changes in intra-country inequalities over time.

This chapter is an attempt to measure the evolution of world personal income inequality over the last three decades. The literature that measures the evolution of world personal income inequality includes, among others, Berry, Bourguignon and Morrisson (1983), Grosh and Nafziger (1986), Ravallion and Chen (1997), Schultz (1998), Melchior, Telle and Wiig (2000), Milanovic (2000), Dowrick and Akmal (2001), and UNPD (1999).

Some of these previous studies are based on survey data (Ravallion and Chen 1997 and Milanovic 2000). By their very nature, these studies use an income definition that is different from that of the national income accounts and ignore benefits from public spending (which are especially important when it comes to health). The advantage of survey data, on the other hand, is that it takes into account home-consumption, which may also be important in poor countries.

The studies of Berry, Bourguignon and Morrisson (1983) and Melchior, Telle and Wiig (2000) introduce population-weights to the traditional measures of PPP-adjusted GDP per capita inequality (so they avoid the first type of error mentioned above), but they explicitly ignore the evolution of intra-country inequality. Melchior, Telle and Wiig (2000) confirm Schultz's (1998) original finding: the variance of population-weighted (log) GDP per capita has decreased, not increased, after 1978. The main reason is, of course, that China has been growing and converging to the rich at rapid rates since 1978. This means that the measures of convergence based on 'each country, one data point' can show divergence, but when we consider 'each citizen, one data point', the picture changes radically. The key factor is that the average Chinese person (and therefore, about a quarter of the world population) has experienced substantial convergence of their personal income. This conclusion was also reached by Dowrick and Akmal (2001). The main problem with Melchior et al. (2000) is that it ignores intra-country inequality. It can be persuasively argued that the growth rate of the Chinese economy has not benefited all citizens equally so that within-China inequality has accompanied the spectacular growth process.³

Schultz (1998) and Dowrick and Akmal (2001) estimate the evolution of within-country inequality. Both find that, if exchange rate measures of GDP are used, then inequality rises. But if PPP-adjusted measures are used instead, then inequality after 1978 either falls or shows little trend. They both conclude that most of the global income inequality is explained by across-country rather than within-country inequality. Schultz uses the Deininger and Squire (1996) data set to regress the available GINIs for particular countries and periods on observed macro-magnitudes, and 'forecasts' the GINIs of the missing countries and periods. Dowrick and Akmal restrict their analysis to the countries that have estimates of the GINI coefficient for years 'close' to 1980 and 1993 and then

estimate the evolution of 'world' income inequality between these two periods. The problem with this approach is that the selection of countries that do not have GINI data is not random. In particular, these are countries that are poor and that have diverged. Ignoring these countries from the analysis biases the results towards finding reductions in world income inequality.

III. Methodology

Throughout the chapter we use the variance of log income as our empirical measure of inequality. We define *global individual variance* of (log) of individual income as:

$$\sigma_t^2 = \operatorname{var}(\ln y_{ijt}) = \frac{\sum_{t=1}^{n_c} \sum_{j=1}^{N_{it}} (\ln y_{ijt} - \mu_t)^2}{N_t}$$
$$= \frac{\sum_{i=1}^{n_c} \sum_{j=1}^{N_{it}} (\ln y_{ijt})^2}{N_t} - \mu_t^2$$
(1)

where y_{ijt} is the income of individual *j* located in country *i* at time *t*, *nc* is the number of countries, and where

$$\mu_t = \frac{\sum_{i=1}^{nc} \sum_{j=1}^{N_{it}} \ln y_{ijt}}{N_t}$$

is the world average log income, and where

$$N_t \equiv \sum_{i=1}^{nc} N_{it}$$

is the world population at time t, and N_{it} is population for country i at time t.

We do not know the level of income for each individual in the world. We can construct measures of income per person for five different groups of people per country and year using quintile income shares. Let s_{kit} be the income share for group *k* in country *i* at time *t*. We assign to each fifth of the population, $N_{it}/5$, the income level 5 $s_{kit} y_{it}$ for each country, for each quintile k = 1, 2, 3, 4,

5, and for each year. For each country *i*, the average of log income (the average of the logs of the 5 quintiles) is:

$$\hat{\mu}_{it} = \frac{1}{5} \sum_{j=1}^{5} \ln(5s_{kit} \gamma_{it}).$$
⁽²⁾

World average of individual log income is given by (remember that there are $N_{it}/5$ people whose log income is $\ln(5 s_{kit} y_{iy})$):

$$\hat{\mu}_{t} = \overline{\ln(\gamma_{ijt})} = \frac{1}{N_{t}} \sum_{i=1}^{n_{c}} \sum_{k=1}^{5} \left(\frac{N_{it}}{5} \ln(5s_{kit}\gamma_{it}) \right) = \sum_{i=1}^{n_{c}} \frac{N_{it}}{N_{t}} \hat{\mu}_{it},$$
(3)

where the last term suggests that the world average of individual log income is just the population-weighted average of country averages of log income.

Notice also that $\hat{\mu}_t$ is different from the population-weighted mean of per capita log-incomes,

$$\hat{\eta}_t = \overline{\ln(\gamma_{it})} = \frac{1}{N_t} \sum_{i=1}^{108} N_{it} \ln(\gamma_{it}).$$

Using the definition of variance from Eq. (1) and the individual incomes (measured using quintile shares), we have that the variance can be estimated as:

$$\hat{\sigma}_t^2 = \frac{1}{N_t} \sum_{i=1}^{n_c} \frac{N_{it}}{5} \sum_{k=1}^{5} \left[\ln \left(5s_{kit} y_{it} \right) \right]^2 - \hat{\mu}_t^2 \,. \tag{4}$$

We will use Eq. (4) as our main estimate of global inequality.

Our measure of global inequality in Eq. (4) can be decomposed into the population-weighted variance of log per capita income (a measure often used in the literature) and a measure of within-country inequality. To decompose, it is useful to add and subtract the following terms:

$$\sum_{i=1}^{nc} \frac{N_{it}}{N_t} \left(\ln y_{it} \right)^2, \quad \hat{\eta}_t^2 = \left(\sum_{i=1}^{nc} \frac{N_{it}}{N_t} \ln(y_{it}) \right)^2, \text{ and } \sum_{i=1}^{nc} \frac{N_{it}}{N_t} \hat{\mu}_{it}^2.$$

After some algebra, the estimated variance becomes:

$$\sigma_{t}^{2} = \left(\sum_{i=1}^{nc} \frac{N_{it}}{N_{t}} \left(\ln y_{it}\right)^{2} - \hat{\eta}_{t}^{2}\right) \\ + \sum_{i=1}^{nc} \frac{N_{it}}{N_{t}} \left(\sum_{k=1}^{5} \frac{1}{5} \left[\ln(5s_{kit}y_{it})\right]^{2} - \hat{\mu}_{it}^{2}\right) \\ + \sum_{i=1}^{nc} \frac{N_{it}}{N_{t}} \left(\hat{\mu}_{it}^{2} - \left(\ln y_{it}\right)^{2}\right) \\ + \left(\hat{\eta}_{t}^{2} - \hat{\mu}_{t}^{2}\right).$$
(5)

The first term is the population-weighted cross-country variance, *pwxcv*, a measure of across-country inequality as used by Schultz (1998) and Dowrick and Akmal (2001).

$$\sigma_t^2(across) \equiv pwxcv = \left(\sum_{i=1}^{108} \frac{N_{it}}{N_t} \left(\ln \gamma_{it}\right)^2 - \hat{\eta}_t^2\right)$$
(6)

The second term is a measure of within-country inequality. It is the population-weighted average of the 5-quintile-within-country variance (for each country, the variance across the 5 groups is given by

$$\left(\sum_{k=1}^{5} \frac{1}{5} \left[\ln(5s_{kit}y_{it}) \right]^2 - \hat{\mu}_{it}^2 \right).$$

The last two terms are 'adjustments' for the fact that the mean of the log is not the log of the mean. The third term in Eq. (5) is a population-weighted average of this within-country correction, while the last term is the difference between the square of the world country-mean and the square of the world mean of log using the individual groups.

IV. Data

The PPP-adjusted GDP per capita and population data are taken from the updated data set by Heston, Summers and Aten (2001) which includes 1998 as

its latest year (the data for 1997 and 1998 are preliminary and should be taken with caution). We use data for the 108 countries for which we have data every year between 1970 and 1998 (the 'balanced data set'). Of course going back to 1970 means that we necessarily exclude countries that did not exist for some part of the sample period. In particular, the Russian Federation and the countries that broke out of the former Soviet Union were excluded. Some Eastern European countries such as Romania, East Germany and Poland, on the other hand, were included in the sample.⁴

It can be persuasively argued that the reported GDP per capita is a biased measure of GDP per capita because it excludes illegal or underground products in the numerator (some activity is not reported so it is missing from official GDP numbers) but it includes them in the denominator (all people are included in population counts, regardless of whether they work in the underground economy or not). If one argues that the underground sector tends to employ the same number of people per unit of output as the legal sector, then a better measure would be GDP per worker (which excludes illegal output in the numerator but also excludes illegal workers in the denominator). We did all the calculations reported in this chapter using GDP per worker and most of the conclusions are broadly similar.

The inequality data used are based on the income shares from the Deininger and Squire (DS) data. These data are based on national-level surveys (these include both income and expenditure surveys). These survey data have been criticized by Atkinson and Brandolini (2001) on various grounds (in fact, Atkinson and Brandolini warn all researchers that use any 'secondary data-sets' that, many times, these data are incomplete, not comparable across countries or over time and a whole array of additional problems). Future research should make use of the best data and comparable data only. The evolution of the big picture for the world is unlikely to change much, however. The main reason is that, as we will see, most of the individual variance comes from the acrosscountry variance rather than the within-country inequality. It is possible, of course, that within-country inequality is vastly mismeasured and that, when we eventually do measure it correctly, differences in incomes within countries end up being larger than across countries. With the data we have available, however, there is nothing that indicates that this is likely to be true. The low quality income shares, therefore, will certainly introduce errors in our measures of world inequality. But they are not likely to change the main conclusions and trends.

We also use the World Development Indicators (WDI) of the World Bank. Using these data we have three broad groups of countries:

- (A) Countries for which we have a time series of income shares (by time series we mean that we have a number of observations over time, although we may not have observations for every year between 1970 and 1998).
- (B) Countries for which we have only one observation between 1970 and 1998.
- (C) Countries for which we have *no* observations of income inequality.

For the 54 countries in group A, we plot the income shares over time and we observe that they tend to follow very smooth trends (see Sala-i-Martin 2002). Using this information, we regress income shares on time to get a linear trend for each country. This was done using two methods – first, with income shares estimated for all five quintiles, and second, with income shares estimated for the top two and the bottom two quintiles with income share of the middle quintile calculated as a residual. Both methods gave identical results.

For two countries – Guatemala and Gabon – some of the estimated income shares were outside the (0, 1) bound, and these countries were shifted to group B. Estimated income shares from 1970 to 1998 were thus obtained for 52 (of 54) countries with a combined 1998 population of 4360 million.

For the 39 countries of group B (37 for which only one income share figure was available plus Guatemala and Gabon, which were dropped from group A for the reasons mentioned in the previous paragraph), the income shares were assumed to be constant for the period 1970–98. The income shares for 25 of the countries were obtained from DS. The population of these 25 countries was 308 million in 1998. Income shares for the other 14 countries were obtained from the WDI (2001). These 14 countries have a combined population of 152 million.

To the extent that income inequality within these countries has changed over time, our assumption that it remained constant will be violated. However, given that we do not know the direction in which this inequality has changed, the direction of the bias is unknown. Berry et al. (1983) make the assumption that *all* countries' inequality is constant over time.⁵ An alternative would have been to restrict our analysis to the countries that have time-series data (countries in Group A). Section VI shows that, excluding these countries from the analysis, as is done by other researchers, may introduce substantial bias which turns out to change some of the important results. The biases arise from two sources. First, and as we just mentioned, the within-country inequality may have changed. Second, and more importantly, the countries that are excluded tend to be countries that are poor and have diverged. Their exclusion from our analysis, therefore, is subject to an important sample selection bias (which tends to bias the results towards finding an excessive reduction in income inequality).

Thus, out of the 108 countries from Summers and Heston, income inequality based on quintile income shares could be calculated for 91 countries. The 91 countries in the sample cover 85 per cent of the world's population (5036 million out of 5925 million) in 1998. (Time-series data on income shares was used for

52 countries with population of 4360 million and time invariant income shares were used for 39 countries with population of 460 million).

The countries of group C (for which there are no within-country inequality data) are treated as if all citizens in the country had the income per capita of the country. Again, we prefer to incorporate these countries in the analysis because, as we will show later, their exclusion may lead to important biases in the results. There are 17 countries in this category, which brings the total amount of countries in our analysis to 108, with a combined 1998 population of 5.1 billion (86 per cent of the world).

It is worth noticing that the European Data come from the same sources and all European countries belong to group A.

V. Global income inequality and its decomposition

The solid line in Figure 1.2 displays the evolution of global income inequality for the world (108 countries), as reported in Eq. (6). We observe that, after increasing during the 1970s, global income inequality declined between 1978 and 1988 and it grew back to the level of 1978 by 1998. Hence, global income inequality does not 'explode', but it does not decline monotonically either.

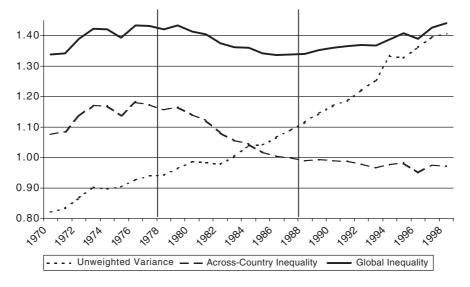


Figure 1.2 Global Inequality and Between-Country Inequality (variance): 108 Countries, 1970–98

To establish comparability, Figure 1.2 also reports the two widely-used measures of global inequality. The first is the unweighted variance of log GDP per capita reported in Figure 1.1 (which is now depicted with a dotted line in

Figure 1.2). Researchers like Pritchet (1997) have used the unweighted-variance of log income to conclude that world income inequality has risen monotonically. As Pritchet puts it, the world displays 'divergence, big time'. Figure 1.2 suggests this conclusion is unwarranted as world income inequality does not show a monotonically increasing trend, at least not during the period 1970–98.

The second measure of world income inequality that is commonly used is the population-weighted variance of log per capita income, *pwxcv*. This has been used, for example, by Schultz (1998) and Dowrick and Akmal (2001). If we take a look at Eq. (6), we see that this measure is what we call 'across-country inequality'. Eq. (5) makes clear that the across-country inequality is a partial measure of global inequality as it ignores the evolution of within-country inequality.

The broken line in Figure 1.2 displays the population-weighted variance of log per capita income or 'across-country inequality'. We see that it increased during the 1970s but declined continuously after 1978. The decline is dramatic during the 1980s and less important during the 1990s. Two important points related to this across-country inequality are worth emphasizing. The first is that the picture that we get when we do not weight countries by their population is very different from the one we get once we do weight the data.

The explanation for the very different behaviour of the unweighted and weighted measures is, of course, that China started growing at substantial rates. Hence, a big fraction of the world's population (China has approximately 20 per cent of the world's population) started converging towards the rich economies after 1978. The process was later reinforced by the positive growth performance of India (which is another very highly populated poor country: it hosts about 15 per cent of the world's population). The unweighted measures treat China and India as simply two data points and give them the same importance as Lesotho (with 2 million inhabitants) or Luxembourg (with half a million). Thus, the unweighted measures give a Chinese citizen 1/600th of the weight that they give to a citizen of Luxembourg.

When China grows and converges towards the OECD but Africa stays behind, the unweighted measures show divergence because the 35 countries in Africa have 35 times more weight than China, even though China has almost twice as many people as the whole African continent combined. This, of course, is captured by the population-weighted measures that correctly take into account the fact that, when the income of 1 billion of the world's poorest people grows and converges towards that of OECD citizens, world inequality declines.

The second point worth emphasizing is that the evolution of the populationweighted variance does not fully reflect global inequality either. Figure 1.2 shows that, while the 'across-country inequality' kept falling during the 1990s, global

inequality peaked. The reason is, of course, that inequality within countries has risen over time.

The main point is that the two traditional measures of global inequality give a distorted picture of what is going on. The unweighted variance suggests that inequality has grown substantially and monotonically during the last three decades. The weighted measure suggests that inequality has declined during the last 20 years, after peaking in 1978. In contrast to both these measures, global inequality declined during the 1980s and increased during the 1990s.

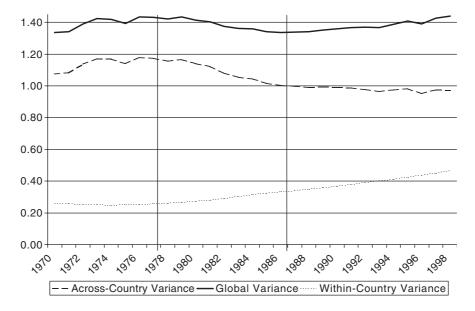


Figure 1.3 Global Inequality Decomposition: 108 Countries, 1970–98

In order to analyse the dynamic behaviour of inequality, it is useful to decompose the *global variance* into *within-country* inequality and *across-country* inequality, as suggested by Eq. (5). Figure 1.3 displays the three measures. A number of aspects of Figure 1.3 are worth emphasizing. First, the magnitude of the within-country variance is small relative to the overall global inequality. Second, the fraction of the global variance that can be assigned to within-country variance increased. Indeed, the ratio of global to within-country variance increased from 0.20 in the 1970s to about 0.3 in the late 1990s. Third, after 1978, the 'u-shape' in global inequality can be explained with a persistent increase in within-country inequality and a persistent decrease in across-country inequality. During the 1980s, the second effect dominated. The reason is that across-inequality fell rather sharply during that decade. During the 1990s, the increase in within-country inequalities more than offsets the convergence across

countries, mainly because the across-country inequality index declines much more slowly than it did during the 1980s whereas the within-country index keeps rising at basically the same rate. Fourth, using either within-country or across-country inequalities alone gives a misleading picture of the evolution of the global variance of income. Fifth, although the within-country inequality appears to grow sharply (in fact, it almost doubles in 30 years) and the acrosscountry index declines sharply after 1978, the sum of the two appears not to move much. In other words, the movements in the global index of inequality move much less than either the across- or the within-country variances.

VI. Sample selection bias

A number of previous studies have arrived at conclusions that may be wrong because of sample selection. In a paper that was widely cited in the popular press, Milanovic (2000) concludes that global income inequalities are rising monotonically. Milanovic claims that the reason why he estimates growing income inequalities when other people fail to do so is that he uses survey data. Figure 1.4 shows that the main explanation for this result is that he chose a very particular sample period: 1988–93. As illustrated in the graph, although these particular years confirm a period of rising income inequality, this is not a general trend for the three decades. His conclusions, therefore, may not be as much the result of a different methodology or data as they may be the result of the particular period he is forced to study because of data availability.⁶

Dowrick and Akmal (2001), on the other hand, compute global inequality between 1980 and 1993, but they restrict the sample of countries to those that have income-share data close to both periods. As suggested in Sections III and IV, this means that they are forced to restrict the sample to the fewer than 50 countries that have at least two income-share data. Restricting the sample to these countries introduces a substantial bias downwards because the countries that do not have such data tend to be poor and their growth rates tend to be small or even negative. In other words, they tend to have diverged. This means that, regardless of what happened to within-country inequality for these missing observations, the exclusion of these diverging countries also eliminates the across-country variance. To see the empirical importance of this effect, Figure 1.4 displays the global measures of inequality for the full sample of 108 countries and for the sample of the 52 countries for which two or more income-share observations are available. We see that the picture is quite different: the smaller sample does not show an increase in inequality during the '90s whereas the entire sample does.

The sample selection problem is important and it should concern us as well. The reason is, of course, that we are excluding the former Soviet economies from our analysis because, among other reasons, they did not exist before 1990.

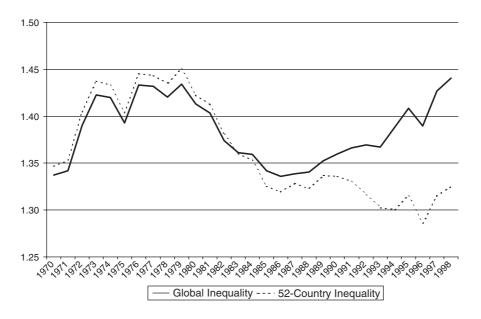


Figure 1.4 Sample Selection: 108 Countries vs. 52 Countries, 1970–98

Researchers argue that, during this period, these economies have experienced low and diverging growth as well as a substantial increase in within-country inequality. If this is true, the inclusion of these countries in our analysis during the 1990s may lead to an even greater increase in global inequality. The fact that the population in these missing countries is relatively small, however, would mean that the corrections would tend to be small.

VII. European inequality

As mentioned in the introduction, the leaders of the anti-globalization movement oppose further integration of world markets because they believe that openness, trade, neoliberalism and globalization cause 'exploding income inequality'. One of the claims most frequently heard relates to the fact that globalization takes political power away from elected officials and gives it to profit-seeking multinationals that nobody has elected. As result, the welfare state that was built in Europe after the Second World War is being dismantled. This, of course, causes 'growing income inequalities'.

None of these claims tends to be substantiated with empirical evidence that shows that more open economies tend to be less democratic and tend to have less government spending per unit of GDP (in fact, Rodrik 1998 shows that the exact opposite is true), that more open economies tend to be more unequal or that a larger welfare state tends to reduce income inequalities. Providing empirical evidence for (or against) all these claims is outside the scope of this chapter. We can, however, use the empirical framework and the data used in this chapter to see whether it is accurate that income inequalities in Europe have exploded.

Figure 1.5 shows that the unweighted variance of log per capita GDP for the 15 EU members plus Switzerland (we add Switzerland to the study because this chapter is written in honour of the 75th birthday of the Graduate Institute of International Studies in Geneva. The fact that most of our income inequality measures are weighted by population, however, means that the results with Switzerland are virtually identical to the results we get if the small Alpine country is excluded. Hence, we keep Switzerland in our analysis).

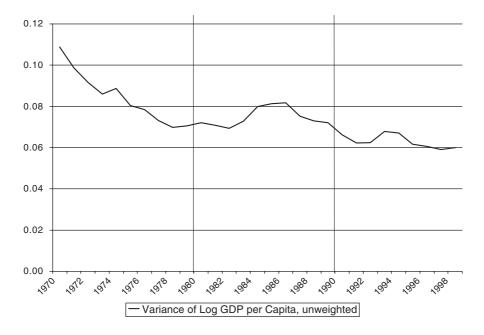
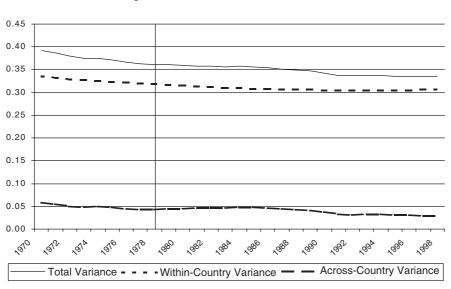


Figure 1.5 Variance of Log Per Capita Income: 15 EU Countries plus Switzerland, 1970–98

Figure 1.6 displays the overall income inequality in Europe (estimated according to Eq. (4)). The surprising result is that total inequality has declined over the last 30 years. Thus, the claim that globalization and openness has led to an explosion in income inequality in Europe is simply wrong.

Another aspect worth highlighting in Figure 1.6 is that, if we examine the vertical axis, we observe that the level of overall inequality in Europe is very small relative to the world: while global income inequality fluctuates around



1.4, the European measure lies around 0.35. Less than a third of that of the world. This is not a surprise.

Figure 1.6 Total, Within- and Across-Country Inequality: EU plus Swizerland, 1970–98

Figure 1.6 also decomposes the overall variance into across-country inequality (which corresponds to the population-weighted variance of log per capita income in Eq. (6)) and within-country inequality, according to Eq. (5). Several things are worth noting here. First, within-country income variance accounts for most of the variance in Europe. This contrasts with our finding for the world. This also suggests that if the European authorities are interested in reducing income disparities, they should focus less on the process of convergence across countries (through the extensive use of cohesion funds or other structural programmes) and concentrate more on the inequalities within countries. Second, withincountry inequality has declined monotonically over time. Third, across-country inequality has also declined over the last 30 years. The pattern of decline, however, has not been monotonic because there was a slight increase during the 1980s. The overall increase during this decade, however, is very small and almost imperceptible to the naked eye. And fourth, the changes in inequality in Europe are very small relative to the changes observed at the global level.

VIII. Conclusions

We analyse the evolution of income inequality over the last 30 years. Using both GDP data and income share data for 108 countries, we decompose global

inequality into within-country and across-country inequality. We show that studies that neglect the within-country variance get a distorted picture of the evolution of global inequality as they tend to predict incorrectly that inequality declined after 1978. We also show that studies that neglect across-country inequality or that fail to give more weight to countries that have more inhabitants tend to get a distorted picture as they tend to predict ever-increasing inequality.

When one takes into account both within- and across-country inequalities, one concludes that global inequality increased slightly during the 1970s, declined during the 1980s and went back up during the 1990s. Overall, however, the movements in global inequality are small compared with movements of each of its components. The main reason for these fluctuating movements is the following: within-country inequality has increased monotonically over the last 30 years. On the other hand, after growing during the 1970s, across-country inequality experienced a sharp decline during the 1980s was so sharp that it more than offset the increase in within-country inequality. Thus, overall inequality declined during that decade. Things were a bit different during the 1990s because, although across-country inequality kept falling, it did so at a much slower rate. In fact, the decline was not sufficient to offset the continuing increase in within-country inequality. Thus, overall inequality increased during the solution offset the continuing increase in within-country inequality increased during the solution offset the continuing increase in within-country inequality kept falling, it did so at a much slower rate. In fact, the decline was not sufficient to offset the continuing increase in within-country inequality. Thus, overall inequality increased during this period.

We also analyse the evolution of income inequality within the European Union (plus Switzerland). The main conclusion is that overall inequality has declined over the last 30 years. Underlying this reduction we observe a decline in both within-country inequality and across-country inequality.

Of course, the data used in this chapter is subject to substantial measurement errors. This is true for all data used in all papers, but it may be especially true for the income shares data (see Atkinson and Brandolini 2001 for a lengthy critique). However, with the data we have today, this chapter shows that the claim that globalization and neoliberalism have caused 'exploding income inequalities' at the world level and at the European level (through the dismantling of the welfare state) could simply be a myth.

Notes

- * I thank Sanket Mohapatra for extraordinary research assistance and for illuminating comments. I also thank Laila Haider and the participants at the conference 'From Europeanization of the Globe to the Globalization of Europe', and especially Tony Atkinson for comments and suggestions.
- 1. Dowrick and Akmal (2001) argue that PPP corrections as done by Summers and Heston (1991) introduce another bias called the 'substitution bias': it ignores the fact that a large

amount of the good may be consumed not because consumers are rich, but because the local price is low. They construct an Afriat correction for this bias.

- 2. Actually, this statement, although intuitive, is wrong. We need to distinguish the concept of 'absolute convergence' and 'conditional convergence'. Neoclassical theories subject to diminishing returns do not predict that poor countries should grow faster than rich countries (which is what we call 'absolute convergence'). The reason is that the growth rate depends on the marginal product of capital (the extra output that one gets by saving and investing one more unit of GDP) but it also depends on the amount of units of GDP that one saves and invests. It could very well be that a poor economy tends to invest a smaller fraction of its GDP and, therefore, it tends to grow less than a rich economy. Conditional on savings (and other similar factors), then the poor economy is predicted to converge. This is what we know as 'conditional convergence'.
- 3. Berry, Bourguignon and Morrisson (1983) allow for intra-country inequality in 1970 but they do not estimate how these inequalities change over time. They say (1983:335): 'we disregard changes in intra-country inequality which may have occurred over 1950–1977. For developed countries reasonably good data indicate that those changes have been minor.' We will show that this omission may be quantitatively important.
- 4. We merged the data for East and West Germany and constructed GDP series for the whole Germany for the whole period, even though the Unified Germany did not exist until the beginning of the 1990s.
- 5. Sala-i-Martin (2002) shows that this assumption tends to underestimate the increase in within-country variance and, as a result, tends to underestimate the increase in global income inequality, especially during the 1990s.
- 6. In a well-known article published in *The Economist* Robert Wade uses Milanovic's article to show that world income inequality has been growing. He also claims that the explanation of the difference in results between him and, say Schultz (1998), is the fact that Milanovic uses survey data rather than the sample period.

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2 Globalization and the European Economy: Medieval Origins to the Industrial Revolution

Ronald Findlay

I. Introduction

Any consideration of 'the Europeanization of the Globe and the Globalization of Europe' must confront the problem of how to specify the spatio-temporal coordinates of the concept of Europe. When does 'Europe' begin as a meaningful cultural, social and political expression and how far east from the shores of the Atlantic and the North Sea does it extend? In this chapter I will begin with Charlemagne, which is to say around 800. It is at about this time that that the designations of Europe and European first begin to be used. Denys Hay (1966:25) cites an eighth-century Spanish chronicler who refers to the forces of Charles Martel, Charlemagne's grandfather, at the celebrated Battle of Poitiers in 732 as *Europeenses* or Europeans, rather than as Christians, and their opponents as Arabs, rather than as Muslims, a nice example of ethnic as opposed to religious identification of 'ourselves' and 'the other'. In terms of space I will go not too much further east than the limits of the Carolingian Empire at its peak, which is conveniently depicted in the map provided by Jacques Boussard (1976:40–1). In this map it is remarkable to see how closely the empire coincides with the area covered by the 'Inner Six' of the European Common Market, with the addition of Austria and Hungary. To the west the Iberian Peninsula was largely under Muslim control, with the British Isles under the Anglo-Saxon kingdoms and their 'Celtic Fringe'. Scandinavia in the north was still pagan as was Germany east of the Elbe, while southern Italy was largely under Byzantine or Muslim rule. Thus for the purposes of this chapter I shall take 'Europe' to be the sum of

all these territories, that is, what is conventionally regarded today as Western Europe. This is purely for analytical convenience and should not be taken to imply any sinister desire to exclude peoples and nations further to the east on historical and cultural grounds from belonging to Europe.

The chapter will concentrate on Europe's contacts and trading relations with other parts of the world and their reciprocal impacts upon each other, in keeping with the themes of 'Europeanization' and 'Globalization'. As the reader of this volume will note I will be using the latter term much more broadly and loosely, in the spirit of Humpty Dumpty, than David Sylvan would like us to do in his contribution. Concentrating on the external relations of this entity 'Europe' with other economic and cultural units does not imply that I regard purely internal developments as necessarily any less significant in the overall evolution of the European economy.

II. The Pirenne thesis

The following quotation is from Henri Pirenne (1939:234): 'without Mohammed Charlemagne would have been inconceivable'.

This juxtaposition of the prophet of Islam with the Frankish founder of the revived Holy Roman Empire was the stroke of genius achieved by the great Belgian historian in his celebrated thesis. If the 'founding father' of Europe as we know it today cannot even be conceived without recognition of the founder of Islam we surely cannot consider 'Europe' to be a wholly autonomous cultural, political and economic entity independent of developments beyond its geographical limits. The argument, advanced more than two generations ago, is well known. Against the conventional view that the Roman Empire fell as a consequence of the Germanic invasions in the fifth century, followed by the long decline of the 'Dark Ages' before revival under the influence of the Italian cities, Pirenne argued that the socio-economic system of the empire in the West was preserved in essentials during the Frankish dynasty of the Merovingians, the key link with Byzantium across the Mediterranean not having been broken so that long-distance commerce and urban civic traditions continued. It was only the conquests of Islam in the seventh century that made the Mediterranean a Muslim lake, and converted Western Europe to becoming a land-locked economic and cultural backwater. The economic system regressed to become a self-sufficient manorial economy, with the bureaucracy financed by the market tolls or tonlieux replaced by the feudal institutions of fief and vassalage. The centre of growth was pulled north away from the Mediterranean and the empire of Charlemagne was erected on the basis of an enserfed peasantry presided over by a feudal nobility, with the cultural traditions of antiquity tenuously preserved by the clergy. In Italy the pope could no longer rely on Byzantine protection and so became dependent on the Carolingian emperors.

The evidence for this startling thesis was summed up by a distinguished commentator, Robert Lopez (1943), as the 'four disappearances' from Western Europe – of papyrus, luxury fabrics, spices and gold coins. Pirenne of course had to show not only that these items were absent, or at least scarce, in Charlemagne's time but that their disappearance coincided with the Muslim conquests in the seventh century and not before or too much later. Papyrus was used in the western empire for most administrative, judicial, commercial and ecclesiastic purposes and as Pirenne (1939:92) says 'whole cargoes of this commodity must have been unloaded upon the quays of the seaports'. The sole source of supply was Egypt, a province of the Byzantine Empire before the Arab conquest. Pirenne claimed (1939:169-76) that the use of papyrus ceased for Merovingian documents in 677, and also that there is no evidence of continuing use by merchants or monks from this time in Gaul, although the situation in Italy was somewhat better. Luxury fabrics such as silks and brocades were also extensively used at the Merovingian court and the churches. Fashions in the West were said by Pirenne (1939:87) to have been set by Constantinople, which was the source of silk from China and its own recently established domestic industry. Again, Pirenne claims that all mention of silk or luxury Oriental fabrics disappears from the West after the late seventh century. The plain Flemish woollen cloth of the Carolingians replaced the silks of the Merovingians, just as parchment was substituted for papyrus. Spices, wines and Oriental foodstuffs also disappear by the late seventh century while the silver pennies of the Carolingians circulated instead of the gold coinage of the Merovingians.

Lopez (1943) casts at least some doubt on each of the 'four disappearances' and thus on the direct evidence in favour of the Pirenne thesis. His main argument is that papyrus, gold coins and luxury fabrics were all state monopolies in the surviving Byzantine Empire and the Islamic Caliphate after the conquest of Egypt. On papyrus he says that its use continued, particularly in Italy, until it was replaced by paper three centuries later. In the barbarian West, however, he attributes the decline in the use of papyrus to the 'melting away' of Roman law that required the use of papyrus for legal documents. A restriction in the supply of papyrus by the Arab state monopoly in the last decade of the seventh century led to the substitution of parchment, which remained in use even after the supply restriction was later removed. On luxury fabrics Lopez appeals to a shift in tastes of the barbarian West to home products, as well as Byzantine restrictions on the highest quality fabrics, such as the imperial purple, to deny the upstart rulers of those former imperial regions the symbols of legitimate authority. In any case he says that the flow of oriental cloths to the West was maintained, on the basis of research by one of Pirenne's own students. In the case of gold coins he argues that the Muslim kingdoms in Spain went on to a silver standard, causing the later Merovingians to imitate it, rather than giving up gold because it was unavailable from the East. In any case gold was used for coinage by Charlemagne's son Louis the Pious. On spices Lopez again claims that tastes may have shifted, but also says that supplies continued to flow westwards.

Another major critique of the Pirenne thesis was by the Orientalist David Dennett (1948). He pointed out that Pirenne's assumption that Islam would (a) want to and (b) had the power to blockade Christian navigation across the Mediterranean is entirely unwarranted on both counts. The Caliphate traded actively with infidels of all kinds and from all points of the compass – Chinese, Indians, Russians, Swedes and even their great rivals the Byzantines. Why would they not trade with the Franks of Gaul? Even if they had wished to, they simply did not have the power to blockade western trade until they captured Sicily, which only happened as late as 850. If the volume of trade was limited this could have been due to the relative backwardness of Frankish Gaul from 650 to 850 for the traditional internal causes associated with the disruptive aspect of the barbarian invasions. All of Gaul's neighbours, including Spain, Italy and northern Europe were actively engaged in eastern trade so why should not Frankish Gaul itself have participated to the extent permitted by its resources and level of development?

In all of the extensive literature stimulated by the Pirenne Thesis the most original and far-reaching contribution was by the Swedish historian and numismatist Sture Bolin (1953). The very title of his paper, 'Mohammed, Charlemagne and Ruric' widens the scope of Pirenne's already breathtaking juxtaposition of the first two historical figures by adding the name of the possibly legendary founder of the Swedish Viking dynasty in ninth-century Russia, an area completely outside the terrain covered by Pirenne. Bolin starts (1953:8) by noting two key points:

Firstly, whether or not trade ceased between Western Europe and the Arab world during the Carolingian period, it is quite certain that, within the Caliphate, trade, industry and a town economy flourished as never before. Secondly, whether the internal trade of western Europe increased or decreased during this epoch, the ancient connections between western Europe and the northern and Baltic countries became very much more important, especially in the first part of the Carolingian age. If these two accepted facts are set in juxtaposition, however, the main problem again thrusts itself forward. One is led to ask whether the communications between the Frankish empire and the North became more lively in consequence of reduced communications between the West and the Orient, or whether the same factors were responsible for the prosperity of trade both in the Caliphate and around the North Sea.

Bolin argues strongly in favour of the second of the two possibilities mentioned above – that the prosperity of the Carolingian Empire on its northern

frontiers was a consequence of the prosperity of the Arab world, even if only indirectly through the mediation of the Swedes in Russia. The evidence that he provides is chiefly numismatic, the extensive hoards of coins, mainly Arab, that have been unearthed by archaeologists in Scandinavia and Russia. In this sense he argues that Pirenne's proposition of no Charlemagne without Mohammed is true, but for exactly the opposite reason. Rather than impoverishing Western Europe by blockading the Mediterranean and making Charlemagne emerge as the ruler of an isolated rural economy with no towns or long-distance trade the Arabs enriched it through indirect trade links with the Swedes in Russia and made possible the resurgence of Western Europe in the Middle Ages. Whatever the final verdict of the evidence for this remarkable argument it should be noted that it is intuitively more plausible from a strictly economic point of view than Pirenne's presumption that the Arabs wanted and were able to establish and maintain an economic blockade over several centuries that would make both parties permanently worse off.

There can be little doubt about the prosperity of the Islamic world for at least its first five centuries, during what Maurice Lombard (1975) has rightly called the 'Golden Age of Islam'. In space it extended from Spain and North Africa to Afghanistan and Central Asia, dominating the southern and eastern shores of the Mediterranean. While there was never a single political authority across this entire realm there was undoubtedly a cultural unity achieved by the religion of Islam and the Arabic language, though Greek and Persian were used for some time after the original conquests of the Byzantine and Sassanid Persian Empires. Administrative and cultural models from both of these sources, blended with Arabic traditions, formed the basis of a brilliant and flourishing civilization. The cultural unity meant that goods, people and ideas could move freely over the entire area. The gold *dinar* and silver *dirhem* of the Caliphs provided an impeccable monetary standard. As Watson (1981) has established there was an Arab agricultural revolution during the years 700 to 1100 in which plants and crops from India and other eastern regions were introduced into Iraq, Syria, Egypt, Sicily, North Africa and Spain. Examples are rice, cotton, sugarcane, citrus fruits and coconut palms. New varieties of known plants were also developed in royal botanical gardens. Irrigation works were built and extended. The resulting higher agricultural productivity supported an extensive urban population in a string of major cities from Damascus and Baghdad to Cairo, Kairouan and Cordoba. Luxury manufactures of all kinds were produced in these cities such as silks, brocades, leather and metal products and many others. Non-Muslim peoples, including Jewish traders and craftsmen, were free to pursue their livelihood and practise their religion on payment of taxes that were not onerously high. The Hellenistic learning was inherited from Byzantium with the original Greek works translated into Arabic and new discoveries made in mathematics, astronomy, medicine and other sciences.

It is clear that such a wealthy and brilliant civilization would have an extensive array of products to tempt the still relatively backward, mainly rural economy of Western Europe. The question is what could it offer in return. The answer from a variety of both Western and Arabic sources is clear. Primary products such as furs from the northern forests were obtained through France. 'Frankish' swords, much admired for the strength and resilience of their steel blades, were a major manufactured product. The main import however was slaves, male and female, mostly Slavs who were still heathen and thus regarded as fair game as opposed to fellow Christians. These slaves should not be regarded as purely intended for heavy manual labour as in the case of the African slave trade across the Atlantic in later centuries. In this case they were often trained and educated to perform services as entertainers, craftsmen and even as soldiers. The furs and slaves, it should be noted, were not products originating in Western Europe but rather in Northern and Eastern Europe, and thus had to be paid for either by precious metals or exports such as woollen cloth and wine. When re-exported to the Islamic world they balanced imports of precious metals, manufactured products such as luxury fabrics, and re-exports from further east such as spices. A prominent role in this trade was played by the so-called 'Rhadanite' Jews whose exact origin has been a source of controversy for a long time. The trade with the north was mediated through the Frisians at the estuary of the Rhine, principally through the port of Dorestad (near Utrecht) and another site known as Quentovic further to the west that traded extensively across the English Channel. Verdun was the main centre for processing and channelling the trade in slaves to the Muslim world.

In contrast to Pirenne, Bolin thus claims that the late Merovingian and early Carolingian period in Western Europe was one of concurrent prosperity with northern and eastern Europe on the one hand, the source of furs and slaves, and the Islamic world on the other, the source of luxury consumer goods and spices from the Far East. The West thus played the role of entrepot or middleman between the two regions up to the early ninth century. From then on, however, the Swedes increasingly went to the source of the furs and slaves in the northern lands, moving them down the Russian rivers to exchange for oriental products and an abundance of silver coins from the Caliphate and other Muslim dynasties such as the Samanids of Bukhara. The metal for the prolific silver coinage came from two great mines, one in the vicinity of Tashkent and the other in the Hindu Kush in Afghanistan. Various nomadic tribes such as the Khazars and the Volga Bulgars were also intermediaries between the Swedish 'Varangians' on the one hand and Byzantium and the Islamic world on the other. The silver coins they obtained were retained as jewellery and in hoards, as well as exchanged with Western Europe for weapons, woollen cloth and wine. The Islamic silver coins the Franks obtained were melted and re-minted under their own seals by the

Carolingian rulers, according to Bolin, which explains why finds of the original coins are plentiful in Scandinavia but rare in Western Europe.

Bolin compares this influx of silver from the Islamic world in the ninth century to the much better known influx from the New World beginning in the sixteenth century and consequently the Varangians to the *conquistadores*. As in the latter case, the impact on the Carolingian economy was apparently a predictable inflation, indicated by the setting of price controls for grain and even for luxury items such as certain types of furs. The weight of the silver coins was also adjusted in line with the depreciation of silver relative to gold.

Bolin's bold and arresting hypothesis of the transmission of Islamic silver to the Carolingian Empire through the medium of the Vikings was sceptically examined by the distinguished numismatist Karl Morrison (1963). He found strong evidence of a plentiful circulation of Carolingian coins within the realm but no evidence of Islamic imports. Bolin, of course, argued that the Islamic coins would have been melted and re-minted before entering circulation in the West, but Morrison questions whether such a policy, even if it existed, could have been so uniformly implemented as to leave only negligible traces of the originals.

The Bolin hypothesis was enthusiastically embraced in an interesting study by the archaeologists Richard Hodges and David Whitehouse (1983). They stressed the role of the Frisians as intermediaries through whom the silver obtained by the Vikings from the east reached the Carolingians. The key site was the trading emporium of Haithabu (Hedeby) at the western end of the Baltic established by a Danish chieftain to exploit these opportunities. Here, and at other sites in the Baltic area such as Birka in Sweden, Western products like wine, pottery and weapons were exchanged for furs, amber and silver. There was even a mint where the conversion could have taken place. Charlemagne captured the site from the Danes in the early ninth century. He took with him on this campaign an elephant that had been presented to him by an embassy from the Abbasid Caliph Haroun-al-Rashid, of Arabian Nights fame. The elephant itself could serve as an emblem of the 'globalization' of the ninth century since it was sent to Baghdad by an Indian maharaja before its journey west to Charlemagne where it died on the shores of the North Sea during the campaign against the Frisians. Charlemagne even undertook an assault on Barcelona against the Umayyad rivals of the Abbasid Caliph, to whom he sent three embassies, receiving two in return.

To conclude this section we could say that while it is undoubtedly an exaggeration to say that 'Charlemagne would be inconceivable without Mohammed' the connections between them, mediated by the possibly mythical Ruric, are nevertheless of considerable interest to students of globalization and its origins. The ideas of Pirenne and Bolin alert us to the possibility of unsuspected links between diverse regions and cultural systems.

III. Emergence of the European economy

There is little doubt that Western Europe in the year 1000 was substantially backward relative to the Byzantine Empire, the Islamic world and China. There were no cities that could remotely approach such behemoths as Constantinople, with a population of 800 000 at its peak, the Abbasid capital of Baghdad, with a population of about half a million and the Sung capital of Kaifeng, even larger at about three-quarters of a million. The foreign and internal trade of these non-European empires was also much greater and more diverse than that of Europe. The ninth century also saw Europe disrupted by the raids of the Vikings in the north, the Muslims in the south and the Hungarians in the east. The empire of Charlemagne was broken up in the bitter civil wars that erupted between his successors.

Eventually, however, the situation stabilized. The Viking raids ceased after those fierce pagans were converted to Christianity and began to develop territorial kingdoms on the basis of trade rather than plunder. In some cases they were successfully absorbed into Western Latin society, as with the Duchy of Normandy. Civilization only added state-building and administrative capacity without diminishing their formidable military prowess, but now it was exercised in the service of Western Christendom rather than against it. The Normans established flourishing new 'conquest states' in Britain and Sicily, and during the Crusades in Palestine. Similarly, the Magyar steppe nomads were converted after their defeat at the Battle of Lechfeld in 995 at the hands of the German emperor Otto and settled down peacefully on the eastern plains. The Muslims were pushed back in Spain, driven out of Sicily by the Normans and out of the western Mediterranean islands by the Catalans.

Some strong underlying upward trends were to manifest themselves starting from the early tenth century. The most important was the rise in agricultural productivity. Major innovations such as the heavy plough, the horse-collar and the three-field rotation system, combined with the widespread availability of land relative to the population, generated a high and rising level of output that sustained a substantial rise in population from the ninth to the thirteenth century. Regional specialization led to a growth of internal trade, especially through the systems of fairs, such as the famous ones of Champagne. Monasteries also made important economic contributions through the organization of their own productive activities and the movement of pilgrims. Cathedrals and castle-building stimulated the construction industry. Wool from sheep reared in Spain and England was woven into cloth in Flanders and finished and dyed in Italy. Population figures based on Russell (1972, Table 1) show the population of Italy doubling from 5 to 10 million, that of Britain going from 2 to 5 million and that of France and the Netherlands more than tripling from

6 to 19 million over the period from 1000 to 1340, while Germany–Scandinavia almost tripled from 4 to 11.5 million.

The most remarkable aspect of the general European expansion in this period was the rise of the trading cities of Italy, particularly Venice and its great rival Genoa, notable histories of which are provided in Lane (1976) and Epstein (1996) respectively. These city-states represented a quite unique phenomenon in world history. The city-state itself, of course, goes back to the beginnings of civilization in Mesopotamia and was the basic form of social and political organization in classical Greece. What then was special about Venice and Genoa?

One essential feature was their political *autonomy*. Unlike Basra or Canton they were not contained within large territorial states but were sovereign entities. Unlike Athens and Sparta, which of course were sovereign, they were *trading* cities, living by long-distance trade. The classical Greek city-states were all based on ownership and exploitation of the surrounding land. Trade was left to resident aliens, the *metics*, who were completely excluded from political activity. Thus it was only in the *maritime* Italian city-states that mercantile or 'capitalist' interests were not just one element or faction in a polity that had to compete with other powerful groups for recognition. They simply *were* the state, and state policy was tantamount to maximizing the long-run advantage of the commercial interests. Of course differences were bound to develop within the general mercantile community between individual sectors, and so state policy had to strike a balance between them. But overall, economic objectives predominated, to an extent unmatched in history, except perhaps by the Dutch Republic after it won independence from the Hapsburgs.

Before launching on its spectacular career as 'Queen of the Adriatic', Venice was a community of boatmen confined to the lagoons at the mouth of the River Po. The people made a modest living by fishing and making salt from the sea, which they traded up-river for grain and other products. They were under the administration of a Byzantine duke or 'doge', supplemented by a few tribunes. Their advantageous location at the head of the gulf, close to the Alpine passes, was beneficial for trade in timber and there also grew up a flourishing traffic in Slav captives from the Balkans. Both slaves and lumber found ready markets in the Islamic world as well as Italy. Politically, Venice became independent of the Byzantine Empire but served as a loyal ally in the conflicts of the empire with the aggressive Normans of southern Italy. The reward for Venice was trading privileges and customs tariff reductions within the lands of the Eastern empire. These formed the basis of profitable re-export trade to the hinterland of Italy, and also brought German merchants to Venice where they were housed in the famous Fondaco dei Tedeschi. They exchanged metal products and silver for Eastern wares that they took north.

Venice's location would have meant little if other ports on either coast of the Adriatic were allowed to compete on equal terms. In order to be able to extract the maximum rents on the east–west and north–south flows of trade, Venice had to have command of the Adriatic, so that all the trade could be channelled through her. In other words, an effective monopoly over exports and imports could only be maintained by naval power. From the eleventh century to the sixteenth, Venice became and remained a major naval power in the Mediterranean. Most of her merchant vessels were armed, and substantial fleets of warships were always maintained for combat and convoy duties by the famous Arsenal.

The launching of the Crusades created vast new opportunities for Venice as well as other maritime city-states in Italy, particularly Genoa and Pisa. While the troops themselves were mostly northern knights and men-at-arms, the Italians provided indispensable transport services, finance and military assistance in the form of siege-engines and other instruments of war. In return they were granted substantial territories and rights in 'Outremer' or 'Beyond-the-Sea' as the Crusaders called the eastern lands that they were allegedly liberating from the infidel. The shrewd Venetians declined substantial territorial possessions on the mainland, preferring to take their reward in strategically located islands and other points where they could control and defend the trade routes. They also had no compunction about raiding Byzantine territory if they felt dissatisfied with whatever commercial privileges they were granted. They also fought regularly with their commercial rivals, the Pisans and Genoese.

The Venetian plunder of the Byzantine Empire culminated in the infamous Fourth Crusade of 1204. Instead of attacking the Muslims, the Venetians and their northern allies found it more profitable to sack Constantinople itself and to install a so-called Latin emperor. Venice's share of the loot was three-eighths of the land and treasure of the Byzantine Empire. Once again she chose well, taking the island of Crete and the famous bronze horses that still adorn the cathedral of San Marco. She was also now able to enter the Black Sea and take advantage of the profitable trade in grain, furs, fish and yet more slaves.

Despite all the warfare of this turbulent period, it is interesting to note that commercial relations continued, with only momentary interruptions due to papal injunctions or political instability. In addition to importing silk and other luxury products from Constantinople for resale to the West, the Venetians obtained Eastern spices, medicines and perfumes through the familiar channel of the Red Sea. Since most of the Indian Ocean merchants were Muslims, they frequently unloaded their goods at Jiddah, the port serving the holy cities of Mecca and Medina. From there caravans took the goods to Damascus and Acre, the port held by the Crusaders. In return for these goods the Venetians sold the traditional wood, metal and slaves but also an important new product, the woollen cloth of Flanders and other European manufacturing towns. Some trade also took place at Alexandria, of Eastern goods that were shipped through Egypt from ports on the western coast of the Red Sea.

Genoa, at the western corner of the Italian peninsula, had a somewhat symmetric location to Venice, with the western instead of the eastern Mediterranean as her natural outlet. She took an active part in the Christian resurgence of the eleventh century, raiding the North African coast and engaging the Muslims at sea. This militant tradition also led her, together with Pisa, to participate more energetically than Venice in the First Crusade. The triumph of Venice in 1204 cut her out of the eastern Mediterranean but Genoa made a strong comeback in 1261, when the Byzantines recaptured Constantinople with substantial naval assistance from Genoa. As a reward, she obtained access to the Black Sea and key strategic colonies at Pera, opposite Constantinople itself, and the island of Chios. In the Black Sea she established outposts at Caffa and at Tana on the Sea of Azov. This opened up lucrative trade in grain, fur and slaves with Southern Russia and also enabled her to take advantage of the overland trade with China. New export items from the Byzantine and Syrian territories were cotton, alum, an important input for woollen manufacture, and mastic from Chios, used in preserving paint and cosmetics. Venice continued to compete with Genoa in the Black Sea area. It was during this period that the Venetian Marco Polo made his famous journey overland to China. While the Genoese were in favour with the Byzantines at Constantinople, the Venetians became the closest trade partners of the Mamluk sultans of Egypt, who had checked the westward advance of the Mongols in 1260 at the Battle of Ain Jalut, near Nazareth in Palestine. The Mamluks, slave soldiers of mostly Turkish and Slav origin, relied on the Venetians and Genoese to provide them with a steady supply of potential new recruits in the form of young captives from the Black Sea region, in exchange for spices from the Red Sea trade, over which Venice was controlling the lion's share of re-exports to the West.

Both Venice and Genoa were involved in a major revolution in nautical technology during this era. Ships become substantially larger and more manoeuvrable because of the adoption of the sternpost rudder. More importantly, the adoption of the mariner's compass made possible sailing by 'dead reckoning', without the necessity of having to observe the stars in order to steer. As Frederick C. Lane (1963) pointed out in a brilliant article on 'The Economic Meaning of the Invention of the Compass', this made it possible to sail in winter, during which time ships had been idle because clouds and fog obscured the stars and coastal landmarks. With two voyages a year instead of one, shipping tonnage was effectively doubled.

The Genoese in this period were at the peak of their maritime and commercial activities. In addition to their exploits in the Black Sea to the east, they continued their earlier combination of raiding and trading with the North African cities. They were eager purchasers of the gold that continued to enter the Mediterranean from the Saharan caravans, and they even ventured deep into the interior, to the oasis city of Sijilmasa, in the attempt to get closer to the source.

They also explored the Canaries and other Atlantic islands, and pioneered the sea routes from the Mediterranean to England and Flanders before the end of the thirteenth century. Their ships took raw materials such as alum and cotton, as well as spices and other luxury products from the East, to the ports of the English Channel and the North Sea, bringing back wool and woollen cloth for Italy as well as re-export to the East. The Venetians, not to be outdone, followed suit.

Thus the period from 1260 to 1350 saw the emergence of a genuine 'worldeconomy', as Janet Abu-Lughod (1989) has emphasized. The links of trade and exchange extended from the British Isles to China, Indonesia, and Africa south of the Sahara. The Italian cities were at the centre of this system and Italy was, with Flanders, the most highly developed part of Europe at this time. Venice, Florence, Milan and Naples, with populations of over 100 000, were the largest cities in Europe. This is why the testimony of Marco Polo, on the wealth and magnificence of China, was so significant as an indication of the primacy of the East in his time.

The economic progress made by Western Europe as a whole during this period was effectively symbolized by the return to gold coinage after a lapse of centuries since the fall of the Roman Empire. In 1253 both Genoa and Florence introduced gold coins, followed by the Venetian ducat in 1284. It was not coincidental that the thirteenth century was also marked by outstanding European achievements in other spheres. Magna Carta was adopted in 1215. The universities of Oxford, Paris and Bologna saw the beginnings of experimental science with the work of Roger Bacon at Oxford, the development of scholastic philosophy and rational theology at Paris and of law at Bologna. It was also the century of Thomas Aquinas and of Dante, to mention only two of the most prominent of the many notable figures of the age. The empire of Charlemagne had splintered into a number of competing kingdoms and territorial units in the ninth century but Europe as a whole was becoming increasingly unified by the Roman Catholic Church, Latin as the language of worship and learning and by the trading and financial networks of the Italian cities that de Roover (1953) referred to as 'The Commercial Revolution of the Thirteenth Century'. Backward relative to the Byzantine and Islamic worlds in 1000, Western Europe had by 1300 at least drawn even and was beginning to pull ahead in economic development. There were signs, however, of the limits of expansion having been reached in the early decades of the fourteenth century.

IV. The Pax Mongolica and the unification of the Eurasian continent

The Mongols are still perhaps best remembered for their ferocity. There is no doubt that they did much to deserve this, from one end of the then known world to the other. A strong case can be made, however, that the long-run

consequences of their conquests were favourable to the progress of the world. How can such an apparently paradoxical conclusion be reached?

The basic argument is that the extent of their conquests across the Eurasian land mass created for the first and indeed only time in history, a single regime presiding over the entire length of the overland trade routes linking China and the Near East. This made it possible for merchants and goods to move safely over these vast distances, facilitating the transmission of ideas and techniques. Since China was substantially ahead of both Islam and the West in the general level of its technology this flow chiefly benefited the lands at the western ends of the trade routes and beyond.

Joseph Needham (1954:140), the great historian of Chinese science and its influence on the West, states that:

China under the Yuan (the Mongol dynasty) became better known to Europe than at any previous or subsequent time until the twentieth century. This was because the region under Mongol control extended for the full breadth of the heartland; it was the first and last time in history that the whole area north of the Himalayas from Shanhaikuan to Budapest and from Canton to Basra was under one political authority. The roads across Central Asia were busier and safer than ever before or since.

Their own mobility and lack of commitment to any particular location or mode of production made them highly 'rational' or 'universalistic' in their attitudes toward economic activities. They were willing to use the talents of any foreigner who was best for the job. Thus we have instances of their using Arab and Persian generals and administrators in China, and Chinese siege engineers in their assaults on Baghdad and other Muslim cities. They were also highly tolerant in matters of religion and were natural supporters of 'free trade', benefiting from the free flow of goods and factors across their domains, since this enhanced the wealth that they could extract for themselves as the privileged caste of their empire. In this they resembled their predecessors the Romans and their successors the British.

The slaughter and destruction they unleashed in China and particularly on Baghdad when they overthrew the Abbasid Caliphate in 1258 made it plausible to consider them as the exogenous force that terminated the spectacular expansion of the Sung Dynasty in China and the golden age of Islam, leaving the field open for the Western Europeans, who got off lightly, to eventually overtake these initially much more advanced civilizations. The balance of current expert opinion, however, does not support this view. Bernard Lewis (1993: Chapter 15) points out that the Abbasid Caliphate had long been in decline before the Mongols killed the last Caliph of Baghdad. Classical Islam was not able to work out a stable political succession and power passed to mercenary and slave soldiers with the Caliphs themselves as figureheads. The Seljuk Turks, in the eleventh century, were effective rulers in Iraq and Syria. Economic difficulties also preceded the impact of the Mongols, which was particularly devastating in Iran and Iraq. The centre of gravity of the Islamic world passed to the Egypt of the Mamluks. This gave Cairo and Alexandria the benefit of the lucrative Indian Ocean spice trade. On the question of the Sung, the historian Ray Huang (1990) is sceptical of claims that they had launched a true 'renaissance' or 'revolution' comparable to what was achieved later in the West. He says (1990:133): 'In the experience of Europe, such a breakthrough came at a moment when the influence of commerce outweighed that of agricultural production by some margin. China in the early modern era did not come close to this jumping-off point. Commerce, even though large in volume by world standards, was spread thin over the mass of peasants.' The Ming who ruled China from 1368 to 1644 as a purely native Chinese dynasty, were unable to achieve this breakthrough almost 300 years after the Mongols.

The volume of trade across the overland routes does not appear to have been great, despite the greater safety. Probably it could not compete in terms of cost with the overseas route. Nevertheless there was considerable exchange of ideas due to the visits of papal envoys to the courts of the Khans, as well as the travels of merchants such as the Polos. The fact that technological change in Europe accelerated so rapidly during this period is ascribed by Sinologists such as Needham, but not only by him, to the transfer of ideas and techniques westward from China. The evidence, perhaps inevitably, is of a 'circumstantial' nature. Thus we know that the Chinese had already invented movable type, gunpowder, the mariner's compass and so on before the West. Now that a possible channel of communication had been opened, and the innovations appear in the West with a substantial lag, Chinese influence is certainly possible and plausible. Direct evidence, however, is mostly lacking. Despite the authority of Needham's awesome erudition it is possible to make a case for independent discovery by Europe. As Hudson (1961:168) argues, however, the burden of proof should be on those who claim independence, not on those like Needham who assert Chinese influence.

The other side of the coin of the Mongols' flexibility and pragmatic readiness to use whatever people or methods were best was that they tended to be absorbed by the more advanced civilizations that they conquered. Unlike the Arabs, whose own language and religion were generally taken over by their subjects, the reverse was the case with the Mongols, despite their attempts to maintain themselves as an aloof ruling class. The societies they ruled and parasitically exploited were deprived of any internal dynamic and thus the burden of their exploitive policies eventually proved insupportable. It was Western Europe that received, as an 'externality', the benefit of trade and the transfer of Chinese technology from the Pax Mongolica, without having at the same time to endure the burden of

the 'Tartar Yoke', which allegedly pressed so heavily on the Chinese, the Iranians and the Arabs, as well as on the Russians under the Golden Horde.

When did 'globalization' begin? This is a familiar question that is being debated extensively today. A strong case can be made that it began with the unification of the central Eurasian land mass by the Mongol conquests and the reactions this aroused in the sedentary civilizations that they were launched against. Each civilization previously had been aware of the others but only as isolated entities, not interactive components of a unified system. In Europe even the legends of 'Prester John', the mythical Christian hero in the East who was so wrongly identified with Genghis Khan and other non-Muslim nomad conquerors, served to provide a unified geopolitical framework, with the thought of taking Islam in the rear and so arousing the desire to establish contact, by sea or land, with these realms beyond Islam for religious, military and commercial objectives. This widening of the conceptual horizons of medieval Europe resulting from consideration of the Mongol phenomenon is discussed with a wealth of interesting detail by Phillips (1998: Chapters 4-7). Frustrated by their Venetian rivals on land the Genoese thought about an end run around Africa in the late thirteenth century, leading to the lost voyage of the Vivaldi brothers in 1291. Another Genoese succeeded in spite of himself two centuries later. As the Central Asian historian Adshead (1993:77) puts it, 'If Europe came to dominate the world, it was possibly because Europe first perceived there was a world to dominate. There is a straight line from Marco Polo to Christopher Columbus, the eastward-looking Venetian to the westward-looking Genoese.'

V. From the Black Death to the bullion famine of the fifteenth century

The integration promoted by the Pax Mongolica also had the unfortunate consequence of leading to what Le Roy Ladurie (1984: Chapter 2) called 'the unification of the globe by disease' or the formation of a 'microbian common market'. There was not only the conceptual unification of the world along with the economic, as pointed out in the previous section, but also a biological unification. Bacteria and viruses, long localized to particular regions, were transferred and mingled by the movement of humans and animals over long distances, as for instance occurred with the operations of the Mongol cavalry. According to McNeill (1977) the plague germs were transmitted from the Burma–Yunnan border by Mongol troops to Central Asia and eventually to the Genoese trading station of Caffa on the Black Sea in 1347. It is alleged that the Khan of the Golden Horde ordered infected corpses to be catapulted into the station during the siege that he laid to it in that year. From Caffa the plague was transmitted by a Genoese vessel to Messina in Sicily from where it rapidly spread to ports around the Mediterranean and eventually all across Europe. The

death rate was close to a third. Cipolla (1994:131) states that it killed about 25 million out of a population of 80 million in Europe as a whole during the period 1348–51. It recurred in waves of mostly diminishing intensity until the end of the sixteenth century. It was undoubtedly the greatest catastrophe to strike the Western world in the second millennium, not even excluding the two world wars of the twentieth century.

As might be expected from a shock of such magnitude the consequences were complex and far-reaching. Before attempting to look at the facts it is would be illuminating to first derive the implications of an economic model to provide some insight into the patterns of response that we should expect. First let us consider a one-sector model in which output is an increasing function of labour, with fixed inputs of land and capital, resulting in a positive but diminishing marginal productivity of labour. The labour force is proportional to population, which in Malthusian fashion has fertility as an increasing function of per capita income and mortality as a decreasing function. This determines a critical level of per capita income at which population would be constant. This enables us to deduce from the production function the size of population and labour force that can be supported by the given state of technology and the fixed inputs of land and capital and hence the level of output. The marginal products of all three inputs being determined we could also obtain the distribution of income to the extent that we believe it to be based on competitive market principles. Suppose now that population and labour now decline instantaneously by a third as a result of the Black Death. Output will fall by less than a third, because of diminishing returns, and so per capita income and the marginal product of labour will rise, while the marginal products of land and capital will fall. Real wages would rise and the position of serfs would improve to the extent that they have any bargaining power at all, while rents would decline and feudal lords would be worse off. The initial rise in per capita incomes would increase fertility and reduce mortality so that population will begin to recover. With technology, land and capital unchanged the economy will eventually return to the original state, with population and all other variables unchanged.

Thus even this simplest of all possible models provides us with some very strong implications that we can confront with the historical evidence. Before that, however, we examine a second model with more structure that will enable us to consider the implications of the Black Death for the relative prices of different classes of commodities. This model has land and labour as inputs and two outputs X and Y, with the land–labour ratio used in production being higher in X than in Y. We can therefore identify X as the land-intensive and Y as the labour-intensive good. Let us also suppose that the labour-intensive good Y is a 'luxury' good with an income-elasticity of demand greater than unity, while the land-intensive good X is a 'necessity', with an income-elasticity of demand less than unity. What happens when the Black Death occurs? By the well-known

Rybczynski theorem the output of X will rise and of Y will fall at constant relative product prices. The rise in per capita incomes associated with the higher land–labour ratio for the economy as a whole and the demand hypothesis for the two goods implies that there will be an excess demand for Y and an excess supply of X if relative prices are held constant. Market clearing requires the price of the labour-intensive good Y to rise relative to that of the land-intensive good X. By the Stolper–Samuelson theorem this change in relative product prices will lead to a rise in the real wage of labour and a fall in the rent per unit of land. Thus the implications of the two-sector model for wages and rents are the same as for the one-sector model but we get in addition the prediction that relative prices will shift in favour of labour-intensive and against land-intensive goods. If we make the same Malthusian assumptions as before, population and hence labour and all other variables will eventually return to their original levels before the occurrence of the Black Death.

Finally we turn to the third and most ambitious model, one that will enable us to trace what will turn out to be the momentous monetary consequences of the Black Death. The full details of the analysis are presented in Findlay and Lundahl (2002). What follows is only a brief sketch intended to give the flavour of the method and the results. The production structure corresponds to the Viner-Ricardo model, with one sector, 'Goods', in which the specific input is capital and the other 'Silver', with a specific input of 'land' or 'mines'. Labour is a common input for the two production sectors, and its supply is endogenous in the same Malthusian fashion as in the two previous models. Labour is perfectly mobile between the two sectors and its allocation is determined by equalizing its marginal value productivity in each sector with the common wage-rate. Capital, of the same stuff as the output of the 'Goods' sector, is an accumulated stock that can be augmented or reduced over time. The main extension to the Viner-Ricardo model is to introduce the demand and supply for an endogenous stock of commodity money, which can be thought of as an amount of pure silver coins. The demand for this money is purely for transactions purposes, with a constant desired ratio between the money stock and the flow of national income, as in the Fisher Equation of Exchange MV = PQ. In the model V is a constant while M, P and Q are all endogenously determined. M is the stock of money, instantaneously equalized to the demand by the movement of P, the price-level of goods in terms of silver, while Q is real national income in terms of goods. The stock of silver coins, M, depreciates at a constant rate due to 'wear and tear'. Consumers spend their income on domestic goods or imported 'Eastern luxuries', which they have to purchase at a fixed relative price in terms of silver. To close the model it is assumed that there is a long-run ratio of capital to money that the agents wish to hold as a function of the real rate of interest, equal to the marginal product of capital in the goods sector.

We begin with the model in long-run stationary equilibrium. The real wage w* is determined at the level necessary to maintain the Malthusian equilibrium, which also determines the marginal product of capital and therefore the real rate of interest r* from the production function in the goods sector. This pins down the desired long-run ratio of capital stock to money supply. The pricelevel P* equates the demand for money to the endogenously determined supply M*. The supply of labour L* and capital stock K*, together with the fixed supply of silver deposits defines a production-possibilities frontier between the flow supplies of goods and silver, with the marginal rate of transformation between them equal to P* as necessary for perfectly competitive equilibrium. This determines the equilibrium flow supplies of goods G* and silver S*. For long-run equilibrium the flow demand for silver, which is the sum of the amount necessary to offset 'depreciation' and to pay for the desired amount of Eastern luxuries, determined by real national income Q* and their relative price in terms of goods, which is a constant times P*, must be equal to the flow supply S*. Real national income Q* is equal to G* plus 1/P*S*. The budget constraint and flow equilibrium in the silver market imply flow equilibrium in the goods market, by Walras' Law. This describes the full long-run stationary equilibrium of the system.

The immediate impact of the Black Death is to reduce real national income and hence the demand for money. Since M and V in the Fisher Equation are unchanged the drop in Q must lead to a rise in P, an inflationary spike. The reduction of the labour force shifts both flow supply curves to the left, while the relative price of silver in terms of goods I/P falls. Thus the flow supply of silver must definitely fall. Since per capita income and wealth of the surviving population have increased, the demand for 'Eastern luxuries' increases because their relative price in terms of goods also falls. The 'depreciation' of the money stock remains unchanged and so there is a net excess flow demand for silver which cannot be cleared by a movement in P since P is determined already in the money market. The excess flow demand for silver must therefore result in a decline in M*, the initial stock of silver coins. The real wage rises above w* because of the decline in the labour force, so population starts to increase after the initial drop. National income and the demand for money also begin to rise as a result. With Q now increasing and M falling, P must now also start falling from the level to which it rose at the initial inflationary spike, which will therefore be followed by a long *deflationary* spiral as M shrinks because of the drain to the East for luxuries and Q rises because of the recovery in population and the labour force.

The relative price of silver l/P is rising steadily during this deflationary process and the increase in the labour force is pushing the flow supply curve of labour to the right, while 'depreciation' of the money stock is falling in proportion to M and the relative price of Eastern luxuries in terms of goods is rising. The excess flow demand for silver therefore falls until it is reduced to zero and then becomes

positive, so that M begins to rise back towards M*. The price-level P, which jumped instantaneously upward at the impact of the Black Death, falls thereafter until it reaches P* again when M and Q have both fallen in the same proportion, as implied by the Fisher Equation. Thereafter, with M continuing to fall or rising more slowly than Q, the price-level falls below P*, but then rises back again towards P* as M and Q both approach their initial stationary levels M* and Q* from below as population, the labour force and the real wage also reach their Malthusian equilibrium levels. The key monetary consequences of the Black Death are therefore an initial inflationary spike in the price-level, followed by a long deflationary contraction that takes it below P* after which its movement is reversed with an inflationary approach back toward P* from below. Eventually the system returns back to exactly the same stationary state as before the onset of the Black Death, assuming no change in the underlying exogenous circumstances such as technology, the stock of silver deposits and behavioural parameters. It should be noted that the model simultaneously endogenizes both population and money, thus resolving a long-standing debate among economic historians between 'Malthusians' and 'Monetarists' over which is the causal factor in the study of long-term movements.

We now turn to a brief examination of the historical evidence in relation to the implications derived from our models. Restrictions of space make it necessary to refer readers to Findlay and Lundahl (2002) for details and sources. On real wages the evidence is scattered but indicates a substantial increase wherever it exists. In England real wages rise by 75 per cent between 1300 and 1450, when they attain a peak not to be reached until centuries later. Data on real wages in the construction industry in Florence show that they rose by 50 per cent between 1360 and 1420 after which they fell slowly back to pre-plague levels by 1600. Population and real wages move inversely to each other, with both taking several centuries to arrive back to the vicinity of their pre-plague magnitudes. This aspect of the models is thus strongly borne out.

There is also strong evidence that labour- (and skill-) intensive goods rose sharply in price relative to land-intensive goods. Wool, wheat, wine, beer and other products with resource-intensive inputs fell relatively in price, while luxury manufactures of all kinds and luxury resource products such as northern furs all rose. Italy, with a strong comparative advantage in luxury products, enjoyed great prosperity during this period, providing the economic base for the cultural efflorescence of the Renaissance. Medieval economic historians engaged in a long debate about whether this era was one of depression or expansion. The resolution of the debate would seem to turn simply on whether one looks at totals or per capita figures, with the latter clearly being the more appropriate. As Bridbury (1962:91) put it, with a dash of dark humour, the Black Death amounted to 'a sort of Marshall Plan on a stupendous scale', for those who were fortunate enough to survive and their successors for at least a few generations.

The prediction of the monetary consequences of the Black Death is also remarkably in conformity with the facts. In a famous article the monetary historian John Day (1978) documents 'The Great Bullion Famine of the Fifteenth Century' without any link to the preceding Black Death of the fourteenth century. The analysis above, however, demonstrates the bullion shortage as a direct consequence of the Black Death in an entirely unexpected way. The collapse and then recovery of silver mining in the European economy is documented by the work of the leading authority on this subject John U. Nef (1987). He first notes (1987:721) that after the Black Death there was a 'long slump lasting for several generations' then followed by (1987:735) 'a boom in mining and metallurgy' from 1460 to 1530, with silver production rising more than fivefold during the decade from 1526 to 1535. The stock of silver in circulation starts to rise again after about 1460. The drain of silver to the East, both through the Baltic for northern products such as furs, amber and wax, and through Venice and Genoa for spices and other oriental products follows the pattern of the 'Eastern Luxuries' in the model. Day (1978) and Fischer (1996) present scattered data on secular price-level changes conforming to the pattern predicted by the model.

