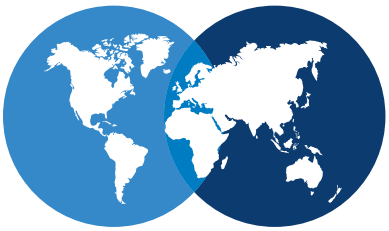
ILLICIT FINANCIAL FLOWS FROM AFRICA:

HIDDEN RESOURCE FOR DEVELOPMENT

GLOBAL FINANCIAL INTEGRITY



GLOBAL FINANCIAL INTEGRITY

ILLICIT FINANCIAL FLOWS FROM AFRICA:

HIDDEN RESOURCE FOR DEVELOPMENT

Illicit Financial Flows from Africa:
Hidden Resource for Development

In December 2008 Global Financial Integrity released its groundbreaking analysis of **Illicit Financial Flows from Developing Countries: 2002 – 2006**. We estimated such flows at $859 billion to $1.06 trillion a year.

We are pleased now to release our analysis of **Illicit Financial Flows from Africa: Hidden Resource for Development**. This study examines the 39-year period from 1970 through 2008. Utilizing accepted economic models, namely the World Bank Residual Method and IMF Direction of Trade Statistics, we estimate that such flows have totaled $854 billion across the period examined. This estimate is regarded as conservative, since it addresses only one form of trade mispricing, does not include the mispricing of services, and does not encompass the proceeds of smuggling. Adjusting the $854 billion estimate to take into account some of the components of illicit flows not covered, it is not unreasonable to estimate total illicit outflows from the continent across the 39 years at some $1.8 trillion.

Much attention has been focused on corruption in recent years, that is, the proceeds of bribery and theft by government officials. In the cross-border flow of illicit money, we find that funds generated by this means are about 3 percent of the global total. Criminal proceeds generated through drug trafficking, racketeering, counterfeiting and more are about 30 to 35 percent of the total. The proceeds of commercial tax evasion, mainly through trade mispricing, are by far the largest component, at some 60 to 65 percent of the global total. While we have not attempted in this study to verify these approximate percentages for Africa, we believe that they are likely to be of roughly the same order of magnitude.

This massive flow of illicit money out of Africa is facilitated by a global shadow financial system comprising tax havens, secrecy jurisdictions, disguised corporations, anonymous trust accounts, fake foundations, trade mispricing, and money laundering techniques. The impact of this structure and the funds it shifts out of Africa is staggering. It drains hard currency reserves, heightens inflation, reduces tax collection, cancels investment, and undermines free trade. It has its greatest impact on those at the bottom of income scales in their countries, removing resources that could otherwise be used for poverty alleviation and economic growth.

Addressing this problem requires concerted effort by both African nations and by western countries. The outflow from Africa and the absorption into western economies deserve equal attention. Through greater transparency in the global financial system illicit outflows can be substantially curtailed, thereby enhancing growth in developing countries and at the same time stabilizing the economies of richer countries.

Global Financial Integrity thanks Dev Kar and Devon Cartwright-Smith for their work in producing this analysis.

Raymond W. Baker
Director, Global Financial Integrity

CONTENTS

A PROGRAM OF THE CENTER FOR INTERNATIONAL POLICY

Illicit Financial Flows from Africa: Hidden Resource for Development

Prepared by Dev Kar and Devon Cartwright-Smith[1]

ABSTRACT

This paper presents an analysis of the volume and pattern of illicit financial flows from African countries over a 39-year period from 1970 to 2008. The paper makes a contribution given that existing research on long-term trends in the pattern of illicit flows from African countries is rather scanty. The classification of African countries used in this paper differs from that in the IMF's World Economic Outlook; here, Egypt and Libya (members of the African Union) are included under North Africa while the group of CFA Franc countries is distributed along a geographical basis. The paper presents estimates of illicit financial flows from Africa and its various regions and economic groupings during the 1970s, 1980s, 1990s, and the most recent nine-year period 2000-2008 for which data are available. We find that illicit flows have not only grown on a decennial basis, cumulatively they have come to far exceed the continent's outstanding external debt at the end of 2008. The statistical analysis of long-term trends brings out some interesting regional disparities in the pattern and growth of such flows. Utilizing the World Bank Residual model and the IMF Direction of Trade Statistics, illicit outflows from Africa across the 39-year period are estimated at US$854 billion. The authors point out that data limitation significantly understates the problem. Making various adjustments to the estimate suggests that the volume of illicit flows over the period 1970 to 2008 may be closer to US$1.8 trillion. We argue that this staggering loss of capital seriously hampers Africa's efforts at poverty alleviation and economic development.

---

1 Dev Kar, formerly a Senior Economist at the International Monetary Fund (IMF), is Lead Economist at Global Financial Integrity (GFI) at the Center for International Policy, Washington DC, and Devon Cartwright-Smith is an Economist at GFI. The authors thank Raymond Baker and other staff at GFI for helpful comments. Thanks are also due to the staff of the IMF's Statistics Department for their assistance with balance of payments data. Any errors that remain are the authors' responsibility. The authors would welcome comments; citations should refer to a Working Paper of Global Financial Integrity, a Program of the Center for International Policy (CIP). The views expressed herein are those of the authors and do not necessarily reflect those of CIP or its board.

I Introduction

The problem of illicit flows from Africa deserves serious consideration. As Governor Ndung'u (2007) of the Central Bank of Kenya noted in his keynote address at a policy seminar of Governors of African central banks:

> The costs of this financial hemorrhage have been significant for African countries. In the short run, massive capital outflows and drainage of national savings have undermined growth by stifling private capital formation. In the medium to long term, delayed investments in support of capital formation and expansion have caused the tax base to remain narrow. Naturally and to the extent that capital flight may encourage external borrowing, debt service payments also increased and further compromised public investment prospects. Furthermore, capital flight has had adverse welfare and distributional consequences on the overwhelming majority of poor in numerous countries in that it heightened income inequality and jeopardized employment prospects. In the majority of countries in the sub-region, unemployment rates have remained exceedingly high in the absence of investment and industrial expansion.

A recent study produced by Global Financial Integrity (GFI) estimates illicit financial flows out of all developing countries at $858 billion to $1.06 trillion a year. Among developing countries, Africa presents the most analytical difficulties because countries with inadequate data account for nearly 37 percent of regional GDP.[2] One thing is certain: while African countries have had to shoulder a heavy debt burden, a number of researchers such as Ndikumana and Boyce (2008), have shown that sustained illicit outflows have turned the continent into a net creditor to the rest of the world.

Seminal research at GFI on the absorption of illicit funds (forthcoming) show that while some of the private assets held outside their countries by developing country nationals may be legitimate, the bulk of such funds are certainly not. This is because estimates of illicit capital outflows provided by economic models such as the World Bank Residual model and the Trade Misinvoicing model (see Section II for a brief description) account for the bulk of deposits reported by banks to the Bank for International Settlements (BIS) and by offshore financial centers.

The purpose of this paper is not to explain the factors that drive illicit financial flows or to carry out a series of econometric tests seeking to determine their significance. There is a wealth of existing research on these subjects. Rather, we analyze the long-term evolution of illicit flows from the continent and its various regional and economic groupings. Thereby, we shed light on how such flows have affected particular groups of countries in terms of the size of regional economies, populations, and inflows of official development assistance. Such an exercise has not been carried out for African countries. In presenting this discussion of long-term trends in regional illicit flows, we also point out certain common pitfalls in data interpretation.

---

2 See, *Illicit Financial Flows from Developing Countries: 2002-2006*, Dev Kar and Devon Cartwright-Smith, Global Financial Integrity, December 2008, Washington DC.

The paper is organized as follows. Section II presents a brief description of the two main economic models used to estimate illicit flows—the World Bank Residual model and the Trade Misinvoicing model based on the IMF's Direction of Trade Statistics. We then explain the methodology and the rationale underlying the treatment of estimates with reference to the traditional method used in past studies. Section III presents a discussion of the long-term evolution of illicit flows starting with the 1970s through the 1980s, 1990s, and the 9-year period 2000-2008. Then we draw out certain dominant regional patterns, ranking countries in terms of the volume of outflows and comparing the results to a recent study by Ndikumana and Boyce (2008). Section IV presents a method to correct for data inadequacies and gaps which understate illicit flows from developing countries. Note that we do not account for illicit flows generated due to smuggling, violations of intellectual property rights, trade in narcotics and other contraband goods, human trafficking, sex trade, and other illegal activities as they are outside the scope of this study. Section V discusses the development impact of illicit flows. Finally, Section VI presents the main conclusions of the paper.

II. Models of Illicit Financial Flows

Illicit money is money that is illegally earned, transferred, or utilized. If it breaks laws in its origin, movement, or use it merits the label.

Flight capital takes two forms. The legal component stays on the books of the entity or individual making the outward transfer. The illegal component is intended to disappear from records in the country from which it comes. By far the greatest part of unrecorded flows are indeed illicit, violating the national criminal and civil codes, tax laws, customs regulations, VAT assessments, exchange control requirements, or banking regulations of the countries out of which the unrecorded/illicit flows occur.

There are two main channels through which illicit capital, unrecorded in official statistics, can leave a country. The World Bank Residual model captures the first channel through which illicit capital leaves a country through its external accounts. The second type of illicit flows, generated through the mispricing of trade transactions, is captured by the Trade Misinvoicing model which uses IMF Direction of Trade Statistics.

Specifically, the World Bank Residual model compares a country's source of funds with its recorded use of funds. Sources of funds—the countries inflows of capital—include increases in net external indebtedness of the public sector and the net inflow of foreign direct investment. The net external indebtedness is derived by calculating the change in the stock of external debt which was obtained from the World Bank's Global Development Finance database. Use of funds includes financing the current account deficit and additions to central bank reserves. Both these data series along with data on foreign direct investment were obtained from the IMF Balance of Payments database. According to the model, whenever a country's source of funds exceeds its recorded use of funds, the residual comprises unaccounted-for, and hence illicit, capital outflows.

Trade misinvoicing has long been recognized as a major conduit for illicit financial flows. By overpricing imports and underpricing exports on customs documents, residents can illegally transfer money abroad. To estimate trade misinvoicing, a developing country's exports to the world are compared to what the world reports as having imported from that country, after adjusting for insurance and freight. Additionally, a country's imports from the world are compared to what the world reports as having exported to that country. Discrepancies in partner-country trade data, after adjusting for insurance and freight, indicate misinvoicing. However, note that this method only captures illicit transfer of fund abroad through customs re-invoicing; IMF Direction of Trade Statistics cannot capture mispricing that is conducted on the same customs invoice (for which we make an adjustment in Section IV).

It should be noted, however, that the trade misinvoicing model can also yield estimates that are negative, suggesting illicit inflows (i.e. unrecorded capital flowing into a developing country) through export over-invoicing and import under-invoicing. This paper presents estimates of illicit financial flows based on the Gross Excluding Reversals (GER) method rather than the traditional Net method. In the Net method, gross capital outflows are reduced by gross capital inflows to derive a net position; the net positions (which can be negative) are then added to the World Bank Residual model estimates. In contrast, under the GER method, only estimates of export under-invoicing and import over-invoicing are included in the illicit flows analysis, while inward illicit flows (i.e., export over-invoicing and import under-invoicing) are ignored. The rationale for the GER method is as follows.

First, the netting of illicit inflows from outflows is not realistic in countries with a history of governance issues, political instability, and lack of prudent economic policies. As structural characteristics that drive illicit financial flows are unlikely to swing back and forth, the GER method limits inward illicit flows to clear cases where flight capital returns following genuine and sustained economic reform. Since legitimate traders do not often use the trade misinvoicing mechanism to bring money into the country, the GER method is preferred in this paper rather than the traditional Net method favored by Ndikumana and Boyce.

Second, the traditional method automatically equates all "wrong" signs as genuine reversals of illicit capital. This flies in the face of macroeconomic reality. For instance, if substantial and sustained inflows of illicit capital (above recorded capital inflows) were in fact true, then central bankers in developing countries should have been complaining of the impact on inflation as well as the tendency of such inflows to appreciate the real effective exchange rate. Instead, what we see is that inflation is mainly driven by well-known factors affecting the monetary base while the domestic currencies of most developing countries have depreciated over time against most convertible currencies like the US dollar. Macroeconomic theory holds that in general a reversal of capital flight is only likely to occur when economic agents are convinced that the government has implemented lasting economic reforms and there are improvements in governance and/or political stability.