As noted above, the system eventually returns to its initial position if all behavioural parameters remain unchanged. In other words if there is no 'hysteresis'. The late Harvard medievalist David Herlihy (1997) argued persuasively, however, that the Black Death was such a profound shock that it permanently altered behavioural patterns, social values and institutions in a direction conducive to material prosperity and economic growth, since people wished to maintain the windfall increases in their well-being that the demographic catastrophe inadvertently bestowed upon them. Thus, in his view, the system never simply returned to the pre-plague equilibrium but instead the recovery from the Black Death propelled the economy well beyond it, resulting in nothing less than the 'Transformation of the West'.

VI. The overseas extension of the European frontier

The idea of the 'frontier' as an organizing concept for historical interpretation was introduced by the American historian Frederick Jackson Turner in his famous work on the westward extension of settlement in the United States. It has been fruitfully applied to other times and societies. The eminent historian of medieval Europe A.R. Lewis (1958:475) stated that 'few periods can be better understood in the light of a frontier concept than Western Europe between 800 and 1500'. In its 'external' aspect the European frontier in this period was exemplified by the *Ostsiedlung*, the migration of the Germans to the east of the Elbe at the expense of the native Slavs and Balts; the Norman invasion of Britain and Ireland; and, perhaps above all, by the long struggle between the Iberian Christian kingdoms and the Muslim realms of Andalusia ending in the

Reconquista. The 'internal' frontier was the reclamation of arable land by the clearing of forests and the draining of swamps and fens that raised agricultural productivity to such high levels. The extension of the area under the plough, supported by and in turn supporting the 'stirrup' in Lynn White's (1962) suggestive formulation of the interaction between agricultural and military technology in the development of feudalism in the Middle Ages, not only reclaimed land but also pacified and civilized the pagan peoples at the margins of European society. Accompanying the warrior and the peasant were the priest and the townsman, adding learning and trade to the rich tapestry of the emerging social fabric. Bartlett (1993) gives a very detailed and instructive account of this historical process.

Lewis sees the period from 1000 to 1250 as an expansive one in which both 'internal' and 'external' frontiers were successfully extended. The 1250–1350 period, however, he regards as being marked by 'the closing of the medieval frontier' in which this process apparently reaches its economic and geographical limits. The early fourteenth century saw the outbreak of devastating famines and there were other signs of diminishing returns and Malthusian pressure on the land. The Black Death therefore struck a society in stasis, much as we have modelled it in the previous section. Removing a third of the population at a stroke was a catastrophe, of course, but as we have seen it created the 'space' for a long boom in production and trade as population recovered, even though it was accompanied by deflation of the price-level in terms of silver. By the middle of the fifteenth century, however, the frontier resource limits began to be approached again.

As Herlihy argued in his stimulating little book, values and institutions were fundamentally altered by the experience of the 'windfall' gains associated with the aftermath of the Black Death. With the limits of Europe itself becoming binding once again an increasingly restless and acquisitive people looked further afield. With the Eastern frontiers blocked by the powerful Ottoman Empire after the fall of Constantinople in 1453 the brighter horizon was in the West, into and eventually across the Atlantic.

Not surprisingly it was Spain and Portugal that led Europe on the way to this 'New' or 'Great Frontier'. It was they that had fought and eventually expelled the Muslims from the Iberian Peninsula and the islands of the western Mediterranean, and harried their North African bases. It was they who colonized the Canaries and the Azores. And it was there that Genoese merchants and sailors went in search of profit and employment, bringing their old ambition of outflanking the Venetians and the Mamluks in their strong hold on the lucrative spice trade. The *conquistadores*, impoverished adventurers from Estremadura, sought fame and fortune in the Indies in much the same way as their ancestors had against the infidel, with titles and land grants as the reward for military success.

The frontier thesis that Turner applied to the nineteenth-century United States was adopted and extended sweepingly to the entire Western world for the period beginning in 1492 by the Texas historian Walter Prescott Webb (1952). As Webb put it, Europe in 1500 had a population of 100 million and an area of about 3.75 million square miles. To this was now added at a stroke another 20 million square miles of potentially enormously productive land and natural resources of all kinds, a fivefold increase in per capita terms. Exploiting this potential would keep Europeans busy for centuries to come, providing them with limitless opportunities for wealth and power. Even more important than the wealth itself was the associated mobility, both geographic and social, and its effect on altering traditional barriers and rigidities. As Eric Jones (1987:84) has stated, 'What had happened was that the Europeans had discovered an unprecedented ecological windfall. Europe was sufficiently decentralized and flexible to develop in response, and not merely content to consume the raw gains. This conjunction of windfall and entrepreneurship happened only once in history.' The interplay between American resources and European enterprise in the newly emerging Atlantic economy and society is also very well analysed and illustrated by Elliott (1974: Chapter 3).

It is important to realize that the 'discovery' of America did not immediately put Europe ahead of the Islamic world or China. The former was still immensely powerful on land, with the three great 'gunpowder empires' of the Ottomans, Safavids and the Mughals. The Ming Dynasty in China launched its great fleets of ocean-going junks into the Indian Ocean under the admiral Zheng He as far as the Red Sea and the Persian Gulf in the early fifteenth century, well before da Gama and Columbus sailed, and China clearly had the technological capacity to engage in overseas commerce and colonization. The *incentive*, however, was missing. The spice islands of the Indonesian archipelago were readily accessible, and nobody had any inkling about America. The court faction that launched the voyages lost out to the traditional emphasis on defending the borders against invasion by the steppe nomads. Thus all the great non-European empires were engaged in the essentially zero-sum game of pushing and preserving their land frontiers against each other and their remaining 'barbarian' enemies. Only Europe had opened up for itself a 'New World' of unbridled opportunity.

Economic relations between 'Europe' and 'America' in this formative period of an emerging 'Atlantic Economy' are analysed in the 'Christopher Columbus' model of Findlay (1993, 1995: Chapter 5). The key feature of this model is an endogenous land frontier, the extent of which is determined by the rate of return linking the yield of a marginal acre brought into production with the rising marginal cost of reclaiming this additional acre from the wilderness. Europe provides the capital and the labour supply in the general equilibrium model, which endogenously determines the extent of the frontier and hence the productive land area of America, along with the allocation of the labour force

between the two continents. Extensions of the model could readily incorporate indigenous American labour as well as imported African slaves as in the 'triangular trade' between the three continents. With the high cost of transport across the Atlantic the first phase of the economic exploitation of the New World is dominated by silver mining using native labour, with the output loaded on to the galleons bringing the silver back to Seville or across the Pacific to Manila.

VII. From the price revolution to the seventeenth-century crisis

The initial impact that the New World made on the Old was the remarkable surge of silver imports from the great mines of Potosi and Zacatecas. The rise in prices that contemporaries observed in sixteenth-century Spain and Europe generally was ascribed to the silver influx, in early statements of the Quantity Theory of Money by Spanish writers of the school of Salamanca and by Jean Bodin. The most systematic and controversial statement of the relationship was by the Chicago economic historian Earl J. Hamilton (1934). The literature since then has grown to enormous proportions but the controversy has continued more or less unabated to the present day. Historians critical of the Quantity Theory approach have tended to associate the inflation with population pressure, to the exasperation and scorn of economists. Thus we have another example of the 'Monetarists vs. Malthusians' debate that we noted in the earlier section on the monetary consequences of the Black Death. Again we attempt to resolve the issue through the application of the Findlay-Lundahl model in which both population and the supply of commodity money are endogenous variables. The reader may also be referred for other interesting treatments of this subject to Jurg Niehans (1993) and Dennis Flynn (1996).

We begin once again from a position of long-run stationary equilibrium. The silver mines of the New World will simply be added to the existing deposits in Europe, so that there is an exogenous upward shift in the specific input to the silver-producing sector of the European economy. For present purposes the native labour force in the Americas can be ignored so that population and capital stock are initially constant. The increase in silver mines shifts out the productionpossibility frontier, thus raising real income Q. With the money supply M initially given and V a constant, P must fall. Thus the initial impact of New World silver is a *deflationary* spike, raising the relative price of silver in terms of 'goods'. The flow supply curve of silver shifts to the right and this combined with the rise in l/P means an increase in the flow output of silver. Despite an increase in the demand for 'Eastern luxuries' there will be a net excess flow supply of silver so that M will increase. The influx of American silver into Europe therefore begins. The rise in silver output pulls labour out of the goods sector, raising the real wage and therefore stimulating the growth of population and the labour force, further raising real income.

Thus, after the initial deflationary spike, the increase in M will run ahead of increases in Q due to the expanding labour force, leading to a sustained rise in P, the price-level of goods in terms of silver. It is this increase in the European price-level during the sixteenth century that has been dubbed the 'Price Revolution'.

As we saw in the case of the deflation of the fifteenth century, however, each initial long swing in the price-level sets in motion a process of reversal. In this case the falling price of silver in terms of goods, l/P, both reduces the flow supply and increases the flow demand for Eastern luxuries, while the 'depreciation' requirement for increasing M also increases the flow demand for silver. Eventually the excess flow supply of silver must turn into an excess flow demand, so that M will contract and P will start to fall. Inflation will therefore be followed by deflation.

The final long-run stationary equilibrium at which the system settles down will be one in which the real wage w* and price-level P* will be unchanged but M*, Q*, L* and K* will all increase in the same proportion as the stock of silver deposits. This is because of the constant returns to scale assumption about the production functions for the two sectors. The silver deposits are the only exogenous variable in this system and so any increase in this productive input will increase K*, L* and hence Q* in the same proportion. Thus the greater the magnitude of the additional natural resource inputs that the discovery of 'America' implies, the greater will be the induced increase in the endogenous 'European' variables L* and K* and the Q* generated by the new Atlantic economy brought into being by Christopher Columbus. The model also accounts endogenously for the drain of part of the New World silver to the East in payment for the additional oriental luxury imports that the expansion of 'Europe' to absorb the resources of 'America' gives rise to.

In principle it ought to be a simple matter to collect the relevant data on the money stock and the price-level and confront the predictions of the model with this evidence. This, however, is far easier said than done. All the relevant figures, from production of precious metals in the Americas and within Europe, shipments to Europe from the Americas and out again to Asia, have been the subject of long and acrimonious controversy, preventing any generally accepted figures for the amount of money in circulation in Europe, in silver equivalent for example, from being available. Price indices have been if anything even more controversial, involving the separation of 'nominal' changes in terms of the unit of account from the relevant 'real' change in terms of silver. What does seem agreed, however, is that the increase in world production of precious metals, particularly silver, from the Americas was very large, both absolutely and relatively; that substantial quantities were retained in Europe as well as transmitted to Asia; and that the price-level of goods in terms of silver did rise

markedly in the course of the sixteenth century, particularly for agricultural products and raw materials, before abating in the seventeenth century.

Hamilton's original estimates of the arrival of 'American treasure' into Europe were based on official Spanish records based on imports coming through Seville. These showed a sharp deceleration in the seventeenth century. Recently the work of the French scholar Michel Morineau has shown that unofficial silver imports greatly increase the total and continue well into the seventeenth and even the eighteenth century. This is felt to cast doubt on the Quantity Theory interpretation of the sixteenth-century Price Revolution by Hamilton since prices stagnated in the seventeenth century. On these and related statistical issues the reader is referred to Barrett (1990).

An elementary but persistent logical error in the literature on the Price Revolution is to look at the correlation between the imports of silver during a particular period and inflation during that period. The relevance of the Quantity Theory is then supposed to turn on the tightness of this relationship. Those in favour point to big arrivals before 1550 and a sharp rise in the price-level, while those opposed point to even bigger arrivals in the second half of the sixteenth century and even in the seventeenth century, with little or no impact on inflation. As is obvious, however, what has to be looked at is not the absolute flow of increments to the money stock, but the *proportionate* difference that they make to the existing stock. On this basis there is no contradiction whatsoever between continuing substantial quantities of imports and the deceleration of inflation. Equal increments have a smaller proportionate effect on a continuously rising money stock. In addition, as our model predicts and is well established, the increase in population and the labour force raises real income Q, which mitigates the inflationary impact of new monetary injections as well.

A second persistent error is to suppose that the Quantity Theory must require all prices to rise in the same proportion in response to a monetary expansion. This will of course only occur in the familiar textbook 'thought experiment' of what will happen if M is doubled overnight, leading to a doubling of all money prices with relative prices of the different goods unchanged. Over time, however, with Q changing in response to movements in the labour force and other 'real' variables, relative prices are bound to shift according to the relevant elasticities of supply and demand.

Associated with this error is the totally egregious one of asserting that rising population causes 'inflation' by 'raising the price of food'! Increases in population, and therefore the labour force, are of course *deflationary*, since other things being equal they raise Q and hence lower P. Yet it is amazing to see up to this day the repeated assertion that population increase, which undoubtedly occurred, was more responsible for the Price Revolution of the sixteenth century than the increase in the quantity of money.

A more cogent criticism of the Hamilton argument was that the rise in the European price-level began in the late fifteenth century and continued in the first third of the sixteenth century before any substantial inflow of American silver had taken place. The explanation in terms of the present analysis is that this earlier rise in the European price-level, coinciding with the expansion of silver production in Germany and Central Europe, was the culmination of the monetary adjustment to the Black Death. Restoration of the stationary equilibrium required the great deflation of the 'bullion famine' of most of the fifteenth century to be reversed by a period of monetary expansion and inflation of the price-level back to their original pre-plague levels, along with the population and the labour force. Once again the association of population increase with inflation of the price-level presents an opportunity to detect a totally spurious correlation, but one that historians untutored in economics continue to make.

Hamilton also argued that increases in money wage-rates lagged behind the increase in the price-level, giving rise to what he called a 'profit inflation' that financed capital accumulation and hence the 'rise of capitalism'. Whatever the merits of this argument it should be clear that it is *not* a necessary implication of the Quantity Theory of Money. Keynes adopted the hypothesis enthusiastically in the *Treatise on Money* but it was severely criticized on empirical grounds by J.U. Nef and other scholars and finds little support today. It is important to realize that the explanation of the rise in the European price-level in terms of an increase in the money supply due to the sustained influx of American silver is by no means affected by the refutation of this auxiliary thesis of Hamilton's.

The upward trends in population, money supply and prices flatten out in the first half of the seventeenth century. These facts form the background to the famous 'Crisis of the Seventeenth Century' formulated by the Marxist historian Eric Hobsbawm (1954), reprinted in Aston (1967). We cannot do justice here to his subtle and complex arguments. He does note, however, the significance of the discovery and conquest of the Americas and the associated influx of silver, and observes cogently that 'The benefit which Europe drew from these initial conquests was thus in the nature of a single bonus rather than a regular dividend. When it was exhausted, crisis was likely to follow' (Aston 1967:23). This is of course exactly the argument made here.

The population of Europe rose from 60 million in 1500 to 68 million in 1550 and 77 million in 1600, falling slightly to 75 million in 1650 and then rising to 83 million in 1700 and 97 million in 1750 (see De Vries 1994:13, Table1). Earlier we cited Cipolla's figure of 80 million as the population of Europe on the eve of the Black Death in 1350. Thus it seems to have taken 350 years for the population to be fully restored to pre-plague levels before rising by another 20 per cent or so by 1750. Real wage-rates in England, according to Hatcher (1977:71, Figure 2) which peaked in the first half of the fifteenth century, had

fallen back to just above their pre-plague levels by the first half of the *eighteenth* century and were not to move ahead until the *nineteenth*. Thus, despite the fluctuations induced by two massive exogenous shocks, the Black Death and the discovery of America, the European economy had barely raised its levels of population and real wage-rates after three or four centuries! And despite undergoing the Renaissance, the Reformation and the Enlightenment!

VIII. Globalization and the Industrial Revolution: cause or consequence?

Despite its seemingly 'one-shot' character, as depicted in the last section, the extension of the overseas frontier to the Americas caused profound changes within Europe itself and subsequently in Asia and Africa as well. The locus of what Kindleberger (1996) calls 'economic primacy' shifted from the Mediterranean to the Atlantic, with Venice and the Italian cities going into decline and being replaced by Amsterdam after the brief flowering of Antwerp. The Hapsburg rulers of Spain and Austria were the initial beneficiaries of the American bonanza but the more permanent gains were reaped by the Dutch and later the British. The two East India Companies used the American treasure to balance their imports of Indonesian pepper, clove and nutmeg, Indian cotton textiles and Chinese silk and porcelain for profitable re-export to consumers in Europe. Steensgaard (1990) shows that exports of treasure (mainly silver) to Asia were three times more than commodity exports in the middle decade of the eighteenth century. The New World also had a notable impact on China, with the introduction of new crops such as maize, peanuts and the sweet potato, which substantially increased agricultural productivity, stimulating the growth of population and output. This increased the demand for silver in China for monetary purposes, which were financed by the export of silk, porcelain and tea. Japan before the seclusion by the Tokugawa Shogunate around 1640 was also actively involved in world trade through the Dutch as intermediaries, exporting copper and silver and importing Chinese, South East Asian and European products.

The next phase of the exploitation of the American discoveries after silver was sugar. This commodity had been introduced into the Mediterranean world by the Arabs from India and its cultivation was taken up by the Iberian powers, who extended it westward to the Canaries and Madeira in the Atlantic as well as to Sao Tome off the African coast. Here began the practice of using African slave labour on sugarcane plantations. After the Atlantic was crossed cultivation was begun in the Caribbean by the Spanish and later the British and the French, and by the Portuguese and the Dutch in Brazil. Other plantation crops were tobacco and indigo. Eventually the famous 'triangular trade' developed, linking Europe with Africa and the Americas with the exchange of manufactures for slaves and for sugar and other plantation products. Rising demand in Europe during the eighteenth century as a consequence of the growth of population and real incomes for tropical products raised slave prices and exports from Africa, with the Europeans engaged in the booming carrying-trade across the Atlantic. The raiding for and capture of slaves in the African interior was undertaken by African coastal states such as the kingdom of Dahomey.

The prominence and magnitude of the slave trade led to the famous thesis of Eric Williams (1944, reprinted 1966) that the profit from the trade was the source of finance for the Industrial Revolution. More broadly his contention can be interpreted as emphasizing the role of the plantation economies of the New World as the indispensable source of raw materials and markets for cotton textiles and other manufactured products of the Industrial Revolution. He states (1966:71) that 'Manchester received a double stimulus from the colonial trade. If it supplied the goods needed on the slave coast and on the plantations, its manufactures depended in turn on the supply of the raw material. Manchester's interest in the islands was twofold.'

The more 'Eurocentric' mainstream of historical scholarship was represented by the views of Engerman (1972) and O'Brien (1982). In a pioneering calculation Engerman estimated profits from the slave trade as about half a percentage point of British national income in 1770, 8 per cent of total investment and about 39 per cent of commercial and industrial investment. Even after adding profits from sugar plantations Engerman felt that these numbers were too small to support the Williams thesis. O'Brien (1982:18) in this connection advanced the much-quoted witticism that 'for the economic growth of the core the periphery was peripheral'.

On the other hand, the Williams thesis was vigorously defended by Barbara Solow (1985, 1987), who argued persuasively that Engerman's numbers were sufficiently high to support it, and by Darity (1982), who formulated a quantitative general equilibrium model of the relationships involved. My own theoretical analysis and investigation of this problem in Findlay (1990) was inspired by the work of these two staunch defenders of the Williams thesis. Collectively, our arguments in favour of Williams seem to have led to a concession by O'Brien and Engerman (1991:181) where they state that: 'Without the enforced and cheap labor of Africans, the rate of growth of transnational commerce between 1660 and the abolition of the slave trade in 1808 would have been far slower.' And (1991:182): 'It is difficult to envisage an alternative path of development that might have carried both international and British trade to the level attained by the early nineteenth century.' Footnote 16 to the first quotation acknowledges Solow (1987) and footnote 17 to the second acknowledges Darity (1982).

Furthermore, (1991:187):

The significance of exports is derogated by using national income as the sole point of reference. Foreign trade needs to be considered in the context of a dynamic general equilibrium model that considers exports (and other sources of changes in demand) to the cycles of growth achieved by the British economy from 1607 to 1802.

Footnote 29 at the end of this quotation is to the working paper version of Findlay (1990).

More recently Engerman appears to have relapsed to his previous position, judging from Eltis and Engerman (2000). On the other hand, O'Brien (1990) maintains the position taken in their joint article. He says (1990:172) that 'The validity of their [Darity's and Findlay's] claims in relation to cotton textiles should be conceded' and also (1990:173) that 'expressing the value of output produced within any sector of an economy as a percentage of national income seems almost calculated to create an impression of insignificance'. It is difficult to disagree with his conclusion to a very valuable paper when he says (1990:177) that 'For the British Industrial Revolution the significance of foreign commerce should not be denied, denigrated or exaggerated. It was obviously important." While conceding on Britain he argues that the spread of industrialization to the continent of Europe was much less dependent on the stimulus of foreign trade. There is no denying that Britain was first, however, and that there is a long line of opinion from Veblen (1915) and Gerschenkron (1962) to David Landes (1969) which maintains that after Prometheus was first unbound in Britain his eastward migration across the continent was only a matter of time.

None of this, however, should be taken to imply that the Industrial Revolution could simply have occurred as a natural outcome of the expansion of overseas trade, however profitable. The acceleration of technical progress and productivity growth that has been sustained ever since depended upon a fortunate combination of circumstance and creative response that was unique to the northwestern corner of Europe in which it took place for the first time in history at some time around the end of the eighteenth century. As Wrigley (1988) has argued convincingly the decisive change was the transition from an 'organic economy' to a 'mineral-based energy economy' based on coal and other fossil fuels rather than on plant and forest products. In other words mankind is no longer dependent for its energy needs on just the surface of the earth but on the vastly less limited resources of its interior. Britain was uniquely placed to take advantage of this opportunity by having extensive overseas markets and sources of raw materials, command of the seas to ensure access to them and, last but not least, large deposits of coal to substitute for a shortage of wood. Railways and steamships opened up the prairies of the New World for the supply of grain and wheat eastward across the Atlantic and of European manufactures and migrants in the opposite direction. It is during this phase of the Atlantic economy that the 'Christopher Columbus model' comes fully into operation with an endogenous land frontier in America determining the extent of European migration and capital exports, together with the terms and volume of trade in manufactures and primary products. O'Rourke and Williamson (1999) analyse this process with particular reference to the convergence of product and factor prices in a pioneering cliometric study. Findlay and O'Rourke (2001) look at the evolution of the world economy from 1500 to 2000, with the impact of the Industrial Revolution playing the dominant role from early in the nineteenth century. Kevin O'Rourke continues these investigations in the next chapter of this volume.

I began this chapter by looking at the relationship between Mohammed and Charlemagne as interpreted by Henri Pirenne. I end it by wondering what that great historian and even greater European would have had to say about the prospect of Turkey joining the European Union. Somehow, I think he would approve.

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3 Europe and the Causes of Globalization, 1790 to 2000

Kevin H. O'Rourke*

I. Introduction

According to the recent declaration agreed by EU leaders at Laeken, the EU seeks to become 'a power wanting to change the course of world affairs in such a way as to benefit not just the rich countries but also the poorest. A power seeking to set globalisation within a moral framework, to anchor it in solidarity and sustainable development' (*Irish Times*, 17 December 2001). Indeed, globalization is identified by the declaration as one of the two key challenges facing the Union. The prominence given to this issue reflects in part the belief, shared by politicians and 'anti-globalization' protestors alike, that globalization is a new and unprecedented phenomenon. But is this in fact the case? And does Europe actually have anything to contribute to this process at the start of the twenty-first century? In this chapter, I trace the evolution of international economic integration over the past two centuries, and seek to explain that evolution, highlighting Europe's role. I conclude by speculating about ways in which the EU may be able to inform the globalization debate over the coming decades.

There will be at least two main themes in what follows. The first is that the move towards greater economic integration has not been unidirectional, but that the globalization process has suffered periodic reversals. Moreover, it is the nineteenth century rather than the twentieth which saw the most impressive integration gains. The second is that the major threats to the smooth functioning of the world economy have changed over time, from war, to tariffs and quotas, to spillovers from domestic regulation. This change in part reflects the changing nature of international trade. The way in which the international community has responded to these evolving threats by developing appropriate institutions

has been the major determinant, along with technology, of globalization trends since 1790.

II. Globalization through history: the nineteenth century was different

Contrary to popular belief, the most impressive episode of international economic integration which the world has seen to date was not the second half of the twentieth century, but the years between 1870 and the Great War. The nineteenth century, and in particular the late nineteenth century, was the period that saw the largest decline ever in intercontinental barriers to trade and factor mobility. I start by surveying trends in commodity market integration (CMI), and then turn to factor mobility and foreign direct investment (FDI).

II.1 Commodity market integration

The costs of trading across frontiers will be reflected in price differentials for homogenous goods in different markets, and a decline in these price differentials provides the clearest indication of international CMI. Findlay (Chapter 2 in this volume) shows that economic links between continents extend far back in time, and that these links had important effects on the transfer of technology and germs, the determination of aggregate price levels, the development of key industries, and other important economic variables. However, prior to the nineteenth century there is no systematic evidence of intercontinental price convergence: for example, Figure 3.1 gives data on price gaps between Amsterdam and South East Asia for three commodities: cloves, coffee and black pepper (here measured as the ratio of the Amsterdam to the Asian price). In all three cases, the story is the same: little or no price convergence prior to 1800, but substantial price convergence thereafter. Nor is there any evidence of Anglo-Indian price convergence from the mid-seventeenth to the mid-eighteenth century: the trade expansion between 1500 and 1800 was due to demand and supply shifts, rather than to CMI (O'Rourke and Williamson, 2002a).

The nineteenth century could not have been more different. Figure 3.1 shows rapid Dutch–Asian price convergence for the nineteenth century: for example, by the 1820s the clove price spread was one-fourteenth of the 1730s' level. Figure 3.2 provides similar evidence for another commodity, wheat, and a different pair of countries, Britain and the US.¹ The price gap fluctuated widely around an average level of maybe 100 per cent between 1800 and 1840, before falling sharply, and reaching negligible levels by the eve of the First World War. (Strikingly, there has been *no* further price convergence for this commodity and this pair of markets during the twentieth century.) The evidence of Figure 3.2 could be replicated many times over: by the late nineteenth century it is difficult to find commodities and pairs of markets for which there is no evidence of

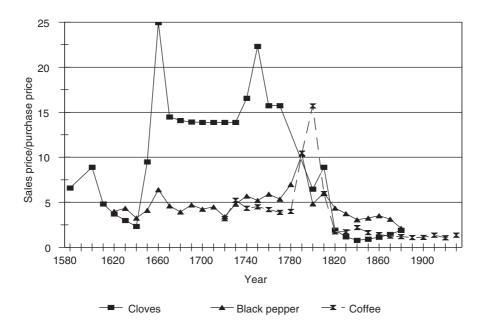


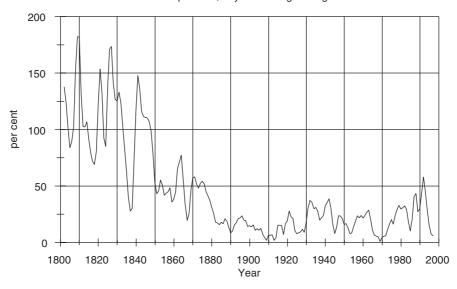
Figure 3.1 Spice and Coffee Markups: Amsterdam vs. South East Asia, 1580–1939 *Source*: O'Rourke and Williamson (2002a).

powerful CMI.² To take just three examples, London–Cincinnati price differentials for bacon fell from 92.5 per cent in 1870 to 17.9 per cent in 1913; the Liverpool–Bombay cotton price spread fell from 57 per cent in 1873 to 20 per cent in 1913; and the London–Rangoon rice price spread fell from 93 to 26 per cent over the same period (O'Rourke and Williamson 1999: 43–53). CMI during this period was a genuinely worldwide phenomenon.

Surprisingly, there has been almost no work done documenting long-run trends in CMI over the twentieth century. Figure 3.2 suggests that for one commodity, wheat, and one pair of countries, Britain and the US, integration is no better today than it was before 1914. Clearly much work needs to be done on this important issue; in what follows I offer a survey of some of the more readily accessible data. Crucially, the evidence that follows is for the late twentieth century only; research spanning the entire twentieth century is to my knowledge non-existent.

The *World Bank Development Indicators* 1999 gives agricultural producer prices (in dollars per metric ton) for wheat and maize. Figure 3.3 gives the coefficient of variation for wheat and maize prices from 1966 to 1995. For wheat, data are available for ten countries over the full period; data for a further nine countries are available through 1994; and data for a further seven countries are available

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per cent, 3-year moving average

Figure 3.2 GB–US Wheat Price Gaps (per cent 3-year moving average), 1800–2000

Source: see note 1.

through 1992.³ For maize, data are available for 13 countries over the full period; for an additional 12 through 1994; and for an additional nine through 1990.⁴ For both foodstuffs the data show a clear *increase* in the coefficient of variation between 1966 and 1995, rather than a decline: no sign of market integration here (the figure uses the 10- and 13-country samples for which data are available over the entire period; using the larger samples available over shorter periods vields identical results).

The other data source I use is the IMF's *International Financial Statistics*, which gives prices for a number of commodities; in some cases, prices are given for the same commodity in more than one market. Table 3.1 gives percentage price gaps for 16 commodities (based on regressions of the price gaps on time and time-squared). There are as many price gaps increasing as decreasing during the 1950s, 1980s and 1990s, as well as overall; more price gaps increased than declined during the 1960s and 1970s.

Of course, one would not want to infer too much from these late twentiethcentury price data. First, since I have taken them from official sources, rather than directly from primary sources such as newspapers, I cannot be sure of how comparable the goods are in each market; price trends may thus reflect changing quality differentials as well as trading costs. Second, the official sources used

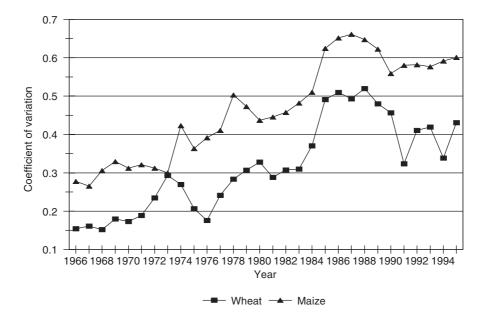


Figure 3.3 International Grain Prices, Coefficient of Variation, 1966–94

Source: see text.

give a biased sample of goods (that is, commodities); if these markets are more prone to government intervention than, say, industrial markets, the figures would give a misleading overall impression. Nonetheless, there is a sharp contrast between this ambiguous late twentieth-century evidence, and the pervasive late nineteenth-century evidence of commodity price convergence. The message is not that commodity markets have in fact disintegrated over the past few decades, but that we urgently need serious research on CMI during the twentieth century.

The lack of such research has led most scholars to rely on quantity data when assessing overall trends in CMI over the period, despite the obvious defects of such measures. Once again, the nineteenth century emerges as the canonical period of increasing world trade. World trade grew at a little over 1 per cent per annum between 1500 and 1800 (O'Rourke and Williamson 2002a), but it has grown at around 3.5 per cent per annum since 1820, with the nineteenth- and twentieth-century growth rates being roughly equal (Maddison 1995). However, the nineteenth-century growth rate was more impressive than the twentieth, in the sense that world GDP growth was twice as high since 1913 as it was between 1820 and 1913: the implication is that trade ratios (for example, the ratio of merchandise exports to GDP) grew more rapidly during the nineteenth century than they did during the twentieth. Table 3.2 documents the eightfold increase in this ratio worldwide between 1820, when trade was negligible as a

Commodity	Markets	1948	1951	1957	1960	1970	1980	1990	1999
Butter	UK-NZ				-0.3	27.8	50.6	68.1	79.4
Cocoa beans	UK/NYC–Brazil	-4.3	-1.7	2.7	4.5	8.4	9.3	7.0	2.4
Coconut oil	NYC-Philippines			18.5	20.0	21.9	19.1	11.8	1.3
Coffee	NYC-Brazil	10.4	14.6	21.6	24.5	31.0	32.5	29.2	22.1
Fishmeal	Hamburg–Iceland					20.2	11.9	8.9	10.3
Lamb	UK-NZ			22.0	33.9	59.1	62.4	43.7	8.1
Lead	NYC–UK			51.4	39.0	14.4	15.8	43.2	90.1
Newsprint	Finland–NYC		5.7	12.4	15.3	22.7	26.7	27.1	25.0
Palm Oil	Europe-Malaysia		5.2	10.3	12.1	15.1	13.1	6.0	-2.0
Rice	New Orleans-Bangkok		48.9	32.2	25.8	14.3	17.5	35.5	64.3
Rubber	NYC-Thailand	45.6	37.6	24.1	18.6	6.9	5.0	12.8	28.2
Sugar	US–Brazil			46.0	46.7	55.1	73.1	100.8	134.0
Sugar	Philippines–Brazil	74.1	61.7	42.6	35.8	26.6	38.1	70.2	116.8
Теа	London–Sri Lanka			18.1	17.0	13.9	11.8	10.6	10.3
Tin	London-Malaysia			2.8	2.9	2.9	2.3	1.0	-0.2
Tin	Bolivia-Malaysia		4.1	2.9	2.4	1.9	2.6	4.7	6.9
Zinc	NYC-Bolivia		5.3	15.8	21.1	38.8	56.5	74.1	90.1
Zinc	NYC-London			26.1	34.5	54.4	61.8	56.6	41.2

Table 3.1 Percentage Price Gaps, Selected Commodities and Markets (based on regressions on time and time-squared)

Source: IMF International Financial Statistics June 2000.

share of GDP, and 1913, when merchandise exports accounted for almost 8 per cent of world GDP, and more than 16 per cent of Western European GDP. Progress in the twentieth century was much less impressive. Table 3.2 shows that merchandise exports accounted for a smaller share of world GDP in 1950 than they had done in 1913, suggesting interwar disintegration; and that the 1913 levels of openness (on this measure) had not been recouped as late as 1973 in the UK, Spain, Australia, Latin America, China, India and Thailand. Indeed, they had not been recouped as late as 1992 in much of the developing world, and in particular in Latin America and India (where they had not even been recouped by 1998).

However, the merchandise share of GDP has been shrinking since 1913, which would tend to pull down the share of merchandise exports in GDP, irrespective of globalization trends. As Robert Feenstra (1998), among others, has pointed out, the growth in merchandise trade has been far more impressive relative to merchandise value added than relative to GDP (although even his Table 2, which gives data for advanced countries only, shows Japanese and UK ratios lower in 1990 than in 1913). And other more qualitative criteria also clearly demarcate the present era from the period before the First World War (CEPR 2002): higher levels of intra-industry trade relative to inter-industry trade; a rapid growth of trade in components, reflecting the increased fragmentation of firms' production

processes;⁵ and the emergence of new, 'weightless' commodities thanks to new information technology.

Table 3.2 Merchandise Exports as a Share of GDP (%)

Country	1820	1870	1913	1929	1950	1973	1992	1998
France	1.3	4.9	7.8	8.6	7.6	15.2	22.9	28.7
Germany	na	9.5	16.1	12.8	6.2	23.8	32.6	38.9
Netherlands	na	17.4	17.3	17.2	12.2	40.7	55.3	61.2
UK	3.1	12.2	17.5	13.3	11.3	14.0	21.4	25.0
Total Western Europe	na	10.0	16.3	13.3	9.4	20.9	29.7	na
Spain	1.1	3.8	8.1	5.0	3.0	5.0	13.4	23.5
USSR/Russia	na	na	2.9	1.6	1.3	3.8	5.1	10.6
Australia	na	7.1	12.3	11.2	8.8	11.0	16.9	18.1
Canada	na	12.0	12.2	15.8	13.0	19.9	27.2	na
USA	2.0	2.5	3.7	3.6	3.0	4.9	8.2	10.1
Argentina	na	9.4	6.8	6.1	2.4	2.1	4.3	7.0
Brazil	na	12.2	9.8	6.9	3.9	2.5	4.7	5.4
Mexico	na	3.9	9.1	12.5	3.0	1.9	6.4	10.7
Total Latin America	na	9.0	9.5	9.7	6.2	4.6	6.2	na
China	na	0.7	1.7	1.8	2.6	1.5	2.3	4.9
India	na	2.6	4.6	3.7	2.9	2.0	1.7	2.4
Indonesia	na	0.9	2.2	3.6	3.4	5.1	7.4	9.0
Japan	na	0.2	2.4	3.5	2.2	7.7	12.4	13.4
Korea	0.0	0.0	1.2	4.5	0.7	8.2	17.8	36.3
Taiwan	-	-	2.5	5.2	2.5	10.2	34.4	na
Thailand	na	2.2	6.8	6.6	7.0	4.1	11.4	13.1
Total Asia	na	1.3	2.6	2.8	2.3	4.4	7.2	na
World	1.0	4.6	7.9	9.0	5.5	10.5	13.5	17.2

Source: Findlay and O'Rourke (2001). na = not available.

Overall, several conclusions regarding CMI over the past two centuries seem reasonable. First, ongoing CMI started in the nineteenth century, which saw far more dramatic progress towards integration than did the twentieth century.⁶ Second, international commodity markets are probably better integrated today than they were in 1913, although we do not have hard quantitative evidence to back up this assertion. Third, there are significant qualitative differences between trade today and trade in the past. Even so, it is important not to exaggerate the significance of the past decade's changes (CEPR 2002). 'Weightless' activities only account for a tiny share of GDP; and gravity equations explaining the volume of trade find that distance continues to influence trade greatly. Thus, a typical elasticity of trade with respect to distance emerging from these regressions (say -1.25) implies that trade volumes at distances of 4000km are down by 82 per cent relative to their values at 1000km. The death of distance has, it turns out, been greatly exaggerated.

II.2 Capital market integration and foreign direct investment

Standard measures tell a consistent story: capital markets became much more integrated in the late nineteenth century, reaching extremely high levels of integration in 1913; they disintegrated during the interwar period, and are only now recovering the levels of integration experienced in 1913. Once again, the nineteenth century stands out as the century which saw the greatest increase in integration: for example, Lothian (2000) documents a big nineteenth-century decline in the international dispersion of real interest rates. By contrast, the twentieth century saw disintegration followed by recovery. This U-shaped pattern is apparent in data on current account to GDP ratios; on real and nominal interest-rate differentials; and in applications of the Feldstein–Horioka test to long-run data (Obstfeld and Taylor 1998, 2001).

As is the case with international commodity markets, however, such quantitative evidence ignores several important qualitative changes which have occurred over time. Net, long-run capital flows may be no more impressive now than in 1913, but international capital markets today differ in several respects from those of a hundred years ago. Most notably, a far broader range of financial assets are traded today, while the ratio of gross to net capital flows is much greater now than then, reflecting greater volumes of short-run capital flows (Bordo, Eichengreen and Kim 1998). On the other hand, international capital markets today do a far less impressive job of channelling savings towards developing countries than did their counterparts of a hundred years ago (Obstfeld and Taylor 2001).

FDI is a dimension of capital flows that deserves separate mention, since it can play a particularly powerful role promoting technological transfer (Cantwell and Piscitello, Chapter 8 in this volume), and in helping peripheral countries converge on the core (Barry, Chapter 9 in this volume). Table 3.3, taken from Michael Twomey's (2000) recent book on the subject, shows that a twentiethcentury U-shaped pattern also applies to FDI: FDI relative to GDP collapsed between 1913 and 1950, before subsequently recovering. Outward FDI remains much less important today than it was in 1913 for two former colonial powers, the UK and the Netherlands. In terms of world averages, the stock of FDI reached over 9 per cent of world GDP in 1913, a figure only exceeded in the early 1990s (the figure stood at 16 per cent in 1999).⁷ FDI is more important now to the world as a whole, but we are talking about a quantitative, not a qualitative shift. Furthermore, as Table 3.3 shows, FDI plays a significantly less important role today in developing countries than it did on the eve of the First World War: it accounts for 18 per cent of GDP in developing countries today, as opposed to 40 per cent in 1914. This reflects the fact that LDCs are host to less than a third of world FDI today, as opposed to almost two-thirds in 1914 (O'Rourke 2002). As in the case of capital flows more generally, however, the

composition of FDI flows has shifted markedly over time (Baldwin and Martin 1999). In 1914, 70 per cent of US FDI in the Third World was in agriculture, mining or petroleum; 26 per cent was in services; and just 1 per cent in manufacturing. In 1998 these figures were 14, 59 and 27 per cent respectively (Twomey 2000:55, Table 3.14).

		Outward stock of FDI/GDP (%)						
Developed Country	1913	1938	1950	1971	1980	1995		
Canada	6	14	6	7	9	20		
France	23	21		5		25		
Germany	11	1		3	4	10		
Japan	11	21		2	2	5		
Netherlands	82	91		35	25	47		
UK	49	38	9	17	15	28		
US	7	8	4	8	8	18		
		Inward stock of FDI/GDP (%)						
Developing Countries	1914	1930s	1950s	1970		1995		
Average colonies	42	61	35	14		19		
Average independent	36	37	17	9		14		
Average	40	51	30	13		18		

Table 3.3 Trends in Foreign Direct Investment, 1913–95

Source: Twomey (2000), Table 3.4, p. 35; Table 7.2, p. 195.

As in the case of commodity trade, it appears that the nineteenth century was the canonical globalization epoch, in that by the end of the period capital markets and FDI had become very extensive; by contrast, quantitative measures show only minor gains over the 1913–2000 period as a whole, with a late twentieth-century recovery following an early twentieth-century slump.

II.3 Migration

It is in the area of migration that the late nineteenth century seems most clearly to have been more globalized than today. Although barriers to immigration were being erected by the end of the period, by and large the late nineteenth century stands out as a relatively liberal interlude in terms of migration policy, and falling transport costs eventually led to huge migration flows (roughly 60 million Europeans emigrated to the New World between 1820 and 1914).

At the beginning of the century, transport costs remained high, free labour flows were still small, and intercontinental migration was dominated by slavery. During the 1820s, free immigration into the Americas averaged a mere 15 380 per annum, compared with a slave inflow of 60 250 per annum. By the 1840s,

the free inflow had increased to 178 530 per annum (and the slave inflow had declined to 44 510 per annum: Chiswick and Hatton, 2001, Table 1), although it was not until the 1880s that the cumulative European migration exceeded that of the African (Eltis 1983: 255). In the first three decades after 1846, total European intercontinental emigration averaged around 300 000 per annum; the numbers more than doubled in the next two decades, and rose to more than 1 million per annum after 1900 (Chiswick and Hatton 2001: Figure 1). There were also significant migrations within Europe and the New World, as well as substantial intercontinental emigration from Asia.

As with trade and capital flows, this dimension of globalization went into reverse after 1914. European emigration had averaged over 1.2 million per annum in the decade before the war; it was less than half that between 1916 and 1930; and during the 1930s it was lower than it had been in the late 1840s (Chiswick and Hatton 2001: Figure 1). Again, decline was followed by recovery; gross immigration into the US was 4.1 million during the 1920s, 0.5 million in the 1930s, 1 million in the 1940s, 2.5 million in the 1950s, 3.3 million in the 1960s, 4.5 million in the 1970s, and 7.3 million in the 1980s (Chiswick and Hatton 2001: Table 2). However, in the case of migration this U-shaped recovery is not yet complete. The world stock of migrants was 2.3 per cent of the total world population in both 1965 and 1990. Within Western Europe, the share of migrants in the total population increased from 3.6 to 6.1 per cent over the same period, while within North America, the migrant share increased from 6 to 8.6 per cent (Zlotnik 1999). By contrast, the foreign born accounted for 14.7 per cent of the population of the United States, and 22 per cent of the Canadian population in 1911. Similarly, 1990s immigration rates into countries like the US (roughly 30 per thousand), Canada (70 to 80 per thousand in the early 1990s) and Germany (roughly 80 per thousand in the first half of the decade, and 50 per thousand thereafter), while clearly substantial, were dwarfed by those of the late nineteenth and early twentieth centuries: in the first decade of the twentieth century these were 167.6 in Canada, 118.4 in Cuba, 102 in the United States, and 291.8 in Argentina (O'Rourke 2002).

II.4 Summary: the nineteenth and twentieth centuries compared

It would appear that the nineteenth century saw greater globalization gains than any period before or since. There is however an important distinction to be made between levels and trends. There was greater progress towards integration in the nineteenth century along every dimension of globalization, but in terms of the absolute level of integration, matters are more obscure. Commodity markets are probably somewhat better integrated today, although we lack convincing evidence to this effect; capital markets are on balance about as well integrated today; and labour markets are less well integrated today.

III. Explaining international economic integration

Why did the nineteenth century see more impressive gains in international economic integration than did the twentieth? The answers must lie in the technological and political histories of the two periods, and I consider each in turn.

III.1 Technological change

Findlay (Chapter 2 in this volume) has discussed the impact of globalization on the European industrial revolution of the late eighteenth century, but causation was by no means one way: some of the most dramatic effects of that revolution, with its breakthroughs in steam technology and metallurgy, would occur in the following century in the transportation sphere. O'Rourke and Williamson (1999) document the impact of railroads in cutting transport costs on land; by sea, the development of the steamship played a crucial role in making intercontinental trade cheaper. Knick Harley's (1988) index of British ocean freight rates remains relatively constant between 1740 and 1840, before dropping by about 70 per cent between 1840 and 1910: a dramatic decline indeed, and one which was mirrored on sea routes worldwide (Findlay and O'Rourke 2001). Strikingly, Figure 3.2 shows that it was precisely around 1840 that sustained CMI involving the British and American wheat markets began. Transport cost declines were the big cause of late nineteenth-century commodity market integration. They were also necessary for the surge in migration during that period: while wage gaps between Europe and the New World had always been high, prior to the advent of cheap ocean transport emigration was simply not an option for those poor Europeans who stood to benefit from it most (Hatton and Williamson 1998).

Figure 3.4 extends the British freight rate evidence into the twentieth century: it plots freight rates deflated by the Statist wholesale price index between 1869 and 1966.⁸ Between 1869 and 1914 these freight rates fell by 34 percentage points (based on a regression of the deflated rates on time and time-squared). Freight rates increased sharply during the war, remaining abnormally high until 1920. While they fell until 1925, they never attained their prewar levels, and rose thereafter, with the overall trend between 1921 and the late 1950s being broadly flat (at a level roughly equal to the 1869 level). However, in the late 1950s real freight rates fell sharply, almost to the lows attained in the late 1900s.

In the most careful study of post-1945 trends to date, David Hummels (1999) concludes that ocean freight rates have actually increased over much of the period. An index of liner shipping prices, calculated by the German Ministry of Transport, rises from 1954 to 1958, is fairly flat until 1970 (despite the introduction of containers in the 1960s), rises through the 1970s, peaks in 1985, and falls sharply thereafter. Deflated by the German GDP deflator it never attains its 1960s levels, even as late as 1997; deflated by the US GDP deflator it only recovers to its 1954 position by 1993.

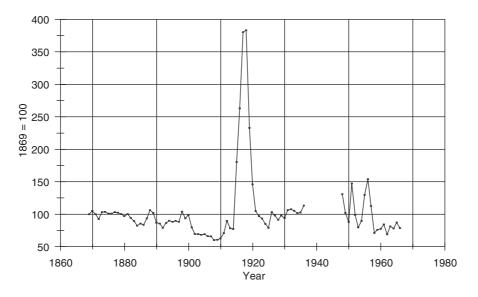


Figure 3.4 Deflated UK Freight Rates, 1869–1966 (1869 = 100)

Source: see note 8.

The fact that ocean freight rates have failed to register significant declines in real terms since 1910 or so seems to offer one obvious explanation for the apparent failure of the twentieth-century economy to register as much CMI as did the preceding century. Three important caveats are in order, however. First, we need better freight rate data spanning the entire period. Second, air travel is obviously a key twentieth-century invention which marks a qualitative break with the past, and which has revolutionized certain sectors of the economy, such as tourism. Net labour flows between continents may be less important now than in 1913, but presumably gross passenger numbers have increased relative to population (a similar distinction to the one made earlier between gross and net flows for capital markets). Air freight rates declined dramatically in the 1950s, 1960s and 1980s, while declining more slowly in the 1990s, and rising in the 1970s. These declines were greatest on North American routes. The result, predictably enough, has been a more than tenfold increase in the ratio of air to ocean shipments in the years since 1962 (Hummels 1999). Third, the increasing speed of ocean transport has implied cost savings not accounted for by the freight rate data. More rapid transport between 1950 and 1998 was, according to Hummels (2001), equivalent to reducing US tariffs on manufacturing goods from 32 to 9 per cent, a significant decline. A similar calculation has not yet been done for the nineteenth century, however, another period of very significant reductions in transport times.

As far as international capital markets are concerned, the most important breakthrough of the last 200 years was the introduction of the telegraph. To take just one example, before the introduction of the trans-Atlantic cable in 1866 it took ten days for information to travel between London and New York: thus, would-be arbitrageurs between those two markets had to place orders, based on information already ten days old, which would only be executed in a further ten days. With the cable, investors could learn of international price differentials, and respond to these, within a day: the result was an immediate 69 per cent decline in mean absolute price differentials for identical assets between the two cities (Garbade and Silber 1978: 825). No other innovation, including that other late nineteenth-century invention, the telephone, or its late twentiethcentury equivalent, the Internet, has had a comparable impact on the speed of information flows and capital market integration.

III.2 Politics

It seems as though technology might indeed help to explain the slower pace of integration experienced in the twentieth century; but it cannot explain the U-shaped pattern of disintegration followed by recovery that seems to have characterized the period since 1913. After all, new technologies are not typically forgotten, and were not in this instance. To explain disintegration, politics has to be taken into account: the historical record indicates that politics can quite easily reverse the impact of technology, at least in the short to medium run.

III.2.1 War

Prior to the eighteenth century, intercontinental trade largely involved 'noncompeting' goods with no obvious substitutes in destination markets, Asian spices being an obvious example. In such an environment, intercontinental trade would not be expected to have the economy-wide income distribution effects which were identified by Heckscher and Ohlin, and the evidence suggests that indeed it did not have such effects (O'Rourke and Williamson 2002b). Political trade disputes were thus not so much intra-national as inter-national, and involved mercantilist states competing for the rents associated with monopolising trade routes or foreign colonies. Wars were frequent, and disrupted the international economy: Figure 3.1 shows disintegration occurring during the 1650s and 1660s, coinciding with the first and second Anglo-Dutch Wars; during the 1750s, coinciding with the Seven Years War (1756–63); and during the 1790s, coinciding with the outbreak of the French and Napoleonic Wars (1791–1815).

Findlay and O'Rourke (2001) show that the disruption associated with the last of these wars was both extensive and long-lived. Blockades and embargoes had a large relative price impact, the volume of trade declined sharply, and import-substitution was everywhere encouraged. This last effect is the primary

reason why wars (or Great Depressions) have such long-lasting consequences: industries which have grown up under such hothouse conditions tend to require protection to survive, and whenever wars end they leave powerful protectionist coalitions in their wake. Thus, according to Crouzet (1964) the trade embargoes and blockades associated with the wars of 1791-1815 replaced French industry's traditional Atlantic orientation with an inward-looking and defensive one, and help explain France's abiding suspicion of the international marketplace; while Jefferson's Embargo Act (1807-09) arguably had similar effects in the Northern US. In exactly the same manner, the First World War led to peacetime demands for industrial protection in countries such as India, Australia and Argentina; more seriously, it led to a wartime expansion of grain production in regions such as North America, to cope with Allied demand, which in turn provoked a postwar crisis of agricultural over-supply which was a key source of interwar trade tensions, and helped provoke the American Smoot-Hawley tariff (Aggarwal and Dupont, Chapter 6 in this volume). Nor do wars only disrupt international commodity markets: Lothian (2001) shows that wars have been associated with capital market disintegration since the seventeenth century, while the negative effects of wars on labour mobility, at least in the context of modern warfare, seem even more obvious.

Viewed in this context, a key institutional innovation which ushered in the long nineteenth century, and helped make it the canonical period of globalization, was the international system instituted by the Congress of Vienna, which marked the end of an unusually bloody, lengthy, and worldwide conflict. In Paul Schroeder's view, the political equilibrium which ensued arose from 'a mutual consensus on norms and rules, respect for law, and an overall balance among the various actors in terms of rights, security, status, claims, duties and satisfactions rather than power' (Schroeder 1992: 694). Rather than relying on an unattainable balance of power, the Congress implicitly recognized British and Russian hegemony in their respective spheres of influence (the wider globe, and Eastern Europe and much of Asia respectively); but the hegemony was relatively benign, and the entire system relied on 'the restoration of the rule of law, beginning with its foundation, the security and legitimacy of all thrones' (Schroeder 1992: 696).

Ultimately, of course, the Vienna system was unable to withstand the rise of Germany, which simultaneously challenged British dominance overseas, Russian dominance in Eastern Europe, and British economic dominance in Western Europe. Nonetheless, the fact remains that battlefield deaths as a proportion of Europe's population were seven times higher in the eighteenth century than they were in the nineteenth (Schroeder 1994: vii), and the nineteenth century stands out as an unusually peaceful one in the context of Europe's bloody history. Thus European wars, which have historically been such a major cause of international economic disruption, were less important

during this canonical globalization period than they have been before or since; and this is surely no coincidence.

III.2.2 Traditional protectionism: tariffs and quotas

The French and Napoleonic wars thus gave rise to a settlement which led to 'a dramatic decline in the incidence, scope, length and violence of wars' (Schroeder 1994: vii). But there are of course more prosaic reasons why the international economy can be disrupted. Tariffs, quotas and other instruments can be used in an effort to stimulate infant industries; or to influence the distribution of income; or to cope with the impact of recession. The nineteenth and early twentieth centuries saw protectionism being implemented for all these reasons, and more.

It was not just wars which gave rise to infant industry protection; such protection was adopted in many New World economies in the late nineteenth century. The great transport cost declines surveyed earlier made intercontinental bulk trade in basic commodities possible, and led to a new worldwide division of labour, in which the resource-rich New World exported food and raw materials in return for European manufactured goods. Not only the New World found itself playing this role: India, a traditional exporter of textiles, found itself specializing more and more in primary products. Thus, textiles accounted for more than half of the English East India Company's exports to Europe in the late 1750s; the figure had dwindled to a mere 3.7 per cent in 1850-51 (Findlay and O'Rourke 2001). India was not legislatively independent, but the New World was, and high tariffs on industrial products were adopted in Latin America, the United States, Canada and Australia. The collapse in primary product prices in the 1920s and 1930s, and the Depression-induced protection in core markets, would persuade many developing countries to follow suit in the twentieth century, with ultimately disastrous consequences.

Another motivation for protection, particularly in the late nineteenth century, was the desire to avoid the distributional effects associated with globalization (O'Rourke and Williamson 1999). As the land-abundant New World exported competing land-intensive products such as wheat to Europe, European landowners found their incomes declining, and in many cases their governments provided them with agricultural protection: thus tariffs represented compensation for declining transport costs (Bairoch 1989: 55–8). As labour-abundant Europe exported unskilled workers to the New World, unskilled wages there fell in relative terms and New World inequality rose. Again, governments responded by tightening immigration restrictions. Thus, globalization largely undermined itself during this period: it did not simply come to an abrupt end in 1914.

This is not to deny the importance of the First World War in destroying the liberal economy of the pre-1914 era: it was an enormous shock which had long-run as well as short-run consequences for international economic integration.

Indeed, the imbalances to which it gave rise were, as already stated, one of the key causes of the interwar descent into autarky. However, the late nineteenthcentury record does clearly show that left to its own devices, globalization can undermine itself politically, and that distribution matters, not just for its own sake, but on account of the political responses which it provokes. (Further evidence of this tendency for markets to undermine themselves can be found in the pre-1914 period's development of a variety of welfare institutions: see Atkinson (Chapter 12 in this volume), and Polanyi 1944.)

An account of the rise and decline of globalization from 1815 to 1945 would therefore go something like this: in the aftermath of a catastrophic world war, the great powers agreed on a system of interstate politics that largely kept the peace for a hundred years. This interlude coincided with a transport revolution that, together with the telegraph, led to the greatest increase in the integration of the international economy which the world has ever seen. The globalization of the late nineteenth century was due to technology rather than economic policies, since tariffs and migration quotas worked hard to mute its impact, at least from the 1870s; and the First World War ultimately undid much of what had been achieved.

The economic imbalances caused by the Great War exacerbated protectionist pressures, while the failure of the League of Nations to recreate the stability of the Congress era made it more difficult for governments to head those pressures off (Aggarwal and Dupont, Chapter 6 in this volume). Two further factors also help explain interwar deglobalization: the Great Depression and democracy. The Depression obviously helped persuade governments to adopt tariffs and migration restrictions; it also led to the widespread adoption of Keynesian macroeconomic policies, which had far-reaching implications for capital mobility. Obstfeld and Taylor (2001) have located the causes of the twentieth-century U-shaped pattern of capital mobility in governments' attempts to wrestle with the famous macroeconomic policy trilemma: you cannot have fixed exchange rates, capital mobility and an independent monetary policy simultaneously. This trilemma was resolved in the late nineteenth century by abandoning interventionist monetary policy: the gold standard promoted capital flows and fixed exchange rates, but tied the monetary authorities' hands. Democracy was always going to make it more difficult for governments to adopt such a stance; faced with the Great Depression, interwar governments abandoned fixed exchange rates and/or capital mobility in order to concentrate on internal macroeconomic management. The postwar Bretton Woods settlement opted for fixed exchange rates and Keynesianism, at the expense of abandoning capital mobility. It was only with the abandonment of fixed exchange rates in the early 1970s that international capital markets began to recover, to the point where they have now become as integrated as they had been in 1913.

Distributional concerns, the macroeconomic environment, and the First World War thus explain the interwar period's descent into autarky. However, just as the wars of 1791–1815 ushered in the Congress of Vienna, so the wars of 1914–45 led to another ambitious postwar settlement which, crucially, involved the setting-up of explicitly economic institutions such as the GATT. These were designed to help governments face down the traditional 'economic' (Listian, Heckscher–Ohlin and Keynesian) demands for protection outlined above. Thus, the settlement promoted the gradual liberalization of commodity markets: trade was liberalized within the OECD, and CMI gradually resumed. Indeed, the CMI which has occurred since 1945 differs from that of the 1870–1914 period in that it was largely due to trade liberalization, rather than technological change.

	1913	1931	1950	1980	1998/99
Austria	18	24	18	14.6	NA
Belgium	9	14	11	NA	NA
Denmark	14	_	3	NA	NA
France	20	30	18	NA	NA
Germany	13	21	26	NA	NA
Italy	18	46	25	NA	NA
Netherlands	4	_	11	NA	NA
Spain	41	63	_	8.3	NA
Sweden	20	21	9	6.2	NA
UK	0	-	23	NA	NA
EU	NA	NA	NA	8.3	4.1
Russia	84	**	**	**	13.4 ^a
Switzerland	9	19	-	3.3	3.2 ^b
Australia	16	-	-	-	6
Canada	26	_	-	-	4.9
Japan	25-30	_	-	9.9	5.5
New Zealand	15-20	_	-	-	4.4
USA	44	48	14	7	4.5
Argentina	28	_	-	-	14
Brazil	50-70	_	-	-	15.2
Colombia	40-60	-	-	-	11.4
Mexico	40-50	_	-	-	12.6
China	4–5	_	-	-	17.4
India	approx. 5	-	_	-	34.2
Iran	3–4	-	_	-	_
Thailand	2–3	_	_	-	47.2 ^c
Turkey	5-10	-	_	-	0.25

Table 3.4 Average Tariffs (%) on Manufactured Goods, Selected Countries, 1913–98

Notes: NA = not applicable; - = not available; ** refers to the fact that the USSR ran such a restrictive trade policy that average tariffs were irrelevant; ^a = 1997; ^b = 1996; ^c = 1993.

Source: Findlay and O'Rourke (2001).

It is important to recognize, however, that focussing on postwar liberalization in the OECD leads to an unbalanced view of late twentieth-century trade policies. Table 3.4 gives data on manufacturing tariffs for a number of countries back to 1913. It shows the familiar OECD story of rising interwar tariffs and falling postwar tariffs, and also shows that for most of these countries tariffs are lower today than they were in 1913 (the UK being an exception). However, this OECD story is not a universal one (and even in the context of the OECD it ignores the more restrictive agricultural protection of today, as well as the greater use of non-tariff barriers). In much of the developing world manufacturing tariffs today are higher than they were in 1913, as a result of import substitution policies, socialism, or the intellectual legacy of decolonization. Just as important, for much of the late twentieth century the Soviet Bloc remained largely closed to international markets: the post-1945 economic settlement only applied to the West, while the post-1945 political settlement led to a Cold War, rather than a post-1815-style peace. It is for this reason above all that the 1990s stands out as a key globalization decade, with an entire region of the world opening itself to international markets for the first time in a generation (Kierzkowski, Chapter 11 in this volume).

IV. The future: coping with regulatory spillovers

Figure 3.5 illustrates the argument thus far: it shows how the level of international economic integration has changed between 1820 and 2000. TT represents the maximum level of integration achievable, given the state of technology: it rises continuously throughout this period, but at a slower rate during the twentieth century than during the nineteenth. How close to this technological frontier the world progresses is however a matter of politics: PP represents the actual level of integration achieved over the period. Integration thus depends on technology (TT), and on politics (the gap between TT and PP). This gap was much smaller in 1875 than in 1820, indicating that in the absence of war, and with the gradual liberalization of trade associated above all with Britain (Aggarwal and Dupont, Chapter 6 in this volume), politics was working in the same integrationist direction as technology. The post-1875 backlash is indicated by the growing TP gap between 1875 and 1914; but this backlash was not sufficient to overturn the impact of continuing technological progress. Where technology dominates nineteenth-century trends, politics explains the twentieth-century U-shape. The disintegration of the First World War is followed by a partial recovery through the 1920s, disintegration through 1945, and the rapid integration of the postwar era, driven by GATT and other political institutions.

Just as the Congress of Vienna succeeded in reducing the incidence of warfare, so the GATT and WTO have succeeded in reducing the incidence of tariffs, and to a lesser extent quotas. These international settlements, following in the wake

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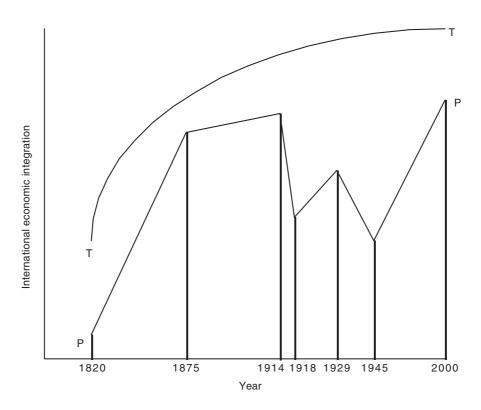


Figure 3.5 A Very Brief History of Globalization

of two 30-year world wars, together with the massive transport cost declines of the nineteenth century, and the more modest declines of the twentieth, are the key to understanding the large globalization upswing of 1815–1914, and the smaller upswing (which largely represented a recovery of prior losses) of 1945–2000.⁹ While wars and tariffs have not gone away, another challenge to CMI has recently gained prominence: the difficulty of reconciling different countries' health, safety, antitrust or environmental standards with the free international movement of goods and services. Disputes regarding hormone-fed beef, or genetically modified crops, or dolphin-friendly tuna, are likely to become more common in the future, if for no other reason than that health, safety, antitrust and environmental legislation can be expected to accumulate in all countries over time, in large part reflecting public opinion.

Over the past two centuries Europe has had a profound impact on globalization trends, both positive and negative. The technological breakthroughs of the late eighteenth and early nineteenth centuries mentioned above were largely (if not entirely) hers; and the world wars which have periodically had such an impact on the international economy have also originated in Europe. Indeed, one of the key determinants of globalization, at least until the Second World War, has been the evolving relationship between Europe's nation-states. European political and economic thought, and European colonialism, are two further factors with which any complete account of the history of international economic integration would have to deal: for example, not only has Europe produced the classical theories of free trade (and its antithesis, Marxism), but European overseas expansion and European nationalism combined to produce post-colonial 'nation-states', which pursued autarkic policies as enthusiastically as had the new European nation-states of the 1920s (Liebich, Chapter 5 in this volume). Today Europe no longer enjoys the international prominence which it once did (but see Steinherr, Chapter 7 in this volume): but does Europe have anything to contribute to international economic integration in the years ahead?

To the extent that spillovers from domestic regulatory regimes into the international trade sphere pose a major challenge for future CMI, the answer is probably 'yes'. EU member states have considerable experience in negotiating complex economic agreements in which domestic regulations and trade concerns are intertwined, the most obvious example of this being the negotiation of the 'Single Market' or '1992' programme. European integration has involved reconciling the 'globalization' of internal EU markets (which is why the EU will never make a particularly convincing opponent of globalization per se) with the continuing heavy regulation of European economies (for good or ill). Europe, it could be said, has a comparative advantage in producing trade agreements between independent nation-states which allow those states to preserve a large amount of domestic regulatory autonomy, while at the same time facilitating the free international flow of commodities and factors of production. As such, it seems that now would be an appropriate time for the EU to become much more centrally involved in debates concerning the 'international economic architecture' (CEPR 2002), and in particular the future of the WTO.

Notes

- * Several good friends have helped me with this chapter. Parts of it draw on joint work with Ronald Findlay (Findlay and O'Rourke 2001) and Jeffrey G. Williamson (O'Rourke and Williamson 1999). I am grateful to both for allowing me to do this, and for many helpful conversations on these and related issues. Tim Hatton, Alan Taylor and Jeff Williamson provided detailed scientific advice on Figure 3.5. I am particularly grateful to Jim Livesey for important historical insights, and for reading an earlier draft. The usual disclaimer applies.
- 1. The British data are Gazette averages through 1980, and are taken from Mitchell (1988). After 1980, they are taken from the Commodity Price Trends tables in the UK *Annual Abstract of Statistics*. The US data for 1870–1913 are taken from O'Rourke (1997), where they are expressed in shillings per cwt; onto these data are spliced the series in US Department of Commerce (1975) for 1800–70; and from the US Department of Agriculture website (http://usda.mannlib.cornell.edu/usda/usda.html) for 1914–99.

- 2. Continental European grain markets protected by defensive tariffs provide one exception: see O'Rourke (1997).
- 3. Data are available over the full period for: Algeria, Australia, Belgium, Greece, Malawi, Pakistan, South Africa, Spain, Tunisia, Turkey. Through 1994, data are available for: Austria, Egypt, France, Ireland, Italy, Paraguay, Portugal, Sweden, United States. Through 1992, data are available for: Denmark, Guatemala, Jordan, Kenya, Norway, Rwanda, United Kingdom.
- 4. Data are available over the full period for: Algeria, Australia, Congo, Greece, South Korea, Malawi, South Africa, Spain, Sri Lanka, Switzerland, Thailand, Turkey, Venezuela. Through 1994, data are available for: Austria, Dominican Republic, Egypt, France, Honduras, Italy, Lesotho, Panama, Paraguay, Philippines, Portugal, United States. Through 1990, data are available for: Belgium, Burkina Faso, Costa Rica, Cote d'Ivoire, Guatemala, Kenya, Rwanda, Zambia, Zimbabwe.
- 5. According to Yeats (1998) 30 per cent of world manufactures trade is trade in components rather than final products.
- 6. It would be nice to have intercontinental price evidence for the period 1450–1550, which would shed light on whether the European Voyages of Discovery led to a significant once-off decline in intercontinental price differentials. Alas, such evidence has not yet been produced.
- 7. For the source of these statistics, see O'Rourke (2002).
- 8. Freight rates from 1869 to 1936 are from Isserlis (1938); from 1948 to 1966 the official freight rates given in Mitchell (1988) are used. The two indices are spliced using the calculation, cited in Mitchell (1988: 531), that nominal freight rates in 1948 were 3.3 times higher than those in 1938; and the assumption that nominal freight rates rose slightly between 1936 and 1938, in the same proportion as did wholesale prices generally.
- 9. The fact that the Peace of Westphalia, associated with the ending of yet another 30-year war, was also associated with institutional innovation (the development of the modern European state system: see Kohen, Chapter 4 in this volume), and with an improvement in outcomes (a decline in religious warfare, and a certain growth of religious tolerance), might lead one to speculate about a 150-year European cycle of systemic crisis, followed by systemic reform. But one should probably not exaggerate.

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4 Europe and the Standardization of the Law: Past and Present

Marcelo G. Kohen

Prenons l'exemple du droit international. Par ses concepts, il est substantiellement européen, mais il porte en lui une transformation du droit qui reste toujours perfectible, donc inachevée. Il faut veiller à ce que la part européenne de ce droit international ne vienne pas le limiter afin que l'on puisse libérer le droit de ses propres limites européo-centriques, mais sans pour autant détruire la mémoire de ce droit, car celle-ci en permet et prescrit aussi la transformation, la perfectibilité infinie.

Il y a donc là encore une tâche de déconstruction sans fin: il faut puiser dans la mémoire de l'héritage les outils conceptuels permettant de contester les limites que cet héritage a imposées jusqu'ici. [...] Le travail philosophique consiste en un affranchissement constant: tout faire pour reconnaître mais aussi passer, sans forcement le trahir, sa propre limite ethnocentrique ou géographique.

Jacques Derrida

Jacques Derrida & Elisabeth Roudinesco (2001), De quoi demain ... Dialogue (Paris: Fayard/Galilée), 39–40.

I. The quest for standardization: between expansion and harmonization

European contributions, in the past, to standardize law in a variety of ways can be considered to be substantial. It may be said that all previous waves of globalization of law have had a distinct European flavour. Currently, the domestic law of countries from all continents either belong to, or are greatly influenced

by, the two major legal systems: continental law and common law. It should be pointed out that the notion of sovereignty, the organization of power through the state in its modern form, the law that regulates the relations amongst states, are all, originally, European constructions.

While the fall of the Berlin Wall in 1989 can be symbolically said to have started the present era of globalization, Europe no longer finds itself in the centre of this phenomenon. The current trend to standardize the law comes, for the first time, not from Europe, but from the United States, along with some specialized international institutions, such as the World Bank, the IMF or the WTO. Furthermore, this process of legal regulation or convergence is made, in some cases, by non-state actors as well, such as the case for the *lex electronica*, telecommunications and other fields. The overwhelming supremacy of the single superpower displays its effects on the realm of law, to the point that, for some, the time has come to speak out against the 'Americanization of the law'.

Law, and legislation in particular, has always been regarded as one of the striking manifestations of sovereignty. In the era of globalization of trade, financial markets, communication and many other sectors of human activity, it is natural to enquire about the changes that have taken place in the sphere of law. Should the idea that the concepts of sovereignty and state are in crisis be true, then the different legal systems cannot escape scrutiny as to their reactions thereto.

The study of the way Europe determined the major legal orientations for the rest of the world in the past, has a twofold relevance. First, it points out that this European prevalence is far from being of purely historic interest: its consequences remain and still influence the evolution of new legal phenomena. Second, the present legal developments or trends in the distribution of power are perceived as being mere replications of previous forms of European legal organization and expansion, while still others are considered, in some circles, as the models to be followed. An example of the former is the comparison of the European Union with the Holy Roman Empire. Examples of the latter are the *ius commune*, existing throughout most of the European continent until the end of the eighteenth century, and the *lex mercatoria*, constructed by the merchants themselves to regulate their relations.

At first sight, globalization naturally calls for standardization of the law. The convergence of rules, even though still formally belonging to different legal systems, is imposed by the reality of the activities carried out on a transnational level. Admittedly, the ideas of unification, harmonization and standardization of the law are probably as old as the science of law itself. By defining natural law, Cicero stated that 'there is a law which is the same in Rome and in Athens, it will be the same today and tomorrow, eternal and immutable, a unique law, for all nations and all times'. For millennia, the idea of a law superior to that created for the legislator and applicable to all human beings, irrespective of the will of

the legislator, was dominant, regardless of whether this natural law emanated from divine will or reason. This prevailing vision of the law was superseded by the positivistic approaches only during the last century. The fact that today many rules have the same content in New York and Paris, in Buenos Aires and Tokyo, has nothing to do with the common nature of human beings or their common submission to the Almighty. It has its roots in the ever-increasing movement of interdependence, exacerbated by globalization. But standardization of the law and likewise interdependence, were not born with the present era of globalization. What is new is their scope and dimension, as well as some particular forms of achieving it.

At this stage, a clarification with regard to the terminology employed here seems necessary. 'Standardization' is used in a rather broad sense. It refers to the different ways of rendering uniform the legal responses to the same facts or situations, irrespective of the place they occur or of the national elements involved. The result of this can be called the legal convergence. The technique of 'standards' is just one amongst others leading to standardization. It consists of the adoption, at an international level, of patterns of normative conduct, with the aim of being generally adopted or followed by the international actors, either public or private, or both.¹ Other techniques include, putting them in the following ascending order of integration: harmonization, reception or imposition of foreign law, and finally unification.