Finally, the netting of inflows from outflows implies that a country somehow gains from illicit inflows which therefore need to be set off against what the country loses through illicit outflows. In reality that is hardly the case as any policy maker will tell us. Illicit inflows captured by these models are also unrecorded and hence the government cannot tax them or use them for productive purposes. Nevertheless, we show that the differences in results found in this study and one carried out by Ndikumana and Boyce (2008) are not all that different either in terms of the volume of real illicit outflows from Africa or in the countries with the highest outflows.

One should bear in mind that there are a number of limitations underlying the two models used to estimate illicit flows. First, no economic model that relies on official data to estimate illicit flows can capture the effects of smuggling which entirely bypasses customs authorities and their recording systems. Smuggling tends to be rampant when there are significant differences in cross-border prices in certain goods between countries that share a long and porous frontier. The profits from smuggling often end up as part of outgoing illicit flows since smugglers seek to shield their ill-gotten gains from the scrutiny of officials, even as smuggling distorts the quality of bilateral trade. As a result, trade data distortions due to smuggling may indicate that there are inward illicit flows into a country when in fact the reverse is true. Economic models that rely on official statistics also cannot capture illicit flows generated through transactions in narcotics and other contraband goods, human trafficking, violations of intellectual and property rights, and the sex trade because related financial flows are not recorded in any books. Hence, economic models understate the actual volume of illicit flows to the extent that these types of illegal transactions are significant for both developing and developed countries.

Second, some economists have argued that misinvoicing should be excluded from estimates of illicit financial flows on the grounds that export under-invoicing and import over-invoicing behave quite differently from other conduits of illicit financial flows. For instance, misinvoicing often takes place in response to high trade taxes and thus may

be unrelated to illicit financial flows captured by other models. However, other economists have advanced equally cogent arguments for including trade misinvoicing estimates. They argue that international trade often provides an excellent conduit for illicit flows so that the exclusion of trade misinvoicing will seriously understate such flows.

Third, the trade misinvoicing model cannot capture illicit outflows generated through "same-invoice" faking. Not all mispriced trade results in a difference between export and import values. When buyers and sellers collude to misprice trade transactions within the same invoice, there is no recorded difference between export and import values. This is the case in much of the abusive transfer pricing by multinational corporations, which often vary invoices as needed to shift profits and capital across borders. In fact, transactions that are completely faked, without any underlying reality, have become common and are especially difficult to estimate. The use of fake invoices is prevalent in many countries where fake invoice vendors offer receipts to potential customers many of whom are accountants, managers and salespersons either seeking to evade taxes for their companies or get reimbursed for their personal expenses by their employers.

Finally, the World Bank Residual and Trade Misinvoicing models understate actual outflows of illicit capital due to missing data, particularly for the earlier years. For instance, reliable data on external debt, foreign direct investment, and Direction of Trade Statistics are not available for most African countries going back to 1970. For many countries, only partial data are available, but a data gap in any part of the model's inputs necessitates setting that model's estimate to zero for that year. For example, South Africa was the only country with sufficient balance of payments data for the early 1970s, but as data on South Africa's external debt are not available, the World Bank Residual model could not be estimated prior to 1994.

Apart from technical and other limitations of economic models to fully capture illicit flows, we also note that there may be a complicated relationship between trade misinvoicing and illicit financial flows. This is because misinvoicing may be driven by other motives to circumvent trade restrictions or to take advantage of government subsidies. For instance, if there are trade restrictions such as high import duties, imports may be under-invoiced to lower the burden of customs duties. A further complication may arise if one were to consider the rate of income taxation in relation to customs duties. If income taxes are higher than duties, an importer may still come out ahead by paying high customs duties (by overpricing imports) so long as the loss in income or profit results in lower income taxes that more than offset the higher customs duties. In Section IV, we attempt to correct for the underestimation of illicit flows from some of these factors.

The relationship between trade misinvoicing and illicit financial flows can also become very complicated if there are active black markets in foreign exchange operating within a country. If exchange rates in black markets are attractive, an importer may over-invoice imports to reduce taxable income and then reap the additional profit from exchanging it in the black market. These illicit profits can then be transferred abroad through one or more of the conduits of illicit flows with which the importer is familiar. On the export side, illicit financial flows are common when the black market premium is higher than the export subsidy. It will then be attractive to raise the necessary foreign exchange on the black market.

The complexities of estimating illicit flows notwithstanding, statistical issues underlying bilateral trade data could also create difficulties in estimation. Compilers of international trade statistics recognize that differences in recording systems and the proper identification of the origin and destination of goods—particularly in an increasingly globalized world where component parts to a final product might originate from a number of countries—can complicate the identification and recording of an accurate country of origin for goods. Moreover, as Kar (1986) finds, floating exchange rates can introduce significant exchange conversion-related discrepancies due to non-uniform conversion procedures and long transit times in the exports and imports of certain heavy machinery or bulk container goods between trading partners.