Harmonization implies the maintenance of different national legislations, but obliges them not to be contradictory with regard to a certain, common aim. Comparativists (that is, jurists specialized in comparative law) refer to 'reception' when dealing with the adoption by a country of foreign legislation or techniques, or even legal thinking or concepts. They do not distinguish, however, between the reception and the imposition of foreign law. The former is, in general, the result of an act of imitation of what is considered to be the best already available legislation. It corresponds to a free choice of the legislator, who decides to borrow rules from existing law abroad instead of creating new rules by their content. The latter is when a foreign legal system was imposed through colonization and conquest, and kept once the foreign domination ended.² Unification of law at the national level was mainly accomplished in the nineteenth century. It occurs at an international or supranational level today. It means the substitution of multiple rules by a unique legislation.

International cooperation presupposes, as bare minimum, harmonization, both in fact and in law. The higher the level of cooperation, the more developed the degree of standardization of the law will be. Therefore, the world that emerged after the end of the Cold War calls for more standardization. The democratization process in Central and Eastern Europe, the solution of certain internal conflicts, the emergence of new states, the constitution of the WTO, the deepening of the European integration, the creation of regional economic

integration institutions everywhere, the development of new technologies, the increasing awareness of the need to pursue common goals in the fields of the protection of human rights and international humanitarian law, environment or other common goods, lead to legal harmonization or even unification, as well as reception. In some cases, there exists a danger of unilateral imposition of foreign law. In still other cases, there is a struggle between different legal systems for the conquest of what could be called the new 'legal markets', that is, the new fields of activity and the new democratic societies.

We will try to illustrate in this chapter that Europe continues to be one of the main 'exporters' of legal constructions of major importance, that the undeniable legal standardization coming from the US, international organizations or even private actors is still partial in its subject matter and, finally, that European states, in spite of the fact that they have faced loss of powers in different fields by their transfer to the top or to the bottom, still remain sovereign and play a significant role in the process of legal convergence.

II. The Europeanization of the law throughout the world

Before dealing with the way Europe exports its law to the rest of the world, it is suitable to briefly refer to two models of standardization, which precisely emerged by standardizing the law in the European continent: those of the Roman world of Antiquity and the Holy Roman Empire of the Middle Ages.³

II.1 Roman law

Roman law had an impact which was threefold. First, the emergence, which started with the appointment of a second praetor (the *praetor peregrinus*) in 242 BC, of the *ius gentium*, separated from the *ius civile*, the latter being applicable to Roman citizens only. Although the idea already existed in Athens, what is remarkable is the very existence of a set of rules intending for application to private relations of Roman citizens with foreigners or between foreigners. Another element with potential impact was that its ground was founded on the fact that all peoples live partly according to their own laws, partly according to the universal principles.⁴ It is not by chance, that later the law regulating the relations between states was called the 'Law of Nations' (*droit des gens, Völkerrecht*). Second, the expansion of Roman domination brought about the spread of Roman law. Third, the codification and the study of Roman law afforded the appearance of what was called, at a later stage in history, the *ius commune*, as we will see below.

Roman law then not only supplied the structure of the legal systems for continental Europe, but influenced other systems and provided the basis of legal reasoning in general as well.

II.2 The Holy Roman Empire

The Holy Roman Empire, characterized by the existence of a multitude of principalities and other local powers, with their double allegiance to the Pope and to the Emperor, was the typical example of legal split, by the existence of a plurality of legal regimes. Each city and principality was governed by its own local custom and legislation.

However, due to the work of scholars who 're-discovered' Justinian's Digest in the twelfth century, the *ius commune*, a set of rules based on Roman law, applicable from Poland to Portugal and from Scotland and Sweden to Sicily, came into being. It did not replace local customs and legislation. It was subsidiary to them, as it filled the gaps, helped in interpretation and provided legal techniques. In this sense, the *ius commune* on the continent was exactly the opposite of what the common law of England was meant to achieve, which indeed, unified the law of the kingdom by the substitution of local customs by the rules set up by the judges.

The process of unification of national law, mainly through codification, sounded the death knell for the *ius commune*, and to a large extent, for the *lex mercatoria* as well.⁵ National law is generally perceived as the reason for the disappearance of the first examples of 'supranational' law. It is no surprise then, that jurists who are analysing the legal convergence provoked by globalization are irresistibly drawn toward the concept of *ius commune*.⁶ The temptation to search for analogies is, indeed, large. As for some of the increasing loss of importance of national codes.⁷ Yet, for some other authors it is the process of standardization of the law carried out by the EC/EU that allows the mention of the birth of a new *ius commune*.⁸ For still others, the experience of the *ius commune* is renewed in Europe, but with the reception of American law.⁹

Nevertheless, the idea of a rebirth of the *ius commune* is nothing new. Already three decades ago, René David proposed, as a way to achieve the unification of private law,

to revive and develop the old idea of *ius commune*, adapted to the modern world. It is essential, leaving aside any question of forming super-states or attacking state sovereignty, to reconstitute a body of law whose persuasive value, if not its statutory authority, will be recognized in the various states.¹⁰

II.3 The notion of sovereignty and the conception of the state

The Peace of Westphalia in 1648 is symbolically mentioned as the cornerstone for the foundation of the modern state, characterized by being a *sovereign* state, that is, not subject to any superior power.

European expansion (not only through colonialism) heralded the use of this model of the state everywhere.¹¹ The phenomenon of decolonization, supposed to be a reaction against European rule, brought about the emergence of new 'European-style' states in all continents. It is not exaggerating to say that all states of the world are shaped according to the European model of nation-state, including the most reluctant ones vis-à-vis Western traditions. Thus, the People's Republic of China, the Islamic Republic of Iran, the Great Socialist Arab Libyan Yamahiriya, to mention a few examples, are all based on the traditional distribution of executive, legislative and judiciary organs. Ironically, the states that received the model of sovereign states from Europe are the first to defend the notion of sovereignty today.

From a legal perspective, this phenomenon of exportation of the European state has been the most important one, since states are the envelope and the structure of the legal domestic systems. However, it is not the only fact worth pointing out. Constitutionalism, codification, standardization of the rules solving the conflict of norms pertaining to different states, are but a few other examples of the way Europe influenced the legal developments of the rest of the world.

II.4 The development of international law

International law, as we know it today, is largely the product of European theory and practice. Needless to say, this does not mean that other regions of the world did not have their own system regulating their international relations, or that they did not contribute to the development of general international law. It is nevertheless a fact that the structure and the main content of international law are of European origin. In his classical study of the history of international law through epochs, Wilhelm Grewe distinguished the main periods that fashioned international law until the First World War as being the Spanish (1494–1648), the French (1648–1815) and the British (1815–1919) epochs. After the end of the First World War, European countries lost their hegemony in the making of international law. The interwar period is characterized as a transition one of Anglo-American predominance, the epoch of the United Nations (1945–89) as the one of American–Soviet rivalry and the emergence of the Third World,¹² and the present epoch as the one of an international community with a single superpower.¹³

The epochs of more quantitative development of international law, the French and British ones, coincide with the designation of this discipline as the 'Public Law of Europe'. International law as a system was indeed considered as only applicable amongst the European powers, including later the new states having a European stock, such as the United States and the Latin American countries.

This decisive European influence in the formation of international law also had its impact in domestic laws of other states, especially the 'new comers', admitted to enjoy 'the benefits of European Public Law', as the Treaty of Paris of 1856 stated referring to the admission granted to the Sublime Porte. For example, the legal regulation of the treatment to be accorded to foreigners needed adaptation in order to satisfy the 'international minimum standard of treatment'. A similar phenomenon of harmonization of national laws through the influence of international law can be found in the second half of the twentieth century with regard to human rights, in which the European influence was preponderant.

II.5 The expansion of the European legal systems

The European legal systems expanded throughout the world through different means. Colonialism was the main way through which other societies were filled with Spanish, French, English and other European legal orders. The movement for codification in continental Europe, which began with the Prussian *Allgemeines Landrecht* in 1794 but took off with the *Code Napoléon* of 1803, was largely followed in the rest of the world. Even a typically isolationist country like Japan could not resist the reception of German and French law at the end of the nineteenth century, when the country opened itself to the rest of the world. In general, European codification inspired the codification movement everywhere. Hence, the codes adopted in Latin America and other countries were a mix of articles generally borrowed from different pre-existing European codes. In extreme cases, a foreign Code was accepted in its entirety, being applicable to the country, without any 'nationalization' at all. The most celebrated case was the adoption of the Swiss Civil Code by Turkey's Kemal Attaturk in 1926.¹⁴

III. The standardization of the law in Europe

Compared with other continents or regions of the world, Europe shows the highest degree of regional standardization of the law. Within Europe, the highest degree corresponds in turn to the EC/EU, although the harmonization process carried out in the 'bigger' Europe is not negligible either.

III.1 Within the EC/EU

The idea of standardization of the members' national law was already present at the foundation of the EEC. Although the Treaty of Rome refers in one case to *'approximation* [*rapprochement*, in French] of national legislations' (art. 3 h), and to *'harmonization* of legislation' (art. 99) in another, the distinction is one of degree rather than substance, for approximation is just a first level of harmonization.¹⁵

Indeed, the EC/EU is a striking example in which different forms of standardization take place. Regulations and decisions are means of unification, whereas directives amount to harmonization.¹⁶ Although directives leave the

choice of form and methods of implementation to the national authorities in order to achieve the results established by them, their effects go further than a simple technique of harmonization. The margin of manoeuvre of national legislation is very limited, thanks to the mechanisms developed by the Court of Justice of Luxembourg to cope with the situation in which a member state did not rightly implement (or did not implement at all) a directive: the indirect effect (that is, the obligation to interpret national legislation in conformity with the directive), the direct effect (the binding effect as to the result to be achieved and the possibility of invoking the directive before national courts) and the responsibility of member states for non-implementation.¹⁷ This is just one example of the powerful standardization effect that the case law of the European Court of Justice possesses, which since the *Costa* v. *ENEL* case has consistently affirmed the supremacy of Community law.¹⁸ Moreover, its judgments with regard to conformity or not of certain legislation or measure of one state ineluctably influences the attitude of the others.

Of the three pillars of the European Union, the first one, the Community Pillar, is the most developed in terms of standardization. In matters of Community-exclusive competence, the result is unification through Community law, since member states are excluded from legislating in those matters. The two other pillars (common foreign and security policy, and justice and home affairs), due to being politically more sensitive, still closely rely upon the direct will of the member states' governments. Consequently, the degree of standardization is lower. One way of developing it is by 'transferring' some matters from these pillars to the first one, as has been the case since 1 May 1999 with the judicial cooperation in civil matters having cross-borders implications.¹⁹

III.2 Pan-European standardization

The process of legal convergence in the 'bigger' Europe is being carried out through different means, of course, far more limited than those existing in the (currently) 'little' Europe. The tools are, in some cases, the traditional system of the adoption of treaties, in other cases, the unilateral reception of Community standards by way of national legislation of non-member states.

The Council of Europe, through the adoption of international conventions over half a century, made a silent but considerable effort toward standardization of law. The subject matter covered by this effort has a wide range, as highlighted by two extreme examples such as the calculation of time-limits and the immunity of states. No doubt, the most sparkling achievement has been the regime of protection of human rights set up by the Treaty of Rome of 1950 and its successive protocols. Other conventions obtained only a limited number of ratifications or accessions, although this does not necessarily mean that their solutions were not followed at the national level.²⁰

The standardization of the law is also achieved by the requirement of harmonization of the domestic law with the Community law of the actual or potential candidates for membership within the EU as one of the conditions for eligibility. The 'acquis communautaire' becomes then a material source of standardization outside the EC/EU. In other cases, the standardization occurs through the creation by treaty of the European Economic Area, or by bilateral agreements between the EU and countries such as Switzerland. Although not being a candidate for membership to the EU, Switzerland has, to a large extent, synchronized its relevant legislation to the same wavelength as that of the EC, through 'der autonome Nachfolgzug', a euphemism used in Bern to explain that Switzerland follows European standards, even though it is not obliged to do so. The same terminology is employed to explain that the Swiss government applies all the Security Council sanctions, without being a member of the United Nations.

III.3 The construction of the European Union and its perspectives

The present wave of globalization has found Europe in a complex process of integration. Nation-states are losing their powers by delegating them both to the top (the Community/the Union) and to the bottom (the regions). We have referred to the former phenomenon above. The latter is mainly the result of constitutional or administrative changes within the states concerned, as was recently the case in the United Kingdom. With different degrees and mechanisms, many European states conducted political or administrative decentralization in the last decades, the extreme case of distribution of power between the central government and the constituent parts of the state being that of Belgium in 1993. The European Union is not completely alien to the present regionalist wave. Some of the regionalist movements – whether secessionist or not - see the EU as the way to escape from their state 'rule'. The Committee of the Regions was established by the Treaty of Maastricht. Some regions have their own offices in Brussels. To some extent, one cannot avoid thinking about some kind of renewal of the Holy Roman Empire, with the fragmentation of political entities in a multitude of regions on the one hand, and the unification of the law applicable to all of them, on the other hand. For the time being, this is a vague perspective, rather than a future reality.

The transfer of sovereign powers and their relinquishment must be distinguished. The key to that distinction lies in the state's capacity to regain them, or put another way, whether the transfer is permanent or not. An independent state which decides to become a member of a federal state consents to the permanent loss of part of its powers (that is, defence, foreign affairs) in favour of the central government. It cannot recover them, unless it successfully secedes. On the contrary, an independent state, a member of an integration institution, such as the European Union, or more generally of any international

organization, always retains the possibility to withdraw, recovering, at the same time, the powers it had previously delegated.

Europe knows where it comes from, but it does not know where it is going, from the point of view of political organization. Supranationalism, federalism with different perspectives, confederation in the framework of the existing nation-state scheme, the splitting of nation-states and the creation of ministates within a confederation, are some of the options at stake.²¹ Today, Europe constitutes the laboratory in which a new distribution of power at the regional level is taking shape.²²

IV. Legal globalization phenomena and their implications for Europe

Globalization of markets and telecommunications, deregulation and privatization characterized the last decade from the economic point of view. The process of democratization in different regions of the world, the adoption of collective sanctions and the use of force with or without UN Security Council authorization, the implementation of an international criminal jurisdiction and some notable cases involving the exercise of universal jurisdiction by national courts with regard to major crimes committed abroad, were outstanding events from the political point of view during the same period. Law followed these developments in different ways. The debate turned, in some cases, around the choice of the necessary new legal regulations, and in other cases around the interpretation of existing rules or the legality of some conducts followed in order to face the new challenges of the post-Cold War era. Undoubtedly, the US decided or at least greatly influenced most of these choices, through unilateral action or through international institutions. Furthermore, American private actors are also playing a major role in the legal configuration of the new economic and communications domains.

IV.1 Americanization of the law

As we have seen above, for some authors, the present period is characterized by the reception of American law in Europe. Like a new *ius commune*, this reception does not consist only in the adoption of American legal rules, techniques or institutions. It also consists of the widespread use of English, in the same vein as Latin was long before, and of the formation of legal professionals in American universities, instead of the old European universities.²³ These last features are largely overestimated as to their impact in the 'Americanization' of the law. For using English as *lingua franca* and studying across the Atlantic does not necessarily imply the adoption of an American way of thinking.

Europe, and with her the rest of the world, has nevertheless received an impressive number of legal concepts and techniques in business, trade, banking,

the stock market, finance, telecommunications, insurance and corporate law in the second half of the last century from the US. Even the terminology borrowed from America is largely kept in its original language. Making a list of the English technical terms now of general use in different languages would be too long. This tendency of reception of American law increased extraordinarily in the last decade. The new trend is to enlarge this phenomenon to other areas of law, such as criminal law or procedure. The 'accusatorial' procedure of common law has begun to be partially or even entirely imposed in continental Europe, which traditionally practised the 'inquisitorial' procedure, in which the judge plays an eminent role.²⁴ Arbitration, already largely imposed in commercial transactions, is also expanding in civil matters. Mediation through private or semi-public agents is also gaining pace in national legislations. These cases of 'privatization' of justice trace their origin to the US.²⁵

One reason for this Americanization is the actual or potential pressure of American economic actors. States are not willing to lose American investments or clients, thus feeling obliged to adapt their legislation to the practice of these American actors. However, this process of Americanization of the law should not be over-evaluated. For a large part, European systems of law remain faithful to their traditions.²⁶ The same can be said about an eventual American constitutional influence in the drawing of the Europe of tomorrow. The idea of the United States of Europe is not new, and it was advanced from extreme opposite sides. American federalism is nevertheless difficult to perceive as a model for European integration. Transplanting the model from the other side of the Atlantic faces a number of considerable obstacles ranging from the linguistic barrier to cultural and historical differences and, further, the difference in their origins and the distribution of power.

Law, and international law in particular, is the field in which the American supremacy has more difficulties in imposing it. Law is probably one of the last pockets of resistance against American hegemony. Outstanding examples are the American impossibility to impose its view in international conferences having adopted multilateral conventions, such as those of Ottawa on Anti-Personnel Mines of 1997, of Kyoto aiming at the adoption of a Protocol to the United Nations Framework Convention on Climate Change of the same year, or of Rome on the Statute of the International Criminal Court of 1998. It is not just by chance, that in all these cases the European positions were different from those adopted by Washington.

IV.2 Standardization by International Organizations

The specialized international (that is, inter-state) organizations, whether from the UN family or not, substantially contribute to the harmonization or even unification of the law in their related fields through their action. It is especially the case of highly technical institutions using the contracting-out system, such

as ICAO, WHO, WMO and others, whose resolutions are directly applicable in the national systems of their members, provided that these states do not notify their decision of not being bound by them. Most importantly, from the point of view of the substance, is the standardization achieved in the field of international trade with the adoption of the Marrakech Agreements and the resulting activity of WTO.

As such, the process of legal convergence is not new. There are even older institutions aiming at the unification of law, such as the Hague Conference of Private International Law, created by an initiative of the Dutch government in 1893, or the International Institute for the Unification of Private Law (Unidroit), created in Rome in 1926. What is particularly novel is the enlargement of the fields covered by the standardization, the level attained by it and the speed of the process.

American influence is tangible in the activity of international institutions in the area of trade and finance. In some cases, the American government plays an eminent role by fixing the agenda, in others, by furnishing the content of major parts of the legal instruments adopted. Thus, the Vienna Convention on Contracts for the International Sale of Goods of 1980, the Unidroit Principles of International Commercial Contracts adopted in 1994 and the Principles of European Contract Law of 1995 are largely modelled after the American Uniform Commercial Code.²⁷ Another example worthy of mention, is that of 'corporate governance', that is, the establishment of basic shareholders rights and the protection of the equity investors. The debate began in the US in the 1970s. The American Law Institute adopted the Principles on Corporate Governance in 1993. The OECD adopted five principles in 1999. These principles were integrated in the European legal systems taking one step at a time. Corporate governance is part of the IMF and World Bank policies of standardization of the law today.

Indeed, one of the contemporary important tools of standardization of the law is the emphasis put by the Bretton Woods institutions to improve, according to them, the legal framework for global markets and finance through the development of legal standards. The fields of primary importance are banking, accounting, bankruptcy, corporate governance, insurance and securities market regulation. These standards may be used as conditionalities in loan agreements.²⁸

A new trend looming large in the era of globalization is the standardization of sensitive legal areas through the actions of a political body such as the Security Council. The most recent and spectacular example is illustrated by resolution 1373 (2001) with regard to the measures that UN state members have to adopt against terrorism, including improving their legislation to better fight this scourge. This new kind of activity is pursued not only with the active participation of the European members of the Council, but in some cases thanks to their own initiative as well.

IV.3 Standardization by private actors

Another trend of globalization is the increasing role played by private actors in the legal regulation of particular fields, a role traditionally reserved for the states and international (inter-governmental) organizations. Globalization would reveal the ultimate consecration of the lex mercatoria. The International Chamber of Commerce and its branch organizations are followed by other nongovernmental institutions in other fields, such as the International Maritime Committee, the International Olympic Committee, and so on. The most remarkable contemporary example of the role of private actors in the legal regulation and management of a particular activity rests in the case of the Internet, the symbol par excellence of globalization. The European Union did not insist upon its original idea of entrusting the administration of the Internet to an international organization and accepted the position of the American government heading the creation of ICANN (Internet Corporation for Assigned Names and Numbers), a private institution created under Californian law. In exchange, the EU obtained the creation of the Governmental Advisory Committee, open to all governments and international organizations, albeit, having only an advisory competence.29

IV.4 Have the European states lost their control upon some new transnational activities? A paradigmatic case: the decision of the Tribunal de Grande Instance of Paris in the *Yahoo!* case

It is a common belief that 'cyberspace' is a world without borders. In order to show that this picture is exaggerated, attention will be drawn to the decisions of the Tribunal de Grande Instance of Paris in the case *UEJF (Union of Jewish Students of France) and LICRA (League Against Racism and Anti-Semitism)* v. *Yahoo! Inc and Yahoo France*, of 22 May 2000 and 20 November 2000. The plaintiffs accused Yahoo! of violating article R.645–1 of the French Penal Code for the display of Nazi objects for sale on its auction site located in the US. The respondent invoked that the French tribunal lacked jurisdiction, primarily because its server was located in the US and its services were essentially addressed to surfers located in the territory of the US. Moreover, according to Yahoo!, any measure decided against it could in any case not be executed in the US, since that measure would be in contradiction with the First Amendment of the Constitution, which guarantees the freedom of opinion and expression.

The Tribunal rejected Yahoo!'s defences. It considered that, even if the site 'Yahoo auctions' is mainly intended for surfers located in the US, the auction of Nazi objects in that site is accessible to all persons willing to follow it, including French people. By permitting the visualization in France of these objects and the eventual participation of French surfers to such an auction, Yahoo! Inc. committed a fault on French territory. The Tribunal also stressed the fact that

Yahoo! knew that its auction site is also addressed to French people, since each connection from France to it is responded to with advertising in French.

The decision of the French tribunal in the *Yahoo!* case imparts three important lessons, the first one being that web sites cannot consider themselves to be safe from prosecution for violation of laws of countries other than where they are located. Consequently, states have the means of pursuing the application of their laws with regard to web sites located outside their territories, provided that a jurisdictional link exists, as in the case depicted above. Finally, this case clearly shows the potential divergent interpretation of basic human rights, such as freedom of expression, on both sides of the Atlantic.³⁰ For the time being, the question remains open, since Yahoo! has brought a case in an American court seeking to preclude any possible enforcement of the French decision in the US and the decision is pending.

V. Conclusions

At the end of the day, a balance of what Europe has done for, and has received from, the standardization of the law, still appears to be in favour of the European input, rather than to reception from abroad.

No doubt Europe, both at the Community and the national level, is experiencing the influence of law coming from 'abroad'. Nevertheless, it is not a novelty. There is no 'pure' system of law, without any external influence. In spite of the fact that there is undeniable influence of American law in some particular fields, the European legal systems keep their main characteristics, techniques and traditions.

There is both an American and a European influence in the standardization of the law.

The experience of integration in Europe is used as a model all over the world: Europe continues to be the main 'exporter' of legal-political constructions related to the organization and distribution of power. In the past, it was the nationstate. At present, it is its model of integration that is followed at different levels in many regions of the world.

The European regime of protection of human rights has been not only a model for the rest of the regions of the world, but also the standard for measuring both the scope of the rights protected and the effectiveness of the system established in those regions.³¹

The influence of Europe in the delineation of the new legal regimes of the twenty-first century will depend in the last resort on the European attitude itself. Independence and active defence of its legal perceptions, interests and values as was notably the case with regard to the Helms–Burton and D'Amato–Kennedy Laws, and within the WTO in other different cases,³² or submission, as is the case in the field of the interpretation of the rules governing the use of force and the

system of collective security.³³ On the one hand, Europe is better placed than any other region or country to face American pretensions to unilaterally impose new rules or peculiar interpretations of existing ones. On the other hand, Europe is well equipped to play a significant role in the collective process of standard-ization of the law at the global level.

Notes

- ISO (International Organization for Standardization) defines 'standard' as a 'document, established by consensus and approved by a recognised body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context'. Other definitions, such as the one of the WTO Agreement on Technical Barriers to Trade, lay stress on the non-mandatory character of compliance with standards. For an analysis of different definitions of standards in a technical sense, see Schepel and Falke (2000:91–5).
- 2. For an interesting analysis of cases of 'reception' in different regions of the world, see Doucet and Vanderlinden (1994).
- 3. See generally Wieacker (1994).
- 4. Gaius, lib. 1 Institutionum.
- 5. Von Ziegler (2000:878). For a critical approach, see Westenberg (1990:198-9).
- 6. See in particular Delmas-Marty (1996).
- 7. Wiegand (1998:219).
- 8. Koopmans (1992).
- 9. Wiegand (1991).
- 10. R. David (1971:4–5). As representative of France at UNCITRAL, Professor David had proposed the creation of an international organization called *'Union pour le jus gentium'*, aiming at the unification of the law governing the private international legal relations. The uniform laws adopted by the organization would automatically enter into force within the member states, unless they announced their contracting out. See David (1977:7).
- 11. Liebich (Chapter 5 in this volume).
- 12. Grewe (1988).
- 13. Grewe (2000).
- 14. It also adopted the Civil Code of Procedure of the Swiss Canton of Neuchatel. See David (1971:16).
- 15. For a discussion of this topic, see Pajor (1992) and the authors he quoted.
- 16. See art. 249 EC Treaty, as it stands after 1 May 1999, date of the entry into force of the Treaty of Amsterdam.
- 17. See Prechal (1995).
- 18. Case 6/64 [1964] ECR 585.
- 19. See art. 65 EC and the analysis of Boele-Woelki (2000) and Kotuby (2001).
- 20. See Monaco (1984). For an updated list of the conventions adopted in the framework of the Council of Europe and the status of signatures, ratifications, accessions and successions, see: http://conventions.coe.int/treaty/EN/cadreprincipal.htm
- 21. See some proposals in Breton and Ursprung (Chapter 13 in this book).
- 22. The Declaration of Laeken of the European Council of 15 December 2001, setting up a 'Convention' in order to make proposals upon the future institutional developments,

raises a number of very important questions with regard to the distribution of power within the European Union itself and between the EU and the member states.

- 23. In this sense: Wiegand (1991:230–2).
- 24. This is true not only in Central and Eastern European countries after the end of communist rule, but also for Western countries such as Italy. See Cedras (2001:153).
- 25. See Kessedjian (2000:238–9).
- 26. In this sense, Reimann (2001:66–7).
- 27. See Jacquet (2000), who also shows other influences, such as those coming from German law.
- 28. See the in-depth research paper of Pistor (2000).
- 29. Mayer (2000), Clerc (2001).
- 30. For a general consideration of this clash of interpretation of the freedom of expression and its impact in Europe, see Weiler (1999:105–7).
- 31. Notably, the US, not having ratified the Inter-American Convention of Human Rights, is not party to any regional system of protection of human rights, although the Inter-American Court of Human Rights has always counted an American judge.
- 32. For example, *European Communities: Measures Concerning Meat and Meat Products* (*Hormones*) WT/DS26/AB/R. Available at: http://www.wto.org
- 33. See notably the conclusions and plan of action of the Extraordinary European Council Meeting on 21 September 2001, SN 140/01. Available at: http://www.europa.eu.int

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5 Nationalizing the Globe, Globalizing the Nation

André Liebich*

I. Inventing the nation-state

The paradigm of the nation-state has been Europe's most successful export product. Indeed, the European model of the nation-state has acquired a worldwide monopolistic position as the sole legitimate form of political organization. As a result, almost the entire globe is today divided into political entities which claim to already be or aspire to become nation-states, that is, sovereign territorial units of governance (states) which coincide with a cultural reality (nations).

In attaining this monopolistic status the nation-state has edged out previously dominant modes of governance. As William McNeill (1986) has superbly argued, within the era of written history, empires, understood as polyethnic and hierarchically organized units, have been the rule. To the extent that these empires have met rival forms of complex and advanced political organization, these have been, as often as not, city-states or, more ephemerally, confederations of states or of city-states. In Martin Thom's (1995:3) words 'the nation-state has been shadowed throughout its history by the union of states, or confederation, a fact which the characteristic teleologies of nationalist belief tend to mask'. Thom's argument has received detailed confirmation in the work of Hendrik Spruyt (1995) and has been theorized by Stein Rokkan (1975). Moreover, the alternative notion of a culturally or ethnically homogenous national state has been decried by William McNeill (1986:59) as a barbarian ideal. Yet it is precisely this ideal that has prevailed in a small but key part of Western Europe.

This is not to say that the modern West European nation-state emerged seamlessly out of the fragmented feudal order and the imperial Roman framework that preceded it. In fact, the rise of the powerful principle of sovereignty may well have initially stunted the development of the national state by conferring equal status upon very diverse and clearly non-national political units. By the end of the nineteenth century, however, the ideal of the nation-state had emerged triumphant in that part of the world that had seen its birth. As Alfred Cobban (1969:31) put it, 'It is [therefore] justifiable to regard the development of a widespread civilisation, in which nation states have not passed away before the attack of the imperial principle, as a peculiar characteristic of the Western world.'

II. Triumph of the nation-state?

The nation-state was a triumphant but fragile construction. Effective affirmation of the nation-state concept did not extend beyond a few already well-established West European states. As Charles Tilly's (1975) work demonstrates, these states had, in all cases, arisen before the adoption of the national principle and even independently of it. Moreover, the nationhood of the most powerful of these states, France and Britain, rested on uncertain premisses. France declared itself a nation on the basis of a set of ideological tenets (eventually to be summarized as *principes républicains*) which ignored existing divisions within the country and gave universalist cover to a particularist national ethos. Britain, as a political construction, overrode its own component parts eventually identifying one of these parts (England) with the whole.

The self-understanding of the nation-state depended on the discounting of such anomalies as minorities. Among the achievements of the nation-state was its ability to reconcile such national monolithism with the political liberalism that was firmly planted in that period. One may recall in this context John Stuart Mill's (1861: Chapter XVI) dictum that 'Free institutions are next to impossible in a country made up of different nationalities', and his dismissive remarks that:

Nobody can suppose that it is not more beneficial to a Breton, or a Basque of French Navarre, to be brought into the current of the ideas and feelings of a highly civilized and cultivated people ... than to sulk on his own rocks, the half-savage relic of past times, revolving in his own little mental orbit, without participation or interest in the general movement of the world. The same remark applies to the Welshman or the Scottish Highlander, as members of the British nation.

This sentiment remains powerful, as witness Michael Lind's (menacing?) statement that 'far from being a threat to democracy, nationalism – the correspondence of cultural nation and state – is a necessary, though not sufficient, condition for democracy in most places today' (Lind 1994:94).

The triumph of the nation-state also coincided with the culminating phase of European overseas expansion. It is tempting to say that the states most involved in this process were able to see themselves as national states at home only because they were empires abroad. The apposite statement of the Victorian historian Sir John Seeley that 'The history of England is not in England but in America and Asia' has been recently echoed by Salmon Rushdie's remark that so much of English history has happened overseas that the English don't know what it means (Seeley and Rushdie, quoted in Colley 2001). Certainly, the role of empire in forging an ideology of national integration, especially for minorities within the new national state (Scots or peripheral Frenchmen, for example) is undeniable. Marxists have had an inkling of empire's role in dampening class consciousness; their analysis can be extended to national consciousness as well.

The imperialism of the European nation-states did not seek to create nationstates out of their overseas possessions. Quite to the contrary. As Uday Singh Mehta (1999:121) puts it, 'The liberal justification of the British Empire in the eighteenth, but most conspicuously in the nineteenth century was premised on the presumed nonexistence of extant native political societies.' Where there was no political society there could hardly be the making of a nation-state. Nevertheless, the dynamics of interaction between the metropolis and its colonies eventually led precisely in that direction. The process was not immediate. The early colonial empires, established before the national principle had taken hold in Europe, had been organized as trading empires (see Curtin 2000). They became transformed into territorially bounded units in the course of the nineteenth century thus establishing the key precondition of their own future statehood. To take but one significant example of this process as described by an Indian author:

What made possible the self-invention of a national community was the fact of alien conquest and colonial subjection. It was the British interest in determining geographical boundaries that by an Act of Parliament in 1899 converted 'India' from the name of a cultural region into a precise pink territory ... The arbitrary precisions of colonial administrative techniques thus brought forth an historical novelty, a unified and bounded space called India. (Khilnani 1997:155)

The first phase of decolonization, in North and South America at the end of the eighteenth century and at the beginning of the nineteenth century (which also preceded the most powerful wave of colonization that took place in the late nineteenth and early twentieth century in Africa and Asia), coincided with the earliest stirrings in favour of the nation-state in Europe. Indeed, the European paradigm of the nation-state was borrowed by the Americas before Europeans were themselves fully conscious of it. It was the last and most significant wave of decolonization, after 1945 (French and British, but also Dutch and Portuguese) that definitively undid territorially based empires governed by nation-states. It demolished these empires, however, in the name of the nation-state principle. Decolonization attributed putative nation status to political entities whose colonial borders had been defined in terms remote from the national principle. Statehood was the only road out of colonialism and statehood was inevitably coupled with nationhood. Both were preconditions of something called 'modernity'. Indeed, nation and state were so closely linked that even non-colonial state entities, from the Ottoman Empire to Nepal, found themselves obliged to don the mantle of nationhood as they emerged into modernity.

It is hardly surprising that post-colonial elites should have sought to imitate the self-understanding of those who had dominated them so successfully. Even those members of the post-colonial elite who had not frequented the LSE or the Sorbonne could not fail to be impressed by the close-knit self-confidence of the imperialists who ruled over them.¹ Such confidence rested on technological superiority, to be sure, but it was also founded on the unifying myth of the nation as a homogeneous body speaking with one voice and in one language.² The lessons were learned thoroughly. Senegal's historic leader, Leopold Senghor, declared that his aim was to achieve the European model of 'la Nation' and this ambition was tacitly shared by many other African and Asian leaders (Neuberger 1976:245). One is not surprised to discover that the Hindu nationalist Vinayak Damodar Savarkar translated Mazzini's autobiography into Marathi or that he founded a secret society modelled on Young Italy (Khilnani 1997:160). And the process of 'Indianization' defined by Savarkar's successors in the BJP as the forging of 'one nation, one people, one culture' has a distinctly familiar ring to it for European ears (Khilnani 1997:151).

The hegemony of the nation-state idea outlived the colonial empires which had transmitted it and which had served, abusively, as its incarnation. Indifferentiated references to 'nation' and to 'state' – as in the use of 'national' to express the notion of 'state-related' (English does not have an adjective for 'staatlich' or 'étatique') or in the use of 'nationality' to express the concept of '(state) citizenship' – are as frequent in the political and legal vocabulary of postcolonial entities as they are in the countries where these terms originated. Moreover, these ambiguities of politics have been re-enforced by the terms in which scholarship has framed the issues confronting post-colonial states. The literature of 'modernization' invokes 'nation-building' or 'state-building' – without systematically differentiating between the two – as developmental imperatives. Knowledge itself thus remains wedded to the nation-state paradigm (Liebich 1997).

The modernization approach gives rise to an optimistic view of the suitability and adaptabilility of the nation-state paradigm to the non-European world. Benyamin Neuberger (1976) sees a similarity between the development of

medieval Europe towards nationalism and the situation of contemporary Africa. He argues that nationalism has always involved a process of imitiation, even within Europe, and therefore the imitative quality of the non-European nationstate does not detract from its force or authenticity. Indeed, citing Aristide Zolberg, he maintains that political architects need blueprints and that the European experience provides a wealth of such models and counter-models for would-be emerging nation-states. The evolution of African politics since Neuberger wrote in 1976 suggests that the process of exporting the nation-state is a more diffiuclt and even bloodier one than the modernization school expected.

Acceptance of – or submission to – the nation-state paradigm has been subjected to critical scrutiny by various post-colonial intellectuals. One Indian author (Kaviraj 1994:129) complains that 'the structure of the international system forces all dissatisfaction to seek articulation, however inappropriate, through the obligatory pretence that each minority, each disgruntled group of people, are a nation in waiting'. Another of his compatriots (Chatterjee 1991:521), responding to Benedict Anderson's thesis of the nation as 'imagined community', objects (somewhat unfairly, in my view) that 'if nationalists in the rest of the world have to choose their imagined community from certain "modular" forms already made available to them by Europe and the Americas, what do they have left to imagine?' The same Indian intellectual fulminates against nationalism as

an ideology [that] is irrational, narrow, hateful and destructive. It is wholly a European export to the rest of the world. It is also one of Europe's most pernicious exports, for it is not a child of reason or liberty, but of their opposite: of fervent romanticism, of political messianism whose inevitable consequence is the annihilation of freedom. (Chatterjee 1986:7)

Such a *cri de coeur* cannot deflect the nation-promoting processes of postcolonial and post-imperial states, however contradictory these may be.³ It confirms the depth and durability of *ressentiment*, that explosive combination of angry rejection and hungry adoption, that fuelled nationalist thought, within Europe as well (Greenfeld 1992). To quote Sudipta Kaviraj again (1994:111), 'The nation-state has undoubtedly become the predominant form of modern political identity, but this idea brings together in an historically special and unstable combination two dissimilar things – the tangibility of an institutional organization of force in the state which derives its imaginative and moral justification from the idea of a nation.' The force of the nation-state paradigm is such that it has even outpowered attempts to formulate alternative bases of legitimacy. The ideal of a state defined in terms of class has disappeared. Even the universally endorsed principle of the self-determination of 'peoples', formulated in an encompassing non-national sense, has become not an alternative to 'national self-determination' but a synonym for it (cf. Barkin and Cronin 1994:123).

III. Sequels of empire

The acknowledged persistence of the nation-state paradigm overlooks, however, another fundamental process: even as the nation-state proclaims its triumph throughout the world, it finds itself undermined on its own home ground. Even as the metropolitan states have given up their empires to bask in their domestic homogeneity, they have found themselves living with remnants of empire in the form of new post-colonial minorities. Empires have gone but minorities have returned. The empire has struck back, or, to use a Burmese expression, it has paid history back with interest.⁴

The relationship between empire and minorities is a direct one whereas the relation between the nation-state and minorities is an inverse one. The nation-state seeks to homogenize its population in cultural terms, whether by assimilation, by expulsion, or by extermination. Forcible methods of homogenization, historically directed against minorities such as Jews and religious dissenters (Wallerstein 1974:147–9), mark the rise of the modern nation-state in Western Europe and they continue to find numerous, more recent imitators elsewhere. In contrast, empires, themselves defined by their heterogeneity, have relied on minorities to hold their structures of power together. Imperial powers have categorized their subject populations and selected some groups over others to pursue their imperial aims, whether economic or military. Even more imaginatively, great powers have created minorities by extending privileges and protection to individuals living under foreign sovereignty in non-colonial though dependent states such as the Ottoman Empire.⁵

It is altogether not surprising that such once-privileged minorities should have paid the price of nation-state formation. The fate of Ottoman Greeks and Armenians caught up in the transformation of the Ottoman Empire into a national Turkish state prefigured the destiny of those Algerians or Indonesians identified with the colonial power and made to bear the consequences of this identification. Unexpectedly, however, the former colonial powers found their home territory to be the destination of a substantial immigration originating in their extinct empires, and not consisting uniquely of those former subjects who had a special relationship to the colonizer. This was as much the case in Great Britain as in France, although the colonial policies of these states had been very different, the former favouring indirect forms of rule, the latter direct ones (Anderson 2000:56ff). Both these countries, as well as other Western European states, clamped down on immigration, beginning with the economic recession of the early 1970s. By then, however, 'there were over 12 million immigrants in Western Europe, and processes of ethnic minority formation had become irreversible' (Castles and Davidson 2000:55).6

The novelty of an ex-colonial population residing more or less permanently - 'here for good', to use Stephen Castles' (1984) expression - in the heart of the ex-colonial power defies the cultural and the political self-understanding of both parties. West European nation-states have only reluctantly made room for national minorities in legal terms and they have done so in a way which excludes from the definition of a minority all non-citizens and immigrants (see Thornberry 1991; Cumper and Wheatley 1999). Such restrictions are so clearly in violation of basic norms of equality of treatment and democratic inclusiveness that they are simply untenable.⁷ Indeed, the impression one has – for example, in looking at the pattern of adoption and reservations concerning the Council of Europe's 1995 Framework Convention on the Protection of National Minorities (www.coe.fr) – is that minority law is being devised in such a way as to cover those minorities which pose the fewest problems for the state and to exclude those, such as the ex-colonials, whose situation is the most urgent. On the policy level, there may be a greater readiness to acknowledge the reality of a foreign but permanent population but such readiness is tinged with hopes of long-term resolution of the problem by way of full integration or assimilation.

In fact, the integrative capacity of the nation-state may well have reached its limit. This is due not only to the numbers involved (millions rather than thousands of newcomers) or to the religious factor (both Britain and France successfully absorbed Jewish immigration from Eastern Europe) but to a combination of subjective and objective factors. These range from the upsurge of a 'politics of identity' in Western countries to the precariousness of employment for members of immigrant communities (see Waever et al. 1993; on the British case, Doty 1996). Among the most significant of these factors is the increasing prominence of diaspora networks, once a typical feature of imperial formations and now a characteristic phenomenon of the European nation-state (Cohen 1997; Kotkin 1993). Whether national (Indian, Chinese, Lebanese), subnational or trans-national (Parsee, Sikh, West Indian, Kurdish, Isamaili), diasporas operate outside the conceptual boundaries of the nation-state. Their terms of reference are those of their group, wherever it may be found, and of their country of origin, as well as of their country of residence. Even more significantly, their terms of reference are increasingly not to a country, that is, a state, and certainly not to a nation-state. In numerous ways, diasporas are thus inherently subversive of the nation-state (cf. Soysal 2001). To be sure, not all diasporas are of a postcolonial origin but they all undermine the pre-eminence of the nation-state, in cultural and economic terms; ultimately, even in political terms.

IV. The legacy of the nation-state

The era of the nation-state will have been a brief and localized one. A state where political identity corresponds fully to cultural identity may have come close to

realization on the Atlantic fringes of the European peninsula at some time in the last 200 years. It did not extend further, either in space or in time. As chance would have it, however, it was precisely at this historical moment that large parts of the world came under the sway of Europe and, with it, of the European idea of the nation-state. The legacy of these circumstances remains with us. It continues to mark the categories of social science (Keating 2001). It still dictates Europeans' attitudes to their own community. It imposes expectations of a specific type of community on the non-European world, one where each political unit corresponds to a single discrete cultural unit. It is a poisoned and unsustainable legacy which we would do well to discard.⁸

Notes

- * My thanks to Gopalan Balachandran and to Sabina Donati for their helpful comments on the draft of this chapter.
- 1. Nothing conveys more eloquently the extent of this self-confidence than the ratios of European officials to native population. These range from 1:18 900 (1930s) in British Kenya, through 1:27 600 (1921) in French West Africa and 1:34 800 (1936) in Belgian Congo, to 1:267 300 (1881) in India and 1:5 333 000 (1872) in Hyderabad, though this last case is not really comparable as Hyderabad was never directly under colonial rule (Hechter 2000:51).
- 2. A noted historian muses on the paradox that colonial decline corresponded to increasing technological superiority in the following terms: 'Superior military technology was thus not in itself a sufficient explanation for the European conquest of the world during the centuries of imperial power. The question remains to be answered, why this hegemony should have crumbled so rapidly just at the moment when technological superiority was at its most absolute. Much of the solution must be sought in the realm of intellectual and moral assumptions' (Howard 1984:41).
- 3. On the subject of 'nationalizing' states, addressed in the context of post-Soviet states but equally relevant in the post-colonial world, see Brubaker (1996:79–106).
- 4. I thank Ronald Findlay for citing this expression to me and for drawing my attention to his 1995 article where he makes, with his usual eloquence, some of the points I try to develop in this chapter.
- 5. In fact, the relation between nation-state and minorities may be one of dependence: I. Seipel, *Die Geistliche Grundlage der Minderheitenfrage* (Vienna: 1925), with the example of the Habsburg monarchy in mind, writes, 'The concept of national minority belongs to the theory of the national state. Neither the supra-national nor the non-national state properly knows national minorities' (quoted in Viefhaus 1960:1). This position is not invalidated by the radical statement that 'the nation-state as it has evolved since the French Revolution is the natural enemy of minorities' (Coulmas 1998:67).
- 6. Of course, not all this population was ex-colonial. In 1981 there were some 1.5 million people of 'New Commonwealth' origin in Britain. By 1995 British-born people of non-European ancestry in Britain (that is, second generation immigrants) totalled nearly 3 million, half of whom originated from the Indian sub-continent. In France in 1990 there were some 1.4 million foreign residents originating in former French North Africa as well as over 1 million immigrants who had become French citizens and some 500,000 citizens of African, Caribbean, Indian Ocean and Pacific Island origin from the DOM-TOMs or overseas departments and territories (Castles and Miller 1998:73,222,226).

- 7. Other countries, most notably France, have put their head in the sand and, in the name of the indivisibility of the Republic, have refused to concede that any minorities inhabit their territory. This extreme conception is being sorely tried as the case of Corsica demonstrates and cannot be sustained for much longer.
- 8. The nature and scope of the disjunction between nation-state expectations and realities may be conveyed in the following figures: 'Ethiopia has a dozen major ethnic groups speaking over 80 languages, while modern Nigeria, roughly equal in size has from 150 to 248 different language groups. This is not necessarily limited to the African subcontinent. India in its 1931 census showed 225 Indian and Burmese languages used by its various tribal or ethnic groups. The 1961 census listed even more 1652 vernaculars as mother tongue. But within this vast variety of languages the census lists 15 major ones' (Gross 1998:94–5). One may savour the remark attributed to the founder of Tanzania, Julius Nyere, that 'Africa's boundaries are so absurd that political prudence required sanctifying them' (quoted in Laitin 2001:89) as well as Laitin's gloss that this statement assumes boundaries elsewhere, in Europe, for example, are rational.

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6 A Leader in Institutional Design? Europe and the Governance of Trade and Monetary Relations

Vinod K. Aggarwal and Cédric Dupont*

I. Introduction

In many respects, Europe has been an innovator in the design of international institutions. In trade, Britain led with nineteenth-century unilateral trade liberalization, followed by the Cobden-Chevallier network of bilateral treaties, a customs union in central Europe, and then inward-looking arrangements with colonies.¹ In the post-Second World War period, Europe has been moving toward regional political and economic integration since the 1950s. The European Community (EC) has also been a leader in the move toward transregional arrangements linking developing countries (Lomé Agreement) and Eastern European countries to the EC as well as inter-regionalism that brings it together with the Association of South East Asian Nations (ASEAN), Mercosur, and other regional blocs.² In finance, Europeans were the primary architects of the gold standard in the nineteenth century, and adapted this system at the turn of the twentieth century. European states played crucial roles in the failed effort to revive the global economy through the innovation of monetary arrangements and the more successful efforts in creating the Bretton Woods system. In the post-Second World War period, following a bewildering array of monetary arrangements, most EC countries have relinquished their national currencies, leading to an unprecedented form of monetary union based on a single currency.

These European designs, for better or worse, have been mimicked throughout the world. The United States pursued bilateral treaties under the Reciprocal Trade Agreements Act in the 1930s, and groups of countries throughout Latin America and Africa pursued regional integration efforts (unsuccessfully, for the most part) in the 1960s. European success in integration has revived many oncemoribund regional agreements, and led to new accords in Africa, the Middle East, South Asia, North America and Latin America. More recently, a growing web of bilateral free trade agreements has continued to link various national economies, including both the geographically propinquous and the more distant. The newest form of trade arrangements link regions together as with the Asia Pacific Economic Cooperation (APEC) forum and the proposed Free Trade Area of the Americas (FTAA).

In money, the Gold Standard has served as a puzzling benchmark for those seeking to achieve exchange rate stability under capital mobility. Currency boards, recently in vogue, are in some sense the modern form for those in the periphery who wish to emulate the strict commitment to gold in the nineteenth century. Although the various schemes designed by EC countries have so far had little impact, the dire consequences of recent financial crises and the successful implementation of monetary union may well provide new impetus for imitation. Whether this proves to be a step forward depends on the degree to which countries are able to pursue the necessary stages of economic liberalization as well as political and monetary cooperation that have accompanied the creation of the euro.

What do these new forms of institutional design portend for the global trade and monetary systems? In trade, will transregionalism or some type of interregionalism be the wave of the future, and will others imitate this form of managing trade? Will such arrangements undermine other, newer forms of trade arrangements such as bilateralism? Will these new forms of trade damage the World Trade Organization (WTO) or lead to further liberalization at the multilateral level? In money, how will the 'Euroized' Europe – in some respects now closer to the periphery – relate to a dollarized world? If the euro is successful, will other groupings imitate European monetary union? And if others follow, how will the current IMF-based system of floating exchange rates be affected by new fixed forms of regionally-based monetary coordination?

This chapter examines the pattern of European institutional innovation and its likely consequences for both Europe and other states. Based on a general analytical framework for the evolution of governance structures in trade and money, we provide both conceptual advances and empirical evidence for Europe's role at the international level. Section II of the chapter develops a classificatory framework to categorize trade and monetary arrangements. Using this basic structure, Sections III and IV provide an analytical history of different institutional forms to which Europe has contributed in trade and money, respectively. We also examine how these new institutional forms have interacted and how their dynamics have affected the choices of other states and regions in

the world. Finally, we conclude with some comments on the likely direction that these arrangements will take, both in Europe and elsewhere.

II. Categorizing trade and monetary arrangements

Over the last 50 years, states have utilized a host of measures to promote or control trade and monetary flows. In terms of the number of actors, these include unilateral, bilateral, minilateral and multilateral arrangements. In terms of issue coverage, the range has been either narrow or broad in scope in trade, and has involved varying degrees of fixity in money. In addition, some arrangements are geographically concentrated, or 'regional', while others link states across long distances. For simplicity, the following two tables and our discussion focuses only on three dimensions of bargaining approaches: (1) the number of states involved; (2) issue scope in trade and fixity in money; and (3) geographical range. For sake of presentation, we do not include other possible characteristics in the table such as timing, openness versus closure, or the like, but instead discuss these in our empirical analysis. The cases focus for the most part on actions that have been taken either by individual European states or by grouping of European states. We begin with a discussion of trade.

II.1 Classifying trade arrangements

Table 6.1 classifies the variety of trade agreements on the dimensions of product coverage, actors, and geographical propinquity and provides illustrative examples of each. In brief, the top row (cells 1–6) refer to different forms of sectoralism. Cell 1 includes such measures as the British Corn Laws, which were a forerunner to the unilateral and then bilateral removal of tariffs in the late 1800s. In cell 2, we have geographically concentrated agreements in specific products, such as the 1932 German–Finish treaty that gave Finland preferential treatment in butter imports that went against the most favoured nation clause.⁴ Cell 3 refers to bilateral agreements that are geographically dispersed, such as a treaty between the UK and Argentina in the 1930s calling for the purchase of specific products (Snyder 1940). On a more protectionist basis, recent examples include the 1980s Voluntary Export Restraints (VERs) negotiated by the United States and by the EC on a bilateral basis with the Japanese in autos. In cells 4 and 5, we have product-specific sectoral agreements, with the first of these that focus on only a few products being geographically concentrated. An example in cell (4) is the 1951 European Coal and Steel Community (ECSC), which, while an agreement to liberalize trade, violated Article 24 of the GATT. This article permits the creation of free trade agreements and customs unions - but only a broad product basis rather than only in a few sectors. Cell 5 provides an example of dispersed sectoral minilateralism, as in the case of the Lancashire Agreement that 'managed' trade in cotton textile and apparel products in the 1950s between

		Unilateral	Bilateral GEOGRAPHICALLY GEOGRAPH CONCENTRATED DISPERSED	Bilateral GEOGRAPHICALLY GEOGRAPHICALLY GEOGRAPHICALLY CONCENTRATED DISPERSED CONCENTRATED DISPERSED	Minilateral GEOGRAPHICALLY GEOGRAPH CONCENTRATED DISPERSED	ral ' GEOGRAPHICALLY DISPERSED	Multilateral
Few F (sector) FrodducT ScopF	Few products (sectoralism)	Removal of Corn Laws (1848)	Removal of Corn Germany-Finland UK-Argentina Laws (1848) treaty (1932) (1930s) 1980s: US-Jap VERs, (EC-Jap	UK–Argentina (1930s) 1980s: US–Japan VERs, (EC–Japan) (3)	ECSC (1951) (4)	Lancashire Pact (1959) (5)	ITA (1997–) BTA (1998–) FSA (1999–) (6)
SCOFE		(1)	(7)	(c)	(1)		(0)
Many	y products	Many products UK unilateral liberalization (1850s)	Cobden-Chevallier UK-Soviet Treaty (1860) Union trea (EC-EE (1937) bilaterals - 1990s) US-Israel f trade agree (1985) (EC-Mexic trade agree (2000)	UK-Soviet Union treaty (1937) US-Israel free trade agreement (1985) (EC-Mexico free trade agreement) (2000)	Zollverein (1828– 66) OEEC (1948) EC (1958) EFTA (1960) EEA (1994)	Zollverein (1828- Imperial Preference GATT (1947- 66) (1932) 93) 93) OEEC (1948) Lomé (1975-) WTO (1994- EC (1958) (tranregionalism) EFT 4 (1960) EFT A (1960) EC-Mercosur framework agreement (1995) (inter- regionalism) ASEM (1996-) (inter-regionalism) (inter-regionalism)	GATT (1947- 93) WTO (1994-) tt
		(2)	(8)	(6)	(10)	(11)	(12)

Table 6.1 Classifying Trade Arrangements³

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the UK and India, Pakistan and Hong Kong. Finally, cell 6 provides an example of multilateral sector-specific accords such as the Information Technology Agreement (ITA), negotiated in 1996, and the Basic Telecom Agreement (BTA) and Financial Services Agreement (FSA) a year later.⁵

The second row focuses on multiproduct efforts. Cell 7 refers to unilateral liberalization or restriction, and includes such actions as the British phase of liberalization in the 1850s or the 1930 Smoot–Hawley tariff in the United States. In cell 8, the Cobden-Chevallier Treaty of 1860 and subsequent bilateral agreements in Europe fit the category of geographically concentrated accords. In cell 9, we have cases of geographically dispersed bilateral agreements. Examples include the US-Israel free trade agreement (with the EC having a similar accord, and ones with Mexico and other countries as well). On a minilateral basis,⁶ cell 10 focuses on geographically focused minilateral agreements, accords that have traditionally been referred to as 'regionalism'. As should be clear from the table, however, cells 2, 4, and 8 are also forms of 'regionalism', although theoretically they may have quite different politicaleconomic implications. Here, European states have been leaders with agreements such as the Zollverein, EC, European Free Trade Association (EFTA) and the European Economic Area (EEA). Cell 11 points to such accords as the Lomé Agreement, EC-Mercosur, and ASEM accords, all of which span regions, but which are not always a grouping that links specific regional arrangements together. These increasingly popular accords, which can be referred to as 'transregional' agreements if they link countries across two regions or 'inter-regional' agreements if they formally link free trade areas or customs unions, are of key theoretical and policy importance in understanding the likely evolution of the trading system.⁷ Finally, cell 12 refers to the case of global trading arrangements, namely multilateral, multiproduct arrangements such as the GATT and its successor organization, the WTO.

II.2 Classifying monetary arrangements

To offset trade-distorting manipulations of exchange rates, European governments have often committed to arrangements to manage exchange rates. To highlight the variety of these commitments, and their respective influence, we use a simple categorization with variation along two dimensions: (1) the number of parties involved; and (2) the type of exchange rate system that states commit to. Regarding the former, we follow the same distinction as for the case of trading arrangements – unilateral, bilateral, minilateral and multilateral. For the latter, we use the commonly used threefold distinction of hard peg, soft peg, and floating.⁸ Hard pegs refer to situations in which governments agree to forgo any independent exchange rate policy. They may adopt an external currency as legal tender – dollarization or euroization; they may rigidly and explicitly peg to an external currency through a currency board; or they may form any of two

forms of monetary alliances – exchange rate unions and monetary unions (Cohen 1998). In contrast, soft pegs are less restrictive arrangements, leaving governments some room for unilateral changes. The menu of options is wide, including notably fixed-but-adjustable parities, crawling pegs, implicit pegs and large or fuzzy bands (Wyplosz 2001b). Floating includes the benchmark case where governments preserve autonomy in exchange rate policy ('free floating' in Cooper's (1975) terms), but also the situation of managed floating in which governments intervene in the market at their own discretion.

Combining the two dimensions of variations yields 12 different categories of commitment, as illustrated with concrete examples in Table 6.2.

Before we briefly discuss these examples, it is important to note that our categorization does not explicitly address the question of the specific rules and procedures (such as margins of fluctuations, intervention requirements, collective reaction provisions, monitoring and enforcement of pegs) that go along with the various commitments.⁹ We might expect harder pegs with large numbers of actors to require more elaborate rules and procedures but there is much variation inside each of our 12 categories – something we carefully consider below in Section IV. Table 6.2 does not aim to be exhaustive, and does not list the solutions used by all countries at any time. In particular, it gives little attention to cells 5 and 9, where one can produce long lists of examples across time.

Row 1 of Table 6.2 indicates that European countries have a long experience with hard pegs. The first attempts were designed at the minilateral level (cell 3). In 1865, Belgium, France, Italy and Switzerland formed the Latin Monetary Union (LMU) that sought to standardize existing gold and silver coinages across the union and therefore to freeze mutual currency values. The LMU made each union member's money legal tender throughout the union (Cohen 1998). Another instance of an exchange rate union was the Scandinavian Monetary Union (SMU). Formed in 1873 by Sweden and Denmark, with Norway joining in 1875, the SMU established one uniform unit of account, the krone, based on gold. Like the LMU, each member's money circulated as legal tender throughout the union (Cohen 1998).

Minilateralism then gave way to an arrangement that would eventually govern world transactions – the Gold Standard. Whereas there is no question that the Gold Standard was a hard peg, one can debate whether it was a collective 'orchestrated' system (cell 3 or 4) or a collection of purely individual commitments on a common metallic anchor, gold (cell 1). For reasons that we discuss in Section IV below, one could consider that for major European countries, including Britain, France, Germany and Russia, the Gold Standard' (Flandreau, Le Cacheux and Zumer 1998). For other countries, notably those at

			ACTOR SCOPE		
		Unilateral	Bilateral	Minilateral	Multilateral
	Hard peg	Gold-Standard (1880–1914) Belgium–Luxembourg	Belgium–Luxembourg	Latin Monetary Union (LMU)	Genoa Conference (1922)
		Gold Exchange Standard	Economic Union (BLEU)	(1865 - 1914)	
		(1925-31)	(1922 - 99)	Scandinavian Monetary	
		Currency boards:		Union (SMU) (1873–1920)	
		Bosnia (1997–), Bulgaria		'European' Gold Standard	
		(1997–), Estonia (1992–)		(1880 - 1914)	
		Lithuania (1994–)			
		DM – or Euroization		Economic and Monetary	
EXCHANGE RATE		Kosovo (2000–)		Union (EMU) (1999–)	
POLICY		Montenegro (2000–)			
		(1)	(2)	(3)	(4)
	Soft peg	Snake (March 1973–78)	Schacht Plan (German	European Payments Union	Bretton Woods
			trade partners)	(EPU) (1950–58)	(1958-73)
			Snake (1972–73)	European Monetary System	
			New Exchange Rate	(EMS) (1979–98)	
			Mechanism (ERM2) (1999–)		
		(5)	(6)	(7)	(8)
	Floating	UK (1979–90 and 1992–)	Schacht Plan (German	Tripartite agreement (1936)	Bretton Woods (1976–)
		Sweden (1992–)	perspective)	Group of Five (G5) and	
				Group of Seven (G7) (1980s)	
		(6)	(10)	(11)	(12)

Table 6.2 Classifying Exchange Rate Policy Commitments for European Nations

the periphery in North and Latin America, the Gold Standard was simply a unilateral hard peg (cell 1).

After the demise of the Gold Standard during the First World War, Europeans tried to relaunch it in a truly multilateral form. When these attempts failed, countries went back to gold on an individual basis. They formed what is generally labelled the Gold Exchange Standard, where there were few rules of the game, indicating a unilateral hard peg choice (cell 1). Meanwhile, the hard peg in Europe also followed a bilateral road, with the creation of the Belgium-Luxembourg Economic Union (BLEU) in 1922. BLEU was formally an exchange rate union, but given the asymmetry in the size of the members it quickly became a hierarchical arrangement with one currency pegged in a kind of currency board arrangement to the other. More recently, hard pegs have attracted much publicity, both at the minilateral level, with the advent of Economic and Monetary Union (EMU), and at the unilateral level, with currency boards and euroization in Central and Eastern Europe. Estonia, Bulgaria and Bosnia-Herzegovina have set up currency boards linking national currencies to the deutsche mark (DM) and now the euro, while Lithuania has preferred a peg to the dollar. Kosovo and Montenegro even went one step further and in late 2000 adopted the deutsche mark and now the euro as legal tender.

Turning to soft pegs, Europe has also been a rich laboratory of experiences. When the Bretton Woods (BW) arrangement quickly proved unable to address the problem of the return to convertibility in post-Second World War Europe, in 1950 European nations and the United States set up the European Payments Union (EPU). The EPU was a multilateral clearing system under the supervision of the Bank for International Settlements (BIS) and within the trade liberalization framework of the Organization of European Economic Cooperation (OEEC). Given that members could not use monetary policy to influence trade but had access to credits in case of deficits, the EPU could be categorized as a minilateral soft peg (cell 7). Twenty years later, after the breakdown of the BW system, Europeans began to redesign their minilateral soft peg. The first attempt, 'the Snake', aimed to stabilize bilateral parities among EC members without any collective support for the individual bilateral parities, which would place it in cell 6. In practice, the Snake quickly turned out to be a DM zone (Tsoukalis 1993) with Belgium, Denmark, the Netherlands, Norway and Sweden pegging unilaterally to a floating German mark (Heller 1978). The next attempt, the European Monetary System (EMS), was developed at the minilateral level. This arrangement sought to limit margins of fluctuations for bilateral exchange rates, with the collective provision of extensive short-term financing facilities to help members defend established parities. The most recent soft peg is the new exchange rate mechanism (ERM2) embodied in the Amsterdam Treaty of the European Union that will link those EC members that are part of EMU to those that remain outside of it. The mechanism follows a hub and spoke pattern with

bilateral parities set between all EMU members and each individual non-EMU member (cell 6).

Floating arrangements have been less frequent in Europe, with the exception of the interwar period. From 1920 to 1925, there was almost a free float. Later, following the disintegration of the Gold Exchange Standard, came the heyday of managed floating. At the bilateral level, Germany under the Schacht Plan designed a system of bilateral exchange clearing arrangements with its key trade partners. Given the tailored nature of these arrangements, we classify them as between soft bilateral pegs (from the perspective of Germany's trading partners that had to accept Germany's conditions) and bilateral floating solutions (from the German perspective). Britain organized economically around its empire, thus building a kind of minilateral response to international monetary problems (cell 7). Floating has never come back to such an extent in Europe. Although Europeans have been part of the stable system of exchange rates managed by the IMF since the mid-1970s (cell 12), they have for the most part been part of soft or hard pegs as discussed above. Notable exceptions have been the UK as well as Sweden after 1992 (cell 9).

III. Trade: European contributions

To examine Europe's leadership in designing novel forms of trade management, it is useful to consider the trajectory of European arrangements in two parts: from the 1840s to the 1930s, and from the 1940s to the present. This division allows us to systematically focus on some key institutional arrangements in each of these time periods with an eye toward their evolution. The Second World War provides a ready dividing line because the creation of the GATT marked a crucial shift in the trading system with the innovation of the first globally based trading regime. It also marked a shift away from the era of protection that sharply exacerbated the depression of the 1930s and which brought an end to the significant liberalization of the nineteenth century and early part of the twentieth century.

III.1 The 1840s to 1930s: From unilateral liberalism to transnational protectionism

The path of trade liberalization in the late nineteenth and early twentieth centuries was marked by a variety of agreements of different forms. In brief summary, the trajectory, based on the categories in Table 6.1 above, includes movement from cell 1 with unilateral sectoral liberalization by the British, and some unilateral broader-scale liberalization (cell 7) to the bilateral Cobden–Chevallier Treaty in 1860 (cell 8). This agreement helped set broader liberalization in motion through additional geographically specific and dispersed agreements (cell 9). Even broader liberalization, albeit on a regional basis, was

taking place about this time with the Zollverein (cell 10), which expanded from a set of bilateral agreements (cell 8). Soon thereafter, an inward turn in trade was marked by a move toward unilateral protection by several countries after the 1873 depression (cell 7). A second move toward protection came after another spate of liberalization in the late 1800s and early 1900s. In this case, the protectionism by the colonial countries took the form of an inward turn to their colonies, as with the transregionalism of the 1932 British Imperial Preference system (cell 11). Nearly simultaneously, the United States instituted the Smoot–Hawley tariff, the Germans created a set of bilateral agreements with the Schacht Plan, and many states concluded dispersed and concentrated bilateral agreements in the mid-1930s.

A more detailed view of this trajectory reveals some of the nuance omitted from the sketch of the broader trends.¹⁰ We begin with Britain's change of trade policy in the early 1840s. Its unilateral liberalization of trade in this decade was marked by the 1848 abolition of the Corn Laws and continued more broadly in the 1850s.¹¹ Trade policy was set according to the national political agenda, leaving others to determine their own liberalization efforts. Britain adopted a general policy of non-discrimination; in fact, trade treaties came to be viewed even as dangerous and disreputable.

During the decade following the repeal of the Corn Laws, few countries followed the British example. A significant systemic shift in policy only came about with the Anglo-French commercial treaty of 1860, which ushered in a period of generally free trade that ended only with the First World War. Under the terms of the treaty, France was obligated to abolish all prohibitions on goods and reduce specific duties to a maximum of 30 per cent ad valorem; most rates were set between 10 and 15 per cent (Bairoch 1989). Britain in turn reduced the number of tariffs from 419 to 48 and lowered the wine tariff. The treaty was subject to renewal after 10 years and could be terminated by either party with a year's notice. The inclusion of a most favoured nation (MFN) clause meant that any tariff concessions vis-à-vis third parties would automatically be extended to the other signatory party without need for renegotiations.

This commercial treaty had systemic implications for the rest of Europe. It launched a general movement toward freer trade as countries attempted to counter the trade diversion that was triggered by this bilateral treaty between the largest economies, and by the subsequent one (1862, effective in 1865) between France and the Zollverein.¹² From this perspective, one can argue that a single bilateral treaty between France and Britain led to de facto multilateral agreement among most European states (Irwin 1993). Tariffs in this virtual multilateral agreement were mostly between 8 and 15 per cent, with a maximum of 25 per cent. At the start of 1908 Britain had MFN agreements with 46 countries, Germany with 30, and France with more than 20. Attempts were made to bring the colonies into the MFN system as well.

What sets this system apart from later arrangements such as the GATT is the fact that this system arose more or less spontaneously and that it was more of a non-system than a formal arrangement. Commitment was therefore quite limited. The key anchor was the MFN principle.¹³ This principle was unexceptional and unconditional, meaning it was applied to all countries with which such an agreement was signed – and not only to those explicitly mentioned in any treaty, as had been the earlier practice. Unconditional meant that the lowest tariff was automatically applied to all without reciprocal concessions.

Although countries continued with the MFN principle, conflicts became more frequent after the late 1870s, and some countries began to turn inward.¹⁴ The main explanation for this change in trade policy toward a more restrictive course with rising tariff rates has been the decline in agricultural prices in the late 1860s and into the 1870s.¹⁵ This shift in trade policy was exacerbated by the expiration in the 1890s of many of the earlier free trade treaties.¹⁶ Of the 53 treaties in force in 1889, 27 elapsed in 1892 and another 21 in 1895 (Bairoch 1989). Renewal of these treaties proved difficult as protectionist pressures increased and tariff wars began to erupt. These were generally triggered when one country rejected an agreement to implement higher tariffs. Such conflicts erupted between France and Italy in 1888–89, Germany and Russia in 1892–94, and France and Switzerland in 1892–95. The threat – and fact – of retaliation was no longer enough to ensure a low-tariff equilibrium among nations.

In assessing the period until the First World War, one might conclude that the main achievement of the period was the institution of MFN status – an innovative non-discriminatory trade policy in marked contrast to earlier practice in Europe. This is undoubtedly a major achievement. But in the absence of an international regime, the system of bilateral treaties failed to deliver a binding mechanism that could avoid a shift back to a more protectionist policy in times of crisis. There was no mechanism that could avoid the backlash after 1880, nor the more severe problems that arose after 1918.

The First World War changed the trading system profoundly. Tariff barriers, prohibitions, quantitative restrictions and exchange controls appeared quickly all over Europe to protect industries and to secure foreign exchange for state purposes. One reason for this deterioration is obviously the 1930s depression in the European economies. A second reason is the marked absence of any formal, multilateral attempt to return to a liberal trade policy, or to restore the MFN framework. Even though most wartime controls were phased out on a unilateral basis after the war had stopped, the process was very slow. In 1927, the League of Nations called for an end of prohibitions and other restrictions. Meanwhile, as countries removed their quantitative restrictions, tariffs took their place. Even Britain did not fully return to its prewar unilateral free trade policy.

Still, some attempts were made to return to a more liberal trading system. In 1927 the World Economic Conference called for a stabilization and subsequent

reduction of trade barriers. Many governments expressed support for this view, and some countries gave up plans to increase their tariffs further. The United States had already readopted the unconditional MFN clause in 1922, and France did so as well when signing a treaty with Germany in 1927. Thus, the prospects for the international trading system turned brighter in the late 1920s – but only for a fleeting moment.

In the summer of 1929, agricultural prices once again fell dramatically, prompting Germany, Italy, France and others to respond with strong tariff increases. The United States responded to this decline in June 1930 with the Smoot–Hawley tariff, which led to a round of retaliatory increases throughout Europe. In 1932, Britain formalized an internal turn to its colonies with the Ottawa Imperial Conference (Glickman 1947). This 'Imperial Preference' allowed British producers to secure market access and assured a supply of raw materials for British industry. This preferential trading arrangement marked a sharp turn away from the strong liberalizing movement following the Anglo-French commercial treaty of 1860. Moreover, the accord did little to boost British industry. Together with the retaliation that followed the Smoot–Hawley tariff in the United States, the massive turn to bilateral trade agreements, and the competitive monetary devaluations of the 1930s, this movement marked a final end to the liberal trading order.

In contrast to the European leadership in liberalizing trade in the late nineteenth century, in the 1930s the United States began to assume greater responsibility within the international trade system. Having fostered a turn to protection by implementing the Smoot–Hawley tariffs, it subsequently tried to reverse this trend. At the Montevideo conference in 1933, the United States and other countries in the Americas promised to reduce trade barriers in the Western hemisphere. At home, the passage of the Reciprocal Trade Agreements Act of 1934 empowered the president to grant concessions of up to 50 per cent in bilateral trade negotiations. By 1939 the United States had signed 20 MFN treaties, covering some 60 per cent of its trade. Chief among them was a 1938 agreement with Britain that provided the nucleus for the postwar trading order and the Bretton Woods conference of 1944 that created a new international system.

As this discussion has shown, different countries played different roles in institutionalizing international trade between the mid-1800s and the 1930s. In the early to middle 1800s, regional integration efforts had been led by Germans in the form of the Zollverein. In the middle to late 1800s, other European countries, particularly Britain, were at the forefront of trade liberalization. The negotiation of bilateral agreements supplemented the initial unilateral British liberalization and led to systemic shifts toward an open international market. Although there was some retrenchment in the latter part of the 1800s, the open system continued – albeit in a more tenuous state – until the First World War. As we have seen, however, a liberal system based on bilateral agreements was

quite fragile: as crises developed, countries began to shift their policies toward protection. Only Britain among the major countries retained truly liberal policies. By the 1930s, the British also turned inward toward their colonies, instituting a policy of Imperial Preference that created a transregional grouping that discouraged trade with outsiders. The open system was finally destroyed by the Depression, and the inward turn itself helped feed a deepening economic downward spiral. It was only with the leadership undertaken by the United States, a reluctant hegemon, that the system began to move toward openness; but the Second World War intervened in what would be a laboured process of post-Second World War liberalization.

III.2 The 1940s to 2000s: from multilateral liberalism to trade potpourri?

The multilateralism fostered by the GATT after 1947 (Table 6.1, cell 12), while reflecting a commitment to the institutionalization of liberalization, reflected at the same time the underlying dispute and dissensus within the United States that led to the stillborn International Trade Organization (ITO). This organization, slated to be the trade equivalent of Bretton Woods, was developed as an agreement that would have very broad issue coverage, an approach that generated controversy. Although the GATT served in lieu of the ITO in some respects, several of the disputes in discussions of the ITO were reflected in the assortment of trade measures that would follow, with many varieties being led by Europeans. Thus, despite the overwhelming success of the multilateral trade liberalization mechanism embodied in the GATT, competitors to the GATT continued to pop up and protectionist regression continued to assert itself.

Europeans continued to pursue regional and preferential approaches in trade, despite the GATT. The 1951 Economic Coal and Steel Community (cell 4) formally violated the GATT because of its focus on only two sectors, and its members sought a waiver of GATT obligations with US support. At the same time, Europeans enacted protectionist measures in specific sectors such as textiles and apparel in the 1950s – both on a unilateral (cell 1) and on a minilateral basis (cell 5). The expansion of the ECSC into the EC brought the European efforts into conformity with the GATT. As liberalization proceeded in the Community, nearby countries outside of the EC sought bilateral ties (cell 8), and inter-regional efforts were made to link the EC to EFTA. This movement accelerated with the end of the Cold War, as East Europeans sought market access to the EC. The EC tried to counter their pressure for full EC membership by creating a new regional institutional form, the European Economic Area (cell 10), that would link the European Free Trade Agreement to the EC. However, the effort made little headway as EFTA states sought membership in the EC instead and the Central and Eastern European countries were uninterested in EFTA. The Europeans also inherited long-standing preferential bilateral ties with colonies (cell 9) which were followed by the creation of minilateral transregional

arrangements such as the Lomé Agreement, which linked former European colonies and later other developing states to Europe (cell 11).

More recently, the EC has supported the creation of sector-specific multilateral agreements such as the Information Technology Agreement, the Basic Telecoms Agreement and the Financial Services Agreement (cell 6). It has also begun to pursue bilateral agreements with distant countries such as Mexico (cell 9) and inter-regional agreements with Mercosur and a mixture of minilateral accords with Asian countries (cell 11). The result has been a potpourri of agreements that may not bode well for liberalization through the WTO.

Because the history of the ECSC and the EC are so well known, we find it more useful for the purposes of this chapter to focus on less well known or more controversial developments. In the 1950s, as trade liberalization through the GATT was proceeding, protectionist pressures began to build in both Europe and the United States.¹⁷ As a result, the United States negotiated Voluntary Export Restraints (VERs) with the Japanese, and the UK sought to restrict Japanese textiles as well as those from India, Pakistan and Hong Kong. With respect to Japan, the UK invoked Article 35 of the GATT, allowing it to withhold concessions from the Japanese and permitting it to continue restricting Japanese imports under the Anglo-Japanese Sterling Payments Agreement. The Commonwealth exporters proved to be a more difficult problem. Under Imperial Preference - renamed Commonwealth Preference to reflect decolonization former colonies had tariff-free access to the UK market, and vice versa. But the increasing imports from Commonwealth members India, Pakistan and Hong Kong, which benefited from restraints on the Japanese, proved to be a domestic British political problem. The solution to this problem was negotiated in the so-called 1959 Lancashire Pact, which called for India, Pakistan and Hong Kong to 'voluntarily' restrict their exports to the UK. This minilateral sectoral agreement proved to be instrumental in encouraging the US government to pursue a broader pact on textiles and apparel, as it too faced growing exports from Hong Kong and increasing political pressure from its domestic industry. The resulting international agreement, the 1961 and 1962 Short and Long Term Arrangements on Cotton Textiles, proved to be an innovation that would continue to be a thorn in negotiations between developed and developing countries. To this day, conflict over the phase-out period for the successor Multifiber Arrangement (MFA) continues to haunt efforts to pursue a Millennium Round of negotiations under WTO auspices.¹⁸

With respect to bilateral and transregional links, some EC members such as France (and then later with its accession to the EC, the UK) had long-standing preferential trading arrangements with former colonies. The Treaty of Rome called for the continuation of such preferential agreements, and after their independence, 18 former colonies maintained their links to the EC through the first Yaoundé Convention of 1963 (renewed in 1969). This agreement was a

transregional rather than an inter-regional agreement, as this grouping was a creation of the EC and not a free trade area or customs union in its own right.¹⁹

The Lomé Convention, a 1975 successor to the Yaoundé Convention, expanded the preferential arrangements to a large group of countries in Africa, the Caribbean and the Pacific (ACP), and governs European trade and financial relations between European countries and many of their former colonies. Created at the high-water mark of developing country unity in international trade and economic relations, the Lomé Convention (or Lomé I) institutionalized European support for and preferential treatment of ACP countries' industries and exports. Lomé I was succeeded by Lomé II (1980), Lomé III (1985) and Lomé IV (1990), all of which extended the essential principles of the original agreement. However, Lomé IV expired in February 2000 with the Europeans and ACP countries having failed to agree to a Lomé V. This failure is due in large part to the changing environment in global trade and finance – most notably the diminishing influence of ACP countries in the 1980s and 1990s, the accession of new members into the EC with different ties to developing countries, and the emergence of the WTO (Ravenhill 2001).

The WTO's strictures against preferential agreements have put tremendous pressure on the Europeans to dismantle the Lomé system, and the United States in particular has used the WTO's dispute mechanism to mandate an end to the EU's preferential treatment of ACP exports such as bananas, among others. If the WTO and globalism remain the effective level of trade arbitration, the EC may face major trade conflict with the United States and be tempted to jettison Lomé. Currently, it is considering a variety of alternatives that could lead to a combination of bilateral free trade agreements and five subregional Lomé agreements.

The European Union also has developed preferential trading arrangements with the Mediterranean countries. This policy began in the 1960s with loose concessionary trade agreements followed in the 1970s by an expansion of economic and financial cooperation. The Barcelona Declaration of 1995 codified the aims of the EC and Med12 countries (Algeria, Morocco, Tunisia, Egypt, Israel, Jordan, Lebanon, the Palestinian autonomous territories, Syria, Turkey, Cyprus and Malta), establishing 2010 as the goal for establishing a free trade area.

Finally, with respect to minilateralism, the EC has been more of a follower than a leader in the development of inter-regional agreements. The EC has long had ties to Asia, but the United States made the first move with its support for the Asia-Pacific Economic Cooperation (APEC) group in 1989 that had been promoted by Australia and Japan. Europe and ASEAN have a long history of formal, if limited, interregional ties: within the first few years of ASEAN's existence, the two established a permanent dialogue through both the Special Coordination Committee and the ASEAN–Brussels Committee. The latest development in the long-standing inter-regional dialogue between Europe and

East Asian countries more generally has taken part with the Asia–Europe Meeting (ASEM), which originated from a proposal by Singapore Prime Minister Goh Chok Tong in 1994. In many respects, ASEM appears to be a response to the relative success of APEC at its 1993 Seattle meeting in setting free trade goals during the heated final negotiations of the Uruguay Round.

While the initial efforts within ASEM were made by the South East Asian states, Japan, China and South Korea have been an integral part of the Asian contingent, differentiating ASEM from the existing EU–ASEAN dialogue and thus combining inter-regionalism and transregionalism. Closer ASEAN–EC relations are largely contingent on the further institutionalization of ASEAN itself – an issue hotly contested in recent years among ASEAN members. Thus, it remains to be seen whether the Asian financial crisis and subsequent political undulations will reduce certain South East Asian countries' resistance to enhancing intra-ASEAN political coordination, and, if so, whether the EC will re-emphasize this transregional relationship in pursuit of a more robust ASEM.

With respect to ties to Latin America, the EC has also been concerned about US initiatives in the region, including the Enterprise for the Americas Initiative first discussed in the late 1980s and now reincarnated as the putative FTAA. Throughout the 1990s, Brazil, Argentina, Uruguay and Paraguay, each a member of Mercosur, followed programmes of fiscal discipline and economic liberalization. The economic expansion that these policies produced were mirrored – and reinforced – by expanding trade and investment ties with the European Union. In 1996 the EC replaced the United States – which has never been as dominant in Mercosur countries as in the rest of Latin America – for the first time as the principal source of foreign investment in Mercosur, and trade levels in most export sectors have multiplied over the decade. An EU–Mercosur inter-regional framework cooperation agreement was signed in December 1995, though its implementation has not been a simple matter owing in particular to conflicts over agriculture.

The Europeans have also been strongly behind the new trend in promoting sector-by-sector liberalization or 'open sectoralism', most notably the Information Technology Agreement (ITA) model, developed in 1996.²⁰ The ITA covers over 90 per cent of the total trade in IT products among 69 participant countries. Similarly, the 1998 Global Agreement on Basic Telecommunications seeks to extend the same sectoral liberalization principle to trade in telecom products.

Although such agreements have been considered to be a promising avenue for trade liberalization, the effect over the long run may be the opposite. Politically, market opening along sectoral lines may *reduce* political support for multilateral, multisector negotiations that would benefit a significantly broader group of industries and consumers. By giving a few economically successful sectors the trade liberalization that they demand, such agreements can easily

undermine the broad coalition for free trade. From an economic perspective, such agreements may also *reduce* economic efficiency. By liberalizing only specific, highly competitive sectors, open sectoral trade agreements may lead to incentives to invest in or discourage exit from the least efficient areas of the economy. It is, of course, difficult to prove that WTO liberalization would proceed more smoothly without such open sectoral agreements. But the concrete realization of the risk that open sectoral liberalization poses to global liberalization has become evident in the surprisingly weak lobbying effort and conservative agenda-setting priorities of US information technology and telecommunications industries for the new round of the WTO. It appears that these sectors have come to rely on extant sectoral agreements and bilateral pressures to open key emerging markets, most notably China, and have lost interest in global institutions.

In summary, Europe's role in promoting liberal trade in the post-Second World War era is decidedly mixed. The creation of the EC has been an important regional liberalizing development, and it has actively participated in the GATT/WTO efforts to reduce trade barriers at the global level. But at the same time, European states have actively protected a number of sectors including textile and agriculture, largely to the detriment of developing countries. Moreover, the creation of the EC also led to a series of preferential agreements that reflect long-standing colonial arrangements from a previous era. While some of these such as Lomé have come under fire and are likely to be eliminated, the trend toward bilateral, transregional, and inter-regional arrangements has a great potential to distort trade by creating entrenched interests in such accords and a diminished interest in global liberalization. In addition, European support of the 'open sectoral' approach to liberalization in information technology, telecoms and other sectors also may similarly undermine efforts to promote broad-scale liberalization.

IV. Money: European contributions

Due to historical circumstances, Europe was the cradle of the management of international monetary relations. The advent of the Gold Standard was a major breakthrough in world economic history. After the First World War, however, European influence in designing monetary arrangements gradually diminished. The attempts by Europeans to launch a new multilateral system that would draw upon the success of its predecessor ultimately failed, putting into question the relevance of hard pegs using gold as an anchor. The next major effort was made by the United States and Britain, and led to the creation of a new form of peg that was softer and multilateral – the Bretton Woods system. European solutions to their economic interdependence resurfaced once the BW system began to founder in the early 1970s. Instead of following the US road toward floating rates, members of the European Community started designing new pegging

arrangements, initially with limited results but gradually with more impact on intra-European trade, and ultimately leading to the pathbreaking EMU.

To trace the roots of European monetary efforts, this section briefly discusses the strength and weaknesses of the Gold Standard as a monetary arrangement, and then turns in more detail to the evolution of European designs after the end of fixity under the BW system. We pay particular attention to the link between institutions and the nature of the cooperation problem, which allows us to discuss potential influence of current European solutions on the rest of the world.

IV. 1 The Gold Standard: institutional features and influence

Britain was the only country on gold during most of the nineteenth century, with most other countries remaining on silver or a bimetallic standard. From the beginning of the 1870s, however, countries began to switch individually to a single gold standard.²¹ Participation in the Gold Standard regime only required three main rules: (i) convertibility between domestic money and gold at a fixed price; (ii) freedom for private citizens to import and export gold; and (iii) some rule relating the domestic money supply to the country's gold stock.²²

With these features, gold flows would help restore trade imbalances, through the so-called 'price-specie flow model' of David Hume.²³ In practice, however, gold flows never reached the expected levels (Eichengreen 1996) because central banks intervened to speed up the adjustment process. They used the discount rate to offset gold shipments, which raised the question of the responsibility for the common level of discount rates. The system remained stable at reasonable levels of discount rate due to a kind of follow-the-leader convention with the Bank of England as conductor of the orchestra (Eichengreen 1987). Stability was also enhanced by a kind of international solidarity (Eichengreen 1996), or set of 'implicit rules' (McKinnon 1993), that pushed central banks to help each other in case of temporary threats to convertibility, as in the case of the Bank of England during the Baring crisis in 1890.

There is clear evidence that the system imposed considerable restraint on the behaviour of countries both at the European core and at the periphery (Bordo and Rockoff 1996). Yet stability, in terms of compliance with the rules of the system, was higher at the centre. Here, there was some mutual help among central banks and national treasuries – in contrast to the periphery, where the absence of solidarity either from the centre or from neighbours pushed governments to go on and off gold depending on domestic political imperatives. In this sense, there was a small hard core of countries organized in a kind of minilateral hard peg system that has been termed the 'European Gold Standard' (Flandreau, Le Cacheux and Zumer 1998), and a broader, softer periphery made of countries that unilaterally pegged on to gold. The two parts contributed to

the maintenance of the whole system, with Britain at its centre, through a mix of trade and capital flows.

The outbreak of the First World War proved a fatal shock for the Gold Standard. Convertibility was either suspended officially or citizens were asked to not convert domestic currency into gold, appealing to patriotism. When the war ended, persistent inflation ruled out a return to convertibility at old rates. Countries instead opted for freely floating exchange rates – with the notable exception of the United States, where inflation had been relatively moderate and gold reserves were abundant.

The 1920s were a period of persistent and ultimately unsuccessful attempts to return to the Gold Standard, which was seen as a desirable goal by almost all countries – in particular European ones.²⁴ Governments did not consider changing the system except to use foreign currencies as reserves to cope with the problem of declining production of gold. This change had important consequences that would have required enduring cooperation among countries. Changing to a system of foreign currency reserves was conditional on other countries adopting the same policy (the new arrangement would have belonged to cell 4 in Table 6.2). A unilateral change of the backing for the domestic currency raised the danger of speculation against one's own currency if others remained on gold reserves.

Several conferences during the 1920s addressed this issue, with the most important being the 1922 Genoa conference. The aim was to negotiate an international convention that allowed countries to hold unlimited amounts of foreign currency reserves. Another theme of the conference was cooperation among central banks (Eichengreen 1996). They were to abstain from manipulating currency values and, most importantly, from an attempt to increase domestic gold reserves at the expenses of other countries. If all increased interest rates to attract gold, none could succeed but all would depress production and employment in a prisoners' dilemma-like situation. None of these aims were achieved, in particular due to US unwillingness to participate in any cooperative scheme.

Faced with this failure, European governments essentially went back to the old system in an uncoordinated way. The immediate result was that each government decided independently on the new gold parity, thereby straining the system. With sharp initial asymmetry, finding an equilibrium between those in deficit and those in surplus quickly proved elusive. Simultaneously, the virtuous circle of confidence between markets and governments that sustained the pre-First World War system never re-emerged after the war. Social and political changes at the domestic level cast doubt on policy-makers' commitment to defend convertibility first – rather than to address domestic problems (Eichengreen 1992; Simmons 1994). Although there were differences between countries concerning the relative weight that was put on exchange

rate stability, all countries shared the willingness not to surrender all social and economic policies to the requirements of being on gold. Hence, devaluations became a real and present possibility and investors became accordingly nervous and cautious.

Under such conditions, the depression that hit the United States and subsequently the rest of the world in the late 1920s was too strong a shock for the system to survive. Germany and Britain suspended convertibility in the summer of 1931, with two dozen countries following their move by 1932 (Eichengreen 1996). Monetary arrangements for those that had suspended gold convertibility strictly followed the trade flag, with Germany organizing exchange clearing systems under the Schacht Plan (Momtchiloff 1954) and Britain using the pound inside the Imperial Preference scheme. These practices further eroded the position of countries still on gold – notably the United States, which ultimately suspended gold convertibility in 1933. By 1936, the return to the floating situation of the early 1920s was complete (Eichengreen 1996). This was less a free float, as it had been before 1925, than a managed float whereby countries actively influenced their currency values.

The desire to avoid the trade-inhibiting consequences of unilateral manipulations triggered the design of a new international system. This design, under the leadership of the United States, led to the first coherent soft peg, the Bretton Woods system. It differed from the classic Gold Standard in many ways.²⁵ The United States was the only country that fixed its currency against gold. Other countries declared (adjustable) parities against the US dollar or gold, and kept currency reserves in terms of gold or dollars. Members would get financial help in case of balance of payments difficulties through the creation of a financial pool. As a further step to ease compliance with parities, members built up controls over capital movements.

In sum, Europe pioneered minilateral systems of hard pegs but failed to adapt them to changing political and economic conditions at both the domestic and international level. A less asymmetric relationship of interdependence between Europe and the rest of the world, coupled with more open domestic polities, made a return to the Gold Standard impossible. To be successful, a new system was needed with formal rules and procedures. Yet the Europeans failed to produce such a system. One reason for this failure was that they lacked the power to supply such a system on their own, with London being challenged by New York. But, they also failed on the cognitive dimension, with a strong intellectual desire to mimic the erstwhile Gold Standard. There was little consideration given to the possibility of a softer peg, with means to make adjustment less costly. In particular, financing facilities were not created and there was no discussion of the relevance of full mobility of capital under a gold standard.²⁶

IV.2 From soft snake to hard EMU

Europe went back to the drawing board of monetary arrangements in the late 1960s when the Bretton Woods system began to break down. The initiative came from the members of the European Community that wished to preserve intra-European exchange rate stability. Following an impetus from the Commission, in 1969 member states set up a committee with a mandate to review the status quo of monetary cooperation in Europe and to propose a blueprint for the transition to a common currency. The Werner committee, named after its chairman, the Prime Minister of Luxembourg Pierre Werner, proposed the creation of monetary union in Europe through a three-stage process. Specifically, it called for the irreversible fixing of exchange rates, the liberalization of capital markets, and the establishment of a common European central bank to manage common monetary policy (Kruse 1980; Ludlow 1982).

This ambitious proposal failed to survive the US decision to close the gold window in August 1971. What remained of the plan was the very first stage, a scheme called the Snake in the (dollar) tunnel, to restrict intra-European bilateral fluctuations to plus-or-minus 2.25 per cent. The scheme included the provision of short-term and very-short financing facilities to help members sustain established parities, and would be monitored by a European Monetary Cooperation Fund (EMCF) (Gros and Thygesen 1992). But the US decision to float the dollar in March 1973 and the first oil shock quickly showed that the Snake was too soft an arrangement to bring exchange rate stability in Western Europe. There was no binding rule to collectively defend bilateral parities, which proved unworkable for those countries in deficit. Under these conditions, the Snake was quickly reduced to a kind of hub and spoke system around the German mark that included countries with strong trade ties with Germany and that wanted to import Germany's success in controlling inflation (Heller 1978; Tsoukalis 1993).

Drawing upon the failure of the Snake and reacting to the increasing intra-European strains coming from the vagaries of the dollar, France, Germany and the United Kingdom designed a new arrangement in the late 1970s, the EMS. Its main element was the European Exchange Rate Mechanism (ERM), a grid of bilateral parities that allowed for a fluctuation of plus-or-minus 2.25 per cent (Gros and Thygesen 1992; Ludlow 1982). The system included short- and midterm credit lines to support interventions and to deal with balance of payments problems. Unlike the IMF, which mades loans from its funds derived from member states, the provision for credit in the EMS was on a bilateral basis. The EMS also created a common unit of account, the European Currency Unit (ECU).

In contrast to the Snake, the EMS imposed concrete obligations on member states. They had to intervene in markets to support exchange rates, and they had to provide financial facilities to those who engaged in costly efforts of intervention. Also in contrast to the Snake, there was explicitly a long-term perspective behind the EMS. Germany and France, in particular, made it clear that the new system not only aimed at the stabilization of the exchange rates but also that it should lead to deeper cooperation in monetary matters (Kruse 1980; Ludlow 1982).

The EMS brought stability to European exchange rates. The standard deviation of effective exchange rates of ERM members was on average half of that of the rest of the world during the period 1975–99 (Wyplosz 2001a). Yet, the system came under stress in the mid-1980s, mostly due to the mismatch between intrazone restrictions on capital movements and global financial integration. Once the liberalization of capital movements was accepted with the Single European Act in 1986, it became clear that the EMS needed to be redesigned. The demand came first from those countries that had to do most of the interventions, the weak-currency countries, as opposed to the dominant-currency country, Germany. But the latter quickly followed suit and proposed the move toward Economic and Monetary Union (Dupont and Wolf 1998). After speedy preparatory work by a special committee, chaired by the President of the EC Commission, Jacques Delors, in December 1991, member states endorsed a plan to move toward a monetary union with a single currency by 1 January 1999.

Under the EMU, members have abandoned national currencies and transferred monetary policy to a supranational and independent 'central bank', the European System of Central Bank (ESCB), committed to the prime objective of price stability (Gros and Thygesen 1992; Kenen 1995). To ensure the smooth functioning of EMU, member states have also committed to restrictions (or restraint) in the use of budgetary policy through the so-called Stability and Growth Pact, which puts a 3 per cent limit on government deficits. They have also agreed to broader structural policies in labour, product and services markets through the development of the so-called reinforced economic policy coordination.²⁷

EMU is clearly an exceptional arrangement – one without any historical equivalent. Yet this, per se, does not necessarily mean that Europe is back as a leader in institutional design. EMU may turn out to be a precursor but this may still take some time. EMU is the ultimate stage of a long experience of collective pegging, under different conditions of capital mobility, and was made possible thanks to its nesting in a large institutional framework that has helped build up mutual trust and confidence.

V. Conclusion

Europe has been a key player in the creation of institutional arrangements in international trade and money, both in the nineteenth and twentieth centuries. Yet its actions have had both positive and negative consequences for the liberalization of trade and the stability of the international monetary system. This

chapter has sought to analyse the variety of arrangements developed over the last two centuries through an innovative conceptual framework for understanding the institutional arrangements in these two issue areas. This approach allows us to also consider the interaction among different types of arrangements, and the prospects for the evolution of the trade and monetary systems.

In brief summary, the typology for trade and monetary arrangements focuses on three elements. For both the trade and monetary area, we consider the number of actors involved in the agreement (unilateral, bilateral, minilateral or multilateral) as well as whether the arrangements are geographically concentrated ('regional') or link states across long distances. With respect to the third element, we examine trade and monetary accords differently. For trade, we examine whether the coverage of products has been either narrow or broad in scope. Put differently, do trade arrangements address the whole host of products and services that might be traded, or only a few? In the monetary area, we focus on three possibilities: hard pegs, soft pegs and floating. The combination of these elements allows us to create comprehensive typologies for classifying both trade and monetary arrangements (see Tables 6.1 and 6.2).

What do we see in terms of European contributions to the evolution of the trading and monetary systems? We divide the analysis of trade into two different eras: the mid-1800s to the Second World War; and the Second World War to the present. In the mid- to late 1800s, following the repeal of the Corn Laws in 1846, the British took the lead in trade liberalization. Following negotiation of the pathbreaking bilateral Cobden–Chevallier Treaty in 1860, bilateral agreements supplemented the initial British move toward unilateral liberalization and led to systemic shifts toward an open international market. Although some countries turned toward protection in the latter part of the 1800s, the British maintained their policy of open trade and the system as a whole continued to remain relatively liberal. But, as we have argued, an open liberal system based on bilateral agreements remained fragile. As countries shifted their policies toward protection, there was no institutional mechanism to retard this trend. In fact, when the British turned inward toward their colonies in the 1930s, the open system came to an end and trade retaliation became the order of the day. Subsequently, Europeans had to rely on the leadership of the United States, a reluctant hegemon, to move the system toward openness – a move that would have to wait until after the Second World War.

In the post-Second World War period, Europe was a fount of tremendous institutional innovation. It led the movement toward regional integration, a development that was often imitated in the 1960s – albeit one that rarely succeeded. But the creation of the EC also brought with it a more negative element for the liberal trading system: the formation of preferential trading arrangements. As the EC has evolved, it has continued to pursue such accords, first with developing countries through the Lomé Agreement, and then with

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Eastern European countries, the Mediterranean region, and others. More recently, the EC has actively taken up inter-regionalism – although in this case it has proved to be more of a follower than a leader behind the United States, which has pursued agreements with East Asia and Latin America through APEC and the FTAA respectively. However, the EC has also been an active leader and participant in the formation of bilateral agreements and sector-specific multilateral agreements such as the ITA and the Basic Telecom agreement.

What do these new forms of trade liberalization portend? Is liberalization, be it through any institutional mechanism, preferable to the pursuit of slow-going multilateral multisector negotiations? While the negotiation of bilateral and sector-specific agreements has intuitive appeal - especially to those exponents of the 'bicycle theory of trade' who believe that one must keep moving forward to maintain a liberal trading order – we believe that such arrangements can be detrimental from a political-economic standpoint. Through the creation of agreements that suit the interests of specific sectoral interests, the broader coalition that would support an open trading policy can be easily undermined, resulting in diminished interest in broad-scale negotiations. The result may be a strengthening of the political power of interests such as textiles and steel that are increasingly uncompetitive in the rich industrial countries. Bilateral agreements can be similarly corrosive. As a patchwork of agreements is created, 'less desirable' countries are left out, and competitive bilateralism may lead not to greater liberalism as it did for some time in the nineteenth century, but to the pursuit of political favouritism and the erosion of support for the WTO.

In money, the Europeans pioneered minilateral systems of hard pegs in the second half of the nineteenth century. Some of these systems still have influence more than a century later – especially in those countries in the periphery of a strong currency. After the First World War, European influence in designing monetary arrangements gradually diminished with its failure to launch a stable Gold Exchange Standard. The United States then took an active leading role and designed the first truly multilateral monetary system, the Bretton Woods system, anchored by the US dollar. But Europe did not follow the US lead for long. Once the dollar went off gold, the Europeans started to pursue their own options through the design of a series of arrangements that aimed to stabilize European exchange rates. The ultimate step in monetary cooperation has been the move toward an unprecedented monetary union – a development that clearly puts Europe in the forefront of currency management.

Our analysis of the European role in the monetary system shows the interplay of power and ideas. While Europe pioneered minilateral systems of hard pegs, it failed to adapt them to changing political and economic conditions. As other countries began to catch up economically with Europe, and as pressure to pursue more open domestic polities increased, a return to the Gold Standard became increasingly difficult. A more formalized international regime to counter the

aggressive competitive devaluation of the 1930s was needed, but the Europeans could not produce such a system. From a political standpoint, the United States came to challenge British political and financial dominance. And from the standpoint of innovation, the Europeans failed to envision a new system that would go beyond the Gold Standard that might include a softer peg.

The most recent innovation in the monetary system, the EMU, looks to have significant promise and may be seen as attractive to those in other regions in the world who have been buffeted by the winds of unrestricted capital flows. Yet the EMU is not an easy arrangement to copy – particularly given its creation in the context of a long-standing regional integration effort. Moreover, the euro is a new phenomenon, and many countries, even in the European Union, do not appear fully convinced of its prospects.

For states in other regions, however, being a follower may have its advantages. Asian countries, through the Chang Mai initiative, have clearly indicated their interest in collective action to protect against the vagaries of markets. The Southern Cone in Latin America is still coping with the consequences of the forced devaluation of the Brazilian currency in 1999 and the Argentine devaluation of January 2002. These countries will be watching carefully whether there is life for a softer belt around the hard core of EMU. The new exchange rate mechanism (ERM2) linking those EC members inside the EMU with those outside of it would – if successful – be good news to those groupings that need to accommodate more heterogeneity, both politically and economically.

On a more general level, three conclusions emerge. First, Europe seems to have had a U-shape leadership in institutional design; this shape largely follows the trend in economic interdependence among European countries. Europe did not have much to offer in the interwar period due to political and military developments. Second, with respect to the development of solutions, Europeans have mostly focused on solving their particular problems and not as leaders for others. Put differently, Europe seems to have little desire to be an exporter of institutional designs. Third, building on this second observation, given the specific objective and context of European solutions, these blueprints will prove difficult to copy. Unless other regions reach comparable degrees of interdependence, they will not be interested or able to use European solutions. Yet there are growing signs that the time for these conditions to be fulfilled may not be so far away. Europeanization of the globe may turn out not to be a phenomenon of the past, but the wave of the future.

Notes

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- 1. We begin our analysis in the nineteenth century. For a discussion of earlier trends and developments, see Findlay (Chapter 2, this volume).
- 2. For the sake of convenience, we shall throughout the chapter use the European Community (EC) as a generic title for the integration process from the Treaty of Rome to the current status. Historical accuracy would force us to distinguish between the European Communities, the European Economic Community, the European Community and the European Union.
- 3. This table was first developed in Aggarwal (2001).
- 4. For a good discussion of bilateral agreements, see Snyder (1940).
- 5. For a discussion and critique of these agreements, see Aggarwal (2001) and Aggarwal and Ravenhill (2001).
- 6. See Yarbrough and Yarbrough (1987) for a discussion of minilateralism.
- 7. See Aggarwal and Fogarty (2001) for a discussion of regionalism, transregionalism and inter-regionalism.
- 8. In a different vein, Cooper (1975) develops a typology of monetary regimes based on five 'roles' of exchange rates fixed, adjustable parities, gliding parities, managed float, and free float coupled with the reserve assets and the degree of market convertibility for capital movements.
- 9. For a discussion that focuses on the legalization processes, see Kohen (Chapter 4, this volume).
- 10. The discussion in this section draws on Dupont and Hefeker (2001). For a complement see O'Rourke (Chapter 3, this volume).
- 11. On the abolition of the Corn Laws, see Schonhardt-Bailey (1996) and O'Rourke and Williamson (1999).
- 12. The Zollverein was itself an interesting innovation. Its nucleus was the customs union between Prussia and Hesse-Darmstadt in 1828. From then until its end in 1866, 16 major states joined this nucleus to form the German Customs Union (Mattli 1999:112). Prussia was clearly the leader of the union with other members following, mainly because they wanted to get an access to its market (for more see Henderson 1958 and Mattli 1999).
- 13. See Lazer (1999) for an analysis of the effects of MFN.
- 14. See Gourevitch (1986) on responses to the 1873 depression.
- 15. See O'Rourke and Williamson (1999: Chapter 6), and O'Rourke (Chapter 3, this volume).
- 16. The extent of the shift in trade policy is a contested topic. For instance, Irwin (1993) argues that the shift was not very important. Tariff rates remained *relatively* low up to 1914, and some countries like Germany actually reversed their trade policy course after the 1880s. Bairoch (1989) on the contrary argues that there was a severe reversal, with several important countries returning gradually to 1800 tariff levels. Although the truth is probably in between these two positions, the dominant view is that significant shifts occurred.
- 17. See Aggarwal (1985) for a detailed discussion of textile restraints.
- 18. The Uruguay Round agreements called for the phase-out of the MFA by 2005.
- 19. See Ravenhill (2001) for a discussion of Lomé since its inception.
- 20. This section draws heavily on Aggarwal (2001) and Aggarwal and Ravenhill (2001).
- 21. See Dupont and Hefeker (2001) for a discussion of the contending explanations for the switch to gold.
- 22. Eichengreen (1985). McKinnon (1993) lists six rules, three explicit ones that correspond to Eichengreen's three rules and three implicit ones that govern the behaviour of central banks and treasuries. For a more general discussion on the

existence and effects of rules during the Gold Standard period, see Bordo and Schwartz (1984).

- 23. For a discussion of Hume's model and its application to the case of the Gold Standard, see Eichengreen (1996:25–30).
- 24. In Britain, the Cunliffe committee, in charge of drafting proposals for the postwar monetary system, did not consider any alternative to restoring the Gold Standard.
- 25. On the Bretton Woods system, see Eichengreen (1996) and James (1995).
- 26. The League of Nations actively encouraged the removal of all restrictions on capital mobility from 1925 onward (see Nurkse 1944). See Simmons (1994) for a discussion of national policies toward capital controls.
- 27. For a discussion of EMU in the context of global financial markets, see Steinherr (Chapter 7, this volume).

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7 Europe in the Global Financial Market

Alfred Steinherr*

I. Introduction

London surely was the global financial market until the First World War. To a modern observer today's role of Europe in the global financial market is much more modest but, as this chapter argues, more significant than what meets the naked eye. To a considerable extent this role is still due to the special place of London in the financial world. This is the point of Section II.

However, the construction of Europe, starting from the European Payments Union in the late 1940s and arriving at the European Union in the 1990s, also contributed significantly to the construction of the global financial market. These contributions are the subject of Section III. See also the chapter by Aggarwal and Dupont (Chapter 6 in this volume).

The major contribution of Europe to global finance has been the creation of a large and open capital market as a side-product of European Monetary Union (EMU), offering an international platform to investors and borrowers around the globe. Section IV develops this point in more detail given the recent nature of this market and its far-reaching significance.

Section V concludes. Europe's role is contrasted with that of the United States and its shortcomings as a global actor are noted. Key to that comparison is my understanding of a new dimension of globalization, which is particularly prevalent in finance.

In this volume, two contributions represent opposite attitudes toward the concept 'globalization'. Sylvan (Chapter 14 in this volume) argues that 'some concepts are so vague and so problematic that nothing can be done except to retire them. In the field of political science, a case in point is the concept of "modernization" and its fraternal twin "development".' He proposes to do the same with globalization unless the concept is made more precise. At the other

extreme, Ruane and Sutherland (Chapter 10 in this volume) search for definitions in dictionaries and conclude that 'globalization manifests itself in increased international trade, foreign direct investment and, to a lesser extent, international migration of labour. But the process of globalizing is much more complex than is evident in aggregate data.' Most contributions do not waste space with definitions thereby implicitly accepting any standard definition such as the one by Ruane and Sutherland.

If globalization is defined in terms of growing shares of foreign trade, foreign investment, or foreign travel, then globalization is a process that started way back in history, reached a first high point before the First World War, its nadir in the interwar period, and started its ascension again under the aegis of the Bretton Woods institutions. But why, if this is a smooth, continuous process that restarted 50 years ago, has globalization received so much more attention and opposition in recent years? I wish to argue that during the 1990s the process received a substantial qualitative change.

This change is both political and financial. The political change came with the demise of communism. The disappearance of communism eliminated the only concrete alternative to capitalism as a practicable model of social organization. It also ended the division of world powers into two camps. The clear winner was the capitalist model and its most resolute and powerful incarnation, the United States. The relatively better economic performance of Japan and Germany in the 1970s and 1980s had stimulated debate and reflection. Even in the United States, the question was raised whether a long-term vision such as represented in Japan by MITI or in Germany by universal banks was the key to better performance as compared to short-term profit orientation as sometimes argued was typical of US institutions. Such doubts evaporated in the 1990s. US capitalism, based on a strong capital market and on a broad-based set of market-supporting institutions, became the unchallenged model for all parts of the world.

But it is one thing to open up local markets to foreign goods and quite another to open up to institutional challenges. What was new, starting in the 1990s, was the global acceptance of market economy principles and of US-designed institutions:¹ such as, transparent accounting standards (usually certified by one of the five big US accounting firms), international rules of law (with the help of US law firms), a state in retreat to favour private initiatives, a loss of monetary control due to liberalization of the financial system and elimination of capital controls (with the help of US securities firms), and the build-up of capital markets (with the help of US investment banks and US rating agencies). In addition, the United States became impatient with slow reformers and pressed countries hard to open up their financial markets. After the Asian financial crisis of 1997–98 not much thankfulness remained for US 'guidance' and the question became fashionable whether this type of globalization was really good for everybody. Asia now contemplates a more regional move forward towards monetary cooperation possibly taking its inspiration from the European experience. My definition of globalization is: 'the acceptance of a set of principles that characterizes a democratic polity, open to the rest of the world, and the US version of a market economy'. With this definition, globalization is a recent phenomenon. My definition is clearly focused on institutions and therefore particularly relevant for financial markets. As I have argued in Steinherr (1998, 2000) the functions of finance have not changed much in history. What has changed dramatically is the institutional organization. This definition is thus narrower and not all-inclusive. By implication, Aggarwal and Dupont (this volume) have espoused such a concept as they entitle their chapter 'A Leader in Institutional Design? Europe and the Governance of Trade and Monetary Relations'. So what has been the European experience with globalization?

II. London: Europe's gate to the world of finance

Until the First World War London was the unchallenged centre of the world financial market. The world was highly globalized in terms of foreign trade and financial flows, hiding the fact that some parts of the world were not participating at all in the global system, whilst others participated as part of the colonial arrangements. In this sense today's situation is not comparable. What has remained of London's pre-eminence is, however, truly remarkable. Whilst the economic and political importance of the United Kingdom has all but disappeared, London has retained a remarkable share of the global financial market and a leadership role that bears no relation to the United Kingdom's declining share of world GNP.

Part of the explanation lies in London's historic concentration of financial savoir-faire. The rest is luck and the capacity of British policy-makers to listen to the market and seize the opportunities offered. In the 1960s, domestic concerns in the United States led to the imposition of an equalization tax and maintenance of Regulation Q. This made it unattractive to repatriate US earnings and London became host to the Euro-dollar market. The establishment of US banks and securities houses in London transferred US managerial and financial know-how. Since then, international business has been conducted more prominently out of London than out of New York. Aided by wise regulatory action and the will to maintain London as a leading financial centre, the international transactions out of London - also supported by increasing trade and financial liberalization worldwide - boomed. London enjoys a time-zone advantage as a go-between for the two giants, Asia and the Americas. Its cosmopolitan population and the English language predestined London for its international role. Also helpful was that its market-based regulatory and legal framework made cooperation and adaptation to US standards easy. London

received a lot in the big global game, by giving in just a little (Luxembourg understood the opportunities offered by globalization a little later but earlier than others and became successful).

Today, London is the epicentre for foreign exchange transactions, for the swap market, or more generally for OTC derivatives, for international asset management, for interbank loans and for Euro-dollar business (Steinherr 1998, 2000). London boasts the biggest international insurance market. English law is, as an alternative to US law, the basis for international transactions. Its advisory capacity and its exchanges are second only to New York. For some commodities the London exchanges are world leaders.

Table 7.1 illustrates the leading role of London as an international lender. The external asset position of banks in the United Kingdom was 20 per cent of the global market or more than twice the US share (all currencies, end 2000). In foreign currency, London's share was 25 per cent and the US share less than 1

Reporting countries	Amo	ounts outst	anding	Amo	unts outst	anding
	1998	1999	2000	1998	1999	2000
	Dec.	Dec.	Dec.	Dec.	Dec.	Dec.
	Assets	(in all curr	rencies)	Assets (in	ı foreign c	urrencies)
ALL COUNTRIES	9 908.0	9 939.5	10 764.4	7 385.6	6 395.0	7 036.9
Austria	82.3	80.9	90.8	61.5	39.1	39.9
Belgium	263.5	297.9	284.7	229.3	106.1	103.4
Denmark	68.4	58.3	58.0	47.3	43.3	42.7
Finland	18.3	26.3	29.3	13.4	13.3	15.0
France	661.6	647.9	640.1	504.5	285.1	283.2
Germany	831.7	870.8	975.4	467.5	316.3	358.0
Hong Kong	501.0	475.8	450.4	468.9	443.7	413.0
Ireland	123.9	152.4	166.6	119.6	84.5	93.9
Italy	224.6	135.9	169.3	103.7	60.5	53.4
Japan	1 252.7	1 193.0	1 199.2	716.9	697.3	747.7
Luxembourg	467.9	495.3	509.7	459.0	207.2	203.8
Netherlands	306.3	280.5	289.6	238.1	134.5	145.6
Portugal	54.8	48.7	50.8	32.5	19.2	17.2
Singapore	437.0	416.9	423.7	437.0	416.9	423.7
Spain	127.4	120.7	137.0	81.2	51.6	64.7
Sweden	50.9	53.1	67.4	33.3	33.6	44.3
Switzerland	593.9	703.3	740.0	499.5	615.5	666.8
United Kingdom	1 904.6	1 816.7	2 094.5	1 691.8	1 625.3	1874.1
United States	813.0	871.0	951.4	78.2	79.1	56.9

Table 7.1 External Positions of Banks in Individual Reporting Countries, 1998–2000 (in billions of US dollars)

Note: External assets include deposits, loans, and security holdings.

Source: BIS Quarterly Review, June 2001.

per cent. (In Table 7.1 the external position includes claims on EU-partners and this overstates the global role of EU countries.)

What has London got to do with Europe? Good question. But geography and UK membership in the European Union provide answers. The important point is that the centre for the most globalized market, the financial market, is London for reasons of history, of its small size and hence need to engage in trade and finance relationships with the rest of the world, of its regulatory and institution-building skills, even if the main actors are US corporations.

I have argued in Steinherr (1998, 2000) that in finance most of the innovations occurred in the United States. In the rest of the world, the scope of business, the way business was conducted, and the institutional forms of finance were adjusted. In adapting to the global competition European intermediaries acquired British and American investment banks, decentralized their operations, transferred asset management and investment banking to the United States and London, internationalized their executive boards and introduced US remuneration and contract principles. Although Europe was a 'net importer' of ideas, of institutional innovations and of procedures, there was some feedback. Worldwide, even in the United States, segmented banking was dropped in favour of continental European universal banking. There is little that differentiates Citigroup from UBS or Deutsche Bank, and all three operate globally.

III. From the European Payments Union to the European Monetary Union

The first European cooperation effort was instigated by the United States. The European Payments Union (EPU) was set up to overcome the foreign exchange scarcity of the immediate postwar period resulting in numerous bilateral agreements. The principle of non-discrimination and of multilateralism was a pillar also of the worldwide trade agreements, as incorporated into the GATT. Here, for the first time this thinking was embodied in a trade-related financial support facility. And the agreement was regional and not all-comprehensive. EPU has been judged in generally positive terms. It made trade flows more efficient and accelerated the return of European countries to (current account) convertibility. Perhaps more importantly it helped to create a mindset among European civil servants that eased the preparations of the Rome Treaty. Ever since, academics have debated whether regional arrangements such as the Customs Union of the European Union were to be considered as a stepping stone or a stumbling block to free world trade. The same question can also be raised with regard to monetary union.

Regional trade or monetary arrangements reflect the fact that the global economy is not without a pronounced topography. Countries trade more with neighbours than with distant partners: more than 80 per cent of Mexico's and

Canada's foreign trade was conducted with the United States, even before NAFTA. The same importance of proximity applies to the EU's neighbours. A simple approach to testing the forces of proximity and of size is offered by the 'gravity' model. This approach, approximating mass with GNP and proximity with some normed distance, can 'explain' up to 85 per cent of bilateral world trade.² Thus, should there be one day a continental American trade and monetary agreement ('the dollar region'), with a European regional order soon comprising up to 30 countries ('the euro region'), and, finally, an Asian trade and monetary area ('the yen region?), then world free trade or a world currency would not be able to provide much additional gain.³

And whilst the United States was supporting the European construction the success of European integration and its openness are positive achievements with widespread international implications. First, after the fall of communism there was never the slightest doubt in the minds of Eastern Europeans about the desirability of joining the EU. So strong is the potential gain as perceived by these countries that the EU has been able to exert pressure on local politics in these countries to influence the direction and speed of reforms. Second, even for NAFTA the success of the European common market was an encouragement. And, whilst Asia is lagging behind in regional cooperation, it is now reconsidering.

The first step toward monetary union in the EU was taken under pressure. In 1969, at a time when the Bretton Woods system was visibly in its final agony, the European Common Market of six participating countries set up a committee chaired by the Luxembourg state minister Pierre Werner to study the scope for monetary cooperation (Steinherr 1994). The Werner report was delivered in 1971 and to a large extent adopted by the Delors Committee 20 years later. What the Werner report made clear, however, was the far greater transgression into sovereign issues required for monetary union as compared to trade liberalization. And for that reason the Werner report was put aside for 20 years. Not only was it recognized that monetary union would imply giving up national monetary policy, it also required some cooperation for fiscal policy, and, much more difficult, profound institutional changes. Independent central banks, a unified internal financial market, making it necessary to stop using national banks for policy objectives at the cost of economic efficiency. Europe had different banking models, ranging from segmented banking to universal banking, and capital markets were generally, albeit to different degrees, underdeveloped.

Has European Monetary Union (EMU) contributed to the global financial market? In my view the answer is an unambiguous yes. EMU has accelerated the elimination of capital controls in Europe. Some European countries maintained capital controls until the late 1980s and it is doubtful that in the absence of EMU these controls would all have disappeared by now. EMU has created a nearly completely integrated capital market among 12 countries. And, whilst with the exception of the British capital market, capital markets in Europe

were unimpressive, the euro capital market is now second to the US dollar market. This has important consequences. For investors and borrowers there is now an alternative to the dollar. A world financial market in which there was only one efficient and liquid market, surrounded by a multitude of too small, too inefficient markets was not really a globalized system. Now, with the US and European markets representing more than 50 per cent of the world financial market, free access to these markets, and their efficiency, represents a giant step towards a world financial market.

Whether Europe is playing a global role of bank lender can be ascertained with the help of Table 7.2.⁴ In terms of overall claims on all countries Switzerland alone matches the United States and the assets of the euro-area are eight times those of the United States. Also Japan plays a secondary role. The same is true for lending to developing countries. The aggregate data may hide special regional exposures or a preference for safer lending. Table 7.2 therefore also lists claims on five 'crisis stricken' countries, two in the US 'proximity' (Argentina and Brazil), two in European 'proximity' (Russia and Turkey) and one in Asia (Indonesia). In all countries but Brazil, a single euro-area country (usually Germany but in Argentina Spain has an even greater exposure) has claims far in excess of those of the United States or Japan. The US claims also show a strong concentration on Latin America, whereas the euro-area displays a more even global presence. In relation to the United States, the euro-area has five times the exposure in Indonesia, more than three times in Argentina, fifteen times in Russia and five times in Turkey. Europe's banks seem to be truly global players.

on:	euro-12	Switzerland	Japan	UK	US
all countries	3327	432	944	564	413
developing countries	433	32	77	73	97
Indonesia	15.2	1.7	10.2	3.5	3.2
Argentina	39.8	2.4	1.8	6.8	11.2
Brazil	32.1	3.0	2.8	6.5	14.4
Russia	30.2	2.0	0.4	0.7	1.4
Turkey	24.5	2.0	2.0	2.6	4.7

Table 7.2Consolidated International Claims of Reporting Banks, End December 2000(in billions of US dollars, by nationality of reporting banks)

Note: The data in this table relate to the consolidated claims of *domestically owned* banks only. Claims of local subsidiaries or branches of foreign banks (which were part of the data in Table 7.1) are excluded.

Source: BIS Quarterly Review, June 2001.

Europe has been in recent years a major lender and investor in the rest of the world. Table 7.3 shows the net international investment position of the euroarea. Several features are of interest. First, overall the euro-area has net liabilities of ϵ 152 billion (January 2001). Thus, the two richest and largest global players,

the United States and the EU, are net borrowers, although the EU's net liabilities pale in comparison to those of the United States. The euro-area is a very large holder of foreign direct investments (€460 billion on a net basis). It also holds €391 billion foreign exchange reserves or about 20 per cent of the world total. But it is a net receiver for portfolio investments (€721 billion) and for deposits and loans (€288 billion). The euro-area is therefore playing a major intermediation role: the rest of the world buys European securities and in exchange receives European direct investments.

Table 7.3 Euro-Area: Net International Investment Position, 1997–2001 (in billions of euros; assets minus liabilities; end-of-period positions)

Total	Direct investment	Portfolio investment	Other investment			Reserve assets
			Trade credits	Loans/ currency and deposits	Other assets/ liabilities	
32.7	177.6	-724.7	79.6	51.3	91.4	363.3
-147.9	152.2	-713.5	100.0	-107.1	88.8	329.4
-75.0	402.4	-752.8	111.9	-338.2	119.0	372.6
-101.4	466.6 459.3	-666.8 -721.5	115.7 114 9	-530.4 -531.6	128.5 128.5	378.0 391.2
	32.7 -147.9 -75.0	32.7 177.6 -147.9 152.2 -75.0 402.4 -101.4 466.6	32.7 177.6 -724.7 -147.9 152.2 -713.5 -75.0 402.4 -752.8 -101.4 466.6 -666.8	investment investment Trade credits 32.7 177.6 -724.7 79.6 -147.9 152.2 -713.5 100.0 -75.0 402.4 -752.8 111.9 -101.4 466.6 -666.8 115.7	investment investment Trade certification Loans/ currency and deposits 32.7 177.6 -724.7 79.6 51.3 -147.9 152.2 -713.5 100.0 -107.1 -75.0 402.4 -752.8 111.9 -338.2 -101.4 466.6 -666.8 115.7 -530.4	investment investment investment investment Trade credits Loans/ currency and deposits Other assets/ liabilities 32.7 177.6 -724.7 79.6 51.3 91.4 -147.9 152.2 -713.5 100.0 -107.1 88.8 -75.0 402.4 -752.8 111.9 -338.2 119.0 -101.4 466.6 -666.8 115.7 -530.4 128.5

Source: ECB, Monthly Bulletin, December 2001.

The change since 1997 has been dramatic for deposits and loans: from a net asset position of ϵ 51 billion in 1997 to a net liability of ϵ 532 in 2001. With the change to the euro Europe has gained deposits, and European loans were called back in the wake of several financial turmoils since 1997.

At the end of 2000, the central banks of the world held foreign exchange reserves of \$1900 billion. About two-thirds were denominated in US dollars. From a portfolio diversification point of view, this excessive dollar share has a simple reason: central banks attach more importance to liquidity than return, in order to use reserves when needed. Until EMU the only liquid market in safe securities was the US treasury market. As argued in the next section, the euro market now offers a real alternative in terms of liquidity and security. Central banks will be able to reduce their dollar overexposure and the euro market is bound to play a significant global role in the future.

IV. Europe's most significant global achievement: the euro capital market⁵

The continental European financial architecture has traditionally been organized around banks. In the last two decades, traditional banking intermediation from

deposits to loans has weakened, whilst capital markets have gained in importance. This is sometimes described as the 'Americanisation of finance' (Steinherr 1998, 2000) even if in the European context this has, so far, been essentially achieved through the transformation of the activities performed by banks and not via the emergence of a set of new and different financial intermediaries. The most significant changes have taken place in the fixed-income market, which is the focus of this section.⁶

The driving forces for the evolution of finance over the last two decades can be grouped into seven broad classes: technology (steep cost decreases in computation, data storage and communication), advances in finance theory, retrenchment of the state in the provision of finance, free capital flows, introduction of worldwide financial standards, institutionalization of management of savings, and demographic changes – in short, the forces of globalization.

Theoretically, what contribution to a more efficient global economy can be expected from EMU?

First, the monetary philosophy underpinning EMU (in line with views in Washington and Tokyo) is that aggregate price stability is a useful goal and that inflation cannot enhance economic growth and efficiency in the medium term. Stable and low inflation should reduce the economic risk, driving down risk premia, and ultimately enabling investors to adopt longer time horizons for their investment. This should lead to the development of an 'equity-based' culture. Adoption of the same policy underpinnings by the three pillars of the world monetary system guarantees long-term exchange stability and represents a step toward a world monetary order.

Second, the adoption of the single currency in most of the European Union eliminates currency risk in cross-border investment decisions. As noted by Brookes (1999) performance of cross-border investments prior to the euro was mainly driven by country-specific factors. In a nutshell about three-quarters of the performance of cross-border investments were ultimately related to exchange fluctuations and domestic monetary policy. As the exchange rate factor disappears with EMU and monetary policy is conducted for the whole eurozone, past investment strategies break down. For example, equity investment will shift away from country factors in favour of sectoral allocations and bond investments should be expected to be attracted to more credit risk (emergence of a corporate bond market) and more arbitrage along the yield curve.

Third, the replacement of national currencies by the euro should lead to the disappearance of a regulatory 'home bias', imposed on many institutional investors facing strict limits on the extent of currency mismatches that they are allowed to bear. For example, in many European countries, life insurance companies (one of the largest investors' groups) are prevented from running currency risk. Hence they are forced to invest their reserves in the currency in

which their liabilities are denominated. This led to two consequences: financial markets were segmented along national currency lines and, as the size of most national markets is small, liquidity was rather poor. The disappearance of national currencies and their replacement by the euro rapidly removed market fragmentation and widened considerably the set of investable securities. This should lead to the convergence of returns (for a given risk) across the zone, much higher levels of liquidity and much bigger cross-border investment flows.

Fourth, to obtain currency risk Europeans need to invest outside the euroarea. As argued in Section III, the euro market is an efficient attractor for investors and borrowers from the rest of the world.

Let us now check whether the changes expected from the introduction of the euro are already visible less than three years after the introduction of the single currency.

Table 7.4 compares outstanding stocks of governments bonds for the three major global entities. The euro-area clearly has a market size for government bonds that exceeds those of the United States and Japan.

	Market value				
	1998	2000			
Euro 11	2 266	2 430			
United States	1 838	1 740			
Japan	1 282	1 733			

Table 7.4 Size of Government Bond Markets, 1998 and 2000 (outstanding stock in billions of US dollars)

Source: Galati and Tsatsaronis (2001).

The government bond market has traditionally been the dominant segment of the bond market. The removal of the 'captive investors' base' that most governments enjoyed prior to EMU has made way for a much more competitive environment. National treasuries have had no choice but to improve the attractiveness of their securities. Table 7.5 shows how the sizes of ten-year benchmark government bonds issued by the three largest countries of the euro-zone have changed in the period 1996–2001. These three countries have the largest funding needs. The issue size of government bonds in 1996 is fairly representative of the situation before national treasuries changed the financing approach in the runup to EMU. With the notable exception of France that had already taken steps to modernize its debt management policies, the size of the largest government benchmarks in both Italy and Germany was about ϵ 10 billion and the trading activity in these bonds was relatively low. As the euro became a distinct prospect, both Germany and Italy increased substantially the size of individual bond issues so as to provide investors with adequate liquidity. Nowadays, benchmark government bonds of the three largest euro-zone countries range between \notin 20 billion and \notin 25 billion. For the sake of comparison, US benchmark Treasury bonds, before the cut in individual issues prompted by the budget surplus, had an individual size of about \$15 billion.

Table 7.5 Size of Benchmark Government Bonds, 1996–2001 (in billions of euros)

	1996	1997	1998	1999	2000	2001
Germany France	12.8 18.7	15.3 21.8	15.0 25.3	20.0 24.0	20.0 18.0	24.0 19.7
Italy	8.7	14.7	22.8	23.0	21.1	18.7

Note: Largest outstanding ten-year government bond in each year, 2001 to end September.

Source: Bloomberg.

National treasuries have taken additional steps to improve the attractiveness of their securities. They have harmonized the characteristics of their bonds (for example, adoption of similar coupon calculation conventions) and have become much more transparent in their issuing policies (pre-announcement of issue calendars, increase in outstanding securities by re-openings).

Smaller European countries have lower refinancing requirements and it would be difficult for them to aim for the benchmark size of the largest ones. However, they have not remained inactive. They have taken steps to improve the liquidity of their securities. For example Spain has focused its borrowing programme on maturities where the largest countries are not very active. The Netherlands and Belgium have restructured their debt through buy-backs and exchange offers to reduce the number of government bonds and to consolidate them into larger issues. In both countries the target size of benchmark government bonds stands at around ϵ 10 billion, about twice as large as before. Several countries (Belgium, Austria and Portugal) have also aimed to reach a wider investors' base by launching the original (large) tranches of new bond issue through syndication. This has allowed them to tap pools of funds that otherwise would not have been available.⁷

All European governments have gained and were able to lower their borrowing costs in the euro market. For example, in the ten-year segment of the bond market yield spreads of euro-zone government bonds with respect to Germany range from ten to 35 basis points. Only a few years back, during the first part of the 1990s, spreads ranged to several hundred basis points.

Since the introduction of the euro there has been a remarkable growth of the non-government bond market. Table 7.6 provides the structure of non-government outstanding bonds by main classes of borrowers. It should be noted

that the absolute size of the non-government bond market in US dollars exceeds that of the euro.

Table 7.6 Distribution of Outstanding Non-Government Bond Markets, 1995–2000 (per cent of total)

		US\$			€	
	1995	2000	difference	1995	2000	difference
Corporations	28.5	24.8	-3.7	8.1	16.3	8.2
Financial institutions	18.9	20.8	1.9	56.3	49.2	-7.0
Collateralized debt	39.6	39.2	-0.3	19.5	26.1	6.5
Non-govt. public sector	11.5	13.7	2.2	11.6	5.3	-6.3
Supranationals	1.6	1.5	-0.1	4.4	3.1	-1.3

Source: BIS 2001.

As Table 7.6 clearly indicates, there has been no dramatic shift in the overall structure of the US dollar bond market between 1995 and 2000. By contrast the euro market has undergone significant changes. The share of the outstanding bonds of corporations has doubled to 16 per cent in only five years, although it still trails that of the US dollar market. The share controlled by banks has been reduced to about 50 per cent, while that controlled by collateralized debt (essentially German Pfandbriefe and securities structured in a similar way in other European countries) has increased.

The evolution of outstanding stocks as depicted in Table 7.6 reacts at slow speed as the pattern of new flows changes. To better understand whether there are visible effects of EMU we turn to flow data.⁸

Table 7.7	Structure by Borrowers o	of Non-C	overnm	ent Bond Issu	ies in Eu	ros, 1999–2001
			_	x	~ ~	

	Amount issued (€bn)			Share of total		
	1999	2000	2001	1999	2000	2001
Local agencies and supranationals	70.5	70.5	57.9	9.0%	10.1%	10.3%
Collateralized bonds	294.6	241.4	145.8	37.5%	34.6%	26.1%
Financials	280.5	249.3	197.4	35.7%	35.7%	35.3%
Corporates	140.3	136.5	158.4	17.9%	19.6%	28.3%
Total non-government	785.9	697.7	559.6	100.0%	100.0%	100.0%

Note: 2001 up to the end of August.

Source: European Commission.

The data in Table 7.7 clearly indicate that there have been quite significant changes in the structure by borrowers in the euro capital market. Let us assume that if the euro had not come into being, the average structure of flows in the

euro-zone bond market would have remained as given by the structure presented in Table 7.6.9 On that basis there have been dramatic shifts. The most important is that the corporate sector has massively increased its direct calls on the bond market. Compared with the 8 per cent market share of non-government outstanding bonds in 1995, the corporate sector has captured about a fifth of the total issuance since the launch of the euro. A second feature is that the share of new bond issues originated by banks is substantially lower than in the past while the collateralized bond market has been growing sharply. Some of this growth is related to changes in banking activity. Instead of holding loans on their balance sheet and refinancing them through bond issues, banks have embarked into securitizing some of their loans. Finally, supranationals have reduced their calls on the euro bond market while regional and local authorities have started to tap the market. It should be observed that the structure by borrowers of new issues in euros is rather close to that of outstanding bonds in US dollars. The notable difference is that in Europe banks play a larger role than in the United States and the converse is true for collateralized bonds. This is not surprising as the participation of US banks in credit creation is much lower than in Europe, while that of other providers of credit outside the banking sector is much more developed in America.

The evidence presented so far suggests that the euro bond market is converging to US standards. It needs to be verified whether this also holds for the characteristics of individual bond issues.¹⁰

An obvious point for comparison is the size of bond issues. In the period January 1999 to August 2001, the median bond issue size in euros is ϵ 200 million and in dollars \$200 million.¹¹ Table 7.8 provides a snapshot of the size distribution of bond issues. There are relatively more issues in dollars in the smaller (less than \$100 million) and larger (more than \$1 billion) size brackets than in euros. In euros, there are relatively more middle-sized issues:¹² issues in euros are more frequent in the intermediate segment ranging from 100 million to 500 million.

	€is	sues	US\$ issues		
	amounts	no. of issues	amounts	no. of issues	
0–99 million	2.94%	24.56%	2.47%	28.88%	
100-249 million	12.60%	29.41%	6.98%	22.61%	
250–499 million	19.61%	22.09%	12.04%	17.98%	
500–999 million	24.96%	15.04%	19.67%	15.42%	
Above 1 billion	39.89%	8.90%	58.84%	15.11%	
Total	100.00%	100.00%	100.00%	100.00%	

Table 7.8 Size Distribution of New International Bond Issues in Euros and US dollars

Source: Thomson Financial IFR, IFR Platinum CD-Rom.

How do US dollar and euro markets compare for the largest corporate deals? Mortgage banks in Germany and several large financial institutions represent a large fraction of top-tier issuers. Among non-financial corporations and their financial subsidiaries, the largest international euro bond issue over the last three years was done by a subsidiary of Olivetti at the time it took over Telecom Italia.¹³ The issue size of the largest individual corporate transactions in euros and dollars are fairly similar. On closer examination, however, two differences emerge: first, the maturity range of the large corporate bond issues is much narrower in euros than in dollars. The longest maturity in euros stands at seven years, while in dollars it goes to 40 years.¹⁴ Second, the vast majority of the large corporate transactions in euros are made by the telecom sector. In the US, the telecom sector has also been a large borrower, but the sectoral diversity is clearly wider.

The evidence presented suggests that the euro bond market has developed nicely and is coming close to sharing the main traits of the US international bond market. Its traditional characteristics have been shed to move close to the global (US) standard. Further convergence is likely because venturing to the capital market requires time and the range of firms accessing the market will grow further over time. For example, in continental Europe about 500 firms are formally rated by the main rating agencies, while in the United States around 3 000 firms are rated (ECB 2001b).¹⁵

What about the 'global role' of the euro, that is, has the euro bond market also recorded success in providing a source of funding for non-resident borrowers? Clearly, the dollar has remained the currency of choice in international borrowings for most non-resident borrowers (outside the EU). However, several sovereigns from Latin America have raised funds in the euro bond market. The progress has been most spectacular with Eastern European sovereigns: most of these countries have an exchange rate policy that is linked to the euro, or at least their main economic ties are with the EU. Hence, borrowing in euros is seen as a sensible alternative.

The fact that the euro bond market is made of two segments (governments priced on German bonds and non-governments priced on the swap rate) that have, in some sense, a life of their own has a big impact on the development of the derivatives market. Hedging of a government bond position with interest rate swaps entails a significant tracking risk; the same holds for investors holding corporate bonds hedged with government securities or government bond-based derivatives contracts. Tables 7.9 and 7.10 depict the evolution of the size of the interest rate swap market in the main currencies and the size of the most successful government bond-based futures contracts. It is easily seen that in both cases the euro derivatives are ranked in top position. Only a few years ago, before EMU became a reality, interest rate swaps in dollar and treasury futures squashed European counterparts. Also here Europe has followed the United

States; competitive pressure and institutional response transformed European seclusion and inefficiency into a global standard.

Table 7.9 Notional Amount of Interest Rate Swap Outstanding, 1998–2000 (in billions of US dollars)

	Jun 1998	Dec 1999	Jun 1999	Dec 1999	Jun 2000	Dec 2000
Euro	13 576	16 461	17 483	20 692	22 948	21 311
US\$	13 214	13 763	16 073	16 510	17 606	19 421
Yen	7 164	9 763	10 207	12 391	12 763	13 107
Others	8 414	10 028	10 309	10 498	10 808	10 829
Total	42 368	50 015	54 072	60 091	64 125	64 668

Source: BIS Quarterly Review of international and banking markets, various issues.

Table 7.10 Turnover and Outstanding Contracts in Government Bond-Based Futures Contracts

		Fu	tures	Option		
Contract	Exchange	Open interest	Total volume	Open interest	Total volume	
Euro-Bund	Eurex	618 804	151 326 295	842 146	26 291 123	
Euro-Bobl	Eurex	385 084	62 502 582	136 688	2 436 491	
Euro-Schatz	Eurex	383 998	42 822 290	149 077	1 954 183	
US 30yr Treasury	CBOT	405 409	62 750 843	447 690	17 267 458	
US 10yr Treasury	CBOT	527 613	46 700 538	605 817	10 629 021	
US 5yr Treasury	СВОТ	358 012	23 331 981	185 008	3 733 542	

Source: Futures and Options Week Vol. 6 No. 04/29 January 2001.

V. Conclusions and Europe's shortcomings as a global player

As a financial global player Europe is doing fine. I have concentrated on the euro-area because the global role of the United Kingdom (and of Switzerland) is legendary.

The European Union and EMU have extended on a regional basis the most perfected free flow of goods, of labour and capital. No global treaty could have achieved as much. In this sense Europe has become a model.

As a global lender and investor Europe also assumes its responsibilities to a degree that compares favourably with Japan and the United States.

EMU has eliminated the last obstacle to an integrated capital market for the euro-area. This capital market is undoubtedly the greatest European contribution to global finance.

This assessment may appear biased in Europe's favour. It is therefore high time to note the shortcomings in Europe's global role.

And, indeed, the shortcomings are numerous. The most serious shortcoming is the absence of a corresponding political union able to exercise leadership. In present circumstances Europe is a valuable and trustworthy follower of US visions and policies. This is most clearly seen in the context of international financial institutions such as the International Monetary Fund and the World Bank. Pressure on these institutions to refocus, interventions for bail-out, certainly in Latin America but also in Asia, are engineered or at least conceptualized and supported by the US treasury. The European Union disposes of a much larger block of voting rights in the IMF than the United States, which is however not used systematically. Europe fails to have a vision and finds it difficult to speak with one voice.

The lack of a political leadership also hampers the 'global dimension' of the European Central Bank's actions or, more modestly, communication policy. Compared to the Federal Reserve it conveys the impression of an exclusively inward-looking institution ('inflationary pressure in Euroland is down or up and therefore monetary policy is ...') without any global responsibility. By contrast, the Federal Reserve never tires of justifying its decisions by global concerns.

US policy makers and financial institutions have been much more active in building a global financial architecture. Although the first capital adequacy measures were hammered out under the chairmanship of a British central banker, Peter Cook, the initiative was clearly US driven. The revised capital adequacy measures were negotiated under US chairmanship under the pressure mainly of US banks to widen the risk basis and to allow for greater sophistication in using bank-owned risk management systems.

Financial markets span the world but market regulations have remained national. This is a potential problem. The few initiatives that exist, such as international bodies to elaborate international accounting standards, master agreements for swaps or legal provisions for swaps, are all under US leadership.

All that suggests a rather second-class performance for Europe. That would surely be correct, in the absence of the United Kingdom. The United Kingdom plays a very central role in all global forums concerned with financial architecture, including the architecture for the European financial market.

There is however one aspect where this lack of European leadership was perceived by many emerging countries as something positive. During the 1990s the US trade and finance diplomacy pressured many countries into an unprepared liberalization of capital account transactions that played a significant role in the outbreak of the Asian crisis in 1997 (see Steinherr and Perée 1999). The Washington consensus (free trade, free capital flows, flexible exchange rates) had a solid theoretical basis for developed countries but ignored the specific conditions in emerging economies. It visibly served US interests (access of US institutions such as banks, securities dealers, asset managers, insurance companies to rapidly growing markets), put into question the traditional institutional set-up (tight and corrupt relationships between official bodies, financial intermediaries and industry), severed traditional controls without creating new ones, and implied a loss of revenue and control for the local administration and politicians. In Asia, Africa and the Arabian Gulf, policy makers toy with the idea of using regional monetary cooperation as a stepping stone for further globalization. The model is Europe.

Notes

- * I thank my assistant Irene Poli for help in finalizing the text, and Henryk Kierzkowski for suggesting the topic.
- 1. The French anti-globalists did not attack McDonald's because they were against international trade of meat but because they opposed the competition for French institutions of high value, called 'French cuisine'.
- 2. In Gros and Steinherr (1995), we extensively use the gravity model to interpret and forecast Eastern Europe's trade relationships with the EU and other parts of the world. To Eastern Europeans 'global' means interaction with the EU. The rest is of secondary importance.
- 3. Turkey has already a customs union agreement with the EU, the Maghreb, and other Mediterranean countries aim at free trade with the EU. Former French colonies in Central and West Africa form two monetary unions traditionally tied to the French franc, and therefore to the euro.
- 4. In the United States the role of banks is much less important in financial intermediation than in Europe. In addition, US banks conduct much of their foreign lending through their offices abroad, mainly London. Therefore the comparison of bank lending is not doing justice to the US role in the world. I therefore use the data of Table 7.2. These data are based on the nationality of banks and exclude US branches from UK banks. And, at any rate, the United States is a very large net borrower. The point is to show that Europe's role is more important than I had first believed.
- 5. This section is based on Perée and Steinherr (2001).
- 6. This does not mean that the bond market is the only segment affected by the euro. All markets are affected. The money market has seen the fastest changes, as it is so dependent on monetary policy. In the case of the equity market, it is difficult to distinguish between the effects of the euro and those of a bull run in equity markets on both sides of the Atlantic Ocean. European Central Bank (2001a, b, c) surveys the evolution of the three markets.
- 7. Ireland provides one of the most striking examples of the efforts to improve the liquidity of its bonds. In 1999, the Irish National Treasury Management Agency exchanged nearly all the government bonds quoted on the stock exchange (which had features that restricted their marketability) for new benchmarks of 3, 5, 10 and 16 years maturity.
- 8. Ideally one would like to analyse the flow of borrowings and their main characteristics and compare the market in euros with an external benchmark (say the US dollar bond market). There are several alternative data sources on bond market activity (Capital Data Bondware, IFR, BIS, European Commission). However, the geographical

coverage and the details available differ substantially. No data source dominates the others in all respects. I rely on the European Commission data to assess the structure by borrowers of bond issues in euros since January 1999 and on IFR data for the main characteristics of individual transactions and for the comparison with the US dollar market.

- 9. There is no reason to suspect that in the long-term flow data would significantly diverge from outstanding stock. This would only be the case if the maturity structure of new issues diverged significantly across broad classes of borrowers. Of course, it is also assumed that the structure of outstanding stocks in 1995 is at its medium-term equilibrium.
- 10. I rely on the IFR Platinum data and consider only international bonds.
- 11. As size may vary considerably, the median is probably a better measure than the average.
- 12. One should note, however, that before the introduction of the euro, bond issues for amounts in excess of DM 1 billion or FRF 3 billion (approximately €500 million) were considered to be of a very large size.
- 13. Tecnost International raised \notin 7.9 billion with one issue, and a month later another \notin 4.5 billion. Telecom firms account for six of the largest ten issues.
- 14. It should be observed that the wave of long-maturity transactions that swept through the US corporate bond market in 2000 was also driven by the sharp reduction in long-term borrowing of the US Treasury, confronted with growing budgetary surpluses.
- 15. A consequence of this has been that many US-based corporates have come to tap the euro-denominated bond market since the creation of the euro.

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8 Corporate Diversification, Internationalization and Location of Technological Activities by MNCs in Europe

John Cantwell and Lucia Piscitello

I. Introduction

I.1 Prelude - context of the chapter

In our previous work (in common with much of the international business literature) we have tended to confine the use of the term 'globalization' to the recent transformation of capitalist structures - thus, Cantwell (1989a) refers to the 'global capitalism' that has emerged since 1945, having evolved from the earlier forms of merchant, then industrial and then finance capitalism. What was observed in the past, and in which process European firms (especially those from Britain, Germany, the Netherlands and Switzerland) were leading contributors, was better termed more simply as the internationalization of business. This took the form of the international dispersal of productive activity, mainly in the search for new resources or markets, and after around 1870 it was conducted increasingly within multinational corporations (MNCs). To facilitate the geographical spread of their production, MNCs also began quite early to internationalize their technological development efforts (Cantwell 1995). Since the motive for most investments was resource-seeking or market-seeking, the objective of undertaking localized corporate research was mainly to adapt products for local markets or to adapt processes and resource extraction methods to local production conditions.

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From this perspective the difference is that internationalization is defined merely as the international dispersal of activity, while globalization is defined as the development of internationally interdependent structures that connect these dispersed activities. It should be noted that this is a different definition of globalization from that adopted in a number of other chapters in this volume, owing to their focus on the integration of markets (which in their terms is sufficient for 'globalization'; see for example Findlay, O'Rourke, and Ruane and Sutherland), regardless of the organizational form of the agents engaged in exchange in locationally dispersed markets, and without any need for a global administrative structure that might connect such markets together (as opposed to the mere existence of the potential for arbitrage between them). Our definition of globalization reflects instead our focus on the firm as an institution, and in particular on the extent of integration of dispersed economic activities within MNCs. Of course, applying our more restrictive definition with the benefit of hindsight, and following the procedure of mapping today's issues back into the past, one can see that there were elements of globalization in earlier internationalization, not least within MNCs. However, the predominant view of international business authors is that the MNCs of the past were best described as systems in which subsidiaries were dependent upon their parent companies, but in which the only genuine interdependence took the form of occasional feedback effects from subsidiary to parent, with little or no interchange between one subsidiary and another that were part of the same corporate group but located in distant foreign countries. If speaking of the internationalization of technological development, subsidiaries essentially exploited (although adapted) the home-based competence of the MNC, but did little to augment that competence for the purposes of the wider international group. Despite this important qualification, European firms were undoubtedly leaders in the internationalization of production and technology (and have been still more so recently), and thus it would be fair to suppose that they were also leaders in what globalization there was in the past. Indeed, owing to the more confined nature of their home base, Dutch and Swiss firms especially must have relied more heavily on their subsidiaries from an early stage, and even British and German MNCs have typically developed at an earlier stage of their growth more elements of international interdependence than most US-owned MNCs.