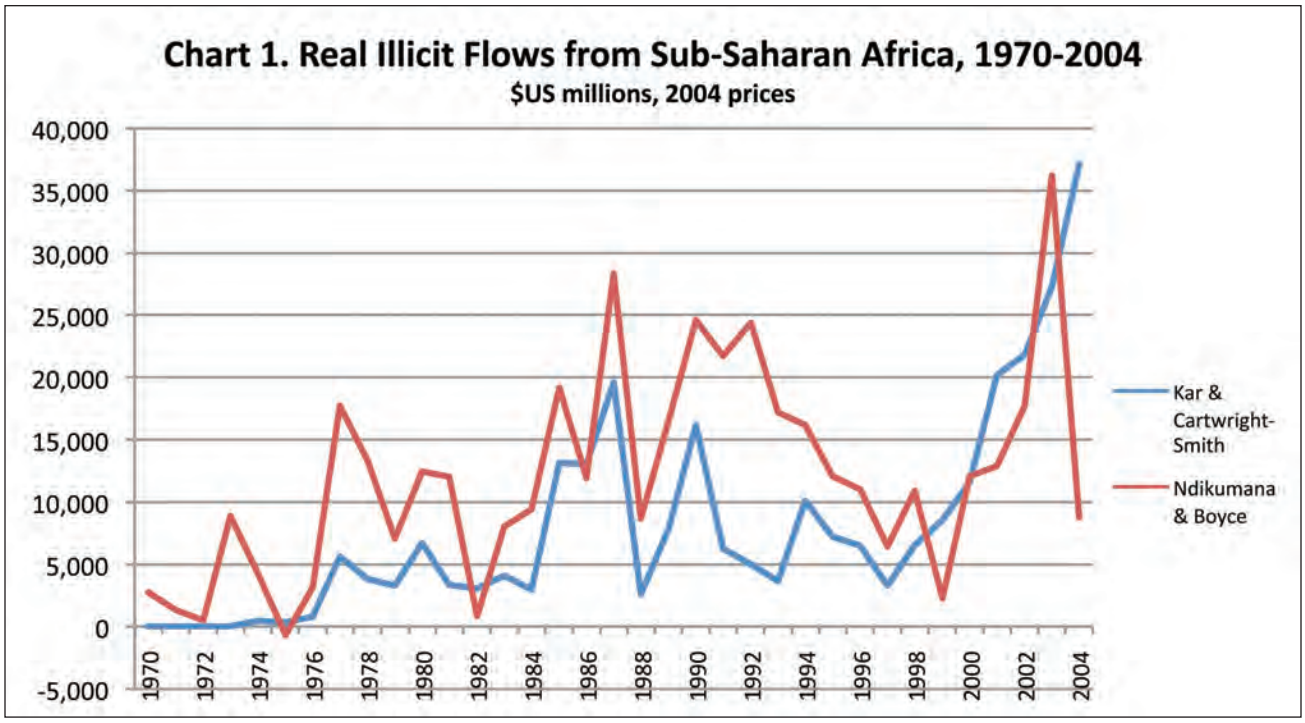
Existing research shows that African countries have experienced massive outflows of illicit capital mainly to Western financial institutions. In fact, Ndikumana and Boyce (2003, 2008) among others find that the continent as a whole has turned into a net creditor to the world. The irony is not lost on bilateral and multilateral creditors who have together provided Africa with substantial and growing amounts of external aid over several decades. Other researchers such as Collier, Hoeffler and Pattilo (2001) point out that many African investors seem to prefer foreign over domestic assets to the extent that the continent now has the highest share of private external assets among developing regions with serious ramifications for self-sustaining economic growth which allow countries to graduate from aid dependence.

Estimates presented in Table 1 show that over the 39-year period Africa lost an astonishing US$854 billion in cumulative capital flight—enough to not only wipe out the region's total external debt outstanding of around US$250 billion (at end-December, 2008) but potentially leave US$600 billion for poverty alleviation and economic growth. Instead, cumulative illicit flows from the continent increased from about US$57 billion in the decade of the 1970s to US$437 billion over the nine years 2000-2008.

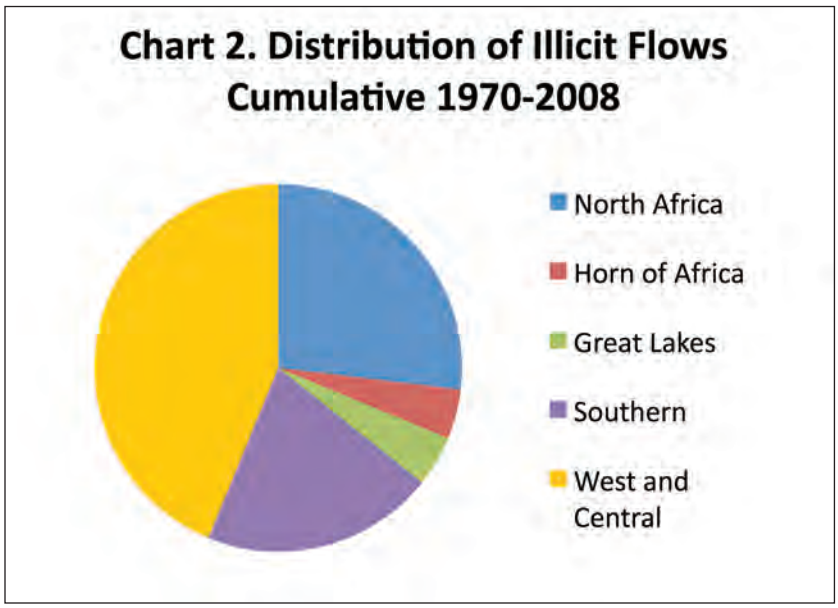
In order to analyze the long-term trend in illicit flows from the continent, we deflate the nominal series by the World consumer price index, base 2004. While Ndikumana and Boyce (2008) also used 2004 prices, they deflated nominal illicit flows by the U.S. producer price index. A plot of the two series on real illicit flows over 1970-2004 (Chart 1) for the Sub-Sahara region shows that they move in tandem, except for 2004 when the Ndikumana and Boyce series plunge dramatically.

Table 1. Africa: Illicit Financial Flows, 1970-2008
(in millions of U.S. Dollars)

Group	Total IFFs				
	1970s	1980s	1990s	2000-2008	1970-2008
Africa	**57,291**	**203,859**	**155,740**	**437,171**	**854,061**
North Africa	19,161	72,020	59,813	78,742	229,737
Sub-Saharan	38,130	131,839	95,927	358,429	624,324
Horn of Africa	2,354	14,131	5,108	15,603	37,197
Great Lakes	6,925	16,079	4,978	10,285	38,267
Southern	5,894	20,581	31,447	116,828	174,751
West and Central	22,956	81,047	54,394	215,712	374,109
Fuel-exporters	20,105	67,685	48,157	218,970	354,917
Nonfuel-exporters	7,867	26,517	22,375	23,342	80,102
Group	Average IFFs				
	1970s	1980s	1990s	2000-2008	1970-2008
Africa	**7,299**	**21,678**	**17,813**	**50,328**	**29,021**
North Africa	3,097	7,754	6,316	9,166	6,866
Sub-Saharan	4,202	13,924	11,497	41,162	22,156
Horn of Africa	249	1,421	715	1,949	1,183
Great Lakes	745	1,778	580	1,286	1,142
Southern	811	2,412	4,659	13,388	9,635
West and Central	2,397	8,313	5,544	24,538	10,196
Fuel-exporters	2,239	6,922	5,105	24,806	9,878
Nonfuel-exporters	1,017	2,729	2,433	2,787	2,502
Group	Rates of Change (real 2008 CPI deflated)				
	1975-1979	1980s	1990s	2000-2008	1970-2008
Africa	**18.9**	**-2.1**	**-4.8**	**24.6**	**12.1**
North Africa	14.0	-11.5	0.5	6.0	6.5
Sub-Saharan	n.a.	1.3	-7.0	30.1	15.1
Horn of Africa	n.a.	7.3	-15.5	33.5	20.0
Great Lakes	13.2	-12.7	-17.7	35.0	13.5
Southern	n.a.	13.5	7.3	21.5	16.7
West and Central	21.5	0.0	-11.4	36.0	14.5
Fuel-exporters	n.a.	2.2	-15.6	42.6	21.8
Nonfuel-exporters	n.a.	11.3	-1.6	11.0	13.6