Much depends as well on how far back we wish to look when we ask what Europe has done for globalization in the past. Considering only the more recent past since, say 1945, then Europe has served as the earliest and prime test bed for globalization. It is in Europe that firms have become most internationalized, have been most prone to establish global networks in their activity, and in which countries' investing companies have developed the most complex and sophisticated cross-border linkages (as contended similarly by Steinherr, Chapter 7 in this volume). Part of the reason has to do with the smaller size of most European

national economies, part has to do with the impetus created by regional integration initially through the EEC and then the EU's single market, and part is due to the close geographical proximity of the European countries and their long-standing historical connections. As a result, globalization has led to a thorough-going reorganization and restructuring of economic activity within Europe, both of an intra-firm kind (mainly across locations and borders as internationally interdependent regional corporate strategies have been established) and of an inter-firm kind (mainly within localized networks or clusters characterized by location-specific skills and expertise). There is no question that globalization is now transforming the shape and structure of European economic activity.

Thus, in accordance with the central theme of the book as to what Europe has done for globalization in the past and what globalization is doing to Europe now, this chapter has two strands. First, we examine the shift from internationalized but largely dependent MNC systems to globalized structures for corporate innovation. In other words, we revisit the trend from decentralized innovation for the purpose of serving geographically scattered markets through the adaptation of established competences, to the emergence of decentralized corporate networks for internationally coordinated strategies of competence creation. Second, we consider with some evidence how this qualitative shift in the globalization of innovation has affected the geographical distribution of corporate technological development efforts in Europe, with reference to the activities of the world's largest industrial firms when located in or originating from Europe.

I.2 Innovation in the firm as an evolutionary process

This chapter is concerned with the determinants of technological competence creation in firms, and in the location of such innovative development activities. As such, our work is grounded on an evolutionary approach that has emerged over the last 20 years or so, which has been concerned (among other things) with trying to delve inside the black box of the firm, and to understand the workings of the firm as a social and competence-generating institution. Hence, it may be helpful to begin with some initial discussion of the theoretical premises that we rely upon, and which we have derived from this literature. Historically, with just a few notable exceptions (such as Marx, Usher and Schumpeter), most often economists have treated technological change either as an exogenous variable (as in the original neoclassical growth theories or growth accounting exercises), or alternatively as a simple response to market demand (as in Schmookler's approach) or to the availability of inventions or discoveries (as in the work of Mensch, or the conventional 'linear' model from science to commercialization popular in public policy discussions).

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Our alternative view, that technological change is an endogenous property of firms (and especially, although not exclusively, large firms) as evolutionary learning institutions, can be traced back in recent times to the pioneering contribution of Penrose (1959). In other words, the new competences a firm is able to create are a product of its prior capabilities or resources and not a simple response to external markets or discoveries. Innovative new competences (capacities to introduce new products and processes) are achieved through an internal search and problem-solving process that can only be revealed by opening up the black box of the firm (Rosenberg 1982, 1994). It is true that interactions between the learning firm and its markets, with the science and discovery base, and with other firms (especially through cooperative relationships within the same industry, as emphasized by Richardson 1972) all play important roles. However, technological change is essentially the outcome of continual experimentation within each firm along some path-dependent course with a certain logic of its own, which have been usefully described as technological trajectories (Dosi 1982). Hence, the evolving profiles of technological competence of firms tend to remain stable over long periods of time and to change only gradually and incrementally, despite the much more dramatic changes in their markets or discovery base (Cantwell and Fai 1999b).

Once the black box of the firm has been opened to examination, the organizational and social aspects of technological capability become clear; technology consists of a localized and tacit element which is context-specific, as well as potentially public knowledge (Nelson 1992). Nelson and Winter (1982) provided the pioneering analysis of how, when technological change is rightly understood as a path-dependent and localized process of experimental learning and search activities undertaken within firms, the fruits of innovative improvements become embodied not just in new devices, equipment or products, but also in the organizational routines of companies. Therefore, it is not surprising that the innovation systems of countries depend largely on the accumulated capabilities of large local firms, which become repositories of technological competence, even if their activities in turn depend upon the supporting structure of other institutions that characterizes the local environment (Nelson 1993).

The technological paths or trajectories that are followed by firms can also be described as a process of corporate technological diversification, which depends upon gradual changes in the degree of relatedness between competences in different technological fields. Firms can be expected to move away from combinations of technological development that have become less related, and towards new combinations of fields of activity between which there is an increase in technological complementarity. If there is a general background rise in technological interrelatedness then this will be associated with a broadening in the average degree of corporate technological diversification relative to any given

extent of product or market diversification (Piscitello 1998). However, for some very large firms that had achieved an already high degree of technological diversification, the effect may run in the opposite direction (Cantwell and Santangelo 2000). That is, greater interrelatedness implies that each firm must utilize more carefully than in the past the most complementary combinations of technologies, which may entail a sharper focus on those combinations in an existing portfolio that are most closely complementary, partially at the expense of other lines of development which have only ever fitted moderately well. Somewhat more distant but still relevant capabilities may be better accommodated through supporting some in-house facilities as a means of monitoring and accessing developments in alliance partners or suppliers or customers, for which the fields in question are more critical and a central area of competence.

The other aspect of the localization of technological change is that it tends to be not just firm-specific but also location-specific, as confirmed by the continuing significance of regional and national systems of innovation (Nelson 1993), and by the tendency towards geographical proximity in the linkages between science and technology (Jaffe, Trajtenberg and Henderson 1993; Rosenberg and Nelson 1996; Cantwell and Piscitello 2002). As a result, MNCs can gain competitive advantage by strategically integrating complementary streams of innovation across geographically dispersed facilities (Cantwell 1989b). By further developing the technological capacities in which a location is already specialized, such international integration of networks for innovation within MNCs may thereby have the effect of reinforcing established national and regional systems of innovation (Cantwell 1995). In this event the closer international integration of complementary lines of technological development within the MNC also becomes bound up with the process of technological diversification at the level of the global corporate group as a whole (Cantwell and Piscitello 2000).

Although the measures of technological diversification and product diversification may be similar, our arguments thus far suggest that the dispersion of technological competence within firms is not theoretically the same as the dispersion of their product markets, even if we would expect a correlation of the two across firms. Over time there could well be periods in which technological diversification and product diversification move in different directions on average. It has been suggested that in recent times there has been a tendency for product ranges to become more concentrated while technological capabilities have become more diversified. More substantively, cumulativeness and pathdependency apply to the process of corporate technological competence development, but not necessarily (or only to a lesser extent) to the composition of a firm's markets.

I.3 Implications for the analysis of MNCs

At a general level, a firm's operations may be dispersed across different types of productive activity (the diversification of technologies or products), or over geographical space (the internationalization of the same). However, as argued above, the analysis of technologies and product markets is different in this respect. Spreading the product markets in which the firm is involved may be a matter of exploiting more effectively established competencies, while moving into new areas of technological development means creating new competence. In terms of product markets, diversification and internationalization have often been considered and analysed separately as two distinct phenomena or alternative routes to growth, in the analytical framework that originated from Penrose (1959). Historically, it was usually a matter of how established competences could be more fully exploited in new markets in related industries, or in other countries. More recently, Penrose's resource-based view of the firm as a collection of productive assets has given rise to a competence-based theory of the firm (Teece, Pisano and Shuen 1997; Chandler, Hagström and Sölvell 1998), in which the firm is seen as an institution that constructs capabilities through internal learning processes in the form of evolutionary experimentation. In this event the major issue is not so much how the firm exploits a given competence, but rather how it establishes a (spatially and sectorally) diffuse system for the creation of new competence. In order not just to exploit effectively but also to consolidate an existing capability, it is generally necessary for a firm to extend that capability into new related fields of production and technology, and across a variety of geographical sites. The corporate internationalization and diversification of technological activity are indeed both ways of spreading the competence base of the firm, and of acquiring new technological assets, or sources of competitive advantage. In this context, recent studies have shown that firm-specific technological competence may be diversified and internationalized, thus leading to the most recent emergence of corporate international networks more and more resembling heterarchies rather than hierarchies (Hedlund 1986).

At the same time, the increasing role of MNCs in the generation of technology has been facilitated by their recent trend to 'globalize' their activities; that is, to establish internal and external networks for innovation which may lead to an improvement of innovation capacity both of the MNC and of host locations (Cantwell and Iammarino 2000). Globalization, and in particular the international integration of technological activities, is indeed a process leading to structural transformation of firms, nations and regions (Dunning 2000), both when directed to augmenting home-based assets – often tapping into foreign research and development (R&D) – and to more effectively deploying existing technological capabilities (Kuemmerle 1999). The growing role of the reorganization of technological activities by MNCs as a source of competitive advantage

has indeed been recently recognized to have an important impact on the shape and character of national systems of innovations and local growth prospects both for the home and host countries.

The chapter is organized in the following way. The following section describes the background concerning the interlinkages between large firms' cumulative growth and internationalization and diversification of their technological competencies. Section III investigates the extent and evolution of the internationalization of technological activity at the national and industry level in Europe in the period 1969–95, by using patents granted in the US to the world's largest industrial firms. Finally, Section IV presents some summarizing and concluding remarks, and draws out one of the policy implications of our argument.

II. Accumulation of corporate technological competence through the diversification and internationalization of capabilities

Recent research applying the framework of the competence-based approach to multinational firms (Cantwell 1989b) has attempted to trace out the technological evolution of large multinational corporations over time as a path-dependent learning process following distinct corporate technological trajectories (Dosi 1982). In the course of this process, MNCs move into new technological fields and they establish innovative activities in multiple geographical sites as a reflection of the development of the underlying capability of firms. In the internationalization field, new theoretical and empirical models have been devised of the process by which multinational companies access locationally dispersed technological assets, through their own international operations and through alliances with other firms (Cantwell 1989b; Kogut and Chang 1991; Dunning 1995; Pugel, Kragas and Kimura 1996; Almeida 1996; Cantwell and Barrera 1998; Kuemmerle 1999; Cantwell and Janne 1999; Pearce 1999; Zander 1999). In the diversification field, the notion of technological diversification has been conceptualized, as a means by which firms extend their technological base and capabilities. Various authors have shown that technological diversification at the firm level, defined as the process by which the breadth of corporate technology is increased over time across a wider range, was an increasing and prevailing phenomenon in Japan (Kodama 1986), in the UK (Pavitt et al. 1989), and in Sweden (Granstrand and Sjölander 1990).

Bringing together the two streams of literature, we have suggested (for example, Cantwell and Piscitello 2000) that the interrelationship between the two phenomena has changed historically, now becoming more often positively related parts of a common process, rather than alternative ways in which competences might be developed (as it seems that they were in general in the past), and that in the more recent internationally integrated or 'globalized' MNC, the geographical dispersion of innovation may come to facilitate the techno-

logical development of the firm, since the MNC can tap into alternative streams of innovation in different centres, and establish favourable cross-border interactions between them (Cantwell 1995; Dunning 1996; Zander 1997).

As far as the evolution of the interrelationship between growth, diversification and internationalization is concerned, our results from a dynamic cross-section econometric analysis run with reference to a large cross-firm panel of technological activity of the largest European and US industrial firms over the period 1901–95 (Cantwell and Piscitello 2000) confirmed the existence of three historical phases.¹ In particular, these three stages of development are associated with three main phenomena: (i) the changes in the international environment for coordinating diverse business operations (Vernon 1973); (ii) reasons related to the corporate life cycle, particularly the shifts in the maturity of the growth process in large firms (Chandler 1990), and in the maturity of internationalization strategies in large multinational companies (Dunning 1992); and (iii) an historical shift in what has been termed the techno-socio-economic paradigm (Freeman and Perez 1988), from technological diversification linked to economies of scale and increasing size (Chandler 1990) to technological diversification based on interrelatedness and new combinations (Cantwell and Fai 1999a).

In the earlier stages of development of large firms in the interwar and early postwar periods, it is reasonable to depict diversification and internationalization of markets as two alternative strategies for corporate growth, as suggested by Penrose (1959). However, in this phase while large firms were commonly diversifying their technological competence in the normal course of growth (as shown by Chandler 1990, and in company case studies by those such as Hounshell and Smith 1988 and Warner 1978), their internationalization of R&D was aimed at the wider exploitation of the basic competence they had already established at home rather than at extending that competence into new fields or 'sourcing' technology abroad. Affiliate R&D concentrated upon the adaptation of products to local tastes, and the adaptation of processes to local resource availabilities and production conditions (Cantwell 1995). Thus, in the early stages, although the internationalization of corporate technology should not be underestimated (a criticism of some recent literature advanced by Cantwell 1995), it was motivated mainly by the extent of dissimilarity between home and foreign markets rather than by the rationale of the process of further competence accumulation.

In the second phase, by around the mid-1970s, the old technology paradigm ran into difficulties (Freeman and Perez 1988), as the opportunities for integrating diverse technologies in large-scale plants had been gradually exhausted. Thus, at around this time the relationship between the accumulation and diversification of competence broke down. Technological diversification was now increasingly based instead on the growing interrelatedness between formerly separate technologies (Kodama 1986), but as with the formation of

corporate international networks, the new opportunities for innovative development were still at an early stage in the 1970s. Even in this second phase, after the early postwar period, there seems to have been a general widening of the internationalization and diversification of technology across a wider range of firms (Cantwell 1995). The most common explanation is that lower transport and communication costs contributed to a general expansion across large firms in the internationalization of technological activity (Vernon 1973), while an increase in technological interrelatedness prompted a broader cross-section of firms into technological diversification² (Pavitt, Robson and Townsend 1989; Patel and Pavitt 1997, 1998).

More recently, however, the nature of the competence-creation process seems to have entered a third phase in the technologically leading firms (Cantwell 1995). What previously had been a dispersed set of loosely connected efforts for the consolidation and adaptation of competence within the firm (achieved through some combination of diversification and internationalization), has been transformed in some companies into a more complex integrated and interactive network for the generation of new competence (Pearce 1999; Zander 1999). This new system for corporate development relies on the interrelatedness between specialized activities conducted in particular locations, each of which takes advantage of spatially-specific resources or capabilities. In this event internationalization, diversification and competence creation become for the first time necessarily interconnected and thus mutually positively related parts of a common process. The wider picture of which this is part is one which formerly local market-oriented affiliates have been increasingly integrated into international networks within their respective multinational companies, such networks coming to resemble 'heterarchies' more than hierarchies (Hedlund 1986; Doz 1986; Porter 1986; Bartlett and Ghoshal 1989; Dunning 1992), and affiliates have increasingly pursued 'asset-seeking' motives (Dunning 1995). The co-evolution of international corporate networks for the accumulation of technological competence and the organizational capability to manage such complex heterarchical structures is a special case of the co-evolution of technological and organizational innovation (Coriat and Dosi 1998).

Beyond the emergence of a new interrelationship between the accumulation, diversification and internationalization of corporate technological competence, the third phase is distinctive in changes in the cross-firm pattern of activity in another respect too. Given that the internationally dispersed development of technology is now a source of competitive advantage, two different types of firm behaviour can be observed, depending upon whether a firm that begins with relatively little international activity needs to 'catch-up' (Cantwell and Sanna-Randaccio 1990), or an established multinational reorganizes its existing international network to better exploit the respective comparative advantages in innovation of the locations in which it operates (Cantwell and Sanna-Randaccio

1993). In an integrated multinational company network each affiliate specializes in accordance with the specific characteristics of local production conditions, technological capabilities and user requirements. The network benefits from economies of scale through the local concentration of particular lines of activity (increasing returns from local research in a specialized field as opposed to research in general), economies of locational agglomeration through an interchange with others operating in the same vicinity in technologically allied fields, and economies of scope through the international intra-firm coordination of related but geographically separated activities. The experience acquired in a specialized activity in one location creates technological spillovers that can be passed on to other parts of the multinational company network elsewhere.³

Other recent evidence suggests that this type of internationally integrated or globalized strategy for innovation is particularly characteristic of corporate technology leaders today (Cantwell 1995). The extent to which the affiliates of MNCs specialize within their industry across national boundaries in accordance with the comparative advantage of local expertise tends to rise as the technological strength of MNCs increases, and in particular tends to be greater for the leading MNCs that originate from the major locational centres of excellence for their industry (Cantwell and Janne 1999). The particular role of the largest and best-known MNCs in the formation of internationally integrated networks for technological development is attributable partly to their capability to devote the resources needed to organize a complex organizational network, and partly due to their having a wide enough range of existing absorptive capacity (an established diversity of new streams of innovation, each to some extent specific to its own particular local institutional setting or environment.

The pattern of locational specialization in innovative efforts in the largest MNCs which emerges is that these firms have tended to continue to focus on their core lines of technological development at home (so long as their home base is sufficiently large), but to diversify relatively more abroad into the development of non-primary supporting fields of technological effort. Thus, for instance, a chemical firm tends to concentrate relatively more at home on the development of its primary chemical technologies, while siting abroad relatively more its innovation in supporting chemical equipment or instruments. Part of the explanation here is the role of competitive deterrence between the world's major players in an industry, which encourages the intra-industry geographical separation of co-specialized research in the primary technologies of an industry. Instead, the scope for locational agglomeration and localized spillovers is better reflected in inter-industry cooperation of a kind that entails the co-location of related research (Cantwell and Kosmopoulou 2002; Cantwell and Santangelo 2000, 2002). The latter type of co-location of the diversified research efforts of MNCs can assume two forms. The first is when specialized supporting fields of

innovation of a non-primary kind for the industry of the MNC are developed in suitably specialized centres of excellence (termed intermediate centres by Cantwell and Iammarino 2000, 2001, since they are more attractive than peripheral lower-order regions that have little local innovation, but they are too focused to be thought of as comprehensive centres of excellence). In such a centre firms may come together to develop, for instance, certain kinds of chemical process technologies. The second type of co-location involves the development of general purpose technologies (relevant across many industries) in all-round centres of excellence, or higher order centres. In this case firms may come together to develop, for example, information and communication technologies, or instruments, or general mechanical methods, or widely used new materials.

The empirical evidence, based on the technological activity of the world's largest firms, supports the notion that the largest and technologically leading firms have witnessed the emergence of corporate international networks for the accumulation of both geographically and sectorally dispersed technological competencies (Cantwell and Piscitello 1999), and highlights the need to examine where and how innovative activity by MNCs is internationally dispersed and geographically concentrated.

III. The globalization of corporate technology at the national and sectoral level

The use of corporate patents as an indicator of advanced technological capacity and the ability to develop innovation is one of the most established and reliable methods of estimating the cross-sectional patterns of innovative activities. The advantages and disadvantages of using patent statistics are well known in the literature (Schmookler 1950, 1966; Pavitt 1985, 1988; Griliches 1990; Archibugi 1992). The use of patent records provides information both on the owner of the invention (from which the country of location of the ultimate parent firm has been derived through a consolidation of patents at the level of international corporate group), and separately the address of the inventor, thus allowing the identification of where the R&D underlying the invention was carried out in geographical terms. The choice of US patenting is convenient, since large firms are especially prone to patent their best quality inventions in the US market, the largest and the most technologically advanced. It is therefore likely that our data reflect the patenting of inventions that have a significant commercial importance, as well as allowing for a meaningful analysis of the territorial distribution of the technological activities of MNCs in the EU.

The database used in what follows consists of patents granted in the US to the world's 792 largest industrial firms as of 1982, derived from both the Fortune 500 US and the Fortune 500 non-US firms listings⁴ (Dunning and Pearce 1985).

Of these 792 companies 730 had an active patenting presence during the period 1969–95. Another 54 historically significant firms were added to these, making 784 corporate groups in all. The additions include (mainly for recent years, but occasionally historically) enterprises that occupied a prominent position in the US patent records, some of which are firms that were omitted from Fortune's listing for classification reasons (for instance, RCA and AT&T were classified as service companies), and others that reflect recent mergers and acquisitions or new entrants to the population of large firms. Patents have been consolidated at the level of the international group of ultimate ownership, allowing for changes due to mergers and acquisitions since 1982. In terms of their sectoral distribution corporate patents can be organized either by the primary industry of the firm to which they are assigned (all the patents of a firm are classified under the same industry), or they can be arranged by the category of technological activity with which they are mainly associated (so each patent is allocated individually to a technological field, and in our database we have derived this from the primary classication of patents in the US patent class system).

Nationality of the parent firm	1969–72	1973–77	1978–82	1983–86	1987–90	1991–95
US	4.96	5.89	6.40	7.53	7.91	8.62
Germany	12.77	11.05	12.07	14.47	17.05	20.72
UK	43.08	41.24	40.47	47.09	50.42	55.79
Italy	13.39	16.03	13.85	12.59	11.14	16.47
France	8.16	7.74	7.17	9.19	18.17	33.17
Japan	2.63	1.88	1.22	1.26	0.92	1.08
Netherlands	50.40	47.37	47.65	53.99	53.96	55.69
Belgium–Lux	50.36	51.11	49.28	58.15	47.53	53.25
Switzerland	44.36	43.63	43.78	41.59	42.99	52.47
Sweden	17.82	19.90	26.20	28.94	30.60	42.42
Austria*	5.06	16.76	19.84	11.82	8.00	0.00
Norway*	20.00	1.67	12.31	32.50	37.14	20.22
Finland*	18.87	27.11	26.89	18.67	27.94	39.49
Canada	41.19	39.30	39.49	35.82	40.12	43.96
Others	28.21	22.22	26.37	30.34	7.54	3.94
Total	10.04	10.53	10.50	10.95	11.28	11.27
excluding Japan	10.52	11.59	12.25	13.87	15.76	16.53
European countries**	28.01	25.19	24.52	26.95	29.99	34.78

Table 8.1 Share of US Patents of the World's Largst Firms Attributable to Research in Foreign Locations, Organized by the Nationality of the Parent Firms, 1969–95 (%)

* Number of patents less than 50 for several periods.

** Including: Germany, UK, Italy, France, Netherlands, Belgium–Lux, Switzerland, Sweden, Denmark, Ireland, Spain, Portugal, Greece, Austria, Norway and Finland.

Source: US patent database developed by John Cantwell at the University of Reading, with the assistance of the US Patent and Trademark Office.

Table 8.1 examines the share of US patents of the world's largest firms attributable to overseas research in terms of the nationality of the parent company. The general trend is upwards – from a foreign research share of 10.5 per cent in 1969-72 to 16.5 per cent in 1991-95, excluding Japanese firms although this is disguised in the overall global average foreign share owing to the sharply rising contribution to total corporate patenting of Japanese companies, whose research has been little internationalized. The most significant increase in internationalization is found in the two most recent periods (from 1987 to 1995). While a significant increase in foreign technological development already started for most of the national groups of companies in 1987-90, all the groups moved to a greater internationalization of technological activity in the early 1990s; even those which have had in the past a somewhat more centralized approach to their research strategy, such as the Japanese or the Italians. Furthermore, the trend increase in the internationalization of research has been most stable and marked in US and Swedish companies since 1969, and in German and French firms since 1983.

For some time, European firms have made much greater use of international research strategies than their counterparts from the US and Japan, although more recently US and Japanese MNCs have increasingly used foreign research facilities. European MNCs still rely to a greater extent on foreign-based research than do others. The total foreign share of the largest European firms increased from 28 to 35 per cent over the whole period 1969-95. The share of technological activity carried out abroad by European firms increased in the early 1970s, then there was a temporary decrease during the late 1970s, followed by a recovery of the upward trend in the 1980s and early 1990s. Unsurprisingly, relatively small European countries, such as the Netherlands, Belgium, Switzerland and Sweden, have among the highest shares of technological activities abroad. In contrast, firms from larger countries with a strong domestic technological base – Japan and the US – have had a much weaker propensity to undertake their technological activity abroad; even though they all showed an increase in internationalization in the early 1990s. France, as well as Germany and Italy, used to be in an unusual position among the European countries in the sense that the technological activity of its largest firms had remained relatively centralized until recently, but it was no longer true in the 1990s. However, British firms have a long international tradition, and have been amongst the most multinational in their organization of technological activity with now well over half of their technological activity (56 per cent) being carried out abroad.

Looking at the locational issue from the parent company's viewpoint, Table 8.2 shows that the R&D activities of European companies abroad are concentrated in the US (over 50 per cent on average) and elsewhere in Europe (about 40 per cent in average). In particular, the share of US patents of European-owned

			Euro	ope		
Nationality of the parent firm	1969–72	1973–77	1978–82	1983–86	1987–90	1991–95
Germany	42.66	49.22	31.40	25.09	22.04	26.92
UK	15.44	18.16	22.40	23.99	24.91	27.17
Italy	33.94	25.54	25.49	48.51	53.57	81.00
France	43.56	59.52	51.80	55.66	68.07	45.69
Total European countries	30.16	37.29	39.53	41.34	41.84	40.39
US	74.20	73.69	73.91	73.27	68.36	57.06
Japan	51.43	26.24	11.27	16.33	19.68	18.94
			US	A		
Nationality of the parent firm	1969–72	1973–77	1978–82	1983-86	1987–90	1991–95
Germany	51.53	38.29	60.30	60.13	62.59	64.16
UK	76.87	72.77	68.56	66.04	66.21	66.10
Italy	59.63	72.83	73.20	50.50	42.86	18.00
France	51.11	33.04	42.81	31.50	29.13	49.95
Total European countries	63.55	55.76	54.44	50.25	50.19	53.12
Japan	43.33	67.93	84.86	83.42	77.15	74.45
			Rest of th	e World		
Nationality of the parent firm	1969–72	1973–77	1978–82	1983–86	1987–90	1991–95
Germany	5.81	12.49	8.30	14.78	15.37	8.92
UK	7.69	9.07	9.04	9.97	8.88	6.73
Italy	6.43	1.63	1.31	0.99	3.57	1.00
France	5.33	7.44	5.39	12.84	2.80	4.36
Total European countries	6.29	6.95	6.03	8.41	7.97	6.49
US	25.80	26.31	26.09	26.73	31.64	42.94
Japan	5.24	5.83	3.87	0.25	3.17	6.61

Table 8.2 Patenting Activity Attributable to Foreign-Located Research, by Host Country and Nationality of Parent Firms, 1969–95 (%)

Source: As for Table 1.

companies attributable to foreign-located research undertaken within Europe has risen from 30.2 per cent in 1969–72 to 40.4 per cent in 1991–95, although this trend seems to have been partially reversed in the early 1990s. It is also worth noting that European-owned firms have also a relatively small share of their research located in the Rest of the World, at 6.3 per cent in 1969–72 and 6.5 per cent in 1991–95.

The US is the most important location for German- and British-owned research abroad, with more than half of their total foreign research accounted for by that location, indicating a reliance upon more widely 'globalized' technological strategies encompassing facilities outside Europe. French firms have also a significant part of their technological activity abroad in the US, while Italian companies recently showed a sharp increase in their preference for other European locations.

Table 8.3 Patenting Activity Attributable to European-Located Foreign-Owned Research, Across Host Countries, 1969–95 (%)

	Total patents from foreign-owned facilities							
European host country	1969–72	1973–77	1978-82	1983-86	1987–90	1991–95		
Germany	27.03	30.23	31.81	35.63	33.47	28.87		
UK	29.34	26.78	25.03	22.63	21.00	21.15		
Italy	4.34	4.94	4.37	4.50	5.97	6.46		
France	13.21	14.95	14.52	14.21	14.92	15.60		
Rest of Europe	26.08	23.10	24.27	23.03	24.64	27.92		
Total Europe	100.00	100.00	100.00	100.00	100.00	100.00		

Source: As for Table 1.

Concerning the dispersion of foreign-owned research activities across the European economy, Table 8.3 indicates the share of European host countries in the foreign-located research of large firms. In particular, it is shown that overall the most attractive European host countries for the technological activity of foreign-owned MNCs were Germany (29 per cent in 1991–95), the UK (21 per cent) and France (16 per cent), and only to a lesser extent Italy (6 per cent). Since 1969–72 the UK has lost some of its earlier share (29 per cent) to most other countries.

Table 8.4 Patenting Activity Attributable to Foreign-Owned Research, as a Proportion of all Patenting from the Local Research of Large Firms, by European Host Country, 1969–95 (%)

	Proportion of patents from foreign-owned facilities								
European host country	1969–72	1973–77	1978-82	1983-86	1987–90	1991–95			
Germany	16.32	15.57	15.16	18.77	18.09	17.37			
UK	27.66	30.80	31.30	36.00	35.44	45.23			
Italy	27.32	31.09	26.49	32.85	43.93	57.50			
France	24.17	24.73	24.04	25.13	27.05	28.94			
Total Europe	22.70	21.63	21.43	24.40	24.97	28.63			

Source: As for Table 1.

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Table 8.4 reports figures by European host country on the share of foreignowned firms in total corporate patents emanating from locally based research. The proportion of European research activity undertaken by foreign-owned companies has increased overall from 23 to 29 per cent, having fallen slightly during the 1970s and then risen during the 1980s, before rising sharply in the 1990s. This is consistent with the general increase in the internationalization of technological development in the major firms displayed in Table 8.1 (from a foreign share of 10.5 per cent to one of 16.5 per cent, excluding Japanese companies). Just as UK-owned firms have long been among the most internationalized in their technological efforts, so now the UK as a country has become highly dependent on the research of foreign-owned firms, which accounts for 45.2 per cent of the UK-located research of the largest firms in 1991-95. The share of foreign-owned firms in local technology creation is also very high in Italy, but this is because there are so few Italian firms in the world's largest (11 out of 784). By contrast, in Germany and France foreign penetration into local R&D has risen much less (from 16.3 to 17.4 per cent and from 24.2 to 28.9 per cent respectively) than has the technological effort of indigenous firms abroad (with reference back to Table 8.1).

Sector	Germany	UK	Italy	France	Europe	World
Food, Drink, and Tobacco	99.64	15.45	100.00	55.25	44.55	22.24
Chemicals	6.49	29.55	31.97	33.31	15.57	14.21
Pharmaceuticals	13.91	50.34	100.00	19.34	27.37	16.16
Metals	9.87	29.62	63.87	11.20	13.25	10.32
Mechanical Engineering	25.84	47.16	100.00	52.00	26.93	12.47
Electrical Equipment	30.01	43.48	91.32	27.85	30.48	9.74
Office Equipment	86.34	76.71	21.87	56.76	67.36	10.34
Motor Vehicles	8.35	13.18	7.67	21.83	12.28	5.68
Aircraft and Aerospace	15.18	10.54	100.00	2.85	13.00	2.39
Coal and Petroleum Products	80.47	19.43	12.07	10.31	39.25	15.08
Professional Instruments	29.90	97.79	100.00	100.00	45.62	3.37
Other Manufacturing	56.64	26.71	26.13	30.66	35.16	10.39
Total	16.87	33.73	36.60	25.86	23.97	10.81

Table 8.5 US Patents from Corporate Research Located in Each Host Country Due to Foreign-Owned Firms, by the Industrial Group of the Parent Company, 1969–95 (%)

Source: As for Table 1.

The sectoral forms of foreign penetration in the major European countries is shown in Tables 8.5 and 8.6, which examine the contribution to local research of foreign-owned firms by industry (Table 8.5) and by the field of technological activity derived from the US patent class system (Table 8.6). Looking first at Table 8.5, in the world as a whole foreign penetration is highest in the chemicals,

pharmaceuticals, oil and food product industries. In Europe instead, while the same applies in oil and food products, the foreign-owned share of local development is below average in chemicals (15.6 per cent as against 24.0 per cent), and only slightly above average (at 27.4 per cent) in pharmaceuticals. This is because of the strength of indigenous companies in the European chemicals and pharmaceuticals industries. In contrast, foreign penetration is above average in Europe in the group of electrical equipment, professional and scientific instruments, and especially in office and computing equipment. These are the industries in which European-owned firms are technologically weakest vis-à-vis their US and Japanese rivals, and so the European economies have become relatively more dependent on the locally conducted research of foreignowned firms. Similar explanations can be applied to the variations across individual host countries. Foreign penetration is not especially high in food products in the UK, in oil in the UK, Italy or France, in electrical equipment in France, or in office and computing equipment in Italy. In each of these cases large indigenous companies have a comparative technological advantage. The one interesting exception to this argument is the high foreign penetration into UK research in pharmaceuticals, an industry in which the UK is a centre of technological excellence. In this instance, the interaction between the innovation of indigenous and foreign-owned companies has taken the form of a virtuous circle of increased activity on both sides (Cantwell 1987, 1989b). The difficulties of establishing this kind of local embeddedness in connecting the investments of foreign-owned companies to those of indigenous firms within the same industry are also suggested by Barry (Chapter 9 in this volume).

Sector	Germany	UK	Italy	France	Europe	World
Food, Drink, and Tobacco	30.85	20.73	61.11	45.71	34.76	13.62
Chemicals	8.09	35.54	31.58	21.19	18.40	12.49
Pharmaceuticals	8.05	41.55	38.57	37.61	23.40	18.79
Metals	28.78	34.86	43.27	20.37	27.97	10.41
Mechanical Engineering	25.73	28.35	40.56	26.58	27.26	12.14
Electrical Equipment	25.13	39.45	60.08	28.66	28.81	9.36
Office Equipment	29.37	50.53	34.40	40.46	34.74	7.84
Motor Vehicles	7.01	20.79	10.14	21.62	11.33	5.57
Aircraft and Aerospace	9.09	0.87	33.33	4.76	5.40	2.58
Coal and Petroleum Products	14.14	18.32	10.34	9.09	25.84	8.62
Professional Instruments	20.63	37.05	23.65	30.58	27.32	8.77
Other Manufacturing	16.33	19.75	19.49	16.06	20.86	9.33
Total	16.87	33.73	36.60	25.86	23.97	10.81

Table 8.6 US Patents from Corporate Research Located in Each Host Country Due to Foreign-Owned Firms, by the Type of Technological Activity, 1969–95 (%)

Source: As for Table 1.

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Turning to the equivalent disaggregation of foreign penetration in European development by the type of technological activity (Table 8.6), the general world background reveals two apparent differences from the industry-based picture. Foreign penetration is relatively low in oil-related chemicals, but above average in mechanical engineering. This suggests that the oil companies are using their high foreign-located development more in relation to mining and mechanical technologies rather than for innovation in petrochemicals, and indeed a similar pattern may apply to a lesser extent to firms in other industries. In Europe, again, foreign penetration is relatively low (unlike in the rest of the world) in the development of chemical and pharmaceutical technologies, but relatively high in the electrical equipment, office and computing equipment, and instruments group, and also in metals and machinery. Conversely again, foreign penetration in pharmaceutical development in the UK is higher than its status as a centre of excellence might suggest, but owes to the positive interaction between UK-owned and the best foreign-owned companies. Foreign participation in new drug development is also high in France, but this is probably attributable to the local regulatory regime, which has insisted on the presence of local research facilities as a condition of local medical sales.

IV. Summary and conclusions

Since the late 1970s (Cantwell and Piscitello 2000), large MNCs have increasingly extended or diversified their fields of technological competence through their use of internationally integrated networks for technological development. In each location in such a network MNCs tap into specialized sources of local expertise, and so differentiate their technological capability, by exploiting geographically separate and hence distinct streams of innovative potential. The recent emergence of internationally integrated MNC networks is best observed in Europe, where the contribution of foreign-owned MNCs to national technological capabilities is much greater than elsewhere. About one-quarter of large-firm R&D carried out within Europe has been conducted under foreign ownership (and this figure had risen to nearly 29 per cent by the early 1990s), while the world average is only just over one-tenth. Part of the reason is that European-owned MNCs are the most internationalized in their strategies for technology development, while much of their foreign-located R&D has remained within Europe, and their European orientation has increased (from a 30 per cent share of foreign R&D in Europe in the late 1960s, to a 40 per cent share by the 1990s). However, it is important to understand that these intra-European networks have significant links with US technology creation as well. The international networks of British-owned and German-owned MNCs are largely US-oriented, while US-owned MNCs remain European-oriented in their foreign location of R&D, despite the lower degree of internationalization of competence

creation in US firms and some fall in their share of foreign activity located in Europe (since their share in Europe still remains at over one-half).

As a consequence of the establishment of these international corporate networks for the diversification of technological competence, in Europe in particular both inward and outward direct investment (FDI) have become important as a facilitator of local technological specialization, in a supporting framework that includes cross-border knowledge flows within MNCs between selected regional centres of excellence. Given the complexity and interdependence of modern technological systems the most dynamic centres of innovation require an ever-increasing intensity of such knowledge flows, which should therefore be encouraged as a matter of policy. This policy conclusion is worth emphasizing, since it is the reverse of the central thrust of the conventional outlook upon technology policy, the major concern of which has been to counteract problems associated with a lack of appropriability of returns on investment in new knowledge creation if knowledge 'leaks out' too freely to those that did not fund its development (Cantwell 1999). Instead, in interlinked networks innovation rises with the intensity of knowledge flows between complementary branches of technological development, since outward and inward knowledge flows become part of a mutual structure that feeds into the local learning that generates corporate technological capabilities, and it is these capabilities that typically earn a return rather than the individual knowledge inputs into learning. Each participating local area finds itself increasingly integrated into an international division of labour for the development of new technological systems.

Thus, the presence of technological development in foreign-owned firms tends to compensate for weaknesses in the indigenous research base of the European economies, partly through the higher shares of foreign-owned MNCs in local technology creation that are typically associated with industries and fields in which indigenous firms are weaker, but also because of the international linkages MNCs provide in support of the activities in which indigenous firms are stronger. In addition, the cross-border networks of MNCs coordinate mutual innovative strengths between the leading centres of excellence across countries (as in the case of the outward and inward investment associated with the UK pharmaceutical industry). As a result, MNC asset-seeking investment is attracted to the major regions for technological development by the generic skills and infrastructure that can be found locally. For all the European locations in which some significant MNC research activity is sited, MNC international networks provide a linkage mechanism for all local companies (through their cooperation with local MNC affiliates) to innovation in other European areas, which allows each locality to become more specialized in the fields of its own greatest potential, while better appreciating and responding to complementary technological development elsewhere in Europe. Hence, the growing intensity of knowledge flows in the European economy helps to promote and not to hinder innovative efforts, with respect to both flows between firms (often within areas) and across borders (often within MNCs).

Notes

- 1. It may be of interest to note that our measure of corporate technological diversification is a variance-based measure analogous to (but the inverse of) that used to represent income inequality by Sala-i-Martin (Chapter 1 in this volume).
- 2. Another aspect which has recently entered into the discussion is the changing nature of technological knowledge itself (Nelson and Thomson 1997), that with the development of scientific and engineering communities became more susceptible to transmission between fields of activity and between countries.
- 3. It has been shown that in recent times, in industries in which such net advantages to multinational integration were available, multinationality has been a source of competitive success and faster growth (Cantwell and Sanna-Randaccio 1993).
- 4. *Fortune* provided two separate listings, one for the largest US and one for the largest non-US firms. While we included all the 500 US firms, non-US firms were then included so long as they were larger than the 500th US firm (hence, the original 792 includes 292 non-US firms).

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9 Economic Policy, Income Convergence and Structural Change in the EU Periphery

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I. Introduction

Ireland's remarkable economic performance over the course of the 1990s, which saw GNP per head rise from below 70 per cent to rough parity with the EU average, is frequently ascribed to its willing embrace of globalization. It is one of the most open economies in the world, not just in terms of the product market but of the labour market as well, and has by far the highest EU proportion of the manufacturing workforce employed in foreign-owned firms. Yet these have been features of the Irish economy ever since the 1970s, if not earlier, and Irish performance over most of the 1960s, 1970s and 1980s exemplified failure rather than success. There was no convergence over this period, with GNP per head remaining at around 65 per cent of the UK and EU levels. In fact the other EU periphery countries – Greece, Spain and Portugal – though less globalized, performed better in convergence terms during the 1960s.

This chapter explores the role of globalization and Europeanization in the convergence process. It revisits some ground covered earlier by Cormac Ó Gráda and Kevin O'Rourke (1996) in their chapter in the well-known Crafts and Toniolo volume. My work differs from theirs in a number of substantive ways however. First, I use the convergence experiences of the other EU periphery economies, Greece, Portugal and Spain, as the backdrop to my analysis. Second, the Ó Gráda and O'Rourke study covered the period from 1950 to 1988, just before Ireland's sustained boom began. I am able therefore to compare the earlier period of failure with the later period of success in order to identify the changes

both in economic policy and in the external environment that facilitated this remarkable turnaround. Third, I will emphasize the role of FDI in effecting transformation in peripheral economies, an issue that received very little consideration in their work.¹

I begin by justifying my use of the group of EU cohesion countries as an appropriate benchmark against which to assess each other's economic performance. The next section of the chapter looks at a number of structural similarities between these various economies, and charts how structural change has occurred in tandem with income convergence. Many interesting questions arise with regard to the latter. Why was Ireland's relative performance so weak in the 1960s and so strong in the 1990s? Why has Portugal overtaken Greece and closed the gap on Spain so rapidly in recent times? And why was the overall convergence experience so poor between the early 1970s and the 1980s? Section III looks at the conduct of national economic policy in an attempt to identify the important inhibitory and contributory factors to growth in each country. Ireland's FDI-based strategy appears to me to have been crucial to the rapidity of recent convergence, and I illustrate this by demonstrating the role of foreign industry in driving the structural changes identified earlier. I then return to the perplexing evidence from the 1960s, to ask why, if globalization seemed to drive convergence in the 1990s, the Irish experience of the 1960s should have been so different?

I conclude by trying to assess whether, now that Ireland has reached the EU average income per head, it can now be regarded structurally as part of the EU core. I argue that it can not. The structural changes apparent in the Irish data of the 1990s mask the risks associated with the Irish development strategy. The strategy has paid off in bringing rapid convergence when the circumstances were right. The economy remains in a more vulnerable position than the 'genuinely core' EU economies. This suggests that a portfolio perspective could fruitfully be brought to bear on the convergence issue, balancing the riskiness of particular development strategies against the possible payoffs. Such a perspective will become increasingly important as globalization proceeds.

II. Economic structure and income convergence in the EU periphery

The concepts of core and periphery are only meaningful when used in relation to each other. In this chapter I am concerned with the core and periphery of the EU, though the lessons drawn will arguably be of significance to peripheral regions defined in non-EU contexts.

Economic geographers define peripherality in terms of 'distance from purchasing power'. The highest concentration of purchasing power in the EU is located in the area that spans Belgium, the Netherlands, northwest Germany and northeastern France. Conventional measures locate Greece as the most peripheral EU state, followed in order by Portugal, Spain and Ireland.² These four so-called 'cohesion countries' have also been the poorest of the EU states over most of the period since 1960.

Economic historians have used the concept of peripherality in a slightly different context, with reference to trade or production structure. Sidney Pollard, in writing of the spread of industrialization, points out for example that:

Somewhere near the outer periphery of Europe [was a] watershed between societies which on contact with the new industrialism were capable of imitating it and becoming part of it, and areas which, at least for a long period, were transformed away from it, becoming specialized as 'colonial' economies and facing an ever widening gap between themselves and the advanced economies. (Pollard 1985:172)

The reference to 'colonial economies' draws our attention to economic structure. Exports from such regions, he suggests, would have been confined to agricultural foodstuffs and raw materials. We will see below that a specialization in products lower down the value-added chain remains a characteristic of peripherality. Indeed the relationship between income per head and economic structure is one of the key themes of this chapter.

Figure 9.1 depicts the convergence experience of the four EU periphery states since 1960 in income per capita terms.³ We see that each of the periphery



Figure 9.1 The Convergence Experiences of the EU Periphery Countries, 1960–2000

countries except Ireland experienced some degree of convergence over the course of the 1960s. None experienced much between 1973 and the late 1980s, at which point the process started again, with particularly dramatic consequences for Ireland over the last decade or so.⁴

Was Ireland's dramatic convergence in income terms reflected in any equally apparent change in the country's trade and industry structure? To see whether the economy has in any profound sense leaped the chasm between EU periphery and EU core requires that we identify differences in the structural characteristics of the two groups of countries.

II.1 Production structure

We begin with production structure. The Krugman index has come to be widely used in recent times as a measure of the dissimilarity in production structures between one state and another, or between one state and a group of others (Krugman 1991). It ranges in value between zero and two, taking a value of zero when the comparator states have the same levels of activity as each other in the various industrial sectors, and taking a value of two when states are specialized in completely dissimilar sectors to each other. Again to surmount transfer-pricing issues, we look at employment weights across industrial sectors.

Of the four periphery states, Ireland experiences the most dramatic transformation in terms of this measure. Of the 15 current EU states, Ireland in the early 1970s appeared most similar to a poor country (Greece) and least similar to a rich country (Sweden). Now it appears most similar to a rich country (the Netherlands, fifth richest EU country in PPP terms in 1996, the last year for which this index has been calculated) and appears least similar to a relatively poor country (Portugal).

Equivalent data for the four periphery countries are contained in Table 9.1.

Country	Greatest similarity 1970s (mid-1990s)	Greatest difference 1970s (mid-1990s)
Ireland	Greece (Netherlands)	Sweden (Portugal)
Portugal	Greece (Italy)	Sweden (Sweden)
Greece	Portugal (Portugal)	Sweden (Sweden)
Spain (large)	Italy (France)	Germany (Germany)

Table 9.1 Similarites and Differences in Industrial Structures

The weaker convergence of the other EU periphery states is reflected in less dramatic transformations. Thus both Portugal and Greece remain most dissimilar to a high income country, Sweden; Greece remains most similar to relatively poor Portugal, while Portugal has moved from being most similar to Greece in the early 1970s to become most similar to Italy (eighth richest in PPP terms).

Spain's pattern is a little more difficult to analyse, because structure is dependent on size as well as income and other factors. Confining attention in the final row, therefore, to the large countries, Spain, Italy, Germany, France and the UK, we do not see much change in the Spanish position.⁵

Economic geographers Keeble, Offord and Walker (1988) also noted a significant difference in the structure of the services sector in core and periphery countries, with the former having a higher share of producer services relative to consumer services.⁶ Even by the late 1980s however, Ireland had come to resemble the core (with the ratio rising from 0.24 in 1968 to 0.33 in 1987, while the ratio for France, for example, remained constant at 0.34). Keeble et al. interpreted this as evidence of a successful industrial strategy.

The most human-capital intensive segment of services is the Financial, Insurance, Real Estate and Business Services (FIRE) component. Midelfart-Knarvik et al. (2000) show that while this remains the most concentrated of the five service-sector groupings for which they have data, it has become less concentrated over time within the EU15, reflecting structural convergence along this dimension also.⁷

Table 9.2 reveals that core countries' shares in total FIRE employment exceed their shares in aggregate employment, with the opposite being the case for the periphery. The gap between the two is diminishing over time however, with Ireland displaying the smallest gap between a peripheral and a core economy.⁸

Country Percentage o	f EU15 FIRE relative t	to EU15 employment	
	1982	1995	
Spain	0.38	0.59	
Portugal	0.36	0.70	
Ireland	0.93	0.95	
Greece	0.54	0.65	
Memo: France	1.16	1.16	
Memo: Netherlands	1.18	1.30	

Table 9.2 Developments in Human-Capital Intensive Service Sectors, 1982 and 1995

Source: Derived from Midelfart-Knarvik et al. (2000).

One final measure of production structure concerns enterprise size. Tables 9.3 and 9.4 illustrate that periphery countries have a larger share of enterprises (in private non-primary sectors) among the micro size class and a smaller share among the large size class. We see that alone of the four countries, Ireland has reversed its position in this regard over the ten years from 1998.

Table 9.3Employment Shares (in Private Non-Primary Sectors) by Enterprise Size,1988 (%)

Size (employees)	loyees) Greece Ireland		Portugal	Spain	EU
Micro (0–9)	59	34	36	36	30
Small (10-99)	21	30	27	30	25
Medium (100-499)	11	18	17	17	16
Large (500+)	9	17	20	17	30

Source: First Annual Report of the European Observatory for SMEs (1993).

Table 9.4 Employment Shares (in Private Non-Primary Sectors) by Enterprise Size, 1998

	Greece	Ireland	Portugal	Spain	EU15
Micro (0–9)	47	18	39	46	34
Small (10-49)	17	16	23	20	19
Medium (50-249)	14	15	18	13	13
Large (250+)	22	51	20	21	34

II.2 Trade structure

Even as recently as the 1970s exports from the EU periphery remained concentrated in natural resource-based products and traditional industry, as suggested by the quote from Pollard, with only very small shares of exports accounted for by modern industry.⁹

By 1998 modern industry is seen to have increased its share in the exports of each periphery economy. Again by far the most dramatic increase is seen in the Irish case, where the share of the modern sector is seen to have overtaken that characterizing the representative core economy, the UK.

Table 9.5 Export shares (%) (1975 and 1978): Greece, Ireland, Portugal and Spain

Exports	Gre	ece	Irel	and	Port	ugal	Spa	nin	Memo	o: UK
	1975	1998	1975	1998	1975	1998	1975	1998	1975	1998
Natural Resources	39	30	51	11	27	11	24	16	10	8
Traditional	38	42	24	15	50	49	40	28	31	26
Modern	10	16	19	68	20	38	31	51	53	61

Modern industry tends to be more complex than traditional or naturalresource-based industry, and the complexity of a sector tends to be reflected in a high share of intra-industry trade. Balassa and Bauwens (1987) showed that IIT rises with a country's per capita income.¹⁰ Given this, it is not surprising that, in 1970, the four peripheral countries plus Finland (which was the next poorest of the EU15 at the time) had the lowest shares of manufacturing-sector IIT in the current EU15 (Greenaway and Hine 1991).

The same authors show however that by 1985 Ireland had caught up to the EU12 average. Brülhart (1998) reports that in 1990 IIT was still generally higher in core EU countries than it was in the EU periphery, but that the gap had narrowed since 1961, and that this applied to all industry sub-categories.¹¹

II.3 R&D activity

One further measure of structural convergence concerns R&D activity. Again we see, in Table 9.6, that Ireland has converged on core EU countries along these various dimensions.

	-	sonnel per oour force	Business F R&D a Domestic of Ind	s % of Product	Business Enterprise R&D as % of GDP		
	1983	1997	1983	1997	1983	1997	
Ireland	4.5	7.8	0.47	1.34	0.3	1.05	
Greece	1.6	3.5*	_	0.19	0.14	0.11	
Spain	2.2	5.3	0.27	0.52	0.23	0.42	
Portugal	2	3.6	_	0.20	0.1	0.15	
Memo: Denmark	6.6	11	0.99	1.93	0.63	1.27	
Memo: Netherlands	10	10.7	1.38	1.42	1.06	1.15	
Memo		9.4 (EU)	(OECD)	1.81			

Table 9.6 R&D Data

Source: OECD Main Science and Technology Indicators (various years); * 1993.

Alternatively one may look upon the output side of R&D activity instead. The number of external patent applications (that is, applications from residents for patent rights abroad) per thousand members of the labour force presents a reasonably similar picture.¹²

III. Economic policy and income convergence

There is by now fairly widespread agreement on the sorts of policies that are conducive to income convergence. Writing just before the strength of the recent Irish boom came to be recognized, Ó Gráda and O'Rourke (1996) identified a number of policy deficiencies that help account for the poor convergence experience of the Irish economy between the 1950s (and indeed much earlier) and the 1980s. They note in particular (i) the delay in dropping protectionism after the Second World War, with Ireland opening up to free trade only in the

1960s; and (ii) the delay in adopting a system of universal second-level education. Ireland moved towards this only in the mid-1960s, lagging substantially behind the rest of Western Europe.

These were longer-term issues. As to the precise timing of the turnaround in economic fortunes in the late 1980s, it is conventionally ascribed to a number of concurrent changes in the country's external and internal policy environments.¹³ The external environment was affected by the introduction of the Single European Market, which raised the potential for expanded FDI inflows (in which Ireland already had a track record of success), and by an increase in the country's Structural Funds allocations. Important internal policy developments included the introduction of more rigorous competition in a number of important sectors, the stabilization of the public finances, and the adoption of a new approach to industrial relations and pay determination which interacted with the conduct of fiscal policy to generate enhanced industrial competitiveness.

We take these policy orientations as our benchmark for an appropriate policy environment, and study how well the other EU periphery economies shape up in these respects. Specifically, we wish to examine four broad areas of economic policy: trade policy, education, infrastructure, and the governance/competitiveness nexus. Our aim is to see which if any of these factors can shed light on Ireland's poor performance relative to the rest of the periphery in the 1960s, its far superior performance over the course of the 1990s, and Portugal's strong performance relative to Greece and Spain over the last decade.

III.1 Trade policy

While most of the rest of Europe quickly subscribed to the General Agreement on Tariffs and Trade signed in 1947, Ireland did not move to embrace free trade until the mid-1960s. Some analysts have suggested that this delayed response may have continued to adversely affect the country's convergence prospects even beyond that date. The other periphery states lagged even further behind in this respect however. Each significantly liberalized external trade only over the course of the 1980s, as discussed in Bliss and De Macedo (1990), yet each achieved some convergence during the 1960s.

III.2 Education and human capital

Education's role in economic development is universally recognized as important. In the case of the periphery states however, some of which have long histories of emigration, the channel of influence may be less direct. When labour is internationally mobile, increased educational throughput cannot guarantee that a demand for these educated workers will surface within the economy. If there are no exogenous factors leading to an increased demand for skilled labour, educated workers may simply emigrate (Markusen 1988).¹⁴ Thus a supply of

educated labour in an open labour-market context may be necessary but is not a sufficient condition for development.

It is nevertheless accepted that Ireland's delay in raising the throughput of the educational system is likely to have hindered convergence. It is clear from Table 9.7 that Ireland lags behind the rest of the OECD by about ten years in terms of the educational standards of the population, as does Greece.¹⁵ Spain lags behind both countries by a further ten years, and Portugal is much further behind again.¹⁶

Table 9.7 Percentage of Population Classified by Educational Attainment, 1998: At least upper secondary, followed by at least tertiary B (which includes occupational specializations and university or professional equivalents)

Age	Ireland	Greece	Spain	Portugal	Memo: OECD
25-34	67 (29)	66 (22)	53 (32)	29 (11)	72 (25)
35-44	56 (22)	52 (19)	38 (21)	20 (9)	65 (23)
45-54	41 (16)	36 (13)	23 (14)	14 (8)	57 (19)
55-64	31 (11)	22 (8)	12 (8)	12 (7)	44 (14)

Source: OECD (2000) Education at a Glance.

III.3 Infrastructure

Biehl (1986) reports relative infrastructural levels for an aggregate of transportation, telecommunications, energy and education, showing that the periphery countries had a substantial infrastructural deficit relative to the core EU countries at that time; Table 9.8.

Table 9.8 Relative Infrastructural Levels in EU Countries, 1985–86

Country	(%)	
Spain	74.3	
Spain Ireland	67.1	
Greece	56	
Portugal	38.7	
Memo: EU	100	

Since that time, of course, major increases in infrastructural spending have been facilitated by the EU Structural and Cohesion Funds. Community support accounted for almost 15 per cent of total investment in Greece in the 1994–99 period, for around 14 per cent in Portugal, 10 per cent in Ireland and 6 per cent in Spain (European Commission 2001, volume 1).

It is not yet clear however whether this funding has allowed the periphery to converge substantially in terms of physical infrastructure. The Commission

report itself suggests that 'while investment in peripheral regions has improved accessibility, it has been accompanied by similar investment in neighbouring regions and more central ones, which can counteract any relative gain' (2001:132).

III.4 Governance and competitiveness

It should be noted at the outset of this discussion of governance issues that only one of the four cohesion countries had a democratic system in place throughout the 1960s and 1970s. The significance of this point is disputed however, as there is no strong general correlation between democracy and growth, independent of possible effects on the other variables under discussion (Barro and Sala-i-Martin 1995).

There are three dimensions of governance on which we wish to focus. The first is microeconomic in orientation and is concerned with the role of the state in terms of ownership, regulation and competition; the second is concerned with the stability and efficiency of macroeconomic policy, and the third with the system of wage determination and its implications for competitiveness.

III.4.1 Microeconomic policy

Koedijk and Kremers (1996) provide a ranking of EU countries in terms of the degree of regulation of product and labour markets, and demonstrate a strong negative relationship between growth and regulation. In terms of their overall indicator, evaluated in the early 1990s, Ireland comes out best (that is, as least regulated) of the EU12 (minus Luxembourg), Portugal and Spain come out about half way down the league table, while Greece comes out worst.¹⁷

III.4.2 Macroeconomic policy

Fischer (1993) explores the role of macroeconomic stability in the growth process. The strongest result, he reports,

is the consistent negative correlation between inflation and growth. Inflation is negatively associated with both capital accumulation and productivity growth. There is a strong positive correlation between the budget surplus and growth, with the evidence suggesting some influence of the surplus on capital accumulation and a stronger effect on the rate of growth of productivity.

The cohesion countries were amongst those exhibiting the greatest nominal instability over the 1970s and 1980s (with all four having higher inflation than the EU15 average over the 1970s and 1980s), with Ireland, Greece and Portugal (in that order) all having debt-to-GDP ratios above the average by 1990. It is interesting to speculate as to whether this may provide a key to the mystery of why convergence halts when the world economy is sluggish. Poorer countries

appear to find it more difficult to maintain macroeconomic stability in such an environment.

The Irish fiscal crisis was eventually brought under control in the late 1980s however, thanks to a strong counter-cyclical cut in government spending. Though no one realized it at the time, this coincided with the beginning of the sustained boom and the debt-to-GDP ratio fell rapidly after that.

III.4.3 Wage determination, industrial relations and competitiveness

In the Irish case, there may have been an important synergy between the form of the fiscal stabilization undertaken in the late 1980s and the important changes introduced at the same time into how industrial relations were conducted.

Ó Gráda and O'Rourke (1996) suggest that Ireland's traditional industrial relations and pay bargaining system, falling as it did between the corporatist and decentralized systems, may have adversely affected economic performance, along Calmfors and Driffill (1988) lines.

Since 1987 Ireland has moved towards a corporatist system, and labour market outcomes are undoubtedly vastly improved. A recent OECD (1997) study located Spain as in an intermediate position throughout the period 1980 to 1990 while finding Portugal to have moved from being decentralized and uncoordinated in 1980 to an intermediate position in 1990. The OECD revisited the Calmfors–Driffill analysis however and found little evidence for their U-shaped relationship.

Whatever the findings of the OECD study however, there are hugely important differences in the operation of the Spanish as against the Portuguese labour market. This will be clear from the very different unemployment experiences of the two countries, with Spanish unemployment averaging around 20 per cent over the last two decades while Portugal's averaged only 7 per cent. A careful analysis by Bover et al. (2000) identifies two key institutional differences that are important in understanding the large disparity in unemployment rates. The first is the difference in unemployment benefit systems. Until 1985 Spain's was generous while Portugal's was almost non-existent. Despite some convergence in regimes since then, Spain still has a higher proportion of the unemployed covered by more generous benefits. The second institutional difference is in wage flexibility. Wage floors established by collective agreements in Portugal are set at lower relative levels than in Spain, and wage increases are less homogenous across sectors. This adds up to an overall picture of labourmarket flexibility in Portugal and labour-market rigidity in Spain. This will have strong implications for convergence, and may well be the main reason for Portugal's catching up rapidly on Spain.¹⁸

Finally we come to another element of competitiveness; one that is often overlooked but that cannot be ignored when considering the Irish case – the

rate of corporation tax. Table 9.9 shows average effective corporation tax rates on US investments for 1992. Ireland is seen to have by far the lowest rate on manufacturing in the EU, and is surpassed only slightly by Singapore and China in the world economy.

Country	Average effective tax rate on US MNCs in 1992 (%)		
Singapore	5.65		
China	5.7		
EU			
Ireland	5.8		
Finland	15.8		
Sweden	16.7		
Netherlands	17.9		
UK	19.3		
Luxembourg	21.6		
France	22.8		
Portugal	25.3		
Spain	25.33		
Belgium	25.9		
Germany	28.9		
Denmark	31.0		
Italy	32.56		
Austria	32.58		
Greece	33.4		

Table 9.9 Effective Corporation Tax Rates, 1992

Source: Altshuler et al. (1998).

IV. Lessons from the analysis of economic policy

The purpose of the preceding discussion was to see whether we could explain the questions raised by the convergence histories charted in Figure 9.1. We speculate that part of the reason for the poor overall convergence performance between 1973 and the late 1980s may be that poorer countries find it more difficult to maintain macroeconomic stability in the face of world economic slowdowns. Better micro- and macroeconomic policy making appear to lie at the heart of the explanation for Portugal's overtaking of Greece in the income rankings in the 1990s, though Greece's peripherality may also have become more disadvantageous. This would not seem to have been because of the instability in the neighbouring Balkans.¹⁹ Peripherality may rather have become increasingly burdensome in the struggle to climb the value-added chain, as Midelfart-Knarvik et al. (2000) suggest. The main factor constraining Spain relative to Portugal would appear to be its much less flexible labour market. We now focus on the difficult questions that arise in attempting to understand Ireland's underperformance relative to that of the other periphery regions in the 1960s, and its very strong performance in the 1990s.

IV.1 The 1960s

Ó Gráda and O'Rourke (1996) make a couple of interesting suggestions with reference to the 1960s dilemma. One revolves around a discussion of 'webs of dependency'. Thus they ask whether Ireland's proximity to and trade links with Britain, 'a slow grower in absolute terms (although not an underperformer in the convergence sense) could have led to slow Irish growth rates', going on to suggest that adding a spatial dimension to the empirical growth literature may prove a fruitful research programme for the future. While I am sympathetic to this view, the webs of dependency idea does not seem to elucidate how the other periphery states managed to converge during this period.

The other topic which Ó Gráda and O'Rourke raise (but leave somewhat in mid-air) concerns the emigration–convergence nexus. My own thoughts on this are developed in Barry (1999: Chapter 2). We know from Williamson (1994) for example that emigration brought much stronger wage convergence than it did convergence in national income per head.²⁰ Indeed while labour mobility in most conventional models guarantees income convergence, in reality income convergence across regions in Europe (which enjoy substantial mobility) has been less dramatic than convergence across states, where mobility is less strong.

Income per capita can be written as labour productivity multiplied by the ratio of workforce to population. Clearly if emigration is concentrated among single people of working age this raises the age–dependency ratio and reduces GNP per capita.

The more interesting effect however concerns the impact of labour-market openness on productivity growth.²¹ Indivisibilities in infrastructure may cause emigration to impact negatively on productivity. Also recall Ó Gráda's (1997:217) warning that because of easy access to the British labour market 'cheaper labour could do little to compensate for Ireland's relative backwardness and isolation, or to generate the investment necessary for faster economic growth'. It is difficult for a manufacturing base to be developed under these conditions which would allow room for learning-by-doing and associated productivity growth. Demand-driven external economies will also clearly be difficult to achieve in regions suffering population decline, while the mechanism of falling real wages, which ultimately in the Krugman and Venables (1990) model allow the periphery to capture back from the core the high-productivity increasing-returns sectors, is unavailable.

If this perspective is correct, perhaps the only strategy consistent with free trade that would have allowed Ireland to develop rapidly in the closing years of the twentieth century was the FDI-led strategy.²²

IV.2 The 1990s

It will be apparent that Irish economic policy from the late 1980s onwards was superior, along all dimensions, to that in the other periphery economies. This may explain Ireland's superior performance, but is hardly sufficient to explain such dramatic convergence. Most will agree that poor policy inhibits convergence while correct policy facilitates it. There are few models that propose that inappropriate policies act merely as a dam behind which the thwarted convergence forces build up, so that when appropriate policies are eventually adopted the lost ground is made up for all the more rapidly. Yet this is a view that is gaining currency in Ireland at present, as exemplified by Ó Gráda (2002).

The one unusual element in the Irish policy mix is the FDI/corporate tax rate nexus, and it is worth exploring the extent to which this can help explain the unusually rapid pace of convergence. I propose to examine this by looking at the role of foreign industry in the structural changes we have seen to be contemporaneous with convergence.

These structural changes were in the area of production structure (increasing similarity to the core, increasing share of human-capital intensive services employment in Europe, increasing firm size), trade structure (share of modern manufactures in aggregate exports, increasing IIT levels) and in the research orientation of the economy. We consider the contribution of foreign industry to each of these in turn.²³

We have seen that Ireland's industrial structure has been growing more similar to that of the EU core. The sectoral structure of domestically owned industry is very much less similar however; the presence of foreign industry increases the similarity substantially. Irish domestic industry has been growing more similar over time though, and the work of Görg and Strobl (2002) suggests that this is because of intermediate-goods linkages to foreign-owned firms. (In Spain, with a much less strong presence of foreign firms, domestic industry has been growing less similar to the core in industrial-structure terms.)

Our second production-structure development index is in terms of the increasing dispersion of 'FIRE' services across the EU. Midelfart-Knarvik et al. (2000) argue that part of the reason for this is that seven of the eight industries most intensive in the use of services became more dispersed between 1970/73 and 1994/97. These seven, in order of service-intensity are: Office and Computing; Glass and Products; Non-Metallic Minerals; Radio, TV and Communications; Drugs and Medicines; Paper and Products; and Printing and Publishing. Of the total level of employment in these sectors in Ireland, around two-thirds are in foreign firms.

Our third index is in terms of the size of firms. Here the impact of foreign industry is straightforward. The average foreign manufacturing firm in Ireland employs five times as many people as the average domestic firm.

Our first trade-structure development index concerns the growing proportion of modern-sector manufactured exports. Domestic industry by the late 1990s was exporting equal amounts from modern and traditional sectors, according to our earlier definition.²⁴ Foreign industry, which dominates by exporting 90 per cent of the total of both these sectors, exported five times as much from modern sectors as from traditional.²⁵

Our second trade-structure index is the proportion of IIT in manufactures. Product characteristics associated with high levels of IIT include high degrees of product differentiation, product innovation and increasing returns, and high levels of FDI (Grimwade 2000). Thus IIT is strongly correlated with the characteristics that describe the foreign-owned segment of Irish manufacturing.²⁶

Our final development index concerns the extent of R&D undertaken in the economy. We saw earlier that Ireland has now achieved the same levels of business-sector R&D relative to GDP as characterize other small rich nations such as Denmark and the Netherlands. In Ireland however, foreign firms over the 1980s and 1990s consistently accounted for over 60 per cent of this expenditure, and are also responsible therefore for the bulk of the increase.

This analysis of the role of foreign industry in generating the structural changes which have come to be associated with convergence suggests itself as necessary to the explanation of Ireland's unusually rapid convergence of the last decade.²⁷

V. The FDI-driven growth strategy: is Ireland structurally now part of the EU core?

After a decade of rapid convergence can Ireland now be classed, in terms other than those of the economic geographers, as part of the core of Europe? Clearly it can if one adopts a definition based on income per head. One might reach the same conclusion by looking superficially at my range of structural indicators. When one looks a little more deeply however the answer becomes less clear.

Mary O'Sullivan (2000) for example points out that the specialization of foreign industry in Ireland in R&D-intensive sectors will bias up the share of R&D in GDP, and she goes on to show that foreign companies in Ireland engage in relatively low levels of R&D by the standards of their own industries. Nor have the high-profile high-tech companies such as Intel and Dell that have located in Ireland patented any Irish-based inventions.

Turning to indigenous industry, she points out that while Ireland's per capita patent performance compares favourably with other small open economies like New Zealand, other comparable countries with a focus on high-technology

industry, such as Finland, Israel and Taiwan, have done considerably better. Productivity in smaller firms (which would consist primarily of indigenous firms) is also relatively low: in 1995 productivity in firms with fewer than 10 employees was only 65 per cent of that in the UK, and was 87 per cent for firms with 10 to 49 employees.

Another interesting data source is Pavelin (2000), who discusses the characteristics of the leading firms in the EU. A leading firm is described as one occupying a place among the top five firms in each of 96 three-digit NACE industries. Because some firms are leaders in more than one industry, the average number of leading firms is around 300. His dataset covers the period around the time of the introduction of the Single Market. It is interesting that though many other small countries had entries – eleven of the firms were from Belgium/Luxembourg, ten were Dutch, five were Swiss, five Spanish, two Danish and two Portuguese – there were none from Ireland or from Greece.

This indicates that much of Irish domestic industry remains peripheral, and suggests that the Irish economy would be extremely vulnerable to anything which stymied the inflow of FDI. The main point about a success story that is strongly dependent on a low rate of corporation tax is the vulnerable position in which it leaves the country. It is true that any country's comparative advantage can disappear or be devalued almost overnight, by technical change for example or by changes in the international trade environment.²⁸ Such changes can rarely be implemented at the stroke of a competitor country's pen however, as may be the case with corporation tax.

This point can be overemphasized of course. The 1990s boom occurred only when a whole range of appropriate policies was in place. The same point can be made by examining the changing sectoral structure of foreign industry in Ireland. A low rate of corporation tax is likely to be of particular benefit to firms which can shift profits between plants via transfer pricing. Such firms are likely to be in R&D and/or advertising-intensive sectors, where 'arm's-length trading prices' are difficult to determine. Yet a range of other conditions needed to be met before Ireland was able to exploit its tax advantage to the full. These sectors, using the Davies and Lyons (1996) classification, accounted for 63 per cent of foreign employment in Ireland in the year 2000, up from 45 per cent in 1973.

This suggests that competitor countries will need to fulfil a host of other conditions besides low corporation tax rates if they are to attract FDI away from Ireland. And yet there appear to be a number of Central and Eastern European (CEE) countries that may be capable of fulfilling these conditions upon EU accession (Barry and Hannan 2001).²⁹

Several studies have attempted to evaluate the implications of increased tax competition for Ireland. Honohan (2001) for example adopts Altshuler et al.'s (1998) estimates of the tax elasticity of US FDI flows, and finds that the stock of US manufacturing investment is 70 per cent higher in Ireland than it would

have been if Ireland had a tax rate equal to the next lowest rate in the EU. The effect is even more dramatic of course if comparison is made with the average EU tax rate. Gropp and Kostial (2000) come to a rather similar conclusion. They find that about 80 per cent of Ireland's net FDI inflow would disappear if rates were harmonized at the average EU level.³⁰

VI. Conclusions

Ireland's dramatic economic boom of the 1990s is frequently ascribed to the country's embrace of globalization. This is too simplistic. The country has had an open labour market for at least 150 years, and capital and product markets have been very open since the 1960s. Yet the economy performed poorly in the convergence stakes until the late 1980s. I am not the first to speculate that labour-market openness may have hindered rather than hastened economic development and income convergence.

The problem for an economy with an open labour market is that it requires some shock to labour demand to get the convergence process rolling. A large part of that shock was provided by the increased inflows of foreign industry that occurred around the time of the development of the Single Market. The low rate of corporation tax played a pivotal role in allowing the economy to capture a high share of these inflows. This factor on its own would have been insufficient to attract the high-technology industry which entered, however. The whole range of building blocks which Ireland had put in place – education, infrastructure, macroeconomic stability, a more rigorous approach to competition policy – all played a role.

Thus Ireland converged very rapidly. Given that policy was appropriate along this whole range of dimensions, convergence would have been likely anyway, but arguably at a much slower pace than was actually achieved. Portugal for example, in economic policy terms, comes out substantially better than Greece while dominating Spain in terms of the functioning of its labour market, and yet its convergence has been much less dramatic than Ireland's. But Ireland's very rapid convergence has come at a price. The country appears vulnerable to shocks which are very likely to occur (tax competition), and may therefore be more vulnerable than economies like Portugal which have followed comparativeadvantage-based paths to development.

The analysis suggests two areas that are likely to warrant further research as globalization progresses. One relates to the concept of *embeddedness*. What factors can ensure that multinational companies which choose a location for one set of reasons choose to remain when these initial conditions change? This may depend on 'competition within companies' – that is, on competition between the plants which the company has set up in various locations. Cantwell and Piscitello (Chapter 8 in this volume) present a very interesting perspective on

this, which suggests that interactions between innovation systems in different locations may be as important as competition between locations.

The other important research area is one related to convergence but which the burgeoning literature on convergence has as yet overlooked. It has been argued here that different industrial strategies are likely to generate different rates of convergence. Different strategies however will also entail different degrees of vulnerability to external and internal shocks.³¹ A portfolio perspective could profitably be brought to bear on this issue.

Notes

- * The financial support of the European Commission under Grant No. ERB-FMRX-CT-980215 is gratefully acknowledged.
- 1. The role of FDI in the transformation of the EU periphery reflects both the globalization process, which has been associated with increased FDI flows worldwide, and the process of European integration, which has increased the attractiveness of the EU periphery as a location from which to export into the rest of Europe. This leads to an upgraded industrial structure. This is strengthened by the increase in trade with developing countries (another dimension of globalization) which squeezes the periphery out of lower value-added industrial sectors.
- 2. These data are from 1990. Peripherality indices are known to change only very gradually over time. Midelfart-Knarvik et al. (2000) use a somewhat different measure of 'market potential' for the entire EU15. This ranks Spain above Ireland and locates Finland between Ireland and Portugal. This suggests that a detailed analysis of Finland as a special case that of a rich peripheral country could prove fruitful.
- 3. The figure charts periphery country income as a percentage of EU15 average income per head (in purchasing power parity terms). Note that GNP is used in place of GDP in the Irish case to avoid the transfer-pricing issues that bedevil Irish output data.
- 4. While Ireland performed poorly up to the late 1980s, the country is located exactly on the Western European convergence line when the whole period from 1950 to the late 1990s is included; Barry (2000). As Ó Gráda (2002) points out however, had the growth occurred earlier rather than later in the period the present value of national income over the whole period would have been substantially larger.
- 5. These data suggest that economic convergence is associated to some extent with convergence in industrial structure, and there is some econometric evidence to support this.
- 6. Producer services are defined as Transport, Communications, and Banking and Financial Services, while consumer services are largely Distribution and Catering.
- 7. I am forced to concentrate on the FIRE sector because their datasource provides information on only this sector for Ireland and Greece.
- 8. The very small increase in the Irish ratio is consistent with the fact that its share of FIRE employment was much closer to its share of total employment even in 1982 than was the case for the other periphery countries.
- 9. Natural resource-based sectors are food, live animals, drink and tobacco, and crude materials such as wool. Traditional industry consists of 'basic manufacturing' (which includes rubber, paper and textiles) and 'miscellaneous manufactures' (which includes furniture, clothing and footwear). Modern industry consists of chemicals plus

machinery and transport equipment. Note that not all sectors are included in the table so proportions do not sum to 100.

- 10. See also Havrylyshyn and Civan (1983).
- 11. Industries were sub-classified by degree of scale economies and by main competitive factor (resource-intensive, labour-intensive, scale-intensive, science-based and differentiated goods).
- 12. In 1997 Ireland stood at 6, around the same as France or Germany. Spain stood at a little over 1, Greece at 0.5 and Portugal at 0.15. (Note that a single innovation can lead to multiple patent applications.) The Netherlands stands at 14 and Denmark at 19!
- 13. Cf. Barry (1999, 2000).
- 14. The story told by MacSharry and White (2000:217) of the campaign to attract Intel to Ireland is interesting in this regard. The company was worried that Ireland had no history as a producer of microchips. The development agency contacted over 300 Irish engineers working abroad in this field and convinced the company that over 80 per cent of them would be prepared to return to Ireland if given a good career opportunity with a quality company.
- 15. The Greek case is very unusual in that those with a tertiary level of education have a higher probability of unemployment than those with lower educational qualifications. This would seem to suggest some unusual labour-market distortions.
- 16. In terms of educational quality, data on standardized tests of mathematical and scientific achievement of school pupils in 4th and 8th grade indicate that Ireland is currently on a par with the OECD norm, while the other periphery countries lag behind.
- 17. Interestingly, Greece came quite far down the scale in terms of implementation of the Single Market measures, while the Greek execution of the human resources programme in CSF II was also rated the least satisfactory of all (Tondl 2001:202).
- 18. Excessively high wage rates in Spain would expand the wedge between the capital–labour ratio in production and the capital–population ratio. The speed of convergence associated with the high capital–labour ratio would be lower than appropriate for an economy with this ratio of capital to population.
- 19. The proportion of Greek exports going to Eastern Europe and the component states of the Soviet Union actually rose between 1985 and 1997, climbing from 4 per cent and 3 per cent respectively to 9 per cent and 5 per cent in the later period.
- 20. Surprisingly, the distinction between wage convergence, income convergence and economic development is not gone into in any detail in O'Rourke and Williamson (1999).
- 21. The discussion that follows assumes that the aggregate production function is more complex than in the basic Cobb–Douglas formulation. See Faini (1996) for an interesting exploration along these lines.
- 22. Interestingly there is a branch of the endogenous-growth literature which suggests something similar. The general conclusion that emerges is that 'if *the industries in which the less developed country has a static comparative advantage are industries in which there are limited opportunities for learning, then the effect of free trade is to speed up learning in the more developed country and to slow it down in the less developed one*' (Stokey 1991:608). Gao (1999) shows that attracting FDI is one way out of this bind. The Stokey view is related to the perspective of Berend and Ranki (1982) who argue that the historical industrialization prospects of each peripheral region depended in part on the characteristics of the less advanced products in which they specialized. Some products permitted easier movement up the value-added chain than others did.

- 23. The association between FDI and these particular structural changes is clearly a function of the era in which the structural changes occur. O'Rourke (Chapter 3 in this volume) points out for example that the manufacturing sector accounts for a much higher share of total FDI flows today than was the case in the past.
- 24. In terms of NACE codes I am classifying NACE 24, 29, 30–33 and 34–35 as Modern and 17–22, 25–28 and 36–37 as Traditional.
- 25. While EU membership was crucial in attracting these foreign industries to Ireland, the growing importance of non-EU export destinations for these companies is significant, as Ruane and Sutherland (Chapter 10 in this volume) show.
- 26. In fact, the manufacturing sectors in which IIT is highest are Chemicals and Machinery, and these sectors tend to be FDI-dominated in the periphery.
- 27. In response to the question of how a sector that accounts directly for only around 10 per cent of employment can have such influence, factors to be taken into account include strong backward linkages per employee (which rose 50 per cent in real terms between 1983 and 1995), demand effects via high wages, tax effects (whereby tax revenues from foreign corporations rose from close to zero in the mid-1980s to sum now to around 10 per cent of income tax revenues) and other spillover effects (Barry, Bradley and O'Malley 1999); Barry 2000).
- 28. Think of the impact on the African copper belt countries of the technical changes which caused the long-term collapse in the demand for copper.
- 29. EU membership may be more beneficial for the CEE countries in this respect than Kierzkowski (Chapter 11 in this volume) suggests.
- 30. As against this, there is some evidence of agglomeration and demonstration effects operating in the Irish case (Barry, Görg and Strobl 2001). It is not clear how easily these may be unwound.
- 31. Other factors which affect the riskiness of locations and strategies include the rapid rate of depreciation of capital in high-tech sectors, and the degree of international mobility of skilled labour (Krugman 1993).

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10 Globalization, Europeanization and Trade in the 1990s: Export Responses of Foreign and Indigenous Manufacturing Companies

Frances Ruane and Julie Sutherland*

I. Introduction

Within little more than a decade, the word globalization has gone from being a 'catch-all' term used in the economics media to capture the process of integration in world financial, product and service markets, to a term that is now used widely to describe the impact of increased international integration across a range of fields - from literature to sociology to technology. More recently the term has begun to acquire a pejorative dimension, as 'anti-globalization' has become the slogan of groups critical of what they see as the exploitation by large corporate interests in the developed world of smaller companies in lesserdeveloped economies. Indeed, this shift in the meaning of globalization has led some economists (for example, Rodrik 2000:177) to favour the term 'international economic integration' as being 'self evident to economists' and less loaded with value judgements. Were this trend to continue, one could see the word entirely disappear from use as quickly as it appeared, to be replaced with parallel expressions such as 'international social integration' and 'international cultural integration'. This would be a loss in terms of our language as these terms lack the breadth that 'globalization' evokes as well as its strong inter- and crossdisciplinary associations.

Clearly globalization is a phenomenon that is wider than a single discipline. The Oxford English Dictionary (OED) defines globalization as 'the act of globalizing', and identifies Webster's Dictionary in 1961 as its source of the use

of the word. Webster in turn defines 'globalize' as 'to make worldwide in scope or application' – nothing specifically related to economics or indeed to any particular discipline. The OED's first reference to the written use of the term globalization (with the European 's' spelling) is in the *Spectator* in 1962 – just four decades ago. The strong economic association with the term in recent times seems to have arisen some 20 years later in the mid-1980s, in the context of increased integration in product and financial markets.¹

The attraction of 'globalization' as a new word may have stemmed from its potential to capture the increased scale and intensity of international, and in particular economic, relationships in the late 1980s, arising from the cumulative effect of declining trade and capital barriers, reduced transport costs, and rapid development in, and diffusion of, modern electronics-based technology. The word came into widespread use in economics at a time when it was unclear how different the world economy might become as the possibilities of international fragmentation of production extended (Arndt and Kierzkowski 2001). This extension is increasingly evident in the growth and scale of international trade in manufactured components. Globalization captured the sense that there was something more than incremental change taking place – that all countries would be affected to some degree by the scale of integration, that no activities within countries were immune to the process, and that it could help some countries to leap-frog development stages.

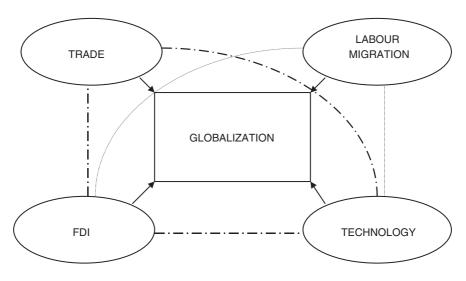


Figure 10.1 Economic Globalization

Figure 10.1 illustrates the complexity of the relationships in the globalization process from an economics perspective. It identifies four key elements – trade,

foreign direct investment (FDI), labour migration and technology. All feed directly into what we call globalization as well as interacting with each other to enhance the extent of globalization. For example, where traditionally trade theorists looked at trade and factor flows as substitutes in terms of achieving factor price equalization, increasingly we see trade and FDI as complements, with the strong growth in intra-firm trade and global outsourcing. Global outsourcing would not have been possible without technology – thus the inter-connection between trade and technology. In some instances labour migration has been seen as an alternative to FDI (for example, in Eastern/Western Europe and in the USA/Mexico relationships), and technology has now allowed production to be separated geographically from factor inputs, for example, when Indian software engineers contribute to software services in Europe and the USA without ever leaving India.

Attempts to gauge the extent and depth of globalization have typically relied upon data measuring international trade and investment flows, omitting other less readily quantifiable aspects of global integration. Better globalization indices are required if we are to capture what is a major difference in the way in which economies have become interconnected over the past two decades. Furthermore, if we are to take a broader view of globalization, we need indices that capture the extent to which other non-economic activities have become increasingly internationalized, as these feed back into the economic relationships. One recent 'Globalization Index'² tracks economic interconnectedness (economic integration and technology) as well as social and political interconnectedness (personal contacts and political engagement) across 62 advanced economies and key emerging markets. While it is easy to criticize the purity of such indices, one must appreciate attempts to measure such important global changes.

During the 1980s we also witnessed a marked increase in the intensity of Europeanization (regional integration within Europe), which has had the effect of redefining the implicit and indeed explicit parameters of economic integration in historic terms. Beginning with the abolition of barriers to trade and factor flows and continuing with the harmonization of fiscal and competition policies, Europe has now created Union-wide institutions and, as of 2002, 11 countries now share a single currency. Throughout this process of Europeanization, economic integration has been used as the key vehicle to achieve more fundamental integration in Europe. For economists interested in the world economy, the trends towards increased globalization and Europeanization have broadened the scope of academic enquiry, increased emphasis on the complexity of economic interdependency both within and between companies and countries, and led to a better understanding of the role that supranational institutional frameworks can and must play in developing such interdependency.

Globalization from an economic perspective manifests itself in increased international trade, foreign direct investment flows and, to a lesser extent,

international migration of labour. But the process of globalizing, even in economic terms, is much more complex than is evident in aggregate data at product or factor level, irrespective of how refined the data are. Many authors have attempted to deal with this complexity by combining studies based on aggregate data (on trade, factor flows, relative prices and wages, and so on) with country or sector case studies or historical examples from specific markets or periods; see for example, Feenstra (1998), Obstfeld (1998) and Williamson (1998).

In the vast literature on globalization, there is great emphasis on the role of multinational corporations (MNCs) in the process. The perceived dominance of MNCs (many of which are headquartered in the US) in certain product and service markets and the extent of global mergers and acquisitions provide, perhaps, some of the main reasons why globalization has attracted its pejorative dimension. While it is certainly the case that a large proportion of world trade takes place through MNCs, access to broader markets has been very important for local companies, which we label LCs. Cross-border trade is particularly important for LCs based in smaller economies, such as many potential EU entrants, because in its absence their scale of production would likely be suboptimal and/or local markets would become overly concentrated. In either case, domestic competitiveness and/or competition could be undermined. There is strong recognition of this effect in EU documents, as trade and competition; see European Commission (1997: Section II-C).

Research into the trade patterns of LCs and MNCs is ongoing, with significant attempts being made to establish national data sets at the company level. For the most part, however, research to date is based on specific country data; see for example, Baily and Solow (2001). In this chapter, we use data for Ireland to explore how the process of globalization impacts on LCs as well as MNCs in the context of Europeanization. We use a highly disaggregated data set of Irish manufacturing companies, both indigenous and foreign-owned, to investigate the pattern of investment and trade flows as possible evidence of increasing globalization. In particular, we examine the nature of investment flows into Irish manufacturing industry to determine if investment is from a European or global source, and how the resulting export destination patterns of European-owned MNCs (EU MNCs), and non-European-owned companies (non-EU MNCs) contrast with each other and with those of Irish LCs.

In Section II we look broadly at recent developments in openness by summarizing trends in merchandise trade and foreign direct investment in a sample of European and non-European countries over the three decades up to 2000. In Section III we concentrate our discussion on trade in manufacturing industry, using data that distinguish between LCs and MNCs operating in Ireland. Given the unprecedented rate of economic development in Ireland in the past decade, which has been strongly driven by MNC activity,³ we compare

the growth and export trends of those sectors dominated by MNCs with those sectors where LCs are dominant. In Section IV we examine the sectoral pattern of FDI and export destinations for both LCs and MNCs across three major sectoral categories in Irish manufacturing in order to establish whether their exporting behaviour has involved increased Europeanization or globalization. In addition, we note the relationship between the changing export destination pattern of Irish companies in each sector and the performance characteristics of exporting companies relative to non-exporters. Finally, in Section V we present some concluding comments based on our analysis.

II. European globalization

The growth in international trade in Europe over the past 50 years has been dominated by increased economic, political and social integration through several different phases - European Economic Community (EEC), European Community (EC) and European Union (EU) - with additional members joining the six original members during the 1970s, 1980s and 1990s. To examine trends in the degree of trade openness at a national level we use the ratio of merchandise trade (measured as the average of imports and exports) to GDP between 1970 and 2000 as an indicator. While this is the standard indicator used to compute openness, the measure is imperfect in two dimensions. On the one hand, it understates the degree of openness because it includes services in the measure of GDP and excludes them in the measure of trade; this downward bias is increasing with the growth in the services share of GDP. On the other hand, the indicator overstates the degree of openness as the measure of imports and exports include trade in intermediate inputs whereas GDP is a value-added concept. Despite these technical shortcomings the indicator does provide a relative measure of the degree of openness across countries over time.

Not surprisingly, the degree of trade openness across the incumbent member countries of the EEC in 1970, some 15 years after the creation of the Common Market, was much higher in the smaller economies (Netherlands and Belgium–Luxembourg) than in the larger economies (France, Germany and Italy), reflecting the greater need of the former to trade in order to meet consumer demands and achieve competitiveness.⁴ The period since 1970 has seen the larger economies narrow that gap, although it remains the case that the ratios of the smaller countries are twice those of the larger countries. Since the trade/GDP ratio rose in France, Germany and Italy by 20, 14 and 28 per cent respectively during the 1960s, there is a clear pattern of increased globalization in terms of merchandise trade, and the ratios for individual countries now well exceed those found prior to the First World War (see Feenstra 1998). This increased openness is regarded as a direct product of the reductions in non-tariff barriers to trade within the EU, the lowering of tariff and non-tariff barriers

under the GATT and more recently under the WTO agreements, the lowering of trade transportation costs per unit, the rise in the share of weightless products in consumption, and the growth in the EU market.

Table 10.1 Ratio of Average Merchandise Exports and Imports to GDP, 1970–2000 (per cent)

Country	1970	1980	1990	1998	2000
France	13.0	18.9	18.9	20.7	23.0
Germany	13.0	23.5	25.1	20.7	23.0
Italy	13.1	19.9	16.1	19.8	22.1
Netherlands	42.8	50.4	45.5	50.9	55.7
Belgium-Luxembourg	45.5	56.9	60.9	66.2 ^a	-
United Kingdom	16.7	21.0	21.0	21.6	21.8
Ireland	33.8	48.7	48.8	67.5	67.8
Denmark	24.0	26.6	25.3	26.7	28.7
Sweden	20.5	25.6	24.3	34.1	35.1
Austria	21.6	26.7	28.3	30.9	35.1
Norway	24.5	28.0	26.5	26.0	27.9
United States	4.2	8.9	8.2	9.9	10.3
Japan	9.4	12.8	8.8	8.8	9.0
Australia	12.5	13.8	13.8	16.5	17.3

^a This figure for Belgium-Luxembourg refers to 1997 due to unavailability of data.

Source: Merchandise export and import figures from International Monetary Fund (2001). GDP figures up to and including 1998 are from the website related to Lane and Milesi-Ferretti (2001). GDP figures for 2000 are from the OECD website.

In 1973 the EEC admitted its first new entrants: Denmark, Ireland and the UK. Reflecting the patterns of the incumbents, the smaller two countries had significantly higher trade/GDP ratios than the UK in 1970. If we can interpret the 1970s and 1990s as the decades reflecting EEC market-entry and single-market effects respectively, Table 10.1 suggests that all three countries, particularly Ireland, enjoyed a strong EEC-entry trade effect, whereas only Ireland enjoyed a very strong single-market effect. The latter effect is primarily realized through the increased attractiveness of Ireland as a production base for manufacturing by non-EU MNCs, especially those from the USA; see Krugman (1997), Barry (1999) and Görg and Ruane (1999). But is such an interpretation justified? Sweden and Austria also saw significant increases in their trade ratios during the 1990s when they entered the EU (in strong contrast to Norway which remained outside the EU), but they also enjoyed very substantial increases in trade in the 1970s when they were not EEC members. In effect, Table 10.1 shows that the 1970s is the only decade in which the ratio of merchandise trade to GDP increased for all countries listed.

Turning to look at some other major OECD countries, we note that the ratios for the US, Japan and Australia are all lower than those for the individual European countries. The US ratio has risen dramatically over the period, with most of this increase (from a low base) taking place in the 1970s. While the ratio for Australia has risen steadily over the period, the Japanese ratio is still below its 1970s level. However, in contrasting EU and non-EU countries it could be argued that these data provide evidence of Europeanization and not globalization, in the sense that the increased trade is intra-EU and a direct impact of the trade diversion effect of creating an economic trade area in Europe.

How much of the trade in Table 10.1 is extra-EU versus intra-EU? If we apply the average ratio of intra-EU trade to total-EU trade of approximately 60 per cent for small countries and 50 per cent for large countries (European Commission 1996), and make the assumption that only non-EU trade represents globalization, it could be argued that Europe is not markedly different from the US in terms of its openness to global trade. This estimate is consistent with the results obtained for 1995, which indicate strongly that the EU15 as an area at that time was no more globalized in trade terms than was the US (see European Commission 1997: Table 2).

Country	1970–74	1975–79	1980-84	1985–89	1990–94	1995-00	1970-00
France	0.7	0.8	0.9	1.8	3.5	6.3	2.3
Germany	1.2 ^a	0.8	0.7	1.3	1.3	5.0	1.7 ^b
Italy	0.6	0.4	0.6	0.7	0.9	1.4	0.8
Netherlands	5.2	3.7	4.3	5.6	7.5	18.3	7.4
Belgium-Luxembourg	g 2.2	2.1	1.5	4.4	7.4	22.8	6.7
United Kingdom	3.2	3.4	3.0	6.0	4.1	12.0	5.3
Ireland ^c	0.7	2.0	1.1	0.3	2.8	8.1	2.5
Denmark	0.9	0.3	0.4	1.3	3.0	10.8	2.8
Sweden	0.8	0.7	1.4	4.1	4.5	14.3	4.3
Austria	1.8	0.4	0.5	0.7	1.4	3.4	1.2
Norway	1.1	1.4	1.0	2.0	1.7	5.6	2.1
United States	0.7	1.0	0.9	1.6	1.6	3.2	1.5
Japan	0.3	0.3	0.4	1.0	0.8	0.6	0.6
Australia	2.0	1.2	1.6	4.2	2.5	3.5	2.5

Table 10.2 Ratio of Average Inflows and Outflows of FDI in Merchandise Goods to GDP Per Period, 1970–2000 (per cent)

^a Refers to 1971–74.

^b Refers to 1971–2000.

^c Inflow and outflow data for Ireland from 1998 onwards have been amended to take account of changes in the methodology and coverage.

Source: Inflow and outflow data and GDP data up to and including 1998 are from the website related to Lane et al. (2001). Data for 1999 and 2000 for inflows and outflows come from the IMF (2001) and data for GDP come from the OECD website.

Paralleling the focus on merchandise trade in Table 10.1, we examine foreign direct investment (FDI) in the merchandise goods sector in Table 10.2. It shows the wide variation in the ratio of the average of inward and outward FDI to GDP in different EU countries for the period 1970-2000, and for six sub-periods within that time frame.⁵ Again, with the exception of Japan, there has been a marked increase in FDI flows for all countries in the 1990s. As with the trade data, the ratios are generally higher in EU than in non-EU countries and, except for Japan, they have risen very steeply in the six-year period to 2000. These indicators mask quite different balances between countries as some have large volumes of inward FDI and little outward, while others have more even volumes flowing in both directions; for example, until the past decade, Ireland had virtually no outward FDI but had exceptionally high levels in inward FDI. If we again apply the ratios of extra-EU to total FDI inflows in the EU to the totals here, and treat only those extra-EU flows as evidence of globalization, we find that in the period since 1985, when this ratio began to decrease, the scale of FDI is not much greater for the larger countries in the EU, with the exception of the UK, than it is for the US (see European Commission 1996: Chapter 4).

In summary, two of the main indicators used to indicate economic globalization show that while openness in trade and FDI has increased in Europe, much of the increase has involved Europeanization rather than globalization. That is, trade and FDI flows by EU countries have been concentrated within Europe rather than flowing strongly into and out of the EU. For the remainder of this chapter we concentrate on how, in the context of FDI, openness in trade impacts upon Ireland, which has the highest trade openness ratio in Table 10.1. We examine how this openness affects the manufacturing sector by investigating the source of FDI and the resulting export destination patterns of both Irish-owned companies (LCs) and foreign-owned companies (MNCs).

III. Globalization and exporting at the national level

How do LCs within an economy fare in the globalization process? They are directly and indirectly affected by the growth of FDI, by the increase in competition on their domestic markets, and by the potential new foreign markets that the globalization process opens up. International organizations would claim that there are very positive benefits from the presence of foreign-owned MNCs operating within the economy (see UNCTAD 2001). There is a growing empirical literature that examines the extent to which LCs can benefit or lose from foreign direct investment, through the linkage, spillover and crowding-out effects generated by MNCs. While some of these studies find evidence at the plant level, suggesting that positive effects through linkages and demon-

stration effects may be counterbalanced by negative crowding-out effects (see Görg and Greenaway 2001).

The data presented in Section II have shown that much of the increase in trade and FDI in Europe has involved increased Europeanization rather than globalization, that is, much FDI has been sourced from Europe, and much of the increase in trade flows has been destined for Europe. But are such patterns consistent for an individual country? For a country that receives a relatively large proportion of FDI, the source of FDI and the resulting proportion and direction of trade can have significant implications for indigenous companies on many levels. In order to understand the connections that may exist between FDI and trade for both MNCs and LCs we examine the nature of trade and investment in Ireland, which was ranked as the most globalized country in the world in 2000.⁶ The remarkable growth of FDI, particularly in the manufacturing sector, has facilitated an unprecedented level of economic growth in Ireland during the 1990s, as is evident in Figure 10.2. It shows that growth in Ireland in the final five years of the twentieth century averaged 8.4 per cent, compared with the EU15 average of 2.6 per cent (see Barry, Chapter 9 in this volume, for a discussion of possible explanations for such exceptional growth in Ireland in

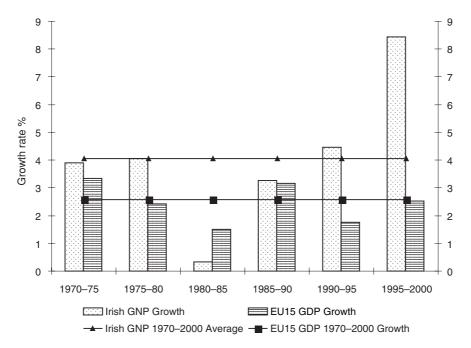


Figure 10.2 Comparison of Irish and EU Growth Rates, 1970–2000 *Source*: Economic and Social Research Institute, Dublin.

this period). Our objective is to examine the source of this FDI in Irish manufacturing, its export patterns, and the resultant changes in LC export patterns.

In particular, we concentrate on how LCs are affected by engaging in exporting as part of the globalization process (see Greenaway and Sapsford 1994; and Richardson and Rindal 1995), leaving aside the impact that globalization may have on LCs through competition on the local market. As merchandise exports by MNCs have grown, to what extent have LCs participated in this growth? Are the LCs tending to operate in the same sectors as MNCs and trade in the same geographic markets? To answer these questions we need to use data that allow us to distinguish company ownership and associate exports with sectors and plants rather than with products.

To study the behaviour of companies we look at data on LCs and MNCs in the Irish manufacturing sector. It could be said that, in terms of globalization, Ireland has had a first mover advantage! It has endured strong outward migration flows for most of the nineteenth and twentieth centuries and strong inward migration over the past decade; high mobility of capital out of and into the economy over different decades, and especially into the manufacturing sector over the past four decades; and high export/import to GDP ratios (both before and after a period of high protection of domestic markets from 1930 to the late 1960s). To set the analysis of the next section in context, we examine here data for the Irish manufacturing sector for the period 1991–98. We chose this period primarily on the grounds of suitable data availability – it is the full extent of the period for which data are available using the NACE Rev. 1 industry classification. It also coincides with a period when the ratio of Ireland's merchandise trade to GDP rose from around 50 per cent to over 67 per cent. Throughout this analysis, we use data on companies with 14 or more employees, as the data for companies with fewer than 14 employees provide a less detailed breakdown of the destination of exports. In the case of each company, we have its majority ownership status; we aggregate all EU-owned companies to generate the foreign category EU MNCs, and aggregate all non-EU-owned companies to form the foreign category non-EU MNCs.⁷ Irish-owned companies are labelled LCs. The data also indicate whether output is exported or sold on the Irish market and, if exported, whether it is exported to the EU, which includes the United Kingdom (Ireland's traditional export market), or the non-EU, which includes the US (the source of increasing amounts of foreign direct investment in Ireland). These export data have an advantage over traditional trade data in that they are more likely than the trade data to register the final destination market for Irish exports, as the latter often note the country of distribution rather than of consumption.

In order to trace the growth of FDI in Irish manufacturing we look at employment growth rather than output growth, as transfer-pricing practices related to FDI companies in Ireland tend to overstate the relative importance of FDI. The data in Figure 10.3 show that, in the period 1991–98, the total number of employees engaged in manufacturing in Ireland rose by 25 per cent, a rate of growth exceptional by European standards. The rate of growth of inward FDI is reflected in the employment growth in MNCs over the period, which was greater (33 per cent) than that in LCs (18 per cent). This growth resulted in a highly 'open' Irish manufacturing sector, with employment in companies with more than 14 employees being evenly split between MNCs and LCs in 1998.

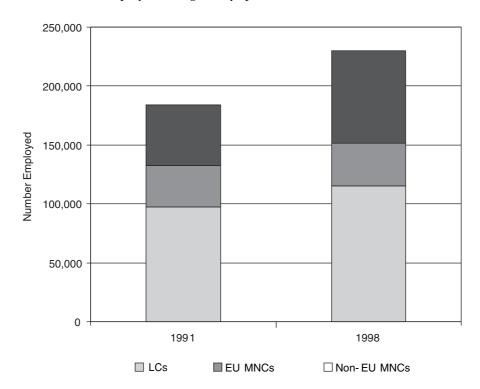


Figure 10.3 Distribution of Employment in Irish Manufacturing, by Ownership, 1991 and 1998.

Source: Own Estimates derived from CSO Census of Local Units.

Employment in EU MNCs remained relatively static, increasing by 3.5 per cent over the period. (This modest increase is the result of two contrasting patterns – a reduction of around 9 per cent in employment in UK-owned companies, Ireland's traditional source of FDI, and an increase in employment in non-UK European companies of 11 per cent.) In contrast, the growth of employment in non-EU MNCs far outpaced employment growth in both Irish and EU companies, rising by almost 53 per cent. The principle source of this non-EU employment growth was in US-owned MNCs, whose employment grew

by almost 70 per cent over the period. Thus the pattern of FDI in Ireland between 1991 and 1998 is clear: growth has been concentrated in the non-EU MNCs, with US-owned companies in particular showing greater growth than any other ownership group. Based on these simple measures it could be argued that although ownership in the Irish manufacturing sector is more Europeanized overall, it is becoming more globalized.

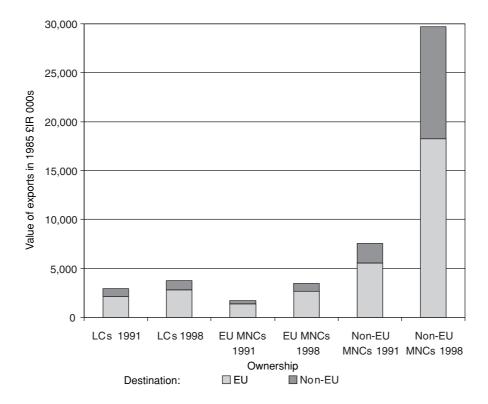
Foreign companies that have established in the Irish manufacturing sector have done so in order to export their outputs; in 1998 over 92 per cent of MNCs in Irish manufacturing engaged in exporting and almost 92 per cent of their total gross output was exported. The scale of involvement in exporting by LCs is, not surprisingly, much lower; 58 per cent of all LCs engaged in exporting in 1998, the same proportion as in 1991. The proportion of total gross output exported by LCs also remained constant between 1991 and 1998 at 36 per cent, although the exports themselves increased substantially in volume terms.

In the context of Ireland becoming a manufacturing platform in Europe for MNCs and of the significant difference in the proportion of output exported by MNCs and LCs, we have analysed the data to determine whether MNCs and LCs based in Ireland are engaged in exporting into the same markets. As noted above, Irish data allow us to distinguish two different market areas – EU and non-EU, so that we can observe differences in Europeanization and globalization patterns.

Figure 10.4 highlights the differences in export destination by ownership between 1991 and 1998. Most notable is the exceptional growth (21 per cent per annum) in total exports by non-EU MNCs, with total exports by both EU MNCs and LCs growing more slowly (11 per cent and 4 per cent per annum respectively) over the period. The share of exports by LCs to the EU increased slightly, from 71 to 73 per cent of total exports, with exports to the UK falling marginally over the period. Thus LCs are now trading relatively more in EU markets, and their dependence on the traditional UK market has continued to decline. This suggests that LCs are becoming more Europeanized in their export patterns, which is not surprising because of the traditional high share of exports going to the UK and the new geographically proximate export opportunities that the rest of the EU provides to Irish LCs. The pattern of exporting differs for foreign-owned companies; EU MNCs are now exporting a marginally greater proportion to non-EU countries, with EU-destined exports falling from 83 to 79 per cent of total EU MNC exports between 1991 and 1998. Similarly but on a more marked scale, non-EU MNCs increased their share of exports to non-EU destinations from 30 to 38 per cent over the period, with the US experiencing the fastest export growth rate (albeit from a comparatively low base). This suggests that in the recent period of globalization non-EU MNCs in particular are using Ireland increasingly as a global and not just an EU export platform.

The above analysis has allowed us to segregate the ownership and export destination patterns in Irish manufacturing in order to ascertain differences

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^a Deflated where appropriate, 1985 = 100.

Figure 10.4 Distribution of Irish Manufacturing Exports by Ownership and Destination, 1991 and 1998.

Source: Own estimates derived from the CSO Census of Local Units.

between Irish-, EU- and non-EU-owned companies. But such aggregation hides the sectoral pattern that underlies the nature of globalization and Europeanization in Irish manufacturing. The pattern of foreign ownership in the Irish manufacturing sector is highly sectorally concentrated, with most non-EU FDI concentrated in the 'high-tech' sectors and EU FDI going into the more traditional manufacturing sectors. Given this FDI pattern, what is the nature of exporting at the sectoral level in Irish manufacturing?

IV. Globalization and exporting at the sectoral level

When we investigate the degree of sectoral variation across manufacturing in Ireland, we find that the growth of manufacturing sector employment over the 1990s, while substantial overall, differed very widely across sectors. Using the

standard NACE Rev. 1 sectoral classification we identify a number of sectors that experienced employment growth in excess of 50 per cent for the period 1991–98. These include the 'high-tech' sectors, namely, Chemicals, Office Machinery & Computers, Electrical Machinery, Communication Equipment, and Precision Instruments.⁸ MNCs account for over 80 per cent of total sector employment in all of these sectors except Electrical Machinery, where they account for over 70 per cent.

Using this technology and MNC division we classify the Irish manufacturing sector into three sub-sectors – the two high-tech, MNC-dominated sectors, namely, Chemicals and Electronics, and the low-tech, LC-dominated sector Other Manufacturing.⁹ A further reason for separating manufacturing into these

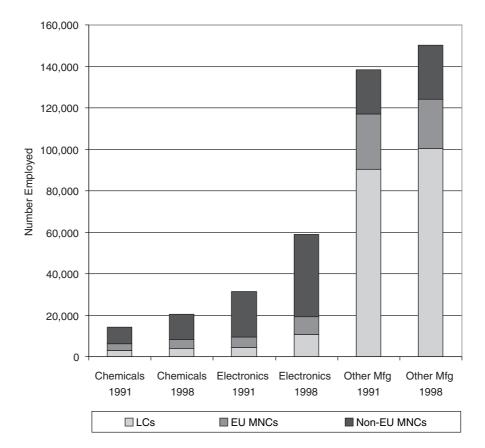


Figure 10.5 Distribution of Sectoral Employment in Irish Manufacturing, by Ownership, 1991 and 1998.

Source: Own estimates based on CSO Census of Local Units.

three sub-groups is that Irish policy has been promoting FDI investment in the Chemicals and Electronics sectors for over 30 years – viewing them as sectors which were growing rapidly in global terms and in which production in Ireland could be competitive, given the high value-added to volume ratios of products in these sectors.¹⁰ We next turn to compare the globalization and Europeanization trends in the high-tech Chemicals and Electronic sectors and the low-tech Other Manufacturing sector.

The distinctive feature of Irish manufacturing over the period considered is the exceptional growth in the Electronics sector. The annual average rate of growth of employment in LCs in the Electronics sector companies was approximately 13 per cent between 1991 and 1998. Whilst LCs led the employment growth in Electronics, both EU and non-EU MNCs also had significant growth. Annual employment growth in the high-tech Chemicals sector was also high during the period, with non-EU MNCs showing faster growth than Irish and EU companies. The distinctive feature of these two sectors is the dominance of non-EU ownership; in 1998, over 67 and 60 per cent of total employment in Electronics and Chemicals respectively was in non-EU MNCs. The main source of this investment is the United States, as is evident in Table 10.3, which shows the very large proportion of US foreign direct investment in these sectors that went to Ireland in 1998. In the context of the relatively small size of the Irish market, these shares indicate the significance of Ireland's role as an export platform in Europe for these sectors.¹¹

	% of US FDI to Europe	% of US FDI to World
Manufacturing	7.0	4.4
Chemicals	15.4	9.1
Electronics	39.2	15.3

Table 10.3Ireland's Share of US FDI Outflows, 1998

Source: US Department of Commerce.

In contrast to these high-tech manufacturing sectors, LCs dominate the lowtech Other Manufacturing sector. Relative to Electronics and Chemicals, employment growth in this sector was minimal, with employment in EU MNCs actually declining over the period. By 1998, 67 per cent of employment in Other Manufacturing was in LCs.

Section III noted the changing nature of the destination of exports at the manufacturing industry level, and in particular the trend of non-EU MNCs towards exporting more of their output to non-EU destinations. Using the disaggregation of sectors dominated by non-EU MNCs (Electronics and Chemicals)

and LCs (Other Manufacturing), the sectoral patterns underlying the export destinations become clearer.

Table 10.4 highlights the export destination pattern of the sub-sectors, which show distinctive trends over the period considered. The rapid export growth in the LC Electronics sector (24 per cent per annum) is increasingly global rather than European, with exports to non-EU countries far outstripping exports to the EU. The same is true for the Chemical sector, except that the growth is more moderate (1 per cent per annum). In both these high-tech sectors, non-EU MNCs are also becoming more globalized, although the EU remains the principal export destination for non-EU manufacturing companies;¹² for EU MNCs, exports from the Electronics sector became increasingly globalized between 1991 and 1998, but exports from the Chemicals sector showed no significant change in their destination pattern, with exports to the EU continuing to account for over 70 per cent of total EU MNC exports.

In contrast to the high-tech MNC-dominated sectors, the Other Manufacturing sector (which grew by approximately 2 per cent per annum) is becoming increasingly Europeanized and less globalized, particularly for LCs, which showed a significant increase in the proportion of their exports going to EU destinations. Although the EU remains the principal destination of LC exports generally, accounting for almost 75 per cent of all exports by LCs in 1998, these data have shown that the 'globalization' of Irish exports is stronger in the two sub-sectors (Electronics and Chemicals) where non-EU MNCs are dominant (see Section III).

	1991		1998	
	EU	non-EU	EU	non-EU
Chemicals				
Irish Companies	93.2	6.8	82.1	17.9
EU MNCs	73.4	26.6	72.6	27.4
non-EU MNCs	63.5	36.5	52.9	47.1
Electronics				
Irish Companies	82.9	17.1	49.7	50.3
EU MNCs	90.8	9.2	80.8	19.2
non-EU MNCs	72.8	27.2	65.7	34.3
Other Mfg (incl. Food)				
Irish Companies	68.5	31.5	76.5	23.5
EU MNCs	82.0	18.0	82.9	17.1
non-EU MNCs	74.0	26.0	75.3	24.7

Table 10.4 Distribution of Sectoral Exports in Irish Manufacturing, by Ownership and Destination, 1991 and 1998^a

^a Deflated where appropriate: 1985 = 100

Source: Authors' estimates, derived from the CSO Census of Local Units.

Further investigation of the nature of the relationship between FDI and the export performance of indigenous companies is beyond the scope of this chapter, but it is useful to note the performance characteristics of Irish-owned exporting companies in particular, given the pattern of FDI and the associated destination of exports outlined here. We have highlighted the changing nature of the destination of exports by LCs and noted the dichotomy between sectors based upon the sectoral level of FDI (EU MNCs versus non-EU MNCs) and the changing export destination patterns (EU versus non-EU). Given these differences, it is interesting to speculate on the performance characteristics of LCs in the various sectors. In particular, are there differences in the characteristics of LCs that export versus those that do not, as well as between LCs that are European exporters versus those whose exports are more globalized?

A growing body of empirical work has documented the superior performance characteristics of exporting companies relative to non-exporters (Bernard and Wagner 1997; Bernard and Jensen 1999).¹³ In the context of Europeanization and globalization, we can speculate on the whether exporting LCs exhibit superior performance characteristics compared with non-exporting LCs and, secondly, whether LCs that are more globalized in their export patterns have superior performance characteristics to those that are more Europeanized.

To examine the nature of LCs that export compared with those whose sole export markets are European, we list the mean value of five characteristics for the two groups in Table 10.5: Employment, Average Earnings, Gross Output, Net Output, and Net Output per Employee. In all instances the mean values for exporters to the EU are higher than for non-exporting LCs. On average, exporting companies are larger, pay higher wages, produce more output, and are more productive than non-exporting LCs in the manufacturing sector.

Our analysis of the changing destination of Irish manufacturing exports has highlighted the Europeanization of export patterns in the Other Manufacturing sector and the globalization of exports in the Chemical and Electronic sectors. The dominance of the UK and to a lesser extent the EU generally as a traditional export destination for Irish manufactured goods suggests that LCs find it easier to export to the EU. However, the increasing importance of export destinations other than the EU may be reflected in superior performance characteristics for non-EU destination exporters, because they are forced to be more competitive and efficient in order to break into these non-traditional markets. Table 10.5 also shows the mean characteristics for LCs that export to non-EU countries (whether or not they export to the EU as well) between 1991 and 1998. The mean value of each characteristic is higher for the non-EU exporters, suggesting that, on average, global exporters employ more people, pay higher wages, produce more gross output, and are more productive than LCs that export only to the EU. In effect, the global exporters exhibit stronger performance characteristics than those companies that export only into the EU.

	Non-exporters	EU-only Exporters	EU and/ or non-EU exporters
No. of employees	40	56	86
Average earnings	£10 239	£10 402	£11 125
Gross output	£2 942 229	£4 293 168	£8 779 135
Net output	£1 039 935	£1 495 585	£2 625 437
Net output per employee	£23 375	£24 850	£28 459

Table 10.5 Mean Characteristics for Exporters vs. Non-Exporters of Irish-Owned Manufacturing Companies, 1991–98^a

^a Deflated where appropriate, 1985 = 100.

Source: Authors' estimates, derived from the CSO Census of Local Units.

In this section we have considered the changing nature of company ownership and the destination of exports by both local and foreign-owned companies in three sub-sectors of the Irish manufacturing industry. By disaggregating the manufacturing industry we are able to note the significant differences in ownership and export destination patterns: in those sectors where non-EU MNCs dominate (Electronics and Chemicals) Irish-owned company exports have become more globalized. In contrast, in the more traditional sectors where Irish or EU-owned companies are dominant, exports are increasingly Europeanized. Moreover, those Irish companies that export globally show better average performance characteristics than those that export only to Europe.

The analysis conducted in this chapter suggests the need for further investigation into a host of issues surrounding the nature of FDI and its influence on indigenous companies and their export ability and performance. Does the presence of foreign-owned companies have an impact on the export performance of domestic companies? The strong presence of MNCs in sectors such as Chemicals and Electronics in Irish manufacturing may provide market access spillovers that enable domestic companies to become more successful exporters (Greenaway, Sousa and Wakelin 2001). Do MNCs have any influence on the probability of an Irish company becoming an exporter and, by extension, the export intensity of Irish companies once they decide to export? What influence, if any, do MNCs have on export destination patterns? If, as appears to be the case in Electronics, Irish LCs are becoming engaged in global sub-supply, how will this impact on the future pattern of export destinations? The proposed addition of new members to the EU in coming years, along with the increasing strength of the EU monetary union, may have profound implications for both the nature of FDI and the destination of exports for small member states such as Ireland. (See Chapter 11 by Kierzkowski in this volume.)

V. Concluding remarks

One feature of the enhanced global integration over the past decade has been the increased awareness by countries of global competitiveness. At this point every country in the OECD monitors indicators, however crude, of competitiveness in peer economies and this monitoring process impacts on domestic economic and social policy making. These indicators cover increasingly wider ranges of variables, reflecting the importance being attached to global competitiveness and the complexity of what feeds into determining competitive advantage. Given the direction of the data in Tables 10.1 and 10.2, this development is not surprising – countries are increasingly conscious of the upward trend in openness for the design of economic and social policies, with globalization often seen as a constraint on national taxation and welfare policies (see Chapter 12 by Atkinson in this volume).

We noted earlier that the discussion around globalization has focused in the main on large companies – on global MNCs. The emergence of genuinely global MNCs is a natural product of the creation of global markets. While some of these MNCs are growing organically, many are growing through mergers and acquisitions (M&As) as the constraints set by national governments on M&As no longer have meaning when geographical markets cannot be sensibly defined in national terms. The issues raised by global competition point to the need for further development in global governance, as raised by Breton and Ursprung in Chapter 13 of this volume.

The main thrust of this chapter has been to look at the possible influence of globalization and Europeanization on what is perceived to be a highly globalized economy, namely, Ireland. But the nature of the globalization process for Ireland is complicated by its membership of the EU; by looking in more detail at the Irish manufacturing sector we have attempted to separate the influence of Europeanization from globalization for this small, highly open economy. We noted the distinction between EU and non-EU MNCs as the source of Irish FDI, with non-EU FDI being concentrated in the high-tech Electronic and Chemical sectors; EU FDI has remained principally in the lower-tech and more traditional areas of Irish manufacturing, where local companies also remain concentrated. Although all MNCs located in Irish manufacturing are highly export-orientated they tend to service different foreign markets. The EU-owned MNCs are consistently EU-orientated, while non-EU MNCs are showing greater export growth to the non-EU markets, although the EU remains their dominant export market.

Ireland established itself as an export platform for MNCs in Europe in the 1970s at a time when its LCs were minimally engaged in exporting, having established strong domestic markets behind high tariff barriers. This chapter demonstrates that, 30 years later, Ireland's LCs are now increasingly export-

oriented, with a progressively larger share of their output going beyond the traditional UK market to the enlarging EU market. As the next phase of EU enlargement occurs, Irish LCs will face increasing competition from Eastern Europe on EU product markets; when taken together with increased competition in the EU for mobile MNC investment, this product market competition will place increasing competitive pressure on Ireland.

Our analysis indicates that, on average, the more globalized LCs in Ireland are stronger in terms of company characteristics than the LCs that export into the EU only or that do not export at all. While this raises the question of causation – are the companies stronger because they export or are only the stronger companies capable of exporting? – it points to a positive link between Europeanization and particularly globalization and dynamics at the company level. If Europe is to develop a faster growing economy, such positive dynamics are crucial.

It is clear from Europe's recent history that the energy behind and enthusiasm for economic integration lies in the drive to create greater political stability in the region through increased political interdependency – what group of economists could have persuaded policy makers in Europe to adopt the single market programme on the basis of potential welfare improvements based on very simple calculations of welfare triangles? It is precisely because policy makers wished to find arguments for further economic integration that they were led to accept so readily the results produced as part of the Cecchini Report. Economists are not traditionally blessed with such broad and rapid acceptance for their analyses and such little ex-ante or ex-post questioning of the accuracy of their estimates! Structures within Europe have led to increased openness among European countries, reflecting Europeanization more than globalization. The increasing emphasis in many fora on the need for Europe to become a significant economic and political power bloc (to counteract the global dominance of the US) is likely to make Europeanization rather than globalization a priority over the coming decade. Whether such Europeanization promotes the process of globalization or occurs at its expense, especially for small, highly open economies traditionally focused upon the European marketplace, remains an open question.

Notes

- * We are grateful to the Irish Central Statistics Office for data assistance and to Ali Ugur for research assistance in preparing this chapter. The usual disclaimer applies.
- 1. The *Oxford English Dictionary* describes 'global' as 'Pertaining to or embracing the totality of a number of items, categories, etc.; comprehensive, all inclusive, unified total; *spec*. pertaining to or involving the whole world; worldwide, universal'. It cites *Harper's Magazine (1892)* as the first use of global in the present context: 'M. de Vogüé loves travel; he goes to the East and to the West for colors and ideas; his interests are

as wide as the universe; his ambition, to use a word of his own, is to be "global".' The earliest reference to globalization in book titles in the *Journal of Economic Literature* Index occurs in 1985.

- 2. The AT Kearney/Foreign Policy Magazine Globalization Index ranks the 20 most global nations for the year 2000.
- 3. See Barry (1999) and Krugman (1997).
- 4. The particularly high openness ratios for Belgium and the Netherlands are likely to be partially explained by their hosting key entry freight ports in mainland Europe.
- 5. We take annual averages over five-year periods (six years in the case of 1995–2000) in order to take account of the large inter-year variations in the flows.
- 6. The AT Kearney/Foreign Policy Globalization Index ranked Ireland, Switzerland and Sweden as the most globalized countries in the world for the year end 2000. See Kearney et al. (2002).
- 7. Ruane and Görg (1997) draw a similar distinction.
- 8. These sectors are described as 'high tech' in terms of the standard OECD classification – it does not mean that the particular activities being undertaken in Ireland are necessarily very high tech.
- 9. The Other Manufacturing component of Irish manufacturing is sometimes segmented for analysis into Food Processing and Other. In our study, the employment and exporting patterns of Food Processing did not significantly differ from those of Other Manufacturing overall and thus we have aggregated the two.
- 10. These include several of the sub-sectors in Ireland that the European Commission indicated would be most affected by the single market policy. See European Commission (1990).
- 11. Evidence on the links between MNCs and LCs is discussed in Görg and Ruane (2001).
- 12. As Barry (Chapter 9 in this volume) notes, intra-industry trade across all industry subsectors in Ireland, particularly Chemicals and Machinery, has been rising since 1961. Within the Electronics sector in particular, anecdotal evidence would suggest that components trade between US-owned MNCs based in Ireland and their parent company may comprise a significant proportion of the non-EU export data quoted. However, although exports to the US by US-owned MNCs based in Irish manufacturing rose from 9 per cent in 1991 to 14 per cent in 1998, they comprised the smallest proportion of exports relative to the UK (15 per cent), the EU (48 per cent), and Elsewhere (24 per cent) in 1998.
- 13. Such econometric studies have shown that exporting plants in the USA and Germany are larger, more productive, and pay higher wages than non-exporters.

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11 Central Europe: 'A la recherche du temps perdu'

Henryk Kierzkowski

I. Introduction

A little over a decade ago, a group of countries in Central Europe embarked on the road towards open markets. Poland, Czechoslovakia and Hungary led the way in introducing the market economy to the region. Soon, other countries followed and economic reforms spread eastward. Almost 30 ex-planned economies in Central and Eastern Europe now follow the rules of the market with varying degrees of success and commitment to economic reform.

This chapter addresses a sub-set of Central and East European transition economies and assesses their successes and failures.¹ The following ten countries come under the microscope of this chapter: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia. I call them 'les élèves modèles' of the transition process. It is not so obvious which countries should be called by that name. My criterion is simple: those are the economies the European Union considers first in line for the Eastward Enlargement. Given their political and economic aspirations, this is truly a compliment and a recognition of their remarkable efforts over a decade.

The group of countries placed under the microscope of this chapter goes sometimes under the name CEECs (Central and East European Countries). Only two countries of this group, Slovenia and the Czech Republic, have reached per capita income of about 60–66 per cent of the EU average, that is, the level where Ireland was in the 1970s before launching an economic take-off. The rest of the CEECs have incomes of less than half the EU average.² The ten CEECs are sometimes sub-divided into a group of eight plus Romania plus Poland. Their total population is roughly 100 million inhabitants; 40 million living in the

CEEC8, the same number in Poland and 20 million in Romania. Poland is by far the biggest country in the region. In this context one of the EU leaders has made a remark to the effect that any Eastern EU enlargement with Poland will be large, and any without it will be small.

A yardstick is needed to measure the economic achievements of the Central European economies. If one asked the inhabitants of the region at the dawn of the new era what they expected most, the common answer would be 'A better life'. And pressed a bit more they would say that they wished for a life as decent as the Western Europeans'. It stands to reason that the behaviour of national incomes is an appropriate measure of an overall assessment of the transition process.

The road to open markets was rough. Following the collapse of the planning system, economic crises erupted. Declines in output were huge. Unemployment increased rapidly, though with a considerable lag and with varying strength. To make matters worse, some of the Central European economies suffered from inflation; some verged on hyperinflation. The output collapse coincided with the introduction of reform programmes to which virtually all the countries had made commitments.

The recession was much more severe and persistent than expected. It created a new class of unemployed and possibly a large number of people who are unemployable. It also created types of risk and uncertainty to which nobody was accustomed under the old system.

The following section investigates in more detail the causes of the collapse. It also questions whether there are alternative yardsticks by which economic transition should be measured. Per capita income in Central Europe may still be well below the level known and enjoyed in Western Europe, but we must also ask: have the respective economies become more alike in terms of the role of the private sector, the importance of the price mechanism, the functioning of the labour and financial markets, and so on? There seems to be a rather visible convergence of the economic systems in the two parts of Europe, notwith-standing the fact that an income convergence has yet to occur.

Section III looks precisely at the factors responsible for income convergence between countries. The new growth theory has produced over the last decade extremely important theoretical and empirical insights into the process of economic development. I, for one, believe that even though the modern growth theory was not specifically designed for the transition economies, it still has important lessons to offer.

The discussion of economic transition involves a discussion of globalization. Where do the emerging market economies stand with regards to the international exchange of goods and services, international investment and migration? Have they been trying to embrace the world economy, become a part of it, or do they shy away from it? These questions are the main focus of Section III. A relatively open trading system, introduced at an initial stage of the transition process, became a key policy objective, at least among the transition leaders. The idea of opening the transition economies did not encounter any serious intellectual opposition in Eastern and Central Europe, which is not to say that governments have always been willing or able to proceed with trade liberalization, or that there have been no pressure groups seeking individual favours.

The opening of Central Europe to trade has been strongly biased in the direction of the European Union. The early attempts at forging special ties with the EU took the form of a series of Europe Agreements. Soon, full membership of the European Union became the main policy objective for many transition economies. Central Europe in particular has sought to accomplish this goal with determination and support of most parties right across the political spectrum.³ Yet, the economic benefits of membership in the European Union can be expected to be relatively small and certainly much smaller than the expectations that had been created. Moreover, the entry date still remains less than firmly fixed and is, in fact, continuously pushed forward.

Many of the benefits associated with the reorientation of trade flows were captured in early Europe Agreements. It is, of course, important for transition economies of Europe to level the playing fields vis-à-vis Western Europe. In order to accomplish this objective EU membership is not required. However, the prospect of joining the European Union is a powerful way of ensuring that the reform process continues.

Section IV considers whether the transition economies of Central Europe need to put all their eggs into the European Community basket. Are there better strategies for joining the world economy? Is the road passing through Brussels a short cut or an unnecessary detour?

II. Collapse of the ancien régime and a new beginning

When Nikita Sergeyevich Khrushchev boasted in the 1960s that the Soviet Union would 'bury' the West, he spoke from his generation's strong faith in the economic superiority of the planning system over the market. Tens of millions of Russians and other Eastern and Central Europeans longed for the day when their economies would overtake the advanced industrialized countries in the West. Many Westerners also believed that though communism failed in terms of individual freedom, it was capable of astonishing economic results in addition to being far more socially fair.⁴

One generation after Khrushchev's threat, the planning system of the Soviet Union and Eastern Europe buried itself. The economic collapse came swiftly and unexpectedly. It occurred in every single country with a planning system.⁵ The most dramatic manifestation of the economic collapse was the behaviour of the GDP. Even in the group of the ten leading transition economies, the

output decline was enormous, as shown in Table 11.1. The Economic Commission for Europe (1992) found its magnitude comparable to the one observed during the Great Depression of 1929–34.

1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 Bulgaria 100.0 90.0 83.2 77.1 76.0 77.4 79.6 71.5 66.5 68.8 70.5 Czech Republic 100.0 98.8 87.3 **86.9** 87.0 88.9 94.1 98.7 97.7 95.5 95.3 Hungary 100.0 96.5 85.0 82.4 81.9 84.6 86.2 87.6 92.0 96.9 101.7 Poland 100.0 95.1 89.9 92.7 96.6 101.6 108.7 115.3 123.1 129.0 134.3 Romania 100.0 94.3 82.1 74.9 76.0 79.0 84.6 87.9 81.9 77.4 75.0 Slovak Republic 100.0 97.3 83.1 77.6 74.7 78.4 83.8 89.3 95.1 99.3 101.1 Slovenia 100.0 95.3 86.8 82.1 84.4 88.9 92.5 95.8 100.2 104.1 108.0 Estonia 100.078.8 72.1 70.7 73.7 76.6 84.7 88.7 87.4 Latvia 100.0 65.0 55.3 55.7 55.2 57.1 62.0 64.2 64.4 Lithuania 100.0 78.7 66.0 **59.5** 61. 64.3 69.0 72.6 69.6

Table 11.1 Real GDP Index for Central European Countries, 1989–99

Source: World Bank, Washington DC.

The collapse of output first took place in Poland, suggesting that the drastic economic reforms, known as the 'Big Bang', were the sinister force causing all the trouble. But soon other reformist countries applying more gradual approaches followed the same fate. Later on, those countries that resisted reforms and the introduction of markets were particularly adversely affected.

After four decades of central planning, unemployment emerged as a major economic and socio-political problem in Eastern and Central Europe. Under the old system everybody had a guaranteed job; avoiding work was considered illegal and was often dealt with harshly.⁶ Economic slow-downs had no consequences whatsoever for employment, which was maintained at the maximum level through the entire period of central planning. The situation changed with the transition to the market economy. The recession resulted in two-digit unemployment rates, considered high by any standards. Unemployment in transition economies is also very persistent.

The early popular assessment that reforms were the main source of income collapse in Central Europe needs to be reappraised.⁷ The belief that the particularly sharp economic downturns observed in the former planned economies stemmed from the drastic transition to market economies does not stand scrutiny.

Janos Kornai (1993:5) perceptively observed that:

All the postsocialist countries without exception are suffering from a grave recession. The course of this recession is conspicuously similar in every case,

even though these are countries whose starting points and specific circumstances differ substantially. The history of the production decline in Poland, the prime example of 'shock therapy' is similar to the one in Hungary, where the transition has been gradual. Production has fallen sharply in countries which started with high international debts, and done the same in Romania and Czechoslovakia (or the Czech Republic and Slovakia), which were untroubled by this problem in the beginning of the transition. Production has fallen where there was no reform before the political turning point, and also where there was a process of reform taking place over many years.

Kornai suggested that the phenomenon under discussion should not be called a recession but rather a transformational recession. Using the business cycle terminology may indeed cast the problem as being macroeconomic in nature. Although it is quite possible, or even likely, that macroeconomic forces played a role in the crises, there surely were other factors involved. In particular:

- The planning system itself contained seeds of stagnation. Only in the very beginning and for a relatively short period of time did the socialist system show considerable dynamism. Since it was based on brute force, its effectiveness inevitably declined.
- Political decisions that created many enterprises and entirely new industries ignored economic calculations. The big push for rapid economic development immediately following the Second World War did not establish conditions for self-sustained growth; rather, it created fundamental inefficiencies in the core of the economy. The industrial structure, outdated and inefficient as it was, relied heavily on raw materials and energy. The planned economies used on average at least twice as much steel and energy per \$1 worth of GDP as other OECD countries. And the steel and energy industries propagated their inefficiencies through the rest of the economy.
- The defence sector became another black hole in the planned economies of Central Europe, and even more so in the case of the Soviet Union. Defence enterprises absorbed not only considerable financial resources of the state, including foreign exchange reserves, but also the best scientists and engineers.
- Depletion of natural and human resources was another negative force increasingly slowing down the system. Natural resources were considered free and hence were overexploited. Human resources did not escape degradation either. While public opinion saw education and human capital formation as a great success of the planning system, human resources were actually run down through pollution, decreasing standards of living, worsening health of the population, and increasing stress.

Thus the great recession that followed the collapse of the *ancien régime* was not just like any other recession or depression.⁸ One may wonder whether focusing attention on macroeconomic aspects of the collapse and using macroeconomic tools such as monetary liquidity, interest rates, taxes and budgetary deficits were all that useful in pulling the countries out of the transformational recession, to use Kornai's term.

While the leading reformists in Central Europe were the first to slide into recession, they also were the first to climb out of it. It took roughly three years for GDP to hit rock bottom and start heading north, or at least north-east. The Czech Republic, Hungary, the Slovak Republic and Slovenia shared a similar experience in this respect, though they followed disparate policies. Unfortunately, this was not the case for Romania, which followed a 'Big Bang' approach and subsequently relapsed into recession. One may argue the Baltic states started, for obvious reasons, the reform process later than more central Central Europeans, but they have followed a similar path to recovery. The magnitude of the GDP decline in Estonia, Latvia and Lithuania exceeded that in other countries of the region by a substantial margin and it is simply too early to call their battle with recession a success. It is clear, however, that Estonia seems to be forging ahead more vigorously than other Baltic states. Finally, in this group of relatively successful reformists, Bulgaria comes out as laggard. It is interesting to note in connection with Frank Barry's analysis in this book (Chapter 9) that the 'new' peripheries contain some of the most successful cases (Slovenia and Estonia) and some marauders (Bulgaria and Romania).

Looking at the collapse of the planning system and the subsequent recession and recovery, it may be somewhat surprising that only Poland and Slovenia's 1999 GDP stood above 1989 levels. The Slovak Republic, doing surprisingly better than the Czech Republic, reached the same level of its GDP as ten years prior. One may feel disappointed that there is so little to show in Central Europe for so much effort over such a long period.⁹

The question of whether economic transition over the last decade succeeded in closing the economic distance between Central and Western Europe is purely academic. Even with sluggish growth among the European Union countries the income gap has widened.¹⁰ There are clearly no East Asian tigers living in Central Europe and a question to be considered later is why their time has not yet come.

Keeping in mind that the group considered here are 'les élèves modèles' of the economic transition, this outcome must be seen by many as a disappointment. The sluggishness of economic performance has in turn fed support for populist parties. 'It's the economy, stupid' may well enter the political vocabulary in Eastern Europe.

One could forward the argument that the transition to a market economy is such a complex process that visible improvements will show up in higher national income only after a considerable lag. There seems to be an element of truth in this thesis. On the other hand, it can be argued that the *ancien régime* was so bankrupt and inefficient that freeing up market forces should result in immediate improvements.¹¹

Figure 11.1 shows that the transition to a market may well be associated with brisk growth. China started its long march to a market economy in 1978 and produced a spectacular and sustainable growth record for over two decades. When Hungary, a clear reform leader in Central Europe, is compared with China its growth record seems unimpressive. Of course, the same goes for other transition economies in Central Europe.

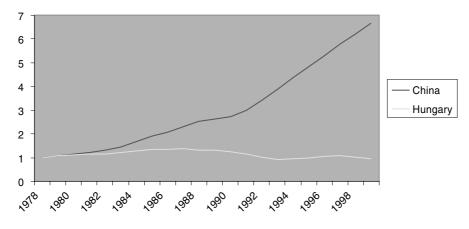


Figure 11.1 Real GDP Index, China and Hungary, 1978–98

Comparing the Chinese approach to and results of economic transformation of the system with those of Central Europe, it is clear that there was no economic collapse after China initiated its reforms in 1978. The Communist Party there, still with a firm grip on power, decided to embrace free markets with *fundamental* reforms. Economic and political chaos were thus averted. In Eastern and Central Europe and the Soviet Union the authorities lost power almost completely before accepting, sometimes reluctantly, the inevitability of systemic reforms.¹²

Having established that no income convergence has taken place *between* leading Central European economies and the European Union or China, it is now tempting to investigate whether there has been income convergence *within* the transition countries. The situation is rather complicated. Table 11.2 shows the extent of poverty in the ten transition economies. The table is just a snapshot picture so it is not sufficient to draw conclusions about the trends in this respect.

In commenting on the emergence of poverty in the transition economies, the World Bank (2000:18) observes:

The progress made by the CEECs in establishing market economies over the last decade has been accompanied by a deterioration in the living standards for some groups and a rise in income inequality. The deterioration in living standards for some groups – or the rise in poverty – has been larger and more persistent than many would have expected at the start of the process.

It must be kept in mind that the countries of Eastern and Central Europe were not as egalitarian under socialism as they claimed to be. Studies undertaken in the 1960s showed that some of the more progressive Western European societies had less income inequality than the socialist countries. Nevertheless, poverty was generally invisible and quite limited in scope. The socialist state, ultimately responsible for the citizen's well-being, had at its disposal administrative tools to remedy striking cases of poverty.¹³ As pointed out earlier, work was considered a duty of every citizen. And since costs and economic calculus did not matter, putting a person to work was no problem at all.

Poverty became a fact of life when, with the collapse of the old system, work was hard to find and the state had no time, and perhaps even wisdom, to extend a safety net for the unfortunate. The focus of the policy makers on achieving macroeconomic stability went hand-in-hand with a belief that a swift recovery was under way to re-ensure work for everybody. There was also a fundamental shift in the attitude towards poverty; while before the existence of this phenomenon was an indictment of the system, today it is a reflection on the skills of an individual.

Again a reference to China may be in order here. As Xavier Sala-i-Martin shows (Chapter 1 in this book), dynamic growth was poverty-reducing in China even though income inequality had increased since 1978. In a sense rising water lifted up all the boats. In Eastern and Central Europe and the ex-Soviet Union the recession brought the water level down and some people found themselves between a rock and a hard place.

Table 11.2 shows the extent of poverty in the ten leading economies of Central Europe using the headcount index of \$2.15/day and \$4.30/day. Absolute poverty and inequality varies greatly across Central Europe. While in Slovenia and the Czech Republic the situation is almost too good to be true, in Poland and Hungary income inequality is similar to what is observed in France or Germany. The absolute poverty rate recorded in Romania, on the other hand, is unique in Europe.

Households whose members have dropped out of the labour market and/or households with a large number of children are most likely to experience the hardships of poverty. There is also a geographic dimension to the problem at hand. Unemployment is not uniformly distributed across regions within individual countries of Central Europe. Politically motivated investments in selected areas were not unknown to central planners, to put it mildly. Often, clusters of investments based on political considerations were supposed to transform the social fabric of society.¹⁴ When the real crunch came, the economic collapse of these regions was particularly pronounced.

	Headcount Index \$2.15/day	Headcount Index \$4.30/day
Bulgaria (1995)	3.1	18.2
Czech Republic (1996)	0.0	0.8
Estonia (1998)	2.1	19.3
Hungary (1997)	1.3	15.4
Latvia (1998)	6.6	34.8
Lithuania (1999)	3.1	22.5
Poland (1998)	1.2	18.4
Romania (1998)	6.8	44.5
Slovak Republic (1997)	2.6	8.6
Slovenia (1997/1998)	0.0	0.7

Table 11.2 Absolute Poverty Rates for Central European Countries (in per cent)

Note: Survey year in parentheses.

Source: World Bank, Washington DC.

A thorough study of growth in the transition economies presented by Ivaschenko (2002) reveals that income inequality tends to increase during recessions and decline during recoveries. Furthermore, he finds that inequality increases with hyperinflation and that there is also a strong positive relationship between the size of the private sector and inequality. Last but not least, civil conflicts have strong adverse impacts on income distribution in the countries of transition. Apart from the question of causality, this complex picture cannot give a very clear answer as to the relationship between transition and income inequality. It is clear, however, that 'les élèves modèles' are in a far better situation, as far as inequality goes, than the former Soviet Union. And their success with macroeconomic stabilization and with calming social conflicts appears to be a reason why at least income distribution has not detoriated dramatically.

The study of Ivaschenko should be complemented by findings of Keane and Prasad (2002). Their careful study of microdata for Poland leads them to the conclusion: 'We showed that the move to a market economy did not entail significant increase in income inequality in Poland, despite rising inequality of labor earnings. The high level of social transfers mitigated the potentially sharp rise in income inequality during the transition.'

We can now draw a conclusion based on the discussion carried so far: income convergence between the leading transition economies and the European Union

		Enterprises		Mar	Markets and Trade	ade	Financial Institutions Securiti	stitutions Securities
			Governance		Trade & foreign		Banking reform &	markets & non-bank
Countries	Large-scale privatization	Small-scale privatization	& enterprise restructuring	Price liberalization	exchange system	Competition policy	interest rate liberalization	financial institutions
Bulgaria	3	3+	2+	ε	4+	2	ų	2
Czech Republic	4	4+	ŝ	°	4+	3	3+	33
Hungary		4+	3+	3+	4+	S	4	3+
Poland		4+	ŝ	3+	4+	ŝ	3+	3+
Romania		4-	2	ŝ	4	2	с, Ч	2
Slovak Republic	4	4+	ŝ	c,	4+	S	с, Ч	2+
Slovenia		4+		c,	4+	2	3+	c,
Estonia	4	4+	ŝ	ŝ	4+	с Ч	-4	ε
Latvia	c.	4	3- -	ŝ	4+	с Ч	ŝ	2+
Lithuania	ŝ	4+	3-	ε	4	2+	S	3-

Table 11.3 Ranking of Reforms in Central Europe

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Source: EBRD Transition Report, 1999, London.

has not yet taken place. Similarly, there has been no income convergence within the individual countries.

While these results may help explain the increasing impatience of the populaces with reforms, they do not, I think, represent a fair and accurate assessment of the transition process. The half-empty glass is also half full.

Another form of convergence worth taking a close look at is the convergence of institutions, markets and legal systems between Central Europe and the European Union. One way of monitoring the reforms in the transition economies, initiated by the European Bank for Reconstruction and Development in London, is by asking how far they have come to resemble developed economies.

Table 11.3 shows the rankings of the Central European economies in eight areas. The lowest grade is 1 and a country that obtained 4+ passes the exam with flying colours – its economy has achieved full resemblance (convergence) with that of the developed countries. Two, possibly three or even four areas strike an observer as showing remarkable successes. Small-scale privatization and foreign trade liberalization, combined with the introduction of exchange rate convert-ibility, demonstrate the commitment of the countries under consideration to private property and the alignment of their national markets with the world economy. It is worth mentioning that these two achievements were generally secured very early on, usually as a part of the initial macroeconomic stabilization package.

Trade and exchange rate liberalizations were crucial strategic variables that had several important effects. First of all, relaxing trade restrictions and abolishing the state monopoly of trade increased the total supply and variety of goods on the domestic markets. In one swoop, long lines of consumers and empty shelves became a thing of the past. Second, domestic producers who often enjoyed monopoly power under socialism had suddenly to meet tough competition from abroad. Third, world relative prices were grafted on the economies where price signals were strongly distorted for decades. Domestic price liberalization without the freeing-up of trade and introduction of exchange rate convertibility would result in a long tâtonnement process, costly mistakes, and consumers and producers being confused as to what true relative prices were.

Trade liberalization, introduction of exchange rate convertibility and Europe Agreements have produced a dramatic re-orientation of trade of the Central European countries. Table 11.4 shows that with the exception of Lithuania more than 50 per cent of exports from the region is directed to the EU market. This is perhaps the most convincing proof of how internationalized the ex-planned economies have become in a very short time.

Often, countries contemplating liberalization and trying to increase their competitiveness favour domestic liberalization first, postponing external openings until they become competitive. This sequencing may well produce a

result where the countries do not become competitive and foreign trade and exchange liberalizations are put off and off.

Table 11.4 Shares of Total Exports of CEECs to the EU, 1989, 1993 and 1998 (in per cent)

	1989	1993	1998
Bulgaria	21.5	48.0	51.5
Czech Republic	n.a.	55.5	64.2
Estonia	n.a	48.3	51.5
Hungary	33.5	57.9	72.9
Latvia	n.a.	32.1	56.6
Lithuania	n.a.	17.0	38.0
Poland	39.6	69.2	68.3
Romania	31.1	41.4	64.6
Slovak Republic	n.a.	29.6	55.7
Slovenia	n.a.	61.6	65.5

n.a. Not applicable.

Source: World Development Indicators, World Bank, Washington DC.

Small-scale privatization, another major accomplishment of the Central European countries, gave the citizens a sense of possession and a good reason to defend the new system. It also demonstrated that transition to a market need not only involve pain, hardships and sacrifices.¹⁵

Large-scale privatization and reforms of the banking system combined with interest rate liberalization show a movement in the right direction. Progress, however, is obviously much slower than in the areas discussed above. There are several reasons for that – there is no obvious model or master plan that can be readily adopted, and dialogue between various partners is required before acceptable solutions can be applied. Often, a long legislative process is necessary to create laws, regulations, and so on. Last but not least, conflicts of interest between various social groups or political powers begin to shape the direction of reforms and the pace of their application.

As can be readily seen, the restructuring of enterprises, introduction and application of competition, and creation and supervision of securities markets and non-bank financial institutions has moved along rather slowly. It is quite possible that progress cannot be rapid in these areas. On the other hand, it probably could have been more rapid than was actually the case. But how long did it take developed countries to introduce competition policy and the institutions that go with it? Problems of security markets and non-bank financial institutions can never be solved, it seems, so there is a continuous need for reforms and improvements even in the most advanced countries.

The half-full glass does not look so bad when measured on a historical scale. There has been institutional convergence. Unfortunately, income convergence between Central Europe and the EU and within individual transition economies is yet to come.

III. Conditions for income convergence

The early growth theories of the 1950s and 1960s had a rather oversimplified vision of the development process. Investments were a key growth factor and a country grew fast when it saved a lot. As the saving function was usually a very simple function of GNP, the path of income would always be determined based on the initial starting conditions and the propensity to save. The early growth models paid very little attention to international factors – trade, foreign investment and aid. Professor Eugene Rostow, however, forwarded a new theory that gained currency. The 'Big Push' theory suggested that problems of developing countries could be resolved by a massive inflow of foreign aid. The development process would be kick-started, a country could reach a higher growth path, and after a while foreign assistance would be redundant. The Rostowian thesis created hopes that the problem of poverty and underdevelopment in the world economy could be resolved after all. There was no specific mechanism by which the countries' incomes would converge.

The modern growth theory starts with Robert Solow (1957a and b). The neoclassical production function used in the Solovian framework offered a mechanism by which capital, if allowed to move between countries, would migrate from places where it is abundant and hence marginal productivity tends to be low, to places where it is scarce and therefore productive.

Physical capital remained the main determinant of income dynamics. Again, the knowledge of the starting point, technology, preferences and saving behaviour would suffice to trace the path of income. The scope for active economic policy was rather limited.