While the overwhelming bulk of this loss in capital through illicit channels over the period 1970-2008 was from Sub-Saharan African countries, there are significant disparities in the regional pattern of illicit flows (Chart 2). For example, capital flight from West and Central Africa, by far the dominant driver of illicit flows from the Sub-Saharan region, is mainly driven by Nigeria which is also included in the economic group "fuel exporters". In fact, the proportion of illicit flows from West and Central African states may be somewhat overstated, given that other regions of Africa include many countries that are poor reporters of data and thereby understate their contributions to illicit flows. For example, flows from the Horn of Africa (represented by the narrow red sliver in Chart 2) are likely to be understated particularly in the earlier decades due to incomplete balance of payments and bilateral trade data from Eritrea, Somalia, and Sudan, which have been historically unstable and prone to conflict. By the same token, civil strife for some periods in the Democratic Republic of the Congo, Rwanda, and Uganda are reflected in incomplete and poor quality data which likely understate the volume of illicit flows from the Great Lakes region. Hence, the long-term evolution of illicit flows from the different regions of Africa need to be interpreted with caution in light of such data deficiencies.



The averages presented in Table 1 are calculated for countries and periods with illicit flows so as not to understate average illicit flows by counting zero model estimates due to missing data. With this caveat in mind, the estimates indicate that Africa lost around US$29 billion per year over the period 1970-2008, of

which the Sub-Saharan region accounted for $22 billion. On average, fuel exporters including Nigeria lost capital at the rate of nearly $10 billion per year, far outstripping the $2.5 billion dollars lost by non-fuel primary commodity exporters per year. Annual average rates of illicit outflows from Sub-Saharan Africa registered a sharp increase in the 9-year period 2000-2008 relative to the earlier decades. This was driven mostly by increased average outflows from the West and Central Africa and Southern regions. A large part of this sharp increase in illicit flows seems to have been financed by rising income levels.

Table 1 also shows that real illicit flows from Africa grew at an average rate of 12.1 percent per annum over the 39-year period. Some of the acceleration in illicit outflows was undoubtedly driven by oil price increases and increased opportunities to misprice trade that typically accompany increasing trading volumes due to globalization. The rates of outflow in illicit capital for West and Central Africa (14.5 percent) as well as Fuel-exporters (21.8 percent) over the entire period 1970-2008 reflect substantial outflows from Nigeria and Sudan. The acceleration of illicit outflows in 2000-2008 from both these regions coincide with unprecedented increases in oil prices. This seems to corroborate Almounsor (2005), who found a significant link between oil price increases and capital flight.

Table 2 presents estimates of illicit financial flows in relation to GDP, population, and official development assistance (ODA). The top half of the table shows the ratio of cumulative illicit flows to end of the decade population. For instance, at the end of 2008, every African lost $989 through total illicit capital that was transferred over the 39-year period. Note that the loss seems to be particularly acute in relation to the 1970s because estimates of illicit outflows for that decade are biased downwards due to missing data.

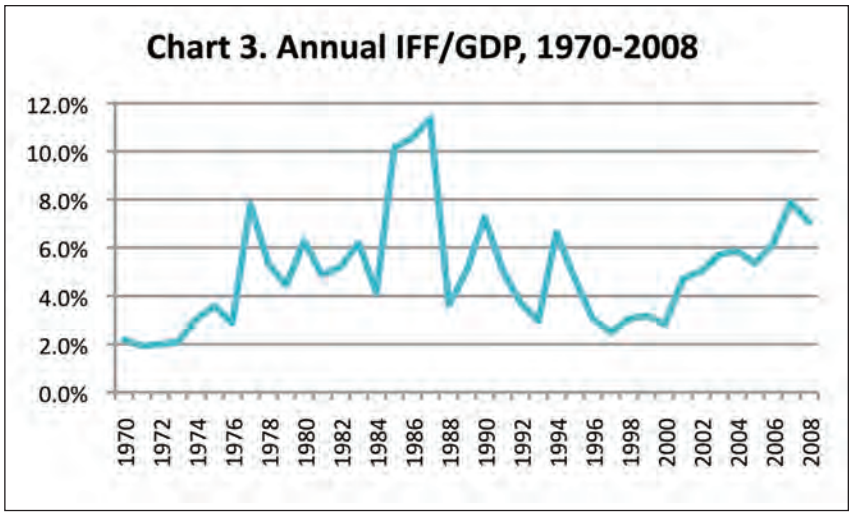
Chart 3 shows that illicit flows from Africa increased from around 2 percent of GDP in 1970, peaks at around 11 percent in 1987, falling sharply to below 4 percent for much of the 1990s, rising again to 8 percent of GDP in 2007 before declining to around 7 percent in 2008. The decline in the last year was due to much faster rates of economic growth in a few large countries. In fact, Sub-Saharan Africa as a whole registered the highest GDP growth rates in over 30 years during the period 2000-2008, underpinned by high commodity prices, improved macroeconomic policies, and structural reforms in a number of countries. The acceleration in growth was mainly driven by oil-producing countries with capacity increases in Angola and the Republic of Congo and new production in Mauritania. However, during this 9-year period when Sub-Saharan Africa enjoyed its strongest period of sustained economic growth, the pace of illicit flows from the region also accelerated relative to previous decades (Table 1). According to an IMF (2000) study, faster economic expansion with rising income levels can actually drive capital flight if growth is not accompanied by genuine economic reform and better governance.