The most recent stage of the development of our understanding of growth consists of numerous theoretical and empirical breakthroughs achieved by Abramowitz (1986), Barro and Sala-i-Martin (1991, 1992, 1995), Baumol (1986) and Romer (1987 a and b) among others. The empirical work of Abramowitz and Baumol centred on the question of automatic convergence of income between countries and offered a reassuring conclusion that such a process operated, at least in the past, for a limited number of nations. Unfortunately, as demonstrated by Barro and Sala-i-Martin (1991, 1992, 1995) and others, the so-called unconditional convergence was a spurious result that could not be reproduced for a larger sample of countries representing different stages of development. Instead, a process of conditional convergence operated across countries and regions.

The most insightful conclusion arising from the research on conditional conversion is that the following factors play an essential role in determining the outcome of the income race:

- Human capital, for any given initial level of physical capital, hastens the catch-up process. The studies used educational attainment and life expectancy as forms of human capital.
- Effective maintenance of the rule of law provided by the government enhances the growth process. Political stability works in the same direction.
- Open trade and anti-monopoly policy at home enhances growth prospects as well.

The positive findings should be contrasted with policies that do not work: distortions and market constraints, tariffs, subsidies and administrated prices inhibit rapid income growth. The modern growth theory also finds that a large government reduces the growth of a country by absorbing an excessive share of GDP.

Institution building, the creation of political and legal stability, the provision of economic freedom, and the protection of property rights ideally can be achieved by honest governments in individual countries.

The gains from free trade can similarly be achieved unilaterally. Small countries, as those in Central Europe, do not have many bargaining chips. A policy of free trade is hence their best option.¹⁶

Yet, the process of transition in Central Europe has been strongly biased in the direction of the European Union. In an ideal world, one could argue that this has been a miscalculation. The European Union is not going to kick-start the growth process if and when new members are let in.¹⁷ This is a task that Central Europe must accomplish by and large for itself. Of course, trade preferences, free or freer movement of labour, regional assistance, and so on, will have some significant, but not decisive, impact.

It must be strongly stressed, however, that positive effects of convergence with the EU institutions, norms and laws cannot be underestimated. The European Union offers the ten CEECs an institutional anchor, sets standards and by a skilful use of carrots and sticks ensures that reforms do not slow down but rather accelerate. The annual regular reports on progress towards accession pinpoint the areas of weaknesses and list successes. In the last series of the reports the Czech Republic, Hungry and Poland, among other candidates, are described as functioning market economies. If the reforms continue, the transition economies should be able to cope with the competitive pressure and market forces that they will face once admitted into the EU.

However, the Commission of the European Communities points where progress is needed urgently. With regard to Hungary, for instance, it remarks: 'the continued overloading of the Supreme Court reduces its ability to provide guidance to lower courts and to unify the Courts' practice ... The fight against corruption remained high on the political agenda ... Corruption however remains a problem, and the new measures would be needed to be implemented quickly to make the fight more effective' (Commission of the European Communities 2001b:98).

The Czech Republic is also taken to task, even though progress is duly noted and the economy is called a functioning market economy. However, it is pointed out that 'it is regrettable that the Czech Republic continues to lack a Civil Service Act for its public administration; this is essential for establishing independence, professionalism and stability'. Almost in the next paragraph an even more severe criticism is put forth: 'Some additional measures to fight corruption and economic crime have been taken. Nonetheless, corruption and economic crime remains a serious cause for concern' (Commission of the European Communities 2001a:104).

Last but not least, Poland's transition has two major shortcomings at the present stage: corruption and weak administration. As for the first weakness the Commission of the European Communities notes: 'Efforts have been made to improve the situation with regard to law enforcement bodies dealing with the fight against organized crime, in particular the police service. These need to be intensified.' The second shortcoming is addressed thus: 'In a number of sectors the level of administrative capacity lags behind' (Commission of the European Communities 2001c:106).

The above criticisms share common elements: building efficient national administration is of high priority. Unfortunately, achieving this task eludes even the three leading transition economies, the Czech Republic, Hungary and Poland; the situation is even worse in other prospective new EU members. It is, of course, far worse outside the group of the ten CEECs. A part of the problem is that talented young people go to the private sector where opportunities, and remunerations, are far greater. Furthermore, the public sector is still politicized to a greater extent than in Western Europe. Thus, planning a lifetime career as a civil servant is subjected to considerable risks unrelated to an individual's professionalism.

The other two commonly shared weaknesses pointed out by the Commission are related to the system of justice and also to the existing corruption. There is little doubt that these critical judgements are right on the money. (The pun is not intended.) However, one may ask whether an observer from outside (the EU) is needed to point all these things out and to inspire, hopefully, corrective actions. In principle, the answer should be no, insiders, or even the proverbial man in the street, in transition economies are perfectly capable of noticing their shortcomings. However, acting decisively on them is altogether another matter.

It is not necessarily the lack of knowledge that may cause the governments of Central Europe, or any government for that matter, to put a wrong foot forward. Young democracies of the region learn very quickly the rules of the system for better and for worse, the power of political lobbying, and so on. This is all part and parcel of the process of democratization, yet when Central Europe is 'à la recherche du temps perdu' precious time and energy and national resources can be wasted in order to *avoid* the right solutions rather than to seize them up quickly. Sometimes clearly *wrong* solutions are put in place as a result of the power game.

I will give two recent examples from Poland. The first concerns the ability and the right of foreigners to buy land there. Polish farmers who are, as a junior partner, represented in the current coalition government and who are masters of driving hard bargains, are set dead against EU nationals buying land at least for 18, well ... 12 or, well ... even less than that many years. The main objection here is that Poland will be bought up by rich West Europeans (read mainly Germans) who can pay exuberant prices. This is an extraordinary argument. When during the period of Stalinism collectivization (limited by comparison with other Socialist countries) of agriculture proceeded and farmers were paid practically zero for their land, there was no national uprising. Today, they take to the streets and mobilize their representatives in the Parliament to protest the threat of foreigners buying Poland at exuberant prices when they can simply say NO to too lucrative deals.

The second example concerns the autonomy of the Polish Central Bank, but in fact a similar problem can be seen elsewhere in the region. Governments and parliaments facing occasional elections would love to have monetary policy responsive to their short-term cancers especially when the going gets tough and no miracle solutions are in sight. So in the present debate in Poland attempts are made to introduce a political control of the National Bank and charge it not only with a responsibility of maintaining the value and stability of national currency but also with paying due attention to unemployment, growth, and so on.

The reality check draws us to a conclusion that an outside interference is needed to keep the reforms on track in Central Europe. In the past this kind of pressure would emanate mainly from the International Monetary Fund and, on balance, it did a lot of good in countries facing macroeconomic disequilibrium and sometimes even chaos. Since the macroeconomc stability has become a norm rather than an exception in the region, both the carrot and the stick held by the IMF have been trimmed. In any case, the Fund never had that large a mandate or long-term perpective to provide the 'institutional anchor' the European Union can provide now.

The above conclusion lends itself to an even more important one: the position of the arbiter puts an enormous responsibility on the European Union itself. It is the quality of its advice, the wisdom of its negotiating conditions and requirements that will shape the destiny of Central Europe in generations to come. Politics is obviously also present in the way the European Union is approaching the whole process of enlargement. This cannot be helped. On the other hand, EU politics can also push the process in a wrong direction. The fear of a flood of labour from Central Europe, which in my view is greatly exaggerated, may result in a marriage of wrong solutions. No labour migration for no sale of land is just an example of such a possible outcome. Two wrongs will not make one right.

In the long run it is a competitive and dynamic Central Europe that is in the whole of Europe's interest. And when I say the whole of Europe I also mean East of East of the European Union.

IV. Conclusions

Long-run political stability requires that the prosperity the Western Europeans have earned spreads out towards Central and Eastern Europe not so much through hand-outs and transfers but through integration and creation of opportunities. This is the same lesson the United States applied to Western Europe right after the Second World War by way of encouraging regional integration.

Income convergence is not automatic but conditional on putting together building blocks required for rapid growth. As amply documented in this book by Marcelo Kohen, André Liebich, Vinod Aggarval, Cédric Dupont and others (practically all the contributors) creating economic, legal and political institutions and perfecting their workings has become Western Europe's comparative advantage. Now is the time to use it for the benefit of the transition economies.

Globalization for Central Europe meant more regionalization than embracing the world markets. In a less than perfect world, this was the right decision.

Notes

- 1. The expression 'Central European and the Baltic states' may be more appropriate, but it loses in bulk what it gains in accuracy.
- 2. World Bank (2000) provides a more detailed comparison of similarities and differences between the CEECs.
- 3. However, in recent years populist and nationalist parties have begun to emerge in Central Europe and their attitude towards opening trade and foreign investment is, unsurprisingly, negative. One could dismiss these extremist parties as insignificant and a side effect of the workings of democracy, except they grow in importance over time.
- 4. Even until the very end many people, experts included, believed that socialism and planning still had a bright future ahead. The policy of détente, by seeking accommodation, recognized at the highest possible level the permanent, or at least long-lasting, nature of the system created around and by the Soviet Union. If an unknown scholar produced in the early or mid-1980s a report predicting an imminent

economic catastrophe in the entire region, breakdown of the Soviet empire, folding up of the COMECON and the Warsaw Pact, disintegration of the Soviet Union itself and collapse of the Berlin Wall he or she would not have been taken seriously. And if the report had predicted, for good measure, that all those events would come to pass without major bloodshed, it would surely have been dismissed by the cognoscenti. I develop this analysis further in Kierzkowski (1996 a and b).

- 5. Surprisingly enough the planning system with all its obvious deficiencies is still in (mis)use in Cuba and North Korea. Since this chapter deals with Central European countries, this puzzle, if it is one, need not be explored here.
- 6. Many analysts argued that open unemployment in the West corresponded to hidden unemployment in the East. From the point of efficiency it is preferable to bring unemployment out into the open. This is probably so, but hidden unemployment is less socially destabilizing, provided that the situation can be maintained. Of course, when after 50 years of 'full employment' a dramatic change takes place in this respect, the populace becomes disorientated and even frightened and the state lacks experience and even a proper institutional framework to deal with the new phenomenon.
- 7. For a more complete discussion of the causes of economic collapse in Eastern and Central Europe see Kierzkowski et al. (1994).
- 8. Stanley Fisher and Ratna Sahay (2000) summarize the events and corresponding expectations: 'When reform began 10 years ago in Central and Eastern Europe, the Baltics, Russia, and other countries of the former Soviet Union, output was expected to fall as a result of economic stabilization programmes and reallocation of resources from unproductive to productive sectors. The view was that, as reform policies took hold and new sectors began to develop, aggregate output would begin to grow. Output did fall in all 25 countries at the start of transition. The extent of the collapse, however, exceeded expectations: output had fallen by more than 40 percent, on average, by the time it bottomed out. By 1999, output was growing in virtually all of the 25 economies, though glacially in some.'
- 9. Even though the present levels of GDPs in Central Europe are not significantly higher than the pre-reform levels, the structures of the supply match the demand much more closely. And there has been a remarkable increase in the variety of goods, which in itself is an indication of increasing welfare.
- 10. The growth of GDP in the European Union over the period 1989–99 was as follows: Italy 15 per cent, UK 21 per cent, France 18 per cent, Germany (1991 base year) 12 per cent, EU without Germany 20 per cent, EU with Germany (1991 base year) 15 per cent.
- 11. Indeed there were areas where changes for the better occurred right away. Greatly improved consumer choice and disappearance of long lines in which people were standing for hours demonstrated the strength and swiftness of markets.
- 12. It will be recalled that even Gorbachev hoped to save the Soviet economic system; he just wanted to make it more efficient and human.
- 13. The state had even more powerful means to make poverty disappear from the streets of big cities. Furthermore, very tight control of national borders greatly inhibited international 'migration' of poverty.
- 14. The new city of Nowa Huta in Poland, built next to Cracow the bastion of Polish church and tradition was specifically intended to create grateful farmers-turned-workers who would create a countervailing social force to the 'bourgeoisie' of the old capital of the country. Ironically, workers of Nowa Huta became particularly strong opponents of the system when Solidarity was born.

- 15. Positive budgetary effects of small-scale privatization provided another valid reason for this policy.
- 16. That Central Europe is small compared to the EU is commonly accepted. And this relative difference in size poses the following problem stated by Kowalczyk (2001): 'Free trade agreements between small and large countries have presented twin challenges to the theory of international trade. First, what happens to the classical proposition that a small country's best trade policy is unilateral free trade? Second, what is in it for each of the parties to such an agreement, i.e., what is in it for the small country and the large country, respectively?'
- 17. One should remember that federal transfers to what used to be East Germany exceeded \$700 billion on the cumulative basis and that the population of that region falls short of 15 million inhabitants.

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12 Globalization and the European Welfare State at the Opening and the Closing of the Twentieth Century

Tony Atkinson

I. Introduction: the welfare state and the world economy in historical context

The twentieth century ended, as described by O'Rourke (Chapter 3 in this volume), like the nineteenth, in a marked phase of globalization. The period 1870–1914 was one of 'rapid globalization: capital and labour flowed across national frontiers in unprecedented quantities, and commodity trade boomed as transport costs declined sharply' (Williamson 1996:277). In the same way, the period 1970–2000 saw the closer integration of commodity and capital markets as costs of mobility fell and barriers to trade and capital movements (if not to labour mobility) were reduced. These parallel developments in the world economy make an interesting contrast with the history of the welfare state. The period of pre-1914 globalization heralded the origins of the modern welfare state. It was seen as a major social innovation. When introducing unemployment insurance in the United Kingdom (UK), Winston Churchill told the House of Commons that 'there is no proposal in the field of politics that I care more about than this great insurance scheme' (Hansard 25 May 1911, 5th series, volume 6, cols 493–510). Yet the globalization of the late twentieth century has been widely seen as a threat to the European welfare state. The welfare state is described as being 'in crisis'. Even if such alarmist language is not new (see Alber 1988, and Kuhnle 1998 for references to past alarms), there now seems to be a majority view that the welfare state is unsustainable. Many economists and policy makers agree with Buchanan that 'the "social model" that many Europeans hold as

superior to the somewhat more limited welfare states elsewhere is not economically viable for the twenty-first century' (1998:14). The 'great insurance scheme' of the early twentieth century has become the twenty-first century's dinosaur.

The apparently contrasting fortunes of the European welfare state in these two periods of globalization are the subject of this essay. Globalization pre-1914 went together with the introduction of the modern welfare state; globalization today appears to presage its demolition. By the 'modern' welfare state, I mean the introduction of programmes of social insurance in place of the old poor law and local social assistance or charitable provision. In Europe, this began in the last two decades of the nineteenth century (I return later to the origins outside Europe). Figure 12.1 shows the rate of diffusion of different social transfer programmes in 24 European countries, recording the dates of first introduction of different programmes. With the exception of family allowances, the major programmes were all to be found in some countries before 1914. The introduction of a programme does not necessarily imply any sizeable spending commitment. Undoubtedly spending built up more slowly, and it continued to grow substantially in the post-1945 period, as illustrated by Figure 12.2, which shows the OECD statistics for government spending on social transfers since 1960 for three European countries. One difference between the beginning and the end of the twentieth century is that we are talking now about double figure, rather than single figure, percentages of gross national product. This is one important feature of the discussion, although I shall be emphasizing that it is only part of the story.

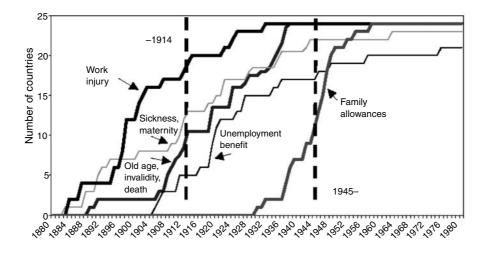


Figure 12.1 First Introduction of Welfare State Programmes in 24 European Countries, 1880–1980

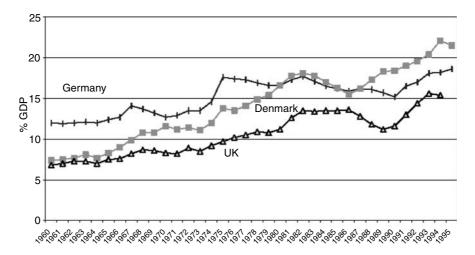


Figure 12.2 Growth of Social Security Transfers, 1960–95

The development of the modern welfare state was a noteworthy achievement: 'the transformation of the nineteenth century liberal state, and its diverse manifestations throughout Europe and North America, into the contemporary welfare state is perhaps the most remarkable accomplishment of democratic governance' (Ashford 1986:1). Yet the welfare state has always had its critics, and they have become increasingly vocal regarding its possible adverse effect on economic performance. In 1981, the OECD signalled the change in thinking with the title of its book The Welfare State in Crisis, in which it asked whether 'some social policies (unemployment compensation, minimum wages and high payroll taxes) have negative effects on the economy' (OECD 1981:5). Official views appeared to have shifted. In the Keynesian postwar period, social transfers, particularly unemployment insurance, had been seen as contributing to the degree of automatic stabilization. The expansion of the welfare state was then regarded as complementary with concerns for full employment. Now, however, many economists argue that the negative economic consequences of social transfers, coupled with concerns about rising demographic pressure, mean that the welfare state must be scaled back or abandoned.

In Europe, an influential document prepared by Drèze and Malinvaud, on the basis of discussions with a group of Belgian and French economists, endorsed the positive functions of the welfare state but listed three major objections:

(i) measures of income protection or social insurance introduce undesired rigidities in the functioning of labour markets; (ii) welfare programmes increase the size of government at a risk of inefficiency; their funding enhances the amount of revenue to be raised, and so the magnitude of tax

distortions; and (iii) welfare programmes may lead to cumulative deficits and mounting public debts. (Drèze and Malinvaud 1994:95)

They concluded 'the agenda should be to make the Welfare State leaner and more efficient' (1994:82). The critique of the welfare state has been taken up with enthusiasm by the popular press. The *Newsweek* article 'Dismantling Europe's Welfare State' stated that

the panoply of social programs, benefits and protections designed to cushion Europeans from the harshest effects of their capitalist economies have become enormously expensive and, in some cases, their consequences extremely perverse. As a result, many people in government and private business believe the system is as much a source of Europe's problems – high unemployment, sluggish economies, lagging productivity growth – as a solace. (20 December 1993)

In some, but not all, European countries, benefits have indeed been scaled back or abolished in the 1980s and 1990s. In the case of unemployment benefit, Austria, Belgium, Finland, Germany, the Netherlands and the UK have enacted significant reforms, which have largely – although not universally – served to reduce benefits and coverage (Atkinson 1999: Chapter 5).

There is no necessary paradox in two periods of globalization having been associated, in one case, with the birth of the modern welfare state, and, in the other, with its scaling back. It is nonetheless an interesting starting point for a consideration of the relationship between globalization and the welfare state. Here I consider three broad hypotheses about the differences in this relationship across the century, described below. A fourth hypothesis is that the pre-1914 period was not one of globalization but of *internationalization*. Hirst and Thompson argue that 'globalization in its radical sense should be taken to mean the development of a new economic structure and not just conjunctural change towards greater international trade and investment within an existing set of economic relations' (1999:7). (A similar distinction is drawn by Cantwell and Piscitello, Chapter 8 in this volume.) Hirst and Thompson define an 'international economy' as one 'that is still fundamentally characterized by exchange between relatively distinct national economies and in which many outcomes ... are substantially determined by processes occurring at the national level' (1999:7). In contrast, in a globalized economy, 'distinct national economies are subsumed and rearticulated into the system by international processes and transactions' (1999:10). As they stress, increased foreign trade and flows of capital are not necessarily indicators of globalization. One resolution to our paradox is therefore that the pre-1914 world was an open but international economy, whereas the globalization of the late twentieth century is fundamentally different, but this proposition is open to challenge (see Hirst and Thompson 1999) and begs the question with which we are concerned. We want to identify the features that have caused this dissolution of national economies (see Sylvan, Chapter 14 in this volume).

In this chapter, I limit myself to considering the impact of internationalization in the sense of the extension of goods trade and factor mobility, as a result of the reduction of transport costs or other barriers. (Use of the term 'internationalization' in place of globalization also serves to highlight the fact that the degree of integration is uneven across the world, much of the increase in crossborder activity being between industrialized countries, and there being marked differences in the degree of participation of different parts of the developing world.) In particular, I explore the - quite complex - relationships between the welfare state (WS) and internationalization (INT), as mediated through economic performance (EP), which I take here to be the level of employment (national output) and the rate of growth. As indicated in Figure 12.3, I begin by analysing the direction of causality from INT to EP to WS. The first hypothesis is that, for the European economy, internationalization is now a threat, not an opportunity as it was 100 years ago, and has reduced the capacity of European countries to 'afford' their welfare states. While at first sight this hypothesis provides a straightforward resolution of the differing relationship at the two ends of the twentieth century, the hypothesis sits uneasily with the fact that many of those who hold that the welfare state is unsustainable also believe greater global economic integration to be beneficial in its impact. This, and other aspects, is examined in Section II.

In Section III, I consider the reverse causality from WS to EP: the possible negative effect of the welfare state on economic performance identified by the

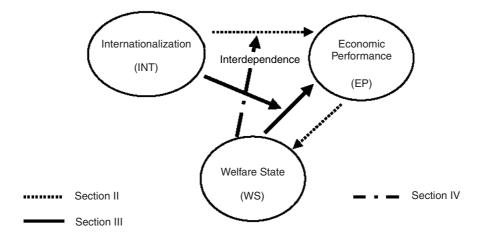


Figure 12.3 Structure of the Argument for Chapter 12

OECD. In considering this mechanism, it is important to bear in mind that our ultimate concern is not with how WS affects EP, but with how *this relation* is affected by the degree of internationalization of the economy. Our focus is on a second derivative: the change in ∂ EP/ ∂ WS as the degree of internationalization changes. The second hypothesis is that the (posited) adverse effect of the welfare state on economic performance is today intensified by the internationalization of the economy (∂ ²EP/ ∂ INT ∂ WS is negative, that is, a negative derivative becomes more negative the larger is INT), whereas this was not the case (or was not believed to be the case) a century ago.

Looking at the proposition in mathematical terms makes clear that, given continuity, we can invert the order of differentiation, and deduce that the larger the welfare state, the bigger the negative (or the smaller the positive) effect of internationalization on economic performance. A contrast is often drawn in this context between Europe, with its significant welfare state, and other OECD countries, notably the United States, where social protection today is less extensive. Krugman (1994) has shown how the impact of increased imports from newly industrializing countries on Europe may be different from that on the US. This is highly plausible, but what his formulation misses (as pointed out by Davis 1998) is the interdependence of Europe and the US. The impact of internationalization on Europe is different on account of the existence of the US pursuing different labour market and welfare state policies. The subject of the final substantive Section IV is the third hypothesis that the differential effect on European economies from internationalization is attributable to their having a much more extensive welfare state than other OECD countries, whereas this was less true 100 years ago.

Our interest in comparing globalization today and in the past is in part to understand the – highly complex – underlying relationships; it is in part to learn about the policy alternatives for the future. Section V summarizes the main conclusions and draws some policy implications. In considering these, the reader should bear in mind that, in the space available, many aspects have had to be omitted. One important omission is the political economy of the welfare state (see, for example, the review of the effect of globalization on government growth in Schulze and Ursprung 1999, and Breton and Ursprung, Chapter 13 in this volume). I focus on how the welfare state affects the economic possibilities open to the government, and the way in which they impinge on the welfare of individuals, not on the political process by which choices are made. Second, I tend to concentrate on those models of the economic impact of the welfare state that have been used by economists in the policy debate. Many of these models are concerned with the mechanisms by which the welfare state has a negative impact, whereas a more balanced account would take account of other channels where the effect is positive (an example is the possible effect of social insurance in encouraging human capital formation, see Sandmo 1995, and

Schmähl 1995). The third qualification is that I confine attention to cash transfers, especially unemployment benefits and old age pensions, and do not consider other elements of the welfare state such as spending on state education or health care. Transfers are among the most contested aspects of the welfare state, so seem the most relevant to the present discussion. Finally, there is no such thing as *'the* European welfare state'. From a distance European welfare systems may seem similar but they differ considerably in their institutional structure. Moreover, benefit systems have changed over time in key particulars. In the course of the argument, I identify a number of cases where the institutional structure of transfers is crucial, and the reader should bear in mind that the generalizations in the chapter apply to differing degrees to different countries and to different time periods.

II. Global competition and the affordability of welfare

It is commonly assumed that there is a positive association between the level of economic attainment and the extent of social transfers that can be afforded. Commenting on the post-Second World War expansion of the National Insurance scheme in the UK, Henderson referred to the 'steadily accruing economic increment, providing at once a safety margin against an adverse turn of events, and a margin for new social reforms' (1949:259). (Although he felt that the speed of expansion had been too 'exuberant'.) This points to the first possible reason for the reversal in the relation between internationalization and the welfare state: the opening of trade and factor mobility a century ago benefited Continental Europe, whereas today greater trade and capital mobility threaten living standards in the OECD countries. In the period from 1870 to 1914, the poorer countries of Western Europe, apart from the Iberian peninsula, 'underwent a spectacular catch-up from the Great Famine to the Great War' (Williamson 1996:277). Today, in contrast, it is the newly industrializing countries that are converging on OECD living standards, and it is often suggested that the increased global competition may actually lower incomes in OECD countries. As put by Johnson and Stafford in the context of explaining declining real wages in the US: 'the effect of foreign competition in reducing the relative price of the goods that the United States formerly exported, can lower aggregate real income in the United States even as world income rises' (1993:127). The same might apply to Europe today, with the 'income effect' meaning that today Europe has to be looking to rein in, not, as in the past, to expand, public spending. (It should be stressed that we are referring here only to the impact of internationalization, not to domestic pressures, such as an ageing population, which may be rendering the welfare state 'unaffordable'.)

There are two problems with this argument. First, the view that the welfare state needs to be scaled back is usually made by economists who also believe

that Europe is gaining – not losing – from globalization. While it is possible that Europe is failing to benefit, along the lines indicated by Johnson and Stafford (1993), this is not an argument one hears commonly made. Second, if a reduction in real income were the mechanism, then all forms of government expenditure would be subject to the same pressure. Reduced overall living standards would lead to cuts in other budget headings. Why should the welfare state be singled out? In the Britain of 1949, Henderson argued that defence spending should share in the fruits of economic growth; put in reverse, the same argument implies that defence should today share in the cuts.

This in turn brings us to an important question. What is the 'cost' of the welfare state that we cannot afford? X million euros spent on defence is a real use of resources; X million spent on social protection is a transfer payment. (There is evidently a difference here from health care and education spending.) An actuarially fair insurance scheme for unemployment does not impose a cost equal to the level of benefits. This point is made by Lindert in his study of social spending 1880–1930 (see Figure 12.4 below), where he argues that one should look at the degree of government subsidy, which may be only a fraction of the total spending: 'the famous Bismarckian social insurance involved almost no redistribution through government budgets' (1994:11). The institutional form of the welfare state – the difference between largely actuarial insurance and largely redistributive social assistance – may be crucial. Third, we have to consider the demand side as well as the supply side. To the extent that globalization threatens living standards in Europe, it may *increase* the demand for insurance, an aspect that has long been recognized in the political science literature (see Burgoon 2001). To the extent that only parts of the population are losers from increased international competition (for example, the low-skilled), there may be greater need for redistributive transfers. Internationalization may have changed the mapping between social security parameters and individual welfares. (Just as in debates about the ageing of the population, we need to take account of the increased demand from the larger elderly population as well as the increased budgetary cost.)

The first hypothesis on its own does not seem to explain the contrasting fortunes at different dates of the European welfare state. Even supposing that the upward convergence of the European economies a century ago was a key factor allowing the expansion of spending on social transfers (a proposition that I have not discussed), it presupposes that today's globalization is lowering overall living standards in Europe – a questionable premise. Even if true, such a worsening of Europe's economic position may increase the demand for social protection, and in any case it does not lead automatically to the welfare state being unaffordable: we have to identify the specific reason why social protection should be singled out. This brings us to the reverse causal relationship between the welfare state and economic performance.

III. Impact of the welfare state on economic performance

Our concern in this section is not with the causal relationship as such, but with the impact on this relationship of internationalisation: does $\partial EP/\partial WS$ become smaller as the degree of internationalization increases? (Is the second derivative negative?) If the impact of the welfare state on economic performance is negative, then it becomes more so; if the impact is positive, then it becomes less so. Moreover, in order for this hypothesis to provide an answer to our original question, we have to argue that a century ago this was not the case, or was not believed to be the case.

III.1 Different economic models

The first problem in considering this explanation is that there are differing views about the direction of the effect on economic performance of the welfare state. The sign of the derivative $\partial EP/\partial WS$ depends on the underlying view as to how the economy operates. The reasons for such differences of view tend to be concealed by the fact that much of the analysis of the welfare state is based on economic models that are implicit rather than explicit. An important contribution of economics is to provide a framework in which the interpretation of terms can be made precise and the steps in the argument elucidated. At the same time, such formal precision may omit essential elements of the problem. Much policy analysis remains rooted in a model of perfectly competitive and perfectly clearing markets. Such a theoretical framework incorporates none of the contingencies for which the welfare state exists. There is no involuntary unemployment, nor is saving for the future introduced in any meaningful way.

For this reason, I consider in this chapter several different models of the impact of the welfare state that contain a clear rationale for social transfers. The first is the non-competitive model used in the recent influential article by Alesina and Perotti (1997) entitled 'The Welfare State and Competitiveness'. They study a two-country world where in the home country wages are bargained by trade unions, generating unemployment in that country. Allowance is made here for a fixed transfer B made to the unemployed (as discussed in Alesina and Perotti 1995). The cost of the welfare state then arises from paying unemployment benefit and from the costs of pensions for the elderly population (assumed fixed in size). In the other (foreign) country, there is a competitive labour market with full employment, so that the cost of the welfare state is purely that of pensions. Homogeneous workers have an alternative use for their time, valued at *R*. The resulting reservation wage is (R + B), which is less than the full employment wage in the absence of benefits (B = 0) and taxes. In a right to manage model where firms determine employment, unions bargain over wages as a mark-up (1 + m) over this reservation wage, where this mark-up depends on the elasticity of the aggregate demand for labour and on the elasticity of the price index. These

elasticities depend in turn on the degree of centralization of wage bargaining. The gross wage is increased by the payroll tax at rate t (assumed here to be the means by which social transfers are financed). The resulting total labour cost is W(1 +t(1 + m)(R + B). This means that the welfare state affects employment via the fiscal burden (t) and the behavioural effect (B). Alesina and Perotti stress that the extent of shifting depends (via the mark-up) on the nature of wage bargaining: 'the effect of labor taxation on unit labor costs depends crucially on the institutional characteristics of labor markets. The effect is weak or nonexistent in countries with highly decentralized labor markets [or] very centralized labor markets' (Perotti 1996:107). If (1 + c)R is the largest gross wage consistent with full employment (c > 0), then the assumption is that W > (1 + c)R in the home country and that the reverse relation holds abroad, where there are no unions (m = 0). (We may note that, if the foreign country has the same welfare state, then this implies that there is some strictly positive value of m at which full employment can be attained at home, so a policy of increased labour market flexibility can in itself restore full employment, without abolishing benefits.)

One advantage of a formal model is that it allows us to see the complexity of the issue at stake. Our concern is not with the effect of the welfare state on employment, but with the impact on this relationship of internationalization. For this purpose the Alesina and Perotti (1997) analysis is a useful starting point, but it does not answer our question: is the negative effect of the welfare state on employment intensified by the opening of the economy to greater trade or capital mobility? To give an answer, we would have to solve the full two-country general equilibrium, and carry out a comparative static analysis, in order to see whether the cross-derivative is negative or positive. Here I simply note that one effect of internationalization may be to raise the elasticity of derived demand for labour and hence reduce the union mark-up. Suppose that the effect of global integration is a reduction in transport costs that reduces the price of foreignproduced goods. With no change in the exchange rate, this reduces the elasticity of the price index and hence reduces the mark-up *m*. If opening of the economy to foreign competition reduces the monopoly power of unions, and hence their magnification of the effect of the welfare state, then internationalization may reduce, not intensify, the negative effect of the welfare state on employment.

In the model just described, both the tax cost and the benefit effects of the welfare state lead to reduced employment. With an alternative set of assumptions, however, it is possible that unemployment insurance plays a positive, rather than a negative role. In Atkinson (1999), I formulate a segmented labour market model, where in addition to the unionized sector there is a non-union sector in which labour is paid an efficiency wage to prevent 'shirking'. In this model, it is possible that unemployment insurance benefits (as distinct from the taxes necessary to finance them) raise employment. The idea that the welfare state may have positive as well as negative economic consequences does not

come as a surprise to most non-economists: the welfare state was 'an answer to developmental problems' (Flora and Heidenheimer 1981:22). A key reason for the difference in prediction is that this alternative (second) model takes account of the institutional conditions under which benefits are paid. On the one hand, the contribution conditions of unemployment insurance (usually ignored in economic models) mean that benefits enter the compensation package negotiated by unions and that there is differential coverage of the two sectors. On the other hand, the provisions, found in most unemployment insurance schemes, which disqualify people who have been dismissed for industrial misconduct, mean that the benefit does not enter the non-shirking condition that determines wages in the non-union sector. This model provides a warning that the institutional features may be crucial, but again does not provide an answer to our question, since international trade needs to be introduced and a full comparative static analysis remains to be carried out to check whether the effect of benefits on employment becomes less positive with increased internationalization. (A trade model with segmented labour markets is analysed by Oslington 1999.)

In the Alesina and Perotti model, the welfare state redistributed towards the unemployed (generated by union wage-setting) and pensioners. In the third model considered here, there would be no unemployment in the absence of benefits, but they are intended to redistribute between two classes of workers: unskilled and skilled. Skill is assumed to be innate: there is no possibility of investing in human capital (for a model of trade and human capital investment, see Findlay and Kierzkowski 1983). In order to place a floor on the real wages of the unskilled, the government pays a benefit, fixed in terms of purchasing power, and no workers will accept jobs paying less than a specified multiple of this amount. The model, that used by Krugman (1994 and 1995), and developed by Davis (1998), is of the Heckscher–Ohlin variety: the two factors of production (skilled and unskilled workers) produce two goods (one using skilled labour intensively relative to the other) under constant returns to scale. There is perfect competition and there are no transport costs. Providing certain assumptions hold, there is a unique relation between relative goods prices and relative wage rates. (In this model, only relative prices matter.) If the wage of the unskilled workers is proportionate to the benefit level, then this determines the relative wage and hence the factor inputs per unit of output (taking account of the payroll tax needed to finance the benefits). If consumers are assumed to spend a fixed proportion of their income on each good (Cobb-Douglas preferences), relative demands are purely a function of the relative goods price. Assuming that the benefit level is set so that the relative wage of the unskilled is above that in full employment, there will be unemployment of unskilled workers (who are still better off in financial terms). In this situation of fully integrated and costless trade, the intervention of the welfare state, for redistributive reasons, causes

unemployment. Suppose now that trade is opened up with newly industrializing countries (NICs) that have an upward sloping supply of the good in which unskilled workers are relatively intensively employed. As long as the home country continues to produce the good, the relative goods price remains fixed (by the benefit level) and the only possible adjustment is via increased unemployment of unskilled workers. In this case, internationalization does indeed intensify the negative effect of the welfare state on employment. (This conclusion would need to be modified if their higher unemployment rate induced unskilled workers to invest in the acquisition of skills: see Davis and Reeve 2001.)

III.2 Changing relationship over time?

The Heckscher–Ohlin trade model describes a situation in which both the derivative (∂ EP/ ∂ WS) and the cross derivative (∂ ²EP/ ∂ WS ∂ INT) are negative. Today's critics of the welfare state are in this case right: the welfare state is a barrier to full employment, and internationalization intensifies the negative effect of the welfare state. But how can this explain the position at the birth of the welfare state? Here, I consider three of the possible explanations: (i) that the originators of the welfare state were unaware of the economic costs, (ii) that the welfare state has changed, and (iii) that the economic and social context has changed.

Is it possible that today's concerns about the economic costs of the welfare state reflect the advances made in economic science? Looking back over the past half century, one might conclude that there is some truth in this assertion. Few economists carried out research on the welfare state in the 1950s and 1960s, and it was only in the 1970s that the econometric studies of Feldstein (for example 1974 and 1976), and others, highlighted the disincentive effects on unemployment duration and on capital formation. At the same time, it would be wrong to say that analysts of the welfare state were unaware of possible disincentive effects. They drew different conclusions. Working back in time, and focusing particularly on the UK, my Poverty in Britain and the Reform of Social Security of 1969 examined the extent to which people could be described as voluntarily unemployed, drawing on evidence from specialist employment staff (a source not greatly cited today) that showed only a small fraction being classified as 'workshy'. (I return below to the possibility that the situation may have changed since the 1950s and 1960s.) In the interwar period there were certainly economists arguing that unemployment benefits acted as a disincentive. Rueff (1931) contended that unemployment insurance set a floor to wages that prevented the labour market from clearing. Robbins stated that 'the post-war rigidity of wages is a by-product of Unemployment Insurance' (1934: 61). Cannan (1930) gave a clear exposition of the way in which unemployment insurance could lead the employers to increase layoff unemployment and the unemployed to take longer over job searches. The report of the Committee of Economists appointed in 1930 as part of the work of the Economic Advisory Council, and

chaired by Keynes, stressed its belief that unemployment benefit impeded mobility and led to rigidity of wage rates (Howson and Winch 1977: 191).

Before the First World War, the possible disincentives were much debated. In Germany, the opposition of employers to unemployment benefit was based on the effect on wage bargaining: 'employers expected unemployment insurance to strengthen the trade unions' position in the labour market' (Ritter 1983:101). At the same time, they distinguished between different types of benefit, and favoured unemployment insurance over means-tested assistance (Mares 1997), showing an awareness of the importance of institutional structure ignored in many of today's models. Employers also recognized that workmen's compensation and sickness insurance had a positive impact on efficiency: the costs of social insurance 'are richly repaid through the higher productivity of our workers' (Schmoller 1918:416, quoted by Rimlinger 1966:567). In the UK, the chief architect of the 1911 legislation (Sir Hubert Llewellyn Smith) drew up a list of 52 objections, including the risk of increased layoff unemployment and of malingering (Harris 1972:307), and the administrative machinery was designed expressly to limit the possible disincentive effects. Benefit was paid for a maximum of 15 weeks in the year. Claimants were disqualified where they had been dismissed due to industrial misconduct or where they had left jobs without due cause. The introduction of insurance was tied to the establishment of Labour Exchanges, testing the claimant's right to benefit, and this was regarded as essential in the German debate: 'in every form of unemployed benefit or insurance an adequate system of Labour Exchanges is of the first importance' (Report of the German Imperial Statistical Department on Unemployment Insurance, quoted by Lennard 1911:336).

Changed attitudes to the welfare state cannot therefore reasonably be attributed to a Pauline conversion of economists; a hundred years ago they were certainly aware of the possible disincentives. The second possibility is that the welfare state has changed. Crucial to the debate about interwar unemployment in the UK was the assertion that unemployment insurance had altered since the original 1911 scheme, thus explaining why unemployment was above the pre-First World War levels. Benjamin and Kochin claim that the attitude of Winston Churchill 'was that of a father towards his prodigal son ... He defended the original system but argued that it had become so liberalized as to produce an inflation of the unemployment figures' (1979:471n). According to Beveridge, another of its parents, the extension of coverage and of benefit duration in the1920s had brought about 'a fundamental change in the character of the scheme. It has been converted ... into a system of general unemployment relief financed mainly by a tax on employment' (1930:407). This change in the nature of the welfare state provides a straightforward reason why it may have been viewed differently a hundred years ago. There would have been a smaller disincentive effect of the B variable in the Alesina and Perotti model, and a lower

effective value of the minimum wage for unskilled workers in the Heckscher–Ohlin trade model. In the segmented labour market model, a change from insurance benefit to non-contributory unemployment assistance means that primary sector workers lose part of their privileged position (Atkinson 2000), and the bargained wage will rise on this account, tending to reduce employment (the effect on the secondary sector wage has also to be taken into account, and this depends on the take-up rate of assistance). On the other hand, the extensions of benefit coverage 'were in part off-set by the increasing severity with which those benefits were administered' (Deacon 1976:9). One cannot look simply at benefit rates, and contribution conditions, without considering the way in which benefits were administered. The 'benefit liberalization' explanation may therefore be a candidate but it requires detailed institutional analysis for a range of countries before it can be regarded as established.

The welfare state has undoubtedly become much larger. Social transfers now account for a much larger fraction of GNP, and it may appear self-evident that its consequences are greater than a hundred years ago when spending was only a few per cent of GNP. Here we must distinguish between the specific behavioural disincentive associated with benefits linked to work and saving decisions, and the general disincentive associated with the burden of financing the welfare state. The latter is *general* in that it arises equally from other forms of government expenditure. (One way of distinguishing the two is to ask: suppose that an outside donor funded the welfare state - would there still be adverse economic consequences (leaving aside the transfer problem)?) The timing of the two effects may differ significantly. Thus in the case of old age pensions, the introduction of a contributory scheme may have an immediate specific effect, even if there is no immediate expenditure, if people adjust their personal savings in anticipation of the state benefits to be paid at a later date. Conversely, if today's workers do not expect to receive a state pension, then there may be no specific effect but a general tax effect as a result of the need to finance state pensions to the currently retired.

The increased cost explanation concentrates on the tax burden, or the term *t* in our earlier analysis. The impact depends on the assumptions made. In the Heckscher–Ohlin trade model with competitive labour markets, relative prices are unaffected by a uniform payroll tax, and there is no change in unemployment (the exchange rate adjusts). In the Alesina and Perotti model, there is no such adjustment: the tax rate increases the wedge between net and gross wage costs. The size of the effect depends, as they recognize, on the extent to which the union and taxpayers perceive a link between the taxes paid and future benefits. With a contributory social insurance scheme, where benefits are linked at an individual level to contributions paid, the union wage demand may be moderated, since it is not a pure tax. With a state pay as you go pension, the value placed on the contributions depends on the relation between the implicit

rate of return, equal in steady state to the rate of growth of the wage bill, *n*, and the rate of interest on private savings, r. The working of the labour market is not in this case affected by the existence of actuarially fair transfers where r = n, although total savings will be reduced. It is therefore possible that there has been a downward shift in the valuation placed on future benefits, for example because the pay as you go scheme is no longer able to provide the enhanced terms usually offered to the earlier cohorts. It is also possible that a reduced value is placed on future receipt of social transfers on account of the political risk associated with the continuance of the scheme (see, for example, Lindbeck 1995). Here there is an obvious circle. Expectations of benefit cuts cause people to discount future entitlements and to treat social security contributions as a pure tax. This leads to adverse economic impacts, which validate the doubts about the financial security of the scheme and strengthen calls for its scaling back. As long as confidence is retained, the social security scheme may be quite viable, but once doubts have come to be held we may have embarked on a trajectory that leads to inevitable rolling back of the welfare state (Atkinson 1999: Chapter 5).

The third line of explanation is that the economy has changed. Here there are many candidates. These include changes in the economy in general. It may be that labour markets are further from perfect competition than a hundred years ago, not least because of the replacement of agriculture by manufacturing as the main source of employment. Robbins says of the period before the First World War, 'that the free market was the typical institution is not open to serious question' (1934:60), but that this changed after the war: 'no one who wishes to understand the persistence of the maladjustments of the great slump can neglect the element of inelasticity ... the rigidities of the labour market and cartel prices' (1934:60). Despite moves to labour market flexibility in recent decades, a union mark-up model may be more relevant today than in 1900. (In the opposite direction, the rise of the service sector at the expense of manufacturing may have reduced the significance of unions.) The changes may relate more expressly to the way in which the welfare state is viewed. Lindbeck (1995) has pointed to the possibility of changed attitudes to the welfare state, arguing that individual responses are influenced by social norms that adapt over time. Initially the welfare state did not affect labour market behaviour, but over time people became more willing to live off unemployment benefits. In terms of the Heckscher–Ohlin trade model, the reservation wage a century ago was, on this argument, a smaller multiple of the benefit level, and hence the unemployment associated with increased international competition was smaller.

IV. European welfare states and the global economy

So far, I have considered the impact of the global economy on Europe, but the title of the book invites us to consider also the impact of Europe on the global

economy. The general equilibrium of the world economy is important, and changes in Europe have implications both for low- and middle-income countries and for the remaining high-income countries. It is with the latter that I begin.

IV.1 Interdependent trade

In the previous section, I considered the impact of the opening of trade with newly industrializing countries (NICs) on an economy with a welfare state, taken as characteristic of continental Europe, which places a floor under the wages of unskilled workers. Krugman (1994 and 1995) has contrasted such a situation with that where the advanced economy has a flexible labour market, taking this as a characterization of the United States (to which we might add Australia, Canada, Japan, New Zealand and the UK). Whereas increased imports from the NICs lead to increased unemployment in continental Europe, they cause widening wage inequality in the US as the relative wages of the unskilled fall. But, as noted in Section I, this formulation misses the *interdependence* of Europe and the US. We cannot look at two parallel universes with two trading blocs (in one case US and NIC, and in the other EU and NIC). We need a three-country (US, NIC and Europe) model. If in a unified analysis the US and continental Europe both produce the goods that face NIC competition, then the wage floor in Europe determines the relative goods prices. Assuming that the minimum wage is unchanged, this prevents the relative price from falling. The US is therefore unaffected by increased trade. Europe bears the brunt in terms of unemployment (Davis 1998). As Neary has noted, the assumption of fixed relative wages in this highly simplified model 'imposes an implausible degree of structure on the world economy' (2001: note 3). (There may also be discontinuities in key variables as functions of the policy parameters, affecting the earlier conclusion about the interchangeability of the order of differentiation.) For this reason, the result is better stated as a tendency: European unemployment tends to prop up US wages.

On this basis, continental Europe is exposed to internationalization, not on account of its welfare state per se, but because its welfare state is more extensive than that of other advanced countries. This third hypothesis suggests a new possible explanation for the differences in attitude to the welfare state across the twentieth century: that Europe is now out of line, whereas this was not the case a century ago. At first glance, such a proposition may appear strange, given continental Europe's leading role in the establishment of the welfare state. But the developments in social protection at the end of the nineteenth century were not limited to Europe. New Zealand introduced old age pensions in 1898. Western Australia introduced work injury benefits in 1902. While the United States is typically regarded as a 'welfare state laggard', Skocpol (1992) has persuasively argued that this overlooks social measures that were distinctive to the US: pensions for Civil War veterans in the late nineteenth century and

mothers' pensions introduced in the early 1900s (40 states enacted such legislation between 1911 and 1920). Lindert (1994) has made estimates of the extent of redistributive social spending, and his figures for 1910 and 1930 are reproduced in Figure 12.4. Levels of social spending were lower in the US, but, in terms of redistributive spending, continental Europe cannot be said to stand out in the first half of the twentieth century. As Lindert notes, the rankings have some resemblance to those in the postwar period, with Scandinavia having higher spending in both 1910 and 1930, but in the latter year the continental European countries ranked bottom (Italy), tenth (Belgium), ninth (France) and eighth (Netherlands) out of the 14 countries.

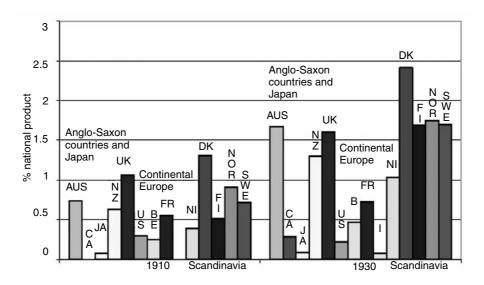


Figure 12.4 Lindert Estimates of Social Spending, 1910 and 1930

The explicit three-country model helps us understand the mechanism by which the existence of the welfare state affects the relationship between global integration and employment, and the way in which the policies of continental Europe impinge on the rest of the OECD (and vice versa). It also allows us to see the limits of the argument. The tendency for Europe to absorb unemployment only holds to the extent that Europe has not already become specialized in goods that use skilled labour intensively. As observed by Cortes, Jean and Pisani-Ferry in the case of France 'it becomes more and more difficult to lose jobs in industries like clothes and footwear', where adjustments belong in the past (1999:135). If, in the standard trade theory model we allow the EU to have become specialized, then the consequences of opening trade are different (see Oslington 1998). Suppose that the NIC is specialized in the good that uses unskilled labour

intensively. Their entry into world trade drives down its price and hence causes the relative wage of unskilled workers to fall in the US, which produces both goods, whereas on the European side, the demand for the good using skilled labour intensively is higher, causing a *fall* in unemployment.

IV.2 Capital market integration

To this point I have concentrated largely on the labour market, but similar considerations apply to capital market integration. Here I do not consider financial markets in detail (see Steinherr, Chapter 7 in this volume), but concentrate on one aspect where the welfare state is particularly relevant: the impact of pensions. It is often argued that the pay as you go state pension schemes of continental Europe have depressed savings, and hence growth, in these countries. In this respect the European bloc cannot compete with those countries that have fully funded pensions. (It does not seem entirely appropriate to call this latter bloc the US, in view of the fact that the United States has a significant state pension scheme with only limited funding that has generated considerable concern about US savings rates.) Here we have a possible explanation of the differential impact of the welfare state today compared with a hundred years ago. Pension schemes have now reached maturity, with their long-run effects on capital formation.

How can we investigate this effect of the welfare state? Here one of the achievements of modern economics is to construct a parsimonious model that captures the essence of lifetime planning involved in pensions: the two-period life-cycle model of overlapping generations. People, identical in all respects apart from their date of birth, live for two periods working for a wage w during the first and living off their savings in the second, where these savings earn a rate of return r. Suppose that we consider simply aggregate production (a one good model, as in neoclassical growth theory) with the undifferentiated labour force growing at rate n. The capital available to the next generation is equal to the savings of the preceding generation of workers. With Cobb-Douglas preferences, savings are a fraction of w less a proportion of the state pension (see Atkinson 1999:150), where that proportion depends on *r* and *n* (it is 1/(1 + n) if r = n, but is smaller to the extent that r is greater than n). State pensions act as a disincentive to save, people taking account of the existence of the state pension when deciding how much to save. If we consider two blocs, one (Europe) with state pensions and one without, then, in the absence of capital flows, steady state capital per person is smaller in the former, leading output to be lower in Europe, and the rate of return higher (and wages lower). If capital markets become integrated (Casarico 2000, and Bräuninger 1999), in the capitalexporting bloc wages and output fall, but the rate of return rises, as does national income (including capital income from abroad). The higher rate of return means that capital flows into Europe, raising output and wages. If economic performance is judged by gross domestic product, then global integration of

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capital markets mitigates the impact of the welfare state: inflows of capital partially offset the reduced level of savings due to the state pension scheme.

So far therefore we have reached an apparently optimistic conclusion: the depressing effect of the maturing welfare state on GNP may be avoided by the capital inflows now possible in a globally integrated capital market (of course, national *income* is affected by the investment income paid abroad). The negative effects of the welfare state are not intensified by internationalization – in fact the reverse. On the other hand, the mitigating effect is reduced to the extent that capital market integration also means opening up investment opportunities in the NIC, since this offers alternative high-return outlets for capital flows from the rest of the OECD. Where rates of return in the NIC are higher than in Europe, the new equilibrium may involve no net capital inflow into Europe; indeed there may be a capital outflow.

Moreover, the conclusion reached may be sensitive to the way in which we believe that the economy operates. Suppose that we combine life-cycle savings with the labour market rigidity modelled earlier: the existence of benefits setting a floor to wages in Europe (above the level that clears the labour market). The fixed wage determines the capital-labour ratio and hence the rate of return in Europe, which is lower than in the bloc with a flexible labour market. In this case, the reduction in savings due to the state pension scheme has no effect on the rate of return but reduces employment. (And the reduction in savings will be larger, since *r* is smaller.) What happens if there is capital market integration? The differential is now in the opposite direction and the rate of return will be equalized by capital moving out of Europe, lowering employment still more. If, furthermore, we consider the impact of opening up investment opportunities in the NIC, then the capital outflow will be from Europe, since any movement of capital from the rest of the OECD will raise their domestic rate of return and attract a corresponding inflow from Europe, where the rate of return continues to be pegged. Unemployment will rise in Europe, as the capital stock is reduced. This may be seen as the counterpart of the result found for trade in goods.

Of course, the degree of capital mobility is in reality less than total, so that again the theoretical model should be taken only as an indication of a tendency, but it underlines how the interdependence between OECD countries is crucial. It is the fact that the welfare state is more extensive than that in other OECD countries that leads to the effects described. This in turn has implications for policy reform that are considered briefly in the concluding section.

V. Conclusion and implications for future policy

This chapter has been concerned with the interrelationship between globalization, the welfare state and economic performance at the two ends of the twentieth century. Its starting point was the observation that the globalization

of 1870–1914 occurred at the same time as the initiation of the modern welfare state, whereas the globalization of 1970–20?? is associated with widespread calls for the scaling back of social protection.

The interrelationship is complex, as may be seen from the fact that we are concerned with changes over time in a second derivative: the effect of internationalization on the effect of the welfare state on economic performance. It is therefore not perhaps surprising that it is hard to line up all the elements required to reach a definite conclusion. Models of trade union bargaining that predict a negative effect of the welfare state on employment via a loss of competitiveness can account for change over time if unions are now more powerful, or if benefits have become more generous, but the models do not necessarily imply that this is intensified by internationalization. Not all models of unionized economies predict a negative relationship between benefits and employment, but if there is a positive relationship it remains possible that this becomes less positive with increased internationalization. The Heckscher-Ohlin trade model yields a negative relationship between the welfare state and employment, which is intensified by the expansion of world trade, and can account for change over time if benefits have become more generous, or if there has been a shift in behaviour, people now expecting a higher wage relative to benefits before they will accept a job. Moreover, the key ingredient is not the welfare state as such, but the fact that the European welfare state is more extensive than in other OECD countries, so that the change over time can be attributed to Europe having moved out of line in the course of the twentieth century. However, this tradebased explanation only holds to the extent that Europe has not already become specialized in goods that use skilled labour intensively; where Europe is specialized, then the effect of increased trade may be beneficial for employment.

One key difference between the two ends of the century lies in the scale of spending. Social security schemes have matured, allowing their long-run effects on capital accumulation to become apparent. Economic performance today may therefore be adversely affected in a way that it was not in 1900. But we are concerned with how this is affected by internationalization, and, at first sight, capital market integration allows countries to draw on alternative supplies of capital, and offset the effect on output (if not on national income). On the other hand, when combined with labour market rigidity, the model predicts that capital flows out of Europe when capital markets are integrated, so that this blend of different elements is capable of explaining how in today's mature welfare states of Europe, with effective wage floors, internationalization may intensify the adverse effect on employment, whereas this was not the case when state pension schemes were in their infancy. At the same time, this model, like the trade model, ignores the institutional features of unemployment insurance designed to avoid the adverse effects on the labour market.

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From this examination of different explanations, we can draw a number of conclusions. The first three are methodological; the second three concern the implications for future policy. The first methodological conclusion is the importance of a historical perspective. This may seem self-evident, but debates about current policy all too often lack any sense of past history. Enthusiasm today for emulating American growth performance forgets that less than 15 years ago the United States had a major investigation into the loss of its technological leadership. In this chapter, I have taken a century-long perspective, and tried to relate today's discussion to the considerations that influenced the development of the welfare state a hundred years ago. The second methodological conclusion concerns the modelling of the economy. One cannot evaluate the impact of the welfare state on economic performance without some underlying theory as to how the economy operates. All too often the model is left implicit and fails to bring out that the conclusions can depend sensitively on the precise assumptions adopted. Here I have considered five different models: a model of trade union wage bargaining, a segmented labour market model with unions and efficiency wages, a Heckscher–Ohlin trade model, and an overlapping generations model of savings, with and without labour market rigidity. A key feature is the incorporation of the contingencies for which the welfare state exists, which requires us to allow for heterogeneity, either ex post (as where some people become unemployed) or ex ante (people born at different dates, or people with different intrinsic skills). At the same time, the models used here remain seriously inadequate, and there are many potential explanations that I have not been able to encompass. I should emphasize that I have considered movement of goods and capital, but not labour. One explanation not considered therefore is that the internationalization at the start of the twentieth century involved much greater labour mobility than today. Nor have I allowed for the differences in land endowments that are crucial in analysis of the earlier internationalization. We need at least a four-factor model. Moreover, the models examined here leave out important areas of decision making (for example regarding the acquisition of human capital); they make strong assumptions about individual motivation (the introduction of social norms by Lindbeck (1995) is a step towards a broader treatment); and they treat the production side of the economy in a simplistic manner, not distinguishing services and manufactures, and not allowing for the fragmentation of the production process (see Jones and Kierzkowski 2001, and Burda and Dluhosch 2001). The third methodological conclusion concerns the importance of institutional detail. While all modelling must abstract from the details of social security provision, which can be arcane in the extreme, we must be sure that the abstraction does not neglect important economic features. In the analysis of social security, key elements of the law and its administration are often missing from the typical economic model. In turn, the institutional structure is determined by political processes, and the exclusion of political economy considerations from our analysis is a serious limitation.

Turning to the implications for the policy debate, what can we conclude about the future of the welfare state in Europe? Is globalization rendering it unsustainable? The first conclusion is that the complexity of the relationships is such that one must be suspicious of any simple statement. We have seen that there are mechanisms by which social transfers may reduce employment, but increased trade does not necessarily intensify these. Domestic pressures, such as providing pensions for ageing societies, may challenge welfare states, but these are not necessarily aggravated by capital market integration. Nor does any intensification automatically imply the demise of the welfare state. We have to distinguish between the general and specific effects of social transfers. If the problem is the general cost of social security, then we have a choice between cuts in different policy fields. The wedge associated with the tax rate can be reduced by cutting defence expenditure. Within the social field, a reduction in tax expenditures (for example cutting tax reliefs for private pensions), allowing more revenue to be raised for a given tax rate, is just as effective in meeting the overall fiscal problem. It is only if the specific form of the expenditure affects decisions, over and above the general tax cost, that the welfare state deserves special attention.

The second policy conclusion is that a lot may depend on the small print. Focus on the specific effects of social transfers highlights the institutional structure of benefits. The extent to which unemployment benefit raises the wage bargained by trade unions depends on the contribution and other conditions. In an efficiency wage model, the specific effect depends on how tightly benefits are administered. Prior to asserting that the European welfare state cannot survive in the face of global competition, we need to ask how it can be reformed to meet changing circumstances. The welfare state can potentially adapt faster than the dinosaur.

The third implication for policy formation is that the high degree of interdependence in the world economy means that we cannot ignore the implications of policy change in Europe for the rest of the world. The US policy makers calling for greater labour market flexibility in Europe may be well aware that this can raise the rate of return to capital in the US. They may be less aware that a decline in the relative wages of the unskilled in Europe can re-export unemployment to the US and turns the terms of trade against the newly industrializing countries. World output may rise, but some of the gains to European economic performance may be achieved at the expense of poorer countries. If welfare states in Europe become more 'competitive', then this reduces the opportunities for the rest of the world.

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13 Globalization, Competitive Governments, and Constitutional Choice in Europe

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I. Introduction

The landscape of globalization presents a remarkably rugged appearance.¹ This is true if one adopts a genuinely global view. Differences in the extent of global market integration are, however, also discernible if one adopts a narrower (Western) European perspective.² The European Union was set up half a century ago with the express purpose of achieving deep economic integration. Despite the remaining differences in integration among member states, the initiative has proved to be remarkably successful.³ The European countries have attained a level of economic integration that provides substantial static gains from trade and significant dynamic gains from increased market competition.⁴

Globalization increases competition among private economic agents, but also among nation-states' governments. The most evident cause of globalizationinduced competition among governments is the increased mobility of capital, labour, households and consumers. Economic agents find themselves increasingly in a position to circumvent government controls. As a consequence, governments compete more vigorously for mobile factors and tax bases. This mechanism is still rather weak in most parts of the world, but in Europe governmental competition has, over the last decades, become a prevalent and noticeable phenomenon. Contrary to an oft-stated opinion, competition between political-economic systems did not come to an end with the demise of communist regimes in Eastern Europe. Globalization of the Western European economies in the second half of the last century paved the way for an era of unprecedented competition among European nation-states.

The political class is averse to competition among governments and is dismissive of the idea that competition can be beneficial. In this respect the political class is not different from the business class which, as Adam Smith already remarked more than 200 years ago, 'seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices'.⁵ If Adam Smith declared collusion among business people to be a conspiracy against consumers, one would expect modern-day economists, faced with the phenomenon of globalization-induced governmental competition, to stress the benefits of competition among governments. After all, does not a restriction of governmental competition by way, for example, of innocent-looking tax harmonization, also define the circumstances of a conspiracy? The conspiracy is by the political class against its principals, the voters. Interestingly, however, there are economists, perhaps a majority, who do regard governmental competition in general and international tax competition in particular as harmful. One might expect economists, because of their training in the merits and power of competition, to systematically praise the virtues of competition wherever it makes an appearance. Traditional economic policy analysts however deplore international tax competition on the grounds that it imperils the provision of public goods and government programmes aimed at income redistribution. Moreover, they disapprove of the structural effect of international tax competition, which tends to shift the burden of taxation from capital, the more mobile factor, to labour, the less mobile factor. At the core of this uneasiness with globalization is the fear that the distributional consequences of globalization-induced tax competition will snowball into an erosion of the welfare state's social safety net. Globalization is thus perceived as debilitating governments, which is the only institution able to hold together a civil society by containing market forces that are blind to higher social objectives. At stake is, according to the French futurist Jacques Attali (1997), nothing less than the future of Western civilization. A more sober but essentially similar assessment is made by the prominent German economist Hans-Werner Sinn (1997) who also comes to the conclusion that governmental competition is often detrimental to social welfare, because if 'governments have stepped in where markets have failed, it can hardly be expected that a reintroduction of a market through the backdoor of systems competition will work. It is likely to bring about the same kind of market failure that justified government intervention in the first place' (1997:248).

The traditional school of economic policy analysis predicts that globalization will give rise to predatory competition between the governments of the European nation-states. The consequence is anticipated to be a marked reduction in, if not the destruction of, the benevolent welfare state, and the creation of social

tensions that ironically could jeopardize the hitherto achieved market integration of Europe, which in turn has been the very cause of governmental competition. This line of reasoning regarding the impending doom of benevolent social institutions has been forcefully promoted by Dani Rodrik in his monograph titled *Has Globalisation Gone Too Far?*⁶ The policy recommendations that follow from this view call for a consolidation of the welfare state through the coordination and harmonization of economic policies at the supranational European level. The advocates of this harmonization believe that the globalization of the European economies needs to be accompanied by a – probably Franco-German led – drive towards European centralization.⁷

Since their power and prominence would increase if the above diagnosis was to be adopted, the main institutions of the EU – the European Commission, the European Court, and the European Parliament – would be more than happy to proceed with greater harmonization or even centralization in response to the increase in government competition due to globalization. Some observers suspect that the willingness of these institutions to take on responsibilities is not driven by default but by design. The German Euro-sceptic Roland Vaubel (1994) has observed that the Commission and the Court pursued market integration with zeal and sometimes ostensibly against the will of the member states. Just as important in the establishment of the common market as the direct personal benefits was, according to Vaubel, the anticipated increase in regulatory power when member states, in an attempt to protect themselves from the greater external political competition, demanded extensive harmonization or centralization of economic policy.

Different reasons can be suggested for the so often heard demand for harmonized or centralized European economic policies. In the final analysis, the assessment of the competitive pressure imposed on the European governments by continuing economic integration depends to a large degree on the observer's view of political life. If one views governments not as healers of all sorts of market failures but as a source of political failures, one is led to the conclusion that the increase in government competition in Europe should not be jeopardized by endorsing schemes that would create cartels or monopolize decision making about economic policies. The devolution of political power that accompanies European economic integration is rather welcomed. This is, of course, the view taken by the political economy school of thought that endorses the public choice approach to government, where government is viewed as composed of people with personal interests and objectives. The traditional school of policy analysis adopts a more static view of governmental competition, emphasizing potential short-run efficiency losses related to international tax evasion. Political economy analysis stresses the dynamic aspects, in particular the intermediate-run efficiency gains from the incentive effects of competition and the long-run gains from the discovery of more efficient policies in a political environment characterized by diversity and lively interaction.

One incentive for governments to compete among themselves was suggested by various extensions of the seminal model developed by Charles Tiebout (1956) regarding the mobility of citizens in federal systems. The incentive effect, however, goes beyond the mobility that is the source of horizontal competition in the Tiebout model. The incentive effect of government competition is also present without voter mobility when voters can observe government performance across jurisdictions and can sanction politicians whose performance is inferior to that of others. The French economist Pierre Salmon (1987) was the first to point out that such comparisons of political performance are perfectly analogous to the incentive mechanisms (called a yardstick competition scheme) developed in labour economics, which judges job performance by setting up a contest between employees with comparable job assignments.

Though the Tiebout mechanism applies only to competition among governments inhabiting a given jurisdictional tier, the Salmon mechanism can, in principle, be extended to explain competition among governments located at different levels of jurisdiction.

Globalization puts significant constraints on the political leverage of European nation-states. Whether these constraints justify the frequently heard calls for policy harmonization and centralization at the European level is, however, an open question. Rather uncontroversial, on the other hand, is the proposal that any allocation of policy responsibilities should be based on a wide democratic consensus among European citizens.⁸ The very success of European economic integration thus calls for a fundamental rethinking of the future political order in Europe.⁹

The objective of this contribution is to present the main arguments that have led us to believe that a European constitution should not restrict but rather should encourage horizontal and vertical governmental competition. In our view the European political order, in defining the relationship among member states and also the relationship between the member states and the EU, ought to be inspired by what we know about competition in the commercial sphere. The above cited policy implication that Adam Smith drew from his observation of business meetings is a precursor of modern competition or antitrust laws: 'It is impossible indeed to prevent such meetings, by any law which either could be executed, or would be consistent with liberty and justice. But though the law cannot hinder people of the same trade from sometimes assembling together, it ought to do nothing to facilitate such assemblies; much less to render them necessary.' We will argue that a European constitution confined to simply emulating and adapting for the political sphere the existing competition or antitrust laws represents a viable and welfare-promoting political order for twenty-first-century Europe.¹⁰

In Section III we elaborate on the case for political competition in government systems. Before doing this, we spell out in Section II how globalization allows governments leeway to implement independent policies, which is after all a prerequisite of competition. Section IV then analyses the channels through which globalization influences government competition. The concluding Section V presents some suggestions for European constitutional reform in the age of globalization.

II. Globalization and the European nation-states

In recent decades, few economic issues have been debated as much as globalization. These debates have spawned immense popular and scientific literatures, and the sensationalist and alarmist tone that characterizes a large part of these debates has not always been restricted to the commentaries written for more popular audiences (cf. Cohen 1996:296). In this section we would like to shed some light on one allegation, to wit that economic globalization debilitates the nation-state to the extent that it becomes ineffective in responding to domestic political demands.¹¹ Our case for extensive governmental competition in an economically integrated Europe suggests that our conclusion will be different.¹²

To begin with, there is no doubt that globalization does have distinct effects on the structure of public finance through both the expenditure and revenue sides of the budget. This is so because actual and potential international mobility places additional constraints on national governments. The constraints on taxation are the most obvious. Multinational enterprises can, for example, move their activities to a foreign subsidiary, or they can manipulate transfer prices to redirect some of their domestically earned profits in low-tax countries. Financial capital can escape taxation by moving abroad, and real capital can in the long run escape the domestic exchequer via direct foreign investment. Consumers may take advantage of differences in excise or value-added taxes by cross-border shopping and nationals can relocate to a foreign country where income taxes are lower. The European nation-states thus begin to lose their monopoly on coercion and find themselves in a situation of strategic interaction with their neighbours.

The intensity of governmental competition depends on a factor's degree of international mobility. Labour is typically less mobile than capital. Financial capital is extremely sensitive to tax-induced differences in net rates of return. Commodity arbitrage, including smuggling, is mostly observed for expensive and highly taxed goods such as cigarettes and alcohol. Mobility also has spatial as well as linguistic and cultural dimensions: the Austrian and German labour markets are more integrated than the labour markets of Italy and the UK simply because Austria and Germany have a common border and language. Likewise, cross-border shopping is much less of a problem for the British than for the

Dutch government. As we noted at the outset, globalization is not a uniform phenomenon. The degree of market integration depends on the type of transaction and on location. This is the reason why globalization-induced government competition has such a strong influence not only on the *level* but also on the *structure* of fiscal activities.

Let us first discuss the effect of globalization on the *size* of the government budget. International trade and capital market integration as well as international mobility of consumers and income-tax payers reduce the ability of governments to finance publicly provided goods. This is so especially if the governments' redistribution objectives are not in line with those of the population at large, if the tax monopoly is abused to exploit citizens, or if there are incentives leading to slack administration and production. Competition reinforced by globalization disciplines governments and makes them more efficient.

Some scholars use the term *efficiency effect* to describe the reduction in public services due to international tax competition.¹³ Tax competition, however, influences only one side of the market for government services, namely the supply side. To obtain a complete picture of the influence of globalization on the size of governments, we also need to look at the demand side. The presumption must be that the demand for public spending, especially for income transfer programmes, varies positively with the extent of globalization, since insurance against personal losses from market dislocations and policies to counteract income inequalities due to global economic integration become a political objective shared by more voters and interest groups. The demand-side effect of globalization thus increases public spending in order to compensate the losers from globalization – hence the term *compensation effect*.¹⁴

The alarmist scenario of a globalization-induced governmental quandary is predicated on a one-sided examination that focuses exclusively on the efficiency effect, an efficiency effect which is moreover assumed to affect all international transactions with full force. The size of the government sector is, however, also influenced by the compensation effect: a higher demand for public insurance against unforeseen structural effects and increased international risk counters the higher costs of financing these services. Whether the supply or the demand effect dominates cannot be determined theoretically, it is an empirical issue.

We now turn to the structural effects of globalization on government budgets. From the *efficiency hypothesis*, we expect that governmental competition will benefit mobile factors of production, taxpayers and consumers consequent on changes in tax policies. Immobile factors, for example, are likely to be more heavily taxed than mobile factors. We should in particular expect a higher tax burden for labour and reductions in tax rates for corporate enterprises and highincome earners. Tax policies are, however, not the only instrument available to governments to attract (say) factors of production. In a global environment,

governments compete by means of tax *and* expenditure policies. Public infrastructure may, for example, be decisive for the profitability of an investment project. An exclusive focus on taxes is therefore misleading. We rather expect competing governments to restructure their expenditures to increase the productivity of mobile factors at the expense of public consumption and social transfers.

The structural effects from the *compensation hypothesis* go in the opposite direction. It leads us to expect governments to redirect their expenditures towards public services that benefit victims of globalization. If the economic risk increases as globalization deepens, social transfers should increase as well. In the light of the compensation hypothesis, taxes can be interpreted as insurance premia and social policies as insurance benefits. This kind of redistribution can be justified by welfare-theoretic arguments but can also be explained by political-economic reasoning. For example, the theory of economic regulation pioneered by the Chicago school makes the point that windfall profits that accrue to a specific group from an exogenous shock, as a rule, are redistributed to some extent even by selfish politicians to those who lose from the shock. The reason for such political behaviour is that marginal political support decreases with increasing income, whereas marginal political opposition increases with decreasing income. The principle of political redistribution expressed as 'share the gain and share the pain' also underlies the compensation hypothesis.

Theoretical arguments as to whether globalization undermines the welfare state are ambiguous and inconclusive. We therefore consider the empirical evidence. Econometric studies that systematically link (capital) taxation and government expenditures to various measures of goods and capital market integration are the most relevant.¹⁵ Most of these studies use data from the OECD countries and are thus readily applicable to the European context.

The studies investigating the relationship between globalization and capital taxation suffer from various methodological weaknesses. For example, some studies use tax revenue instead of the effective tax rate as the dependent variable. Others use trade integration instead of capital market integration as the crucial explanatory variable. Studies that use an indicator of capital market integration usually resort to rather uninformative dummy variables. These weaknesses notwithstanding, the studies allow us to tentatively conclude that globalization did not dramatically reduce capital tax rates. Corporate tax rates remained at a remarkably high level considering the predictions usually associated with locational mobility. On the other hand, a marked increase took place in labour taxes, which points to a structural effect of globalization. The standard tax competition model, which predicts a level effect, apparently does not capture what is going on, whereas the observed structural effect is more in line with the theoretical predictions. In any case, we interpret these results as indicating that the efficiency effect may well constrain government behaviour to some

extent in the future, but will not undermine the effectiveness of the basic government activities.

This interpretation is confirmed by regression results on government expenditures. Most studies fail to find a negative relationship between the extent of goods and capital market integration and either the size of government measured as total government expenditures or the social budget. Many of the results are in line with the compensation hypothesis. The idea that globalization pre-empts ideologically motivated social policies is also not supported by the data. The results indicate instead that partisan characteristics still play an important role in fiscal policy, and, most importantly for our concern, so do also the democratic institutions that govern the interaction between government and economic interests. Regressions presented by Vaubel (2000), for example, show that federal institutions have a significantly negative impact on government spending and also on social transfers if the extent of global market integration is properly taken into account.

Vaubel's results indicate that political institutions continue to matter in a globalized world. Globalization therefore leaves nation-states with a substantial margin for experimentation and meaningful competition. The focus of Vaubel's study on federal institutions moreover points to an alternative way of examining the popular hypothesis that deep market integration undermines policy independence in integrated jurisdictions. After all, a rather similar hypothesis has been extensively investigated in the context of federal states since Wallace Oates published his seminal book on fiscal federalism in 1972 and since Geoffrey Brennan and James Buchanan advocated fiscal competition as a device to discipline Leviathan in their 1980 monograph on the power to tax.

The substantial literature on fiscal federalism and the size of the public sector is surveyed by Gebhard Kirchgässner (2002) who comes to the conclusion that 'taking all currently available empirical evidence together ... we might conclude that there is some evidence that fiscal federalism leads - ceteris paribus - to a smaller size of the government, but the evidence is far from being overwhelming'. This assessment is corroborated by the empirical evidence on income redistribution in Switzerland presented by Lars Feld (2000). Switzerland makes for an especially interesting country study because the Swiss federal system allocates the fundamental responsibility for personal income and corporate taxation to the lower-tiered governments, the cantons; moreover, observed taxation levels show a substantial variation across cantons and even communities. It is, therefore, not surprising that in Switzerland fiscally induced mobility applies mainly to high-income earners, whereas in the United States it applies mainly to potential welfare recipients. Even though government competition in Switzerland is especially intense with respect to income taxation, the share of income redistribution undertaken by the sub-national governments increased between 1977 and 1992. Moreover, the redistribution objective was

achieved by an increased use of taxation relative to expenditures. This is strong evidence that income redistribution is feasible in decentralized systems, even if the competing governments are deeply integrated in a common market. One might add, following Feld's assessment, that the Swiss example also indicates that a redistribution policy needs to be based on a broad popular consent – in the Swiss case achieved by a direct democratic political process – to be viable if interjurisdictional mobility is high. This is an insight which we believe has strong implications for European constitutional design.

We thus arrive at the conclusion that competition among governments is quite compatible with market integration. We acknowledge that our view is mainly based on the fiscal competition literature. We have focused on fiscal policy, first, because the ability of governments to conduct income redistribution is absolutely crucial when discussing the viability of decentralized policy making in the age of globalization. The second reason is simply that much more is known about fiscal competition that about government competition through (say) regulatory policies.

We might add, however, that the empirical evidence does in particular not support the popular doomsday view of globalization regarding environmental regulation. The fear that increasing capital mobility will give rise to a downward competition of environmental standards in order to attract productive capital has been the foundation for the so-called ecological dumping debate. The empirical evidence shows that differences in environmental standards have neither a significant impact on the pattern of trade nor on the flow of foreign direct investment. The data do reveal however that trade policy exerts a significant influence on environmental quality: (developing) economies that are more integrated in the world markets suffer – ceteris paribus – less from pollution than more closed economies.¹⁶

Having cleared the way for our recommendation of a federal Europe composed of competing governments, we are now ready to describe the mechanism of the envisaged political order.

III. On political competition in governmental systems

There are two glaring inconsistencies in the conventional microeconomic modelling of economic behaviour – inconsistencies to which many noneconomists and, ironically, many intellectuals, adhere. First, as producers, labourers, investors, consumers, and in many of the other roles they play, individuals are viewed as pursuing, in the most efficient way possible, ends which increase their profits, incomes, wealth and utility. They are presumed, in other words, to be motivated to seek their own interests and, in addition, to do so with a minimum of resources. Then, without skipping a beat, as politicians and public sector bureaucrats, individuals are presumed to be consumed by a desire to maximize the common good or some index of social welfare. They are viewed, to put it differently, as selfless persons while also driven to be efficient in the use of resources.

The first inconsistency is related to the assumptions of selfishness and selflessness. It becomes immediately apparent as soon as we take note of the fact that many politicians and public sector bureaucrats have been, in their past, private producers, market labourers, and/or investors, and in the present all are consumers. The implied schizophrenia, dependent exclusively on the imputation of roles, is unacceptable. It is imperative that all actors, in whatever role they are cast, be viewed as either selfish or selfless. Though there are altruistic and public-spirited individuals in the world, in constructing models that can help understand behaviour, in formulating rules to guide action, and in designing policies, there can be little doubt that the assumption that individuals are principally motivated by their own interests is the most productive.

The first inconsistency is father (or mother) to the second. We have known since Adam Smith's *Wealth of Nations* (1776) – with elaborations and refinements added on as economics became more systematic – that if self-seeking behaviour is kept in check – in effect, regulated or controlled – by competition, it can yield beneficial results.¹⁷ This is the famous invisible hand theorem. It has corollaries. One of them is that if individuals and organizations pursue their interests – while abiding by rules that are virtually all related to property and contract law – that pursuit begets competition.

In the analysis of public sector behaviour – in Public Economics (formerly Public Finance), Welfare Economics, and even in Public Choice Theory – governments are (almost always tacitly) assumed to be monopolists.¹⁸ If we suppose, as we must, that those who inhabit the supply side of the public sector are persons and organizations like those we find in the marketplace and elsewhere in society – that is, persons and organizations that seek their own interest – it would appear that we are left with a situation in which no constraint exists to regulate behaviour. But we are not. The corollary of Smith's invisible hand theorem must be assumed to kick in.

There are in real world democracies some instances in which politicians and bureaucrats are more or less unconstrained or seem to be, but those instances are fewer than appears to the untrained eye – to the eye that has not learnt to detect the manifestations of competitive behaviour. In most situations, the actors on the supply side are constrained. In some cases, the constraints may be only weakly binding, but it is seldom the case that public sector actors are free to do what they want. The constraints are of two sorts: (a) electoral contests at more or less regular time intervals; and (b) checks and balances. These two features – both necessary for the existence of a democratic order – promote and encourage competition.

Though there is still considerable confusion, even at the highest levels of debate, about electoral rules and especially about how the products of these rules are influenced by the political institutions in which they are incorporated and, in turn, help mould these institutions, there is general familiarity with elections and the sort of competition they beget. The same cannot be said about checks and balances. To get a handle on the realities which these concepts capture, it is essential to accept two propositions. First, that checks and balances are not a characteristic of the American system of government and of that system alone – they are a feature of all governmental systems. Second, that governments are not monolithic bodies, but instead are compound structures made up of a large number of autonomous and quasi-autonomous elected and non-elected centres of power. Of special interest for the present discussion are the centres of power which come to mind when we think of decentralized (and federalized) governmental systems - the central governmental institutions, the member states (countries, provinces, states, cantons, republics, and so on), and the even more remote peripheral bodies.

There is no better way of understanding what is meant by checks and balances than to refer to Epaminondas Panagopoulos's (1985) superb summary of the evolution, over the last two millennia, of the discussions that eventually clarified these difficult concepts. Three interconnected ideas, central to the history of this evolution, are particularly important for the present discussion. All three relate to the relationship between checks on the one hand and balances on the other (for a detailed discussion of the matter, see Breton 1996, Chapter 3).

The first is the notion that to have the capacity to check it is necessary that the centres of power that constitute compound governments be balanced or 'equipoised' vis-à-vis each other; hence the concentration of the literature on the separation and distribution of powers and responsibilities and on the division and dispersion of political power among the centres that make up compound governments. Over the years, the institutions that provided the background to the reflections first of the Greeks, then of the Romans, followed by the Venetians, the Florentines, the British, the French and the Americans, kept changing, but the preoccupation, throughout, remained focused on the necessity of guaranteeing balance between ever new constellations of centres of power, on the means of achieving that balance, and on the consequences of moving away from it. The position we take in this chapter is that one should identify the notion of balance with that of autonomy or quasi-autonomy which derives from a properly understood idea of the separation of powers.

The second idea – in fact, an implicit assumption – that is central to the history of the debates on checks and balances is that if centres of power are balanced, they will necessarily check each other. The burden of this assumption is that if the *institutions* are balanced or equipoised, the *behaviour* adopted by participants in the political process will, of necessity, be characterized by the use of checks.

Checking behaviour, in other words, derives from balance. The assumption found its way naturally and unobtrusively in the discussions no doubt because the analysts were primarily concerned with the problem of balance – that is, with the problem of institutional design – and also, one surmises, because they were observing that equipoised and hence autonomous and quasi-autonomous centres of power in fact checked each other. It is, however, an unfortunate assumption for at least two reasons. First, it easily leads one to the view that the capacity to check derives from institutional arrangements and from legal and constitutional dispositions alone and not also from the productivity of the resources allocated to the use of checking instruments and from the responses of citizens to the use of these instruments. Second, it induces one to disregard the possibility of collusion between sub-sets of centres once a separation of powers, and hence balance, is achieved – collusion which is often disguised as harmonization.

The third idea which drove many of the protagonists engaged in the millennial debates on checks and balances follows from the first two. It is that balancing is a 'substitute' of sorts for checking and that, as a consequence, one need be concerned with only one of the two, especially if one's primary preoccupation is the design of a 'good' compound government. This, too, helps us understand why the literature is largely focused on balances. It will transpire, as we proceed, that checks and balances are related, but it should also become clear that the relationship between the two realities is a complicated one. It might be better to sometimes use the words checks and balances and at other times the words checks and counter-checks to describe that particular dimension of political competition.

For many persons the concept of political competition is unacceptable. The realities that it evokes are, to them, unsavory. In addition, in the minds of many laypersons, competition is incompatible with, and even antithetical to cooperation, that is to the execution of actions leading to coordination. With this as background, the idea that governmental centres of power compete among themselves is often thought to be impertinent and cynical. It will be useful therefore to examine briefly the types of behaviour which are generally associated with checking and counter-checking.

We have already noted that economic models of perfect and imperfect competition have for many years been applied to politics. We mention two applications. In the perfect competition tradition, Charles Tiebout (1956) assumes the existence of numerous local governments supplying goods and services for which a demand exists, which are compelled by the competition of other local governments to supply these goods and services efficiently at tax prices equal to their marginal costs. Competition in this context is between local governments (the counterpart of firms) for the patronage of mobile citizens (the analogue of consuming households). Competition insures that both local

governments and citizens behave, at least if the costs of mobility are low, as price-takers. In the imperfect competition tradition, Anthony Downs (1957) models the rivalry of political parties along the lines of the locational or spatial competition theory suggested by Harold Hotelling (1929).

To gain further insights into the kinds of behaviour associated with competition and competitiveness, it is helpful to complement the models of perfect and imperfect competition just noted with the model of competition proposed by Joseph Schumpeter (1911, 1942) and other Austrian economists, which we may call the model of entrepreneurial competition. To model Schumpeterian entrepreneurial competition, one must distinguish between two central components. There is first a steady-state 'circular flow' equilibrium in which the marginal equalities on the supply side (see Samuelson 1982:10–11), those on the demand side, and the equality of supply and demand over all markets are satisfied. The steady-state circular flow can be characterized as 'a stationary solution to a dynamical process' (Samuelson 1943:61) in which 'the same things' keep repeating themselves. The circular flow equilibrium, therefore, is a long-run neoclassical equilibrium and the competitive behaviour which obtains in that equilibrium is that of neoclassical theory.

The second component is associated with innovation and entrepreneurship on the one hand and with imitation on the other. Schumpeter, in his later work, identified innovative behaviour with 'Creative Destruction' (capitals in the original) which, through 'the introduction of a new good', 'the introduction of a new method of production', 'the opening of a new market', 'the conquest of a new source of supply', and 'the carrying out of the new organization of any industry' (Schumpeter 1911:66), brings forth new 'things' and eliminates others. Creative destruction derives from and indeed defines entrepreneurship. Innovation, when it is successful and therefore profitable, induces others, covetous of the innovational rents, to imitate the actions of entrepreneurs either by simple duplication or by producing substitutes. In the process, the imitators increase the demand for labour, capital and other factors of production, thus pushing up their prices and the entire schedule of average costs. By increasing the supply of goods and services, they push down their prices. The increase in unit costs and the fall in supply prices eventually eliminate the rents of entrepreneurship and bring forth the circular flow equilibrium of neoclassical theory.

We must now recognize that the entrepreneurial innovation which sets the competitive process in motion, the imitation which follows, and the Creative Destruction that they generate are not inconsistent with cooperative behaviour and the coordination of activities. It would be a mistake, however, to focus on these acts of cooperation and coordination and conceive of Creative Destruction as the outcome of a cooperative process. In looking for new technologies, supply sources, organizational forms, products, methods of finance, labour-management relations and other new ways of solving supply problems, entrepreneurs will

consult with other people, collaborate with them on certain projects, harmonize various activities and even integrate some operations. All these actions describe what is generally meant by cooperation and coordination. If these activities serve to bring forth new innovations, they serve to foster competition. Indeed, to the extent that cooperation and coordination make it possible for innovations to come on stream more rapidly than they would otherwise, they become a force in the process of Creative Destruction. As a general rule, we can say that in the absence of collusion, cooperation and competition can and will generally coexist and also that the existence of one is not proof of the absence of the other. In particular, we can say that the observation of cooperation and coordination does not deny that the underlying determining force is competition.

The stationary element (the neoclassical circular flow) and the dynamical process (the innovational-imitational mechanics) both apply to political life as much as they do to economic life. Indeed, there are politicians and other public sector actors who, like some of their counterparts in the business world, are entrepreneurs and who therefore innovate by creating new goods and services, by introducing new techniques of production, exploring for new sources of supply, devising new methods of financing their operations, designing and instating new organizational forms, inaugurating new promotion methods, discovering new ways of obtaining information about the preferences of their constituents as well as by originating new ways of achieving a better match between the volume and the quality of goods and services provided and the volume and quality desired by citizens.

These political entrepreneurs often achieve their ends by forming a new consensus, by introducing symbols capable of producing solidarity, by galvanizing popular energies in the face of an emergency and, last but not least, by creating, adapting and cultivating 'ideologies' which, following Downs (1957:96), we can define as 'verbal image[s] of the good society and of the chief means of constructing such a society' or, following Joseph Kalt and Mark Zupan (1984:281) as the 'more or less consistent sets of normative statements as to best or preferred states of the world'.

How does entrepreneurial competition relate to checking behaviour? Checking is used by centres of power to extract concessions from other centres and to force them to compromise on initial positions. To put it differently, a centre of power undertakes to check another centre in order to oblige the latter to compromise. The often repeated dictum that 'politics is the art of compromise' is a backhanded endorsement of the view that politics is competitive and that a primary means of competition is the use of checks, since no one would compromise unless forced to do so. Concessions and compromises, we insist, cannot be conceived as pertaining *exclusively* to the negative actions of giving up on, backing down from, or renouncing an initial position; they must also and, we suggest, principally be thought of as belonging to the class of positive

activities associated with innovative Schumpeterian entrepreneurship. In other words, for a politician to compromise is to come up with something else, with an alternative that meets the objection of the centre of power that made use of the check, while also meeting the preferences of one's own constituency.

If the foregoing is applied to intergovernmental relations in decentralized governmental systems, it is important to begin by distinguishing between horizontal and vertical competition. In standard theory the distinction is not made, except in a most off-handed way. It restricts its attention to the first and assumes that the motor behind this horizontal intergovernmental competition is the interjurisdictional mobility of persons and capital searching for the best and lowest cost bundle of goods and services. The assumption has its roots in the early work of Tiebout (1956). Whether interjurisdictional mobility is strong enough a force to motivate intergovernmental competition is not known, however. If, as is generally believed by American scholars, it is powerful enough to do so in the United States, we agree with Dieter Bös (1983) that it does not have that power in the other decentralized governmental systems found in the rest of the world. However, were the mobility mechanism powerful enough to motivate horizontal competition, comprehensive competition would still be absent, because mobility has nothing to do with the problem of the assignment of powers to different jurisdictional tiers.¹⁹ To deal with this problem we need to refer to vertical competition and to the fact that even if individuals are able to move from jurisdiction to jurisdiction they cannot move from one jurisdictional tier to another. In decentralized systems, one is a citizen of *all* the tiers that are constitutive of the governmental system. Therefore, if competition exists between tiers, it cannot be the result of mobility.

As noted in Section I, a decade and a half ago, Pierre Salmon (1987) applied the theory of labour tournaments initially proposed by Edward Lazear and Sherwin Rosen (1981) to horizontal intergovernmental competition arguing, in effect, that if the citizens of a jurisdiction evaluate the performance of their government by comparing it to the performance of governments elsewhere but at the same jurisdictional tier, they would induce their own government to do as well or better than these governments and in the process would prompt their governing politicians to compete with opposition politicians. One virtue of the Salmon mechanism, in addition to the fact that it is a complement to the Tiebout mechanism whenever that last mechanism is operative, is that it will also motivate vertical competition whenever citizens use the performance of governments located at other jurisdictional tiers as benchmarks to evaluate what their own government is doing.

The initial formulation of the Salmon mechanism and, to our knowledge, all subsequent formulations, assumed that citizens compared the performance of their own government to that of a benchmark government in terms of the 'levels and qualities of services, of levels of taxes or of more general economic and social indicators' (Salmon 1987:32). However, as argued by Breton (1996), competition in governmental systems compels all centres of power to forge Wicksellian connections (defined in the next two paragraphs) that are as tight as possible so as to be granted the consent (vote) of citizens.²⁰ In the light of this result, we suggest that citizens evaluate the relative performance of governments in terms of the tightness of Wicksellian connections – both for horizontal and vertical competition.

What are Wicksellian connections and why is it an improvement to articulate the Salmon mechanism on them rather than on the vector of goods, services, taxes, and other indicators on which the mechanism has hitherto been articulated? A Wicksellian connection is a link between the quantity of a particular good or service supplied by centres of power and the taxprice that citizens pay for that good or service. Knut Wicksell (1896) and Erik Lindahl (1919) showed that if decisions regarding public expenditures and their financing were taken simultaneously and under a rule of (quasi) unanimity, a perfectly tight nexus between the two variables would emerge. Breton (1996, passim) argued that competition between centres of power, if it was perfect and not distorted by informational problems, would also generate completely tight Wicksellian connections. In the real world, competition is, of course, never perfect and informational problems abound, and as a consequence Wicksellian connections are less than perfectly tight. Still, as long as some competition exists, there will be Wicksellian connections.

The virtue of a Salmon mechanism expressed in terms of Wicksellian connections is that a given citizen can carry out comparisons of performance in terms of a common standardized variable, whether the benchmark government inhabits the same or a different jurisdictional level from that in which the citizen dwells. A variable that serves that purpose well is the size of the utility losses inflicted on citizens whenever the volume of goods and services provided by centres of power differs from the volume desired at given taxprices. Put differently, citizens experience the same kind of utility losses from decisions made by governments whatever the jurisdictional tier the governments inhabit. The goods and services supplied can differ, but the efforts to achieve tightness in Wicksellian connections will not.²¹ Indeed, the ability to compare performance horizontally is likely to reinforce the ability to execute vertical comparisons and *vice versa*.

How does vertical competition manifest itself? When powers are assigned to different levels of government, the assignment is never precise or explicit enough to cover all possible contingencies. Adapting the theory of contracts, which says that a contract is incomplete whenever its meaning, though obvious to the signatories of the document, is ambiguous to third parties, we could say that assignments are always incomplete in the sense that even if their meaning was absolutely transparent to those who drafted and endorsed the initial

constitutional document, that meaning can no longer be clear to successor generations that are the *de facto* third parties of contract theory. Constitutions or other documents that spell out the assignment of powers are therefore, of necessity, also imprecise. As a consequence, it is always possible for governments at one jurisdictional tier to invade²² – to make inroads, incursions, or forays into – the policy domain of governments located at a different tier. The invasions need not actually take place – it is sufficient that they be possible. It is easy to provide evidence confirming that governments, more or less continuously, invade the policy domains of governments inhabiting other tiers. In Canada and the United States, external affairs is a federal (or national) power, though many provinces and states have representation abroad. Education, in most federal states, is an exclusive provincial or state responsibility, though in most if not all instances, central governments play a role. Cases of constitutional invasions in Italy are described in Breton and Fraschini (forthcoming).

IV. Globalization and governmental competition in Europe

Globalization is driven by two different influences: purposeful political action and technological innovation. These two influences, in turn, shape five channels through which globalization impacts on governmental competition. In this section, we describe these five channels.

A first channel acts as conduit for the Tiebout mechanism, and involves the consequences for government competition and the survival of the European welfare states as EU citizens become increasingly mobile. In the absence of the opportunity to relocate, politically weak groups of citizens find it impossible to escape involuntary redistribution. They can reduce their exposure to an offensive tax, but the ability to substitute away from a taxable activity is often limited. In a globalized environment exploited minorities have the means of 'voting with their feet' to move to a jurisdiction in which the Wicksellian connections are more to their liking. In the limit, with perfect mobility, perfect information, perfect divisibility, and with scale economies appropriately utilized, votermobility results in a first best solution; mobility 'acts like a silent unanimity rule and produces the same outcome as we would expect under this voting rule in an immobile world' (Dennis Mueller 1998:177). This implies that redistribution programmes that are not supported by voters at large will tend to disappear as voter mobility increases, whereas generally accepted redistribution programmes will survive. Notice, that redistribution programmes that are sustainable in a globalized environment do not need universal acceptance but rather general acceptance by the voters in the jurisdiction in which the redistribution takes place. Globalization may thus well reduce the size of the welfare state, but only by eliminating programmes which lack popular support.

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A second channel, which accommodates globalization-induced mobility of goods, factor inputs, and consumers, is associated with international tax evasion. A precondition for the mobility of tax bases is, of course, extensive liberalization of international market access. International transactions, however, will only take place in a liberalized environment if incentives exist to undertake crossborder transactions. Capital, for example, will only flow readily across borders if technologies to administer and monitor the foreign investments are available.²³ The breaking-up of production chains within multinational enterprises,²⁴ the just-in-time import of inputs, the global diversification of R&D locations,²⁵ and the efficient management of international portfolios are a viable alternative to domestic transactions only if the additional costs of international transactions do not exceed the cost reduction offered by the access available to foreign markets. Only if the political will to liberalize international markets is accompanied by a general availability of advanced information and communication technologies can we expect market integration to generate effective competition among governments. These conditions appear to be increasingly satisfied in Europe at the onset of the twenty-first century.²⁶

Most theoretical studies that look unfavourably on international tax competition assume that governments, in financing public goods, are restricted to using taxes that can be evaded through international transactions. If this assumption is coupled with the classical benevolent-dictator portrait of government, one necessarily arrives at the result of an under-provision of public services due to free-riding behaviour on the part of some tax-payers through capital tax evasion, cross-border shopping, and so on. The benevolent-dictator presumption of the standard approach to modelling international tax competition leads to the conclusion that governmental competition cannot provide efficiency gains and imposition of artificial restrictions on one (internationally mobile) tax base neglects the possibility of shifting the tax burden to a base that is less exposed to free-riding. In a model that allows for competitioninduced efficiency gains and for tax schemes that specifically charge the beneficiaries of publicly provided services, international tax competition clearly increases the efficiency of the public sector and reduces the welfare state to programmes that find the approval of the citizens at large.

We are led to agree with Dennis Mueller (1998:182) regarding the advocates of the traditional normative theory of economic policy analysis who pose as impartial observers who 'know what the proper level of taxation for the country should be and how this money should be spent, and fear that any loss in tax revenue will harm these programs. Such fears are unfounded, if governments provide the goods and services their citizens want, and use benefit taxes to finance them.'

A third channel through which globalization affects international government competition is through the Salmon mechanism. To understand how

governmental accountability depends on the degree of global economic integration, consider the member states of the European Union whose governments provide a given set of goods financed with some tax scheme, and assume that the transformation of tax revenues into public services is subject to a country-specific shock that is not observed by the voters. If the shocks are completely uncorrelated across countries, the voters can base their evaluation of domestic government performance only on the observed performance in terms of the Wicksellian connection between taxes paid and services received. Under these circumstances, politicians face a rather weak re-election constraint. The political agency problem strongly favours the agents, namely the political class, who must be presumed to use their political leeway to pay off pressure groups who provide them with political support, indulge in their ideological proclivities, enjoy the easy life of an unconstrained agent, or simply plod along.

The scenario changes dramatically if economic integration gives rise to a positive correlation among shocks across European countries. After all, the common European market is characterized not only by the feature of common access but also by the fact that the individual economies become increasingly indistinguishable and begin to share a common European quality. This is so because trade and capital market integration have, over time, blurred the internal structural differences between the economies that used to have distinct national characteristics,²⁷ and the European Monetary Union has taken care of the country-specific *external* shocks in the form of different exchange rate exposures. European economic integration is thus accompanied by more homogeneous exogenous shocks for national political-economic systems. In the limit with individual shocks perfectly correlated, this homogeneity in shocks would result in optimal Wicksellian connections in all countries, because the Salmon mechanism among the national governments would provide each government with an incentive to do better than their peers. We would end up with a firstbest equilibrium in the tradition of Bertrand. To be sure, the country-specific shocks will never be perfectly correlated, but some correlation will help voters gather information on the relative performance of their government so that they can respond to bad local political performance on election day.²⁸

The same reasoning applies to *vertical competition* which emerges if the nationstate governments and the supranational (European) government provide public services that share common features in production. If one attempts to integrate the Government of Europe into the framework of governmental competition, it is of great importance that the policy responsibilities of that European government not be isolated from the policy responsibilities of member-state governments by way of assigning to the European government responsibilities that member states can no longer access. A wrongly understood and incompetently implemented subsidiarity principle is liable to throttle vertical government competition that represents an indispensable mechanism for enhancing incentive compatibility at the European level.

Empirical evidence relating to the impact of the Salmon mechanism is available for some federal countries. In federal systems the performance of the junior governments is sufficiently comparable so that the voters can alleviate the agency problem by making meaningful comparisons between jurisdictions. In their classical article Timothy Besley and Anne Case (1995) analyse US state data and find that vote-seeking and tax-setting are indeed tied together through the nexus of what they call political yardstick competition. Similar results have also been derived for several European countries.²⁹

Of course, the Salmon mechanism can only work properly if the governments do not collude. This caveat also applies to mobility-induced governmental competition described above, but the conditions for a successful government cartel are especially favourable in the case of yardstick competition because the increase in political support deriving from aggressive yardstick competition wears off relatively fast compared to the more lasting gains derived from the attraction of valuable factors of production. In any case, the possibility of collusion among governments needs to be taken into account whenever the political order in a globalized world is discussed. Moreover, there cannot be any doubt that governmental competition needs to rely even more heavily on political institutions set up to supervise and enforce political competition when competition is vertical. A European constitutional assembly thus needs to address the issue of encouraging political competition not only among member states but also among governments of the member states and the EU government.

Closely related to vertical competition within the hierarchical levels of compound governments is the fourth channel linking globalization to government competition. Hierarchical governmental structures exhibit incentive effects similar to hierarchies in private enterprises where promotion to a senior position is coupled to an above-average job performance at the junior level. This kind of promotion mechanism is also at work in federal states if the top political assignments at the federal level go to contenders who have documented outstanding performance in junior governments. This appears to be the case in many federal states. Contenders for the United States presidency, for example, have often a track record as state governors, viable candidates for the position of the Federal Chancellor in Germany depend on a strong performance as Prime Minister of one of the 'Länder', and many Swiss Federal Counsellors have successfully served in a cantonal government. With increasing political integration, a position in the European government will become the prize of a successful political career and will be more and more valued. The German slander for a politician who has outlasted his days 'Hast du einen Opa, schick ihn nach Europa' (If you have a grandpa, send him to Europe) is already now a thing of the past. The high valuation of EU-level government assignments, coupled with

increasing globalization-induced comparability of government performance in the European nation-states, will undoubtedly give rise to stronger horizontal and vertical governmental competition if the future political order in Europe is designed in such a way that this promotion mechanism can make an impact. An obvious way to achieve this objective is to have EU government positions decided through general elections.

Political fragmentation and decentralization are a prerequisite for government competition, but entrepreneurial innovation sets the competitive process in motion. As we have argued above, globalization consolidates isolated politicaleconomic systems and thereby sets the stage for governmental competition. But economic integration also stimulates political innovation and entrepreneurship. This is the last channel of influence that we discuss. First of all, it is important to notice that the processes of innovation and competition reinforce each other: on the one hand innovation gives rise to competition, on the other hand competition drives entrepreneurial behaviour. A political order that attempts to promote innovation thus needs to take advantage of all possibilities to stir competition. In the European context this means that a constituent assembly should understand that even in the age of globalization-induced governmental competition, political fragmentation and decentralization are not tantamount to inescapable political divergence; that globalization provides the European political system with the innovation incentives essential for regaining a leading position in the global political arena; and that globalization facilitates the transmission of political innovations via imitation so that the whole political system will profit from local instances of progress. Europe's constitutional thinkers should remember that Western Europe, from the age of Enlightenment until the Industrial Revolution, used to be the most dynamic of the globe's regions. According to the economic historian Eric Jones, Western Europe achieved this leading role because competition among the European states did not suppress unorthodox thoughts and the states were open enough to cross-fertilize each another.³⁰ Taking this episode as an example, the designers of a new European political order are well advised not to stifle globalizationinduced governmental competition in a time when Europe can ill afford to forgo the favourable conditions for innovation and growth that accompany competitive governments.

V. Some markers for constitutional design

The theory of constitutional design is still very much in a state of flux. Basic questions remain without agreed upon answers, and some questions are not even asked. There is, for example, no agreement on the role and function of the judiciary in interpreting constitutional documents. Nor is there any consensus on the degree to which constitutional rules should be binding. Should the

provisions of constitutions be specific or general? Should constitutions evolve to mirror changing ethical, social, political and economic realities? Or should the 'original intent' prevail? If the latter, how does one ascertain this original intent? These are just a few of the questions begging for answers.

It is in a context of this sort that we venture to formulate some markers that could serve as guides for the formulation of a constitution for Europe. Our selection will, of necessity, be incomplete, but points in a direction that favours individual freedom, public policy innovation, and flexibility to meet the challenges of a constantly and rapidly changing world.

At least since Tocqueville's (1835–40) *Democracy in America*, the view has been incessantly repeated (see, among others, Oates 1972, 1999; Begg et al., 1993) that the centralization of a power implies a *uniform* implementation of the policies nested in that power. That belief has been adhered to in the face of evidence from all the federal countries that centralization does *not* entail uniformity of policies. In Canada for example, the policies designed and executed by the federal government regarding the country's oceans – the Atlantic, the Arctic and the Pacific – are specific to each ocean, that is they vary from one ocean to the other. The same is true in respect of the fisheries, agriculture, unemployment insurance, and so on. In matters such as monetary policy, national defence, and passports, uniformity is the rule. Technical considerations and circumstances dictate the extent of uniformity, not whether the power is centralized or not.

Some powers have to be centralized. When deciding to do so, it is important to be respectful of diversity and to stay away from uniform provisions as much as is efficiently possible. In other words, the benefits of uniformity should be compared with costs, and net benefits should be maximized. The same holds true with respect to harmonization. Sometimes this entails considerable uniformity, but it is often possible to harmonize while being respectful of diversity. A good example of the latter are the EU-wide arrest warrants that have been approved by the 15 member states. The principle behind the agreement on the EU-wide warrants – an element of harmonization – is the mutual recognition of distinct national legal systems – a respect for diversity. Another good example is provided by the development of model legal frameworks, such as UNIDROIT, that can serve as guides to legal arrangements and legal evolution.³¹

The competitive devaluations of currencies and the tariff wars of the 1930s, as well as the competitive downgrading of some television programming to maintain higher ratings, are cases of races to the bottom. However, the history of the behaviour of exchange rates and of barriers to trade in the post-Second World War period as well as the history of the cinema provide evidence that such races are not inevitable. The elimination of races to the bottom in regard to exchange rates and tariffs seems to be attributable to the creation of international bodies and to regimes (see Ruggie 1983; Keohane 1984) that regulate

behaviour and to which all countries are committed. This is a question that is deserving of more attention. It would seem that, in general, no one benefits from races to the bottom. When possible, agreements on protocols that can prevent governments from such races should be devised without removing the incentive to compete.

All decentralized governmental systems are made up of constituent units of unequal size. New South Wales and Tasmania in Australia, Ontario and Prince Edward Island in Canada, Germany and Luxembourg in the European Union, Uttar Pradesh and Sikkim in India, California and Delaware in the United States, and so on. This disparity in size negatively affects the *modi operandi* of checks and counter-checks at both the horizontal and vertical levels of intergovernmental relations – a consequence of a lack of balance. The temptation is to deal with the biases identified with the operations on competition by suppressing them. The challenge therefore is to invent institutions that make it possible for the smaller units to compete effectively. The American or the Australian senate, made up of equal numbers of senators from each state, is one such institution. The Canadian system of Equalization Grants, which equalizes per capita revenues in the provinces is another.

In all competitive contests there are winners and losers, even when the outcome of competition is socially beneficial. It is important that there are rules to insure that the losers are not always the same jurisdictions. Assuming such rules to be in place, it is critical, if the competitive game is to be played efficiently and fairly, that when the centre loses, it does not repossess the power or powers over which it has lost, or when units at the periphery lose, that they do not quit the game. This last requirement raises the question of secession. Should member states of a union be allowed to secede? The answer, we believe, must be in the affirmative, but it is a yes that must be qualified. Secession being a fundamental constitutional matter, the decision cannot be based on a simple majority vote. Two-thirds and even three-quarter majorities have been advocated by scholars who have considered the matter. In addition if a referendum on secession is lost - the secessionists are defeated - a new referendum cannot be repeated immediately. There must be a significant lapse of time before a new referendum is held - 25 and 40 years have been suggested. These are difficult constitutional matters, but they have all been examined and discussed by experts and solutions are available.

At the end of this exercise, it is surely superfluous to insist that, in designing a constitution, care should be taken to remove all artificial barriers to mobility of goods, services, capital and people. In addition, institutions should be encouraged that will allow citizens to evaluate the performance of their governments by comparing that performance at the lowest cost possible with that of other governments in the Union.

Notes

- * The authors thank Arye Hillman for helpful comments.
- 1. Differences in the extent of global market integration are so pronounced across the activities of particular groups that some scholars such as Sylvan (Chapter 14 in this volume) propose to break with the traditional concept of (aggregate) globalization and to rework it by adopting a micro approach based on personal histories of globalization.
- 2. As compared to the Western European countries, the transition countries in Eastern Europe have, of course, experienced a rather different economic and institutional development. The experience with open market policies in the former socialist countries in Eastern Europe is discussed in Kierzkowski (Chapter 11 in this volume).
- 3. Aggarval and Dupont (Chapter 6 in this volume) document, however, that the roots of European success in integration can be traced back to nineteenth-century European institutional innovations in governance structures at the international level. For the 'early' history of globalization in Europe, see Findlay (Chapter 2 in this volume).
- 4. To what extent the outstanding economic performance of Ireland in the 1990s can be ascribed to the country's embrace of globalization is analysed in Barry (Chapter 9 in this volume) and Ruane and Sutherland (Chapter 10 in this volume).
- 5. Adam Smith (1776), Book I, Ch. 10, paragraph 82.
- 6. O'Rourke (Chapter 3 in this volume) shows that similar forces were at work in the late nineteenth century. Globalization largely undermined itself politically during this period by giving rise to protectionism which was supposed to cushion the distributional effects associated with technology-induced globalization.
- 7. See Section V for a discussion of the concepts of harmonization and centralization.
- 8. Siedentop (2001), for example, forcefully argues that only a commonly agreed upon European constitution will be able to withstand the pressures emanating from the widely different political cultures prevailing in the member states.
- 9. To what extent confederal arrangements emerge from economic integration and in how far these arrangements can be useful in constitutionalizing globalization is elaborated upon in Elazar (1998).
- 10. The view that constitutions of federal systems should, above all, regulate and supervise competition among the lower-tiered governments has already been advanced by Breton (1987). In the 1990s this view has found some support especially with German economists (cf. Vaubel 2000: note 5).
- 11. Another flawed idea propagated by the anti-globalization movement as a myth for which the empirical evidence is mixed or weak concerns the adverse globalization effects on global income distribution. This myth is debunked in Sala-i-Martin (Chapter 1 in this volume).
- 12. This is, however, not to say that the classical nation-state with a perfect match of political and cultural identity will remain the model for the predominant political governance structure in the future. We agree with Liebich (Chapter 5 in this volume) that globalization-induced political and economic forces will thoroughly change the self-conception of the traditional political institutions.
- 13. For a specific model of this efficiency effect derived from his theory of competitive governments, see Breton (1998).
- 14. Atkinson (Chapter 12 in this volume) notes the existence of a supply and demand influence on the outcome of globalization.

- 15. The respective literature is extensively surveyed in Schulze and Ursprung (1999). More recent results are to be found in Bretschger and Hettich (forthcoming), Burgoon (2001), Iversen and Cusack (2000), and Vaubel (2000).
- 16. A recent survey on the theoretical and empirical literature on various topics in the field of international environmental economics is to be found in Schulze and Ursprung (2001).
- 17. We write 'can yield' and not 'will yield' because assumptions related to, for example, returns to scale and external effects are needed to generate the 'will yield'.
- 18. Below, we note two exceptions to that proposition.
- 19. In the Tiebout model and in the models that derive from that seminal contribution, the division of powers is a consequence of the 'span' of public goods local public goods are assigned to local governments and the other public goods to a central government which, however, plays no role in the models. This last point is powerfully made in Keen (1998).
- 20. For a defence of that assumption see Breton (1996:48–57). See also the literature on probabilistic voting in, for example, Calvert (1986).
- 21. As in the tournament model suggested by Nalebuff and Stiglitz (1983), the comparison of performance will be more precise if the random disturbances affecting performance are common to all centres of power instead of being idiosyncratic to each.
- 22. We are in search of a vocabulary. We use the expressions invade and invasion which may convey a sense of hostility which is generally not part of the actions undertaken for lack of a better term. In the discussion which follows, invasions can be challenged before tribunals. Whether they are hostile or not is therefore not material.
- 23. O'Rourke (Chapter 3 in this volume), for example, observes that the most important breakthrough of the last 200 years for global capital market integration was the introduction of the telegraph.
- 24. See, for example, Arndt and Kierzkowski (2001).
- 25. See Cantwell and Piscitello (Chapter 8 in this volume).
- 26. The extraordinary achievements in European financial market integration are discussed in Steinherr (Chapter 7 in this volume).
- 27. The surprisingly swift convergence of the Irish production and trade structure towards the EU core is described in Barry (Chapter 9 in this volume).
- 28. A formal signal extraction model which gives rise to the described effects is to be found in Zantman (2000).
- 29. Cf. Ashworth and Heyndels (1997) for Belgium, Büttner (2001) for Germany, Schaltegger and Küttel (forthcoming) for Switzerland.
- 30. The volume edited by Bernholz et al. (1998) confronts the hypothesis that competition of political systems has been a crucial condition for innovation and prosperity in the history of mankind with empirical evidence from selected periods of history.
- 31. The American and European influences on the standardization of the law are traced in Kohen (Chapter 4 in this volume).

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14 Periphery, Centre, Mass: Alternative Histories of Europe's Role in Globalization

David Sylvan

I. Introduction: looking backward or news from nowhere?

Historical studies of globalization treat it as a locationally ambiguous concept. On the one hand, the phenomenon is understood as precisely not centred around a particular place, such as Europe, or, now, the United States; rather, the term denotes a 'new economic structure' in which 'distinct national economies are subsumed and rearticulated into the system by international processes and transactions' (Hirst and Thompson 1999:7,10). On this reading, if globalization is anywhere, it is worldwide, even if certain places have not yet succumbed. To study the history of globalization, or whether there is a new sort of globalization, thus involves not so much looking backward at a certain country or region as it does looking into locationally disparate 'processes' and 'transactions'.

Or should one say 'locationally irrelevant'? After all, if one is dealing with a new economic (and political? and cultural?) 'structure', its defining characteristics are phenomena¹ whose geographical origins and whose current locations are both besides the point. In a double sense, therefore, the quintessentially capitalist process of globalization exemplifies perfectly the title of Morris's socialist phantasy.

However, the a-locational quality of globalization is not absolute. To speak, as some activists or politicians do, of 'resisting' globalization; or, as scholars do, of the 'spread' of globalization or the 'incorporation' of areas into the globalized economy is to presume that globalization is a locally instantiable process: a given place can, but need not, be globalized. Moreover, the very notion of 'inter-

national processes and transactions' presupposes the crossing of some sort of border and hence of multiple places qua countries.

My argument in this chapter is threefold. First, that conceptualizing globalization as locationally ambiguous is concomitant² with particular 'diffusionist' histories, in which globalization spreads from 'centres' (for example, Europe and the US) to 'peripheries'. Second, that this approach to globalization is at heart premised on magnitudinal extremes and is, for that reason, scientifically and theoretically problematic. Finally, I will argue that an alternative conceptualization of globalization is concomitant with different kinds of histories, in which globalization – or, to be precise, globalizations, in the plural – are phenomena internal to capitalism and to mass politics.

II. Histories of diffusion

The locational ambiguity of globalization is standardly depicted as a matter of interlocked transactional processes washing over or undermining (depending on the preferred metaphor) national-level processes and rules. For example, a recent paper by Grahl represents central banks as placed 'between the globalized markets for money and for bonds'; similarly, he refers to 'the sheer scale of the financial resources now being deployed to crack open the insider systems of Germany or Japan, made possible by the (practically) integrated world-payments system' (2001:35,43). Even international institutions can be portrayed as being challenged by globalization phenomena: 'the administered protection rules of the WTO are seriously flawed in a world-trading system characterized by extensive vertical and horizontal international fragmentation of production' (Baldwin 2001:257).

It might seem as if the washing-over image need not imply that the (triumphant) new processes are necessarily location-less; instead, they could be localizable to a particular country or region. However, the geographical origin of these new processes – a point to which I shall return below – is usually argued in the literature to be of less significance in characterizing those processes than is their sheer efficiency and logic. For example, globalized equity financing permits a significant reduction in capital costs and a rapid deployment of capital resources as compared with internal or 'national' financing mechanisms (Mayer 1997; Stulz 1999). The fact that techniques of company surveillance and of significant movements in and out of assets by large investors were developed over the last several decades in US and British markets does not mean that policy makers in other countries were blind to their economic advantages (Steinherr, Chapter 7 in this volume). Given that these techniques can, in principle, be used by any investors anywhere, it makes no more sense to say that they remain 'Anglo-American' than it does to claim that, say, double entry bookkeeping

remains 'Florentine'.³ In this sense, it is reasonable to speak of globalization as the replacement of locally specific processes by more efficient, a-locational ones.

In and of itself, such a pattern of replacement would seem to be a generic feature of market economies, analysable as similar to technological change. However, replacing local processes often involves changing national laws (such as those pertaining to tariff schedules) and thus the adoption of a-locational processes cannot be seen as simply the typical working-out of producer competition. The state is involved, and the nature of this involvement can take different forms, each entailing a particular sort of diffusionist history.

To start with, there is what we might call 'imperial' diffusion. The essential phenomenon here is what Rosa Luxemburg (1913: Chapter 29) called 'the struggle against peasant economy', that is, the transformation of subsistence or other non-market production and distribution processes into commodity ones. These transformations – classic instances of which were in India and Egypt – were imposed through administrative and military means, following formal or de facto annexation. This type of diffusion was of great historical significance in many parts of Africa and Asia, typically characterizing the first several decades of colonial rule.

A second type of diffusion we might call 'comprador'. This is typical of Latin American states in the nineteenth century and indeed corresponds to much of what is commonly cited as the first great wave of globalization (Williamson 1996; cf. Cardoso and Faletto 1979). It involves the state and local elites acting as facilitators of foreign investment along with the development of commodity trade with Europe (particularly Britain). Only as local power struggles played out – often in the shadow of European economic crisis – was this form of diffusion brought to a halt in the larger South American countries; it continued elsewhere in the hemisphere and arguably characterizes trade and investment policy in certain African states today.

A third sort of diffusion could be labelled as 'hegemonic'. The archetypal example is the use of US wealth, power and influence in the Second World War and the subsequent decades to gain European acquiescence in rules that opened their colonial and domestic markets to US exports and rendered their currencies convertible. Arguably, these rules made possible the second great (and continuing) wave of globalization in Western Europe and a handful of other states (Eichengreen 1996); arguably, too, they set in motion a rule-making dynamic (notably regarding trade and investment) which continues to this day (though see also Aggarwal and Dupont, Chapter 6 in this volume). It is also reasonable to see a new instance of hegemonic diffusion in the recent negotiations between the European Union and would-be members in Central and Eastern Europe.

Both comprador and hegemonic diffusion presuppose a 'receiving' state which, if not necessarily liberal, sees its principal economic tasks as distinct from the day-to-day competition implicit in globalization. A fourth type of diffusion, however, places those tasks at the centre of the globalizing project; we might therefore term it 'reforming'. This is exemplified in the liberalization of financial markets in various European countries in the 1980s and 1990s, or in the opening of previously protected sectors to foreign competition, such as occurred in the Brazilian computer industry over the last 15 years. Such policies were in general not undertaken because of sheer ideological fervour, but as a means to modernize indigenous structures and to render more attractive foreign investments. Of course, such reforms may result from a de facto alliance between foreign investors and governments, on the one hand, and domestic modernizers, on the other, but without the latter, it is unlikely that the reforms would have been implemented.⁴

A final type of diffusion also involves a state project, but in this case, its aim is principally developmental. In countries such as the so-called Asian tigers, foreign capital was sought for purposes of building up manufacturing exports. These investments also involved the transfer of technology and expertise, which in turn was able to be used by indigenous exporters. However, just as comprador diffusion was limited in its effects outside of the export sector, so too is developmental diffusion limited. The idea was that foreign firms not compete with local firms on the domestic market (Gereffi 1996); in this sense, the countries often cited as in the forefront of export-led growth are less globalized than newspaper accounts might suggest.

Notice that in these five diffusionist histories, nothing occurred automatically. The fact that there were efficiency gains to be had from replacing local or national processes with a-locational, global ones may have been an important consideration in decisions to opt for such replacement, but the decision required political will on the part of state elites. We have here an updated version of Polanyi's (1957) famous argument that the self-regulating market was a political act, imposed by the state. Nor is it the case that the state was dragged unwillingly into changing laws to adopt global processes. Of course there were pressures, notably from the United States (as now from the European Union), from international organizations, and from various firms and investors, but such pressures found crucial echoes in the arguments of state officials.⁵

What was on offer to the state in each instance of diffusion was not globalization *tout court* but a particular package of globalizing measures: getting rid of Imperial Preference, for example, or letting foreigners repatriate profits in particular kinds of investments. This does not mean that intellectual connections could not be drawn between certain packages and other ones; it does, however, mean that 'globalization', understood precisely as an a-locational congeries of phenomena, signifies different things at different times and in different places. For example, in the nineteenth century, the free migration of labour played an important role in enabling certain kinds of commodity exports. Now, free

migration has largely come to an end, but that does not mean that globalization no longer exists.

Even with a shorter time horizon, the nature of the 'package' can shift. Reforming diffusion, for example, was only possible after a 15 to 20-year process of deregulation in the United States and Britain, as well as a series of economic studies on the efficiency of particular regulatory mechanisms. What all of this suggests is that the locational ambiguity of the way in which globalization is usually presented is unstable: the more we wish to insist on particular countries undergoing globalization, the less we are able to talk about globalization itself (as in 'the acceleration of globalization' or 'the deepening of globalization'). This is the case even for the same country or group of countries: as we saw above, there were at least two different sorts of diffusion processes that could be labelled as 'the globalization of Europe'.

It seems, then, that histories of globalization, understood as a locationally ambiguous phenomenon, are deeply problematic. They either turn into histories of state decisions and their influence on groups of people's transactions; or they become accounts of how certain classes of transactions grew, or speeded up, or were replaced by other classes. Either alternative is tantamount to resolving the ambiguity by eliminating one of its two senses. Let us therefore consider each in turn, beginning with the second.

III. Globalization as magnitude: a critique

It is a commonplace among scholars of globalization that transactions themselves can only serve as imperfect measures of the phenomenon. Nonetheless, transactions – specifically, the magnitudes of transactions – seem to be hard-wired into any discussion of globalization. Consider, as a perfectly typical example, Chapter 10 in this volume by Ruane and Sutherland, in which they state explicitly that:

The attraction of 'globalization' as a new word may have stemmed from its potential to capture the increased scale and intensity of international relationships in the late 1980s, arising from the cumulative effect of declining trade and capital barriers, reduced transport costs, modern electronics-based technology.

Note the magnitudinal phrases: 'increased scale and intensity'; 'cumulative effect'; 'declining'; 'reduced'. (A few sentences later, Ruane and Sutherland go on to add that 'there was something more than incremental change taking place'.) The only magnitudinal phrase missing from this account is something about the speed of transactions, though that can be inferred from the reference to 'reduced transport costs'.

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In effect, most discussions of globalization treat it as a qualitative change in the world economy occasioned by high levels of 'international' transactions, or by high ratios of 'international' transactions to 'domestic' ones, or by exceptionally rapid 'international' transactions. However, there is a significant silence when it comes to specifying just what this qualitative change involves. As we saw above, Hirst and Thompson refer vaguely to 'a new economic structure'; Atkinson (Chapter 12 in this volume) raises, though leaves to 'one side', the possibility that contemporary globalization involves 'the dissolution of national economies into a new global structure'; and Ruane and Sutherland suggest that 'all countries would be affected to some degree by the scale of integration'. I cite these passages not to criticize these scholars but to observe that everyone – academics, policy makers, and activists – is in roughly the same boat: a sense that somehow something is different now about the world economy, but that specific claims about that something are difficult to specify and likely to appear overly reductive.

Faute de mieux, therefore, measures are used as stand-ins for the concept. The impression is that, in classic Hegelian fashion, at a certain point quantitative increments become qualitative changes.⁶ Since it is extremely difficult to specify the latter, the temptation is great to fall back on the former and to isolate the extreme end of the distribution as indicating some sort of significant change. Unfortunately, this strategy is bad from the standpoint of social science practice. We would not say that taller, heavier human beings are in some sense a different species from shorter, lighter ones; nor would we say that it makes sense to theorize about high-speed trains separately from older, slower ones. Or rather, we would only say these things if we have particular consequences in view: how to train human beings to become better basketball players, for instance, or how to advertise three-star restaurants in Paris to potential clients in London. But, as we have seen, there are no particular consequences specified by many works on globalization.

Even in purely statistical terms, a focus on high magnitudes makes no sense. To say, for example, that some countries have 'high' levels of 'international' transactions compared with the mean level of such transactions for a set of countries is to presume some continuous univariate distribution in which the transaction scores are independent of each other. This, however, is not the case. We know that trade and investment patterns are clustered in various ways, so that the transaction score of one country will have an influence on the transaction scores of certain other countries. This means, paradoxically, that as countries are brought closer together by some presumed globalization process, our ability to make meaningful magnitudinal descriptions of this process declines.

A further problem with magnitudinal comparisons has to do with the scaling of sample means from different time periods. Assume, as seems likely, that transaction speed has increased over the last two centuries because of improvements in transportation and communication technology. What of it,

though? To say, for example, that in the days of steamships, it took two weeks for a short-term loan to be consummated; that with the advent of the telegraph, it took two hours; and that with computer trading it takes only two minutes, is in itself to say nothing. The question is along what sort of scale are these three means arrayed? If an interval scale, then we are buying into the notion that an improvement of an hour and 58 minutes has the same significance (again, for what?) in 1890 as it does today. If, however, the means are arrayed along an ordinal scale, then the absolute level of the scores vanishes and the distinctiveness of contemporary scores is vitiated.

In response to these criticisms, it might be argued that if various transaction indicators show a sharp rise over time, it means that some process of integration or convergence is at work, even if the nature of that process cannot be specified. Unfortunately, this argument is based on a naïve kind of operationism. Consider the mean absolute level of 'foreign' transactions for a group of countries, as expressed in dollar terms. If this mean rises, it may simply signify a wealth effect. Similarly, consider the mean ratio of 'foreign' to 'domestic' transactions for that same group of countries. If this mean rises, it may, instead of indicating convergence, simply point to relative changes in the prices of different goods. In short, we cannot assume that the data speak on their own.

However, beyond the scaling and distribution issues connected with transactions, the use of such indicators raises fundamental problems of classification. How do we determine whether a given transaction is 'foreign' or 'domestic' in nature? To take a by-now hackneyed example, if a McDonald's restaurant in France is owned and run by French citizens, supplied by French middlemen selling the products of French farmers, and serves French permanent residents, should it then be deemed 'foreign'? One could, I imagine, slough off the problem onto customs inspectors, simply using their labels. This move, though, does not address various issues in the identification of capital or other resources; more importantly, it does not address the types of questions that transaction analyses presumably aim to answer. If New Jersey tomato farmers are put out of business by tomatoes brought in from warmer climates, does it matter if the latter come from Florida or from Mexico? What if local farmers respond to changing consumer tastes by over-expanding and being unable to pay back their loans? In short, we cannot assume that our ability to classify transactions as 'foreign' or 'domestic' necessarily sheds light on the presumed globalization processes in which we are interested.

Ironically, some of the difficulties with magnitudinal approaches to globalization stem from the local-bound nature of many transactions. One cannot construct any kind of measure of 'foreign' transactions without a notion of certain transactions as crossing national borders. However such transactions are to be classified, they are only identifiable by virtue of national territory being treated homogeneously. This is a serious problem, and not only for countries with large populations and/or territories. Each country is assumed either to have low levels of variation among its residents as regards production, competition and consumption; or else these levels of variation are assumed to be roughly the same from one country to the next. The former assumption is problematic; the latter one makes no sense. Yet, in light of the fact, discussed above, that globalization involves decisions by the state that, in principle, apply to the entire country, there does not seem any way of avoiding one of the two assumptions.

Geographical heterogeneity is in fact a significant problem for transaction analysis. Consider, for example, a particular region within one country: the Ohio River Valley in the early nineteenth century. When the first wave of settlers arrived from the East, they found Indians who for over a century had been trading furs for European and colonial manufactured products. As the Indians began to be pushed out, they were replaced by groups who 'practiced extensive and subsistence farming ... they were almost wholly self-supporting, concentrating on diverse production of things immediately usable. A surplus meant not gain but wasted effort' (West 1994:132). Shortly afterward, a second wave of settlers, coexisting with the first, arrived with different goals: to produce cash crops destined for various buyers, including those in Europe: grains, pork, whiskey.

In transactional terms, this region was characterized by different levels and kinds of connection to the international market. Should we say that the Ohio Valley went first from low levels of globalization to medium levels, then back again to low levels, then once more to higher levels? And what of the subsistence farmers – some of whom came from Europe and brought with them European manufactured goods – living within a short horseback ride of their market-producing neighbours?

This extreme heterogeneity is in fact typical of many parts of the world over the past two to three centuries. The same peasants who were incorporated into the international market as day labourers or tenant farmers persisted for many decades in trying to provide most of their needs by subsistence agriculture. As recently as the 1970s, for example, highland Indian communities in Guatemala were characterized by seasonal migrations of the men to lowland plantations, with the women producing most foodstuffs locally (for an update, see Hamilton, Asturias and Tevalán 2001). To speak of Guatemalan transaction levels, or even of highland Guatemalan transaction levels, is therefore not terribly illuminating.

At base, the problems with magnitudinal approaches to globalization stem from their all-purpose nature. To be sure, some scholars tailor their measures to address particular presumed consequences of globalization, such as factor price convergence (for example, O'Rourke and Williamson 1999).⁷ This, however, is rare, and the usual situation is one in which the same transaction scores are used to discuss highly varied hypotheses (cf. Sutcliffe and Glyn 1999). Under these circumstances the scores are highly likely to be invalid even as measures of the basic concept of globalization;⁸ and it is little wonder, then, that historical

questions as presumably basic as whether there have been one, two, or several waves of globalization, or whether the world now is significantly more globalized than in the past, have not yet been resolved. The 'a-local' way of resolving the ambiguity discussed above turns out not to be promising.

IV. An alternative: globalized groups

The above discussion suggests how more satisfactory histories of globalization could be undertaken. First, such histories must be locally bound. An a-locational history of globalization is inherently vague, not only because globalization is locally instantiated but because it involves state goals which will vary by time and place. Second, the places to which globalization histories must be locally bound must be as homogeneous as possible; ideally, this involves not only physical delimitations but social ones as well. Third, since transactions have no universal meaning, globalization histories must specify the theoretical significance of certain types of transactions. Fourth, the preceding two requirements suggest that the significance of transactions be guaranteed by evidence that particular transactions are important to particular social groups.

I therefore suggest a relational formula for defining types of globalization and researching their histories. Groups of persons are globalized with respect to particular types of activities if they knowingly enter into ongoing transactions with persons or products from two other countries and if they deem those transactions important for those types of activities. Several things about this definition should be noted. It is doubly relational, being scoped both with respect to groups of persons and to types of activities. Both kinds of scoping are necessary: globalization is group- and activity-specific. This in turn breaks down yet further the notion of globalized localities as countries or regions.⁹ In this sense, the only way in which a general history of globalization can be written is via multiple specific histories of globalizations in the plural. On the other hand, since transactions have significance which varies considerably, it simplifies our task to devolve the significance on the persons studied. (This is also why the adverb 'knowingly' is inserted; although it also opens the possibility of once-'foreign' products coming to be considered as now 'domestic'.) Note finally that two sorts of inter-temporal magnitudinal comparisons are possible with this definition. One is group-specific: do certain groups enter into more, fewer, or the same number of globalized activities over time? Similarly, we can ask about temporal comparisons with respect to activities: are certain activities globalized for more, fewer, or the same number of groups over time?

Given the enormous number of groups and activities that have existed around the world in just the last half-century or so, any sort of conspectus of globalization histories is out of the question. But what we can do, in the spirit of this volume, is to indicate some of the European groups and activities most and least susceptible to being globalized. Consider two sets of groups: peasants and blue collar workers engaged in manufacturing; and consider further two types of activities: production and leisure activities.

When Edward Banfield lived in the Italian village of 'Montegrano' (Chiaromonte, in Potenza) in the 1950s, he was struck by its extreme isolation: 'most of the townspeople make no use of the highways and other communications facilities ... Many people have never travelled beyond these neighboring towns and some women have never left Montegrano' (1958:46–7). Most of the villagers were peasants, and most of the peasants were engaged in subsistence agriculture with literally 'little or nothing for sale' (1958:49–50). Qua production, then, it cannot be said that this group of peasants was globalized.

Qua leisure, however, the story was quite different. Peasants had changed their clothing styles, buying shoes, shirts and suits, many of which were made by tailors from pattern catalogues showing 'the styles in Rome, Paris, and New York'. Younger peasant women wore print dresses that came secondhand from America. Peasants would also go to the cinema, which had nightly showings of Italian and foreign films (1958:60,59,46). Thus, in terms of their leisure activities, the peasants of this isolated village had already become globalized – long before the advent of Levi's and McDonald's, it might be added.

This contrast between near-autarkic production activities and globalized leisure activities is striking; it points to the advantages of the kind of fine-grained, ethnographic approach to globalization laid out above. Consider now blue collar workers engaged today in manufacturing activities. What kind of transactions can they knowingly enter into with persons or products from two other countries and consider to be important for their manufacturing activities? Several types of transactions seem possible.

- If the factory is owned or co-owned by a company from another country, foremen or (more likely) managers can come from that country. However, it is unlikely that managers come from two countries other than the workers' own one.
- Co-workers can be immigrants or migrant workers. Routine interactions with such co-workers may or may not be important; it depends on how the factory is organized.
- The factory can depend on raw materials or semi-finished inputs from one or more other countries. It is unlikely that these transactions are of much significance to most workers except, of course, if they are cut off (as was the case with British textile workers during the American Civil War¹⁰).
- The factory can sell its output to buyers in other countries. As with the case of inputs, it is unlikely that these transactions are of much significance to most workers unless they, too, are interrupted or unless they expand

greatly, leading to overtime or to additional friends or family members being employed by the factory.

What is notably absent from this list is a mention of competition. Certainly workers are aware that their jobs depend heavily on how competitive their factory is in the face of foreign (and domestic) competition, but they do not usually enter into any transactions with foreign competitors or foreign products. (The one exception to this statement involves extra-factory interactions: encounters with persons imagined to be of the same nationality as the competitors, or, as a consumer, seeing the products of those competitors.) This is not to deny the reality of competition for workers, but rather to insist on its symbolic or mediated quality.¹¹

Hence, it appears that, qua manufacturing activities, workers are likely to be globalized only when managers come from several countries or when a recession leads to unemployment. This nuances considerably standard country-level accounts of globalization as relevant principally at the level of manufacturing competition and its effects on blue collar wages. The question then becomes which group engaged in manufacturing activities is most likely to be globalized as a consequence of competition. A priori, it would seem to be managers, executives, and other categories of white collar employees. They come into contact with customers (also with suppliers) and, via these contacts, apprehend competition as a transaction in its own right. Such direct forms of interaction, I would hypothesize, go a long way toward explaining why managers and executives of domestic firms are among the strongest opponents of foreign entry into national markets.

If we now turn from manufacturing activities to leisure activities, the story changes again. What kinds of transactions can blue collar workers knowingly enter into with persons or products from two other countries and consider to be important for their leisure activities?

- Qua persons, the transaction opportunities are quite limited. In principle, travel enables workers to interact with persons from other countries; in practice, holiday patterns largely rule this out.
- Routine consumption products food, clothing, appliances, and so forth

 come from numerous countries. However, it is unclear whether consumption of these products should count as a transaction. Most such products are simply used, or used up, in a limited period of time. Even consumer durables, such as television sets from East Asian countries, rapidly fade into the background as products in their own right. Only in exceptional cases such as an automobile worker shopping for a car is the fact of the product's being foreign even noticed for more than a few seconds.¹²

• Entertainment products, such as music, film, and television programmes, offer the best prospect of transaction. They carry with them an emotional charge which inhabits the imagination of consumers. (The same might also be said of certain fashionable types of clothing.) Moreover, the sounds and images in such products readily permit the country of (presumed) origin to be made concrete in a way that most other types of transactions do not. If, as is overwhelmingly the case, the country in question is the United States, a place that many blue collar workers – especially in poorer countries – are unlikely ever to visit, then the images and sounds contained in entertainment products are of even greater importance.

These considerations suggest that, precisely unlike in the United States, blue collar workers in European countries (and, by extension, in countries around the world) have for years been globalized in their leisure activities. (Indeed, it is unclear whether repealing 'cultural exception' rules would have much impact on the globalization of various groups in their leisure activities; although it would certainly result in the disappearance of particular film makers and musicians.) I suspect that much the same could be said about managers and executives, although they enjoy greater opportunities for transactions with other persons. Here, then, is a likely finding that jibes moderately well with standard accounts of Hollywood and MTV.

More generally, these observations suggest several hypotheses to be explored in future research. First, globalization of the workplace is, for many European groups, both quite limited and quite recent, much more so than aggregate transaction figures would indicate. It is quite possible for different groups working in the same companies to vary considerably regarding whether or not their work activities are globalized. The fact that, say, a given factory is owned or invested in by foreigners is less significant for certain groups in that factory than the way in which the factory is run. Second, because globalization depends (in the phenomenological approach advocated above) greatly on seeing other persons, US workers are less globalized in their productive activities than are European ones, and European workers less globalized (except, perhaps, for recent immigrants) than workers in foreign-owned and -run factories in certain Asian and Latin American countries. A similar ordinal ranking can be made about leisure activities, although there, perhaps, European workers may be somewhat more globalized than their Asian and Latin American counterparts.

Third, and perhaps most interestingly, globalization for many groups is likely to be more prevalent in leisure activities (though not all types of such activities) than in workplace activities. This suggests that transactions vary considerably in their salience depending on both the activity and the group. Recall the globalized peasants of Montegrano in the 1950s: the lira value of leisure activity transactions with other countries was minimal; nonetheless, the peasants had

entered into important imaginative links with foreigners. If one then considers the possibility of local copies or imitations of foreign models, the matter becomes more complicated still.

A fourth, and most general, possibility pertains to the very way in which we talk about globalization. Recall the washing-over or undermining metaphors in the locationally ambiguous standard histories of globalization. The general pattern described is one in which a congeries of high-efficiency processes replaces less efficient, local or national processes: efficiency diffuses from the centre (earlier Europe; now the US) to the periphery. As we have seen, this portrayal is deeply problematic, both in its own right and because a group- and activity-centred focus paints a more intricate picture.

From the standpoint of blue collar workers, foreign competition in manufacturing may be perceived as simply one more attempt by managers to speed up and otherwise rationalize production. This perception can just as well be shared by American workers as by European ones; from their point of view, speed-up policies have the effect of aligning developed country factory norms on those of developing countries. If one wishes, this could be characterized as an inversion of centre–periphery relations. However, a description more in line with the disembodied nature of blue collar workers' perceptions of foreign competition would be that the quest for efficiency is internal to a capitalist economy and that diffusion is accordingly many-directional. From this perspective, globalization would in the end simply be a label for certain transactional features of capitalism.

A similar conclusion obtains when thinking about leisure activities. In order for different groups in Europe and elsewhere to be globalized in entertainment, there has to be a steady stream of entertainment commodities produced and distributed to such groups. This involves the coexistence of a culture industry, to borrow Adorno's famous phrase, and a mass consumer market. Arguably these, too, are developments internal to a capitalist economy.

Furthermore, if the above discussion is correct, then managers and executives will be far more bothered by the embodiment of foreign competition than are blue collar workers. In order for managers successfully to advocate protectionist measures, though, they will need to present foreign competition as a threat both to blue collar workers and to national industrial infrastructure. Put differently, we should expect that in an environment of mass politics, foreign competition will routinely be put forward as an argument for state intervention and protection.¹³

Seen in this way, globalization doubly disappears as a general concept. On the one hand, it dissolves into a series of multiple globalizations, varying by group, activity, and time. On the other hand, these multiple histories are arguably reflections of general trends in political economy: the development of capitalism, of a mass market, and of new sorts of commodities; and the development of mass participation in politics, precisely permitting antitransactional policies to be advocated on grounds of protecting the bulk of the population. Seen in this way, many of the critiques of globalization are themselves instances of these general – should I say 'globalizing' – trends.

What then can be said about a basic theme of this book, that is, 'the globalization of Europe'? On my argument, this is a concept far more complicated than even the broad range of studies in this volume suggests. There are as many 'globalizations of Europe' as there are groups and activities in Europe. Some of these globalizations may well have involved diffusion from the United States; in other cases, however, what once was 'foreign' has come to be considered as 'European', if not local. In the end, even sounds and images, important as they may be for different groups' imaginations (including those who claim to be defending 'national culture') may come to be assimilated. To modify slightly the point made in the preceding paragraph, the very analysis of 'the globalization of Europe' may only be possible at a transitional moment in that process.

V. Conclusion: globalization and its discontents

Beyond the descriptive possibilities for studying globalization histories and the analytical possibilities for moving beyond the centre/periphery diffusionist metaphor, the proposals put forward in this chapter represent a plea for breaking with the very concept of globalization as the term has been used over the past decade. The only way of saving 'globalization' for purposes of analytical and empirical research is, as I have argued, to rework it from top to bottom, leaving only the word itself and a Cheshire cat-like hint of its transactional origins. This, it may be thought, is an extreme remedy; the concept in its standard meaning might be salvageable.

I think not. Some concepts are so vague and so problematic that nothing can be done except to retire them. In the field of political science, a case in point is the concept of 'modernization' and its fraternal twin, 'development'. We have also put aside – decades ago, in some cases – concepts such as 'system' and 'homeostasis'.

'Globalization' is a particularly evocative concept. When it first began to be widely used, back in the mid-1990s, it seemed to point toward some new, emergent features of international relations: a world in which, somehow or other, transactions would lead to new types of integration and new kinds of constraints. At this point, good social scientific practice would have led scholars to specify the 'some', the 'somehow' and the 'new' in the preceding sentence. What the concept would have lost in evocative power it would have gained in precision and explicitness.

Instead, perhaps predictably so, the term leached out into public discourse: newspaper articles, political speeches, and mantra-like invocations whenever

someone wanted to convey a sense of the *Zeitgeist*. At the same time, numerous scholars determined to show that whatever globalization meant, it was not necessarily new: either the phenomena denoted by the term had been present earlier; or else other phenomena could be relabelled as akin to globalization.¹⁴

The result of these various efforts is that the term has become familiar to us before we had a chance to specify a meaning. Thus, we all think we understood what the term means, whereas in practice, we did not. Under these circumstances, little of precision can be done with the term unless it is revamped considerably. Good quality research (historical in this case) depends on a precisely defined concept.

Notes

- 1. Or, to be precise, classes of phenomena. Many of the phenomena commonly cited as characteristic of globalization have existed in earlier eras; what was missing then was precisely that they were not typical of those eras, in other words that individual phenomena were not linked together into classes of phenomena. For example, what Jones and Kierzkowski (2001) call 'international production fragmentation' is in itself hardly a novel phenomenon. What makes it characteristic of the contemporary world economy is its linkage with foreign direct investment, just-in-time inventory methods, and other phenomena.
- 2. I do not claim that locational ambiguity is in some sense a cause or a consequence of diffusionist histories. Instead, as I will argue below, when scholars or policy makers conceptualize globalization as locationally ambiguous, a historical account of it as diffusing seems to make sense.
- 3. Nor, arguably, that other market or institutional innovations remain 'European'. If, of course, usage of new techniques is restricted de facto or de jure; or if advantages from them flow almost entirely to actors in one particular location, then of course this condition does not obtain. But we would not in that case say that the techniques in question are global; rather, that they are imperial. This, however, is an empirical question and, in practice, the vast majority of clusters of phenomena commonly discussed as replacing 'national' counterparts are in fact widely used, with their advantages similarly dispersed geographically.
- 4. Reforms undertaken in a crisis situation, at the behest of the IMF or other international agencies, are difficult to classify as instances of globalization via reformist diffusion. In part, this is because such reforms do not typically open the economy to international competition; more fundamentally, though, such reforms are made to return the country to the condition of being a successful export platform, which places them under the fifth, rather than the fourth, diffusion process.
- 5. A good case in point is Keynes's 18 December 1945 speech to the House of Lords in favour of accepting the American loan, in which he argued that 'it is surely crazy to prefer' a situation of 'separate economic blocs and all the friction and loss of friendship they must bring' (138 H.L. Deb. 793–4). It is worth recalling that the Labour government saw itself as confronted with the task of modernizing the country; and that the conditions of the loan were opposed by the most reactionary wing of the Conservative Party.

- 6. It should be emphasized that the Hegelian formulation remains vague even when it can be modelled mathematically, say, as a non-linear dynamic system with 'jumps' between equilibrium branches. The issue at stake is the interpretation of the jumps. Krugman's otherwise lovely article (1997) on the new economic geography elides this point, assuming that particular distributional patterns are straightforwardly meaningful; in fact, they are anything but.
- 7. A recent review article on the policy convergence literature and its shortcomings (Drezner 2001) paints a rather grim picture of the lack of specification as to just what sorts of consequences increased transactions are supposed to have.
- 8. It is worth recalling that concepts are defined by embedding them in a network of other concepts; hence the same concept may be defined differently when testing different hypotheses. A classic example is the way in which 'mass' in Newtonian physics is defined as being conserved, whereas in Einsteinian physics it is defined as convertible to energy. Similar considerations are relevant for globalization: a hypothesis that globalization, via expanding the number of competitors, will lower factor prices implies a different definition of globalization than does a hypothesis that globalization, by increasing the number of non-citizen economic decision makers, will reduce the power of the state. It is highly unlikely, to put it mildly, that both of these concepts can be measured validly using the same transaction scores.
- 9. I have nonetheless included the clause about 'two other countries' both to capture the importance of national boundaries and to distinguish globalization from imperial membership and from dyadic relations.
- 10. It is worth recalling that even with the considerable economic distress occasioned by the interruption of cotton supplies, British factory workers mostly backed the Union and not the Confederacy (Foner 1981). This nicely illustrates just why the significance of transactions has to be demonstrated rather than assumed.
- 11. This way of representing competition is part of a much longer blue collar tradition of depersonalizing (arguably, correctly) the business cycle and other threats of unemployment (Hobsbawm 1962: Chapter 5; Moore 1978: Chapter 6).
- 12. Decades ago, things were somewhat different. In *The Road to Wigan Pier*, Orwell has an often-quoted discussion of just how attractive shiny but tasteless American apples were to English consumers.
- 13. It will be noted that this last argument bears a certain family resemblance to that of Schumpeter in *Capitalism, Socialism, and Democracy* (1950). Of course, protectionist measures have been advocated for centuries; the difference is that the kinds of appeals now made gesture at social cohesion far more explicitly than back in the days of either Thomas Mun or Alexander Hamilton (Sylvan 1981).
- 14. One of the latest versions of this genre is by Keohane and Nye (2000).

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