Table 2. Africa: Illicit Financial Flows Indicators, 1970-2008

Group	IFF/Decade-end Population ($ per cap)				
	1970s	1980s	1990s	2000-2008	1970-2008
Africa	**$154.42**	**$362.74**	**$229.03**	**$505.98**	**$988.50**
North Africa	$222.80	$637.35	$538.85	$605.71	$1,767.21
Sub-Saharan	$133.79	$293.63	$168.59	$488.32	$850.58
Horn of Africa	$42.80	$193.57	$78.59	$126.85	$302.41
Great Lakes	$106.54	$141.05	$32.97	$52.74	$196.24
Southern	$267.93	$316.63	$283.31	$891.82	$1,333.98
West and Central	$160.53	$411.41	$224.77	$756.89	$1,312.66
Fuel-exporters	$170.38	$425.69	$341.54	$968.89	$1,570.43
Nonfuel-exporters	$131.12	$236.76	$177.58	$144.98	$497.52

Group	IFF/ODA (ratio)				
	1970s	1980s	1990s	2000-2008	1970-2008
Africa	**2.10**	**2.41**	**1.05**	**2.38**	**1.92**
North Africa	2.38	3.31	1.42	3.35	2.40
Sub-Saharan	1.98	2.10	0.90	2.24	1.79
Horn of Africa	1.41	1.42	0.49	0.77	0.88
Great Lakes	1.18	1.01	0.22	0.28	0.47
Southern	1.80	1.49	1.04	3.33	2.12
West and Central	2.71	3.48	1.24	3.19	2.61
Fuel-exporters	5.74	7.02	3.70	5.65	5.47
Nonfuel-exporters	1.51	1.38	0.67	0.51	0.77

It would be erroneous to conclude that things have started to stabilize in the most recent year because illicit flows have declined as a percent of regional GDP. As noted previously, this merely reflects the fact that Africa's GDP growth outpaced the growth in such flows due to the boom in oil and primary commodity prices. But the current global economic crisis may reduce aid flows to the region because donor countries themselves are mired in severe recessions. A reduction in aid flows could have serious repercussions in countries where external aid provides significant budgetary support.



Per capita, the North Africa region (comprising of Algeria, Egypt, Libya, Morocco, and Tunisia) lost $1,767 in investable capital over the 39-year period with Southern Africa and West and Central Africa following closely behind at approximately $1,334 and $1,313 per capita, respectively. Again, except for the dip in the 1990s, the loss of illicit funds per capita has been steadily increasing over the period across most regions of Africa in spite of the high rates of population growth prevalent throughout the continent.

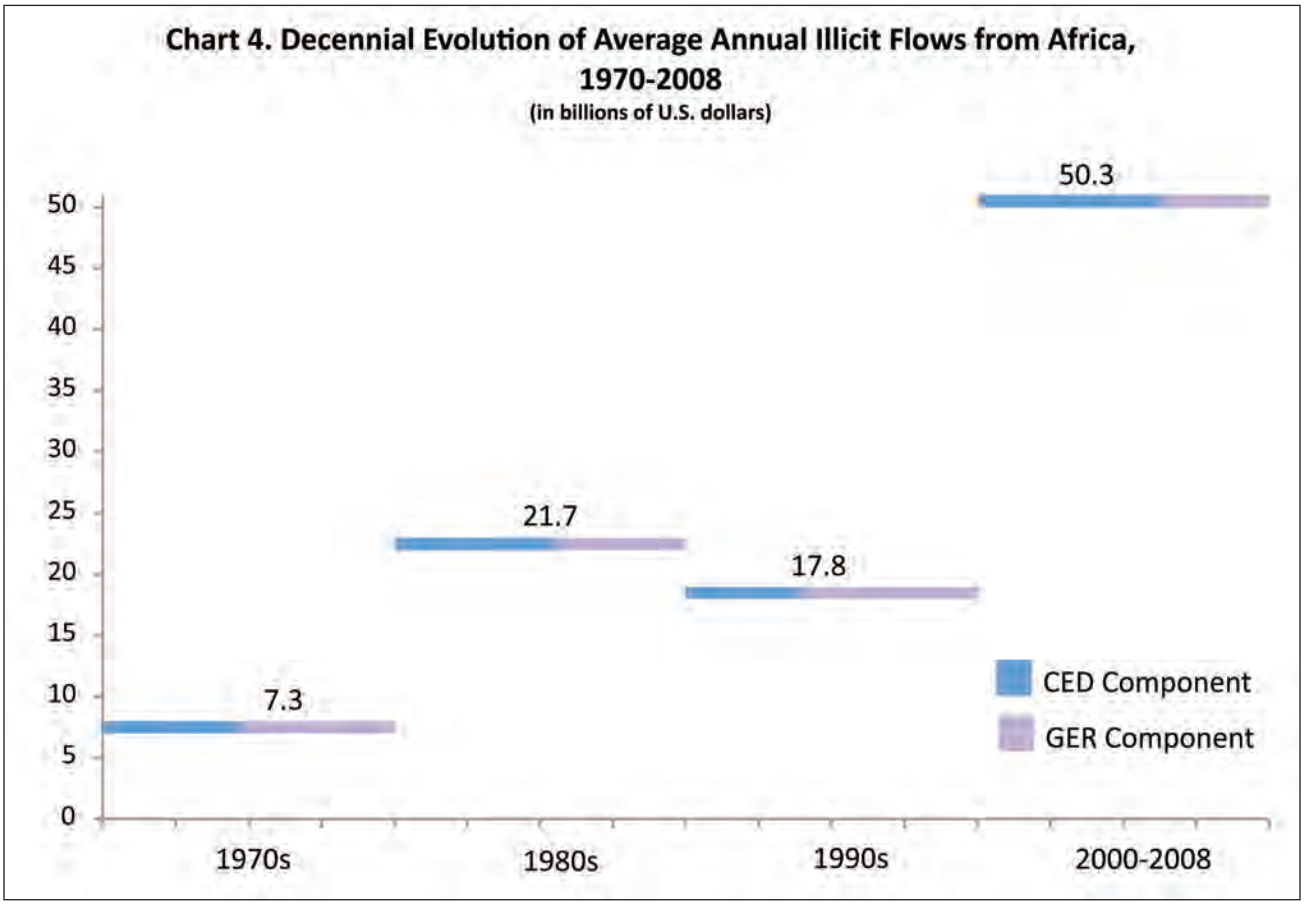
The ratio of illicit flows to official development assistance as shown in the bottom half of Table 2, provides a somewhat misleading picture of the seriousness of the issue of capital flight from Africa. For the region as a whole, illicit outflows outpaced official development assistance by a factor of around 2 to 1 for most of the historical period. For some regions like North Africa or West and Central Africa, however, that ratio rose to slightly more than 3 to 1in the 1980s and during 2000-2008. The comparatively low ratios are not only because illicit flows are understated for many regions due to missing data but also because Africa is the largest recipient of external aid in the world.

How do some of these estimates compare with past research? While a number of past studies present evidence of substantial illicit financial flows from Africa, the study by Ndikumana and Boyce (2008) is the most recent and comprehensive one on the subject. They estimate illicit flows (or illegal capital flight) for a sample of 40 Sub-Saharan African (SSA) countries over the period 1970-2004 and find evidence of a "revolving door" effect between the contracting of external debt and illicit outflows. Over the 35-year period, real capital flight (in 2004 dollars) from the SSA countries amounted to $420 billion, which would jump to $607 billion if one were to include imputed interest earnings.

In contrast, we adopted a conservative approach to estimating capital flight in that we omitted a country from the total if we deemed that its data were unreliable or if some of the data were incomplete. For the same sample size and time period as the Ndikumana and Boyce study, we find that Sub-Saharan Africa as a whole lost US$282 billion in real 2004 dollars over the period 1970-2004; extending the period to 2008 sharply increased the cumulative total to US$533 billion.

A few points regarding our estimates versus those derived by Ndikumana and Boyce are in order. The lower figure for 1970-2004 (relative to that found by Ndikumana and Boyce) reflects our extremely conservative approach to measuring capital flight in that we set to zero those flows that cannot be supported by complete data on balance of payments or the Direction of Trade Statistics. Also, upon closer analysis of country data, we find that illicit outflows from Nigeria alone had increased to US$50 billion in 2008. In our experience, the balance of payments data

reported by Nigeria are subject to significant revisions after a lag of 2-3 years. Hence, it remains to be seen whether subsequent revisions to underlying official data on Nigeria corroborate such a high volume of illicit flows in 2008.

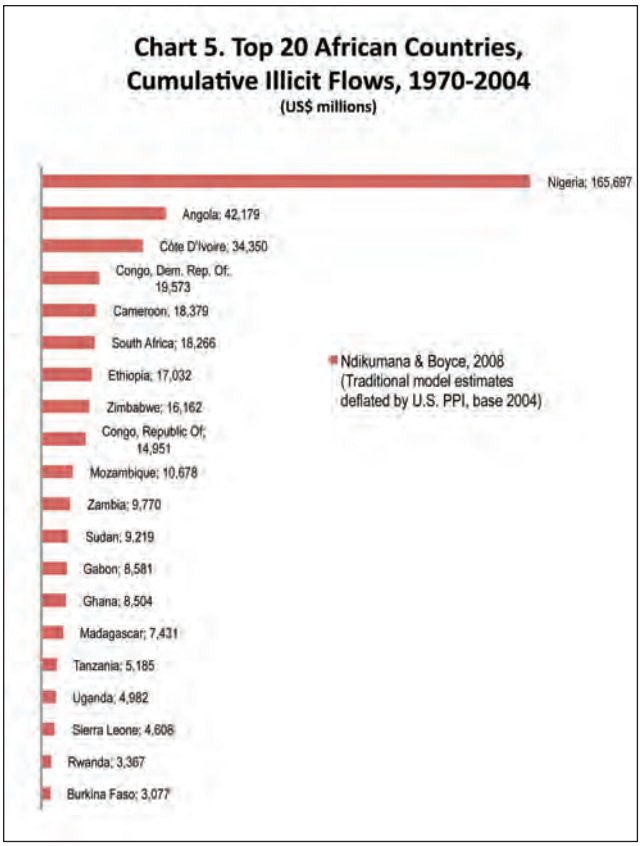


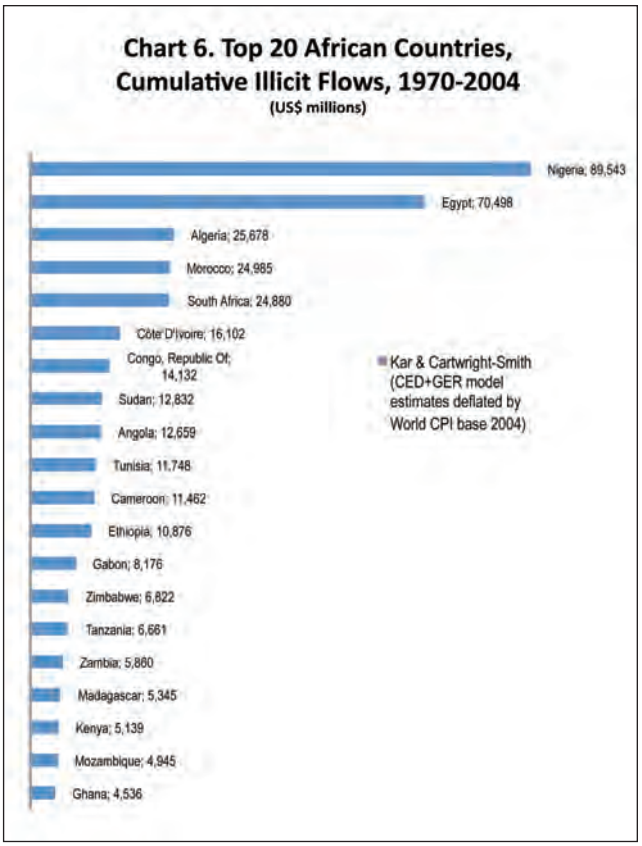
On balance, our findings corroborate Ndikumana and Boyce in that the stock of private assets held abroad by Sub-Saharan Africans exceeds the combined stock of the region's external debt, thereby making it a net creditor to the world. This finding is not surprising given that, except for a small decline in the 1990s, average illicit flows from the continent have been ratcheting upwards every decade since the 1970s (Chart 4).

Next, we rank African countries by the size of cumulative illicit flows from 1970-2004, deflated to 2004 dollars, and compare our results with those of Ndikumana and Boyce. The following observations can be made keeping in mind that while the Ndikumana and Boyce study focuses only on Sub-Saharan Africa, our sample also includes countries in North Africa (Algeria, Egypt, Libya, Morocco, and Tunisia):

- Despite the difference in sample and significant data issues, 15 of the top 20 countries with cumulative illicit outflows (Angola, Cameroon, Republic of Congo, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Madagascar, Mozambique, Nigeria, South Africa, Sudan, Tanzania, Zambia, and Zimbabwe) are identified by both studies (Charts 5 and 6 on page 19).

- Both studies find Nigeria at the top of the list of countries with the highest cumulative illicit flows over the period 1970 to 2004. However, while Ndikumana and Boyce find that illicit flows from South Africa (the largest economy in Sub-Saharan Africa) are lower than from much smaller economies such as Cameroon and Côte d'Ivoire, we find that illicit flows from South Africa was the fifth highest after Egypt, Algeria, and Morocco (in North Africa).





- Of the five countries unique to our list (Egypt, Algeria, Morocco, Tunisia, and Kenya), illicit flows from each of the first three are much higher than any of the five remaining countries in the Ndikumana and Boyce paper (Democratic Republic of Congo, Uganda, Sierra Leone, Rwanda, and Burkina Faso). Only Kenya could possibly have shown up in the Ndikumana and Boyce list of top-20 countries while the others on our list are outside their sample of countries. In fact, illicit flows from Kenya are higher than any of the last four remaining countries in the Ndikumana and Boyce study. It is interesting to note that while the Ndikumana and Boyce study does not find Kenya as one of the top 20 countries with illicit flows, our finding corroborates an IMF (2000) study that trade misinvoicing is a significant problem for Kenya.

IV. Adjustment for the Underestimation of Illicit Flows

For reasons pointed out in Section II including limitations of economic models, there is no question that illicit financial flows are significantly understated. In this section, we attempt to correct for some of the factors responsible for the underestimation while clearly recognizing the limitations of such methods. It should be noted that adjustments to include illicit flows generated through illegal activities such as smuggling, trade in narcotics and other contraband goods, human trafficking, the sex trade, and other illegal activities, are outside the scope of this paper. Nevertheless, the exercise provides some guide to the margins of error associated with the estimation of illicit flows. Table 3 (page 20) presents the adjusted estimates in the following sequence of calculations.

Table 3. Adjustment for Illicit Financial Flows from Africa, 1970-2008 (in millions of U.S. dollars, unless otherwise noted)

IFF Adjustment	1970s	1980s	1990s	2000-2008	1970-2008
GER Goods (A)	29,988	91,302	93,955	162,335	377,581
Services Factor	0.23	0.24	0.32	0.28	0.28
GER Services (B=A*factor)	7,041	22,604	30,263	45,172	105,783
GER G&S (A+B)	37,029	113,906	124,218	207,507	483,363
Same-invoice faking (C)	37,029	113,906	124,218	207,507	483,363
Total (A+B+C)	74,058	227,812	248,436	415,014	966,727
CED (D)	27,303	112,557	61,785	274,836	476,480
Total (A+B+C+D)	101,361	340,369	310,221	689,850	1,443,207
Missing data (E)	43,954	64,960	62,201	94,128	367,691
Grand Total (A+B+C+D+E)	145,315	405,329	372,423	783,977	1,810,898

First, the GER estimates of trade misinvoicing in goods is adjusted to also include international trade in services that are not covered by IMF's Direction of Trade Statistics. The services factor is derived as the ratio of world trade in services (IMF Balance of Payments line 78addZF plus line 78aedZF) to world trade in goods (world exports plus imports). The GER estimates of trade misinvoicing involving goods are then "bumped up" by the services factor to come up with total trade misinvoicing in goods *and* services.

Next, as noted earlier, the IMF's Direction of Trade Statistics used in the Trade Misinvoicing model does not capture same-invoice faking. Hence, total trade mispricing estimates are further adjusted for "same-invoice" faking by assuming that such faking is at least equal to re-invoiced trade mispricing.[3] At this stage, the cumulative illicit flows from Africa over the period 1970-2008 amount to nearly US$1 trillion.

Next, we add the World Bank Residual, CED, model estimates to this subtotal to derive total illicit flows for all African countries that have reported data to the IMF and the World Bank. Total illicit flows from African countries that report data to the Fund and the Bank are estimated at US$1.4 trillion.

Finally, we adjust this total for the number of African countries that do not report either balance of payments or external debt data. We assume that illicit flows from the countries with missing data bear the same ratio to GDP as they do for countries that report the data.

As a result of these adjustments, total illicit flows from Africa over the period 1970-2008 more than double from US$854 billion to US$1.8 trillion. While this is a staggering volume of illicit outflows, it is likely to be still higher if we were to include flows due to other illegal activities.

---

3 There are reasons to believe that because same-invoice faking is much more difficult to detect due to word-of-mouth collusion between traders, such practices may be more frequent than re-invoiced trade mispricing. Hence, the assumption that the incidence of same-invoice faking is at least equal to re-invoiced trade, is conservative.

The enormity of such a huge outflow of illicit capital explains why donor-driven efforts to spur economic development and reduce poverty have been underachieving in Africa. Policy measures must be taken to address the factors underlying illicit outflows and also to impress upon the G-20 the need for better transparency and tighter oversight of international banks and offshore financial centers that absorb these flows.

Research at Global Financial Integrity shows that the massive outflows of illicit capital are not just due to sub-optimal policies in individual developing countries but rather that such policies find synergy in deep flaws within the global financial system. Take for example a simple indicator of aid effectiveness. According to recent studies by GFI and other researchers, developing countries lose at least $10 through illegal flight capital for every $1 they receive in external assistance. The comparable ratios for African countries are misleadingly low not only because of data deficiencies but also due to the fact that they receive a disproportional share of development assistance provided to developing countries.

So long as illicit capital continues to hemorrhage out of poor African countries over the long term at a rapid pace, efforts to reduce poverty and boost economic growth will be thwarted as income distribution becomes ever more skewed leading to economic and political instability.

The current global financial crisis, which has generated a world-wide public backlash against the lack of transparency and excesses of financial institutions, offers both African and rich donor countries an historic opportunity to address the problem of illicit flows and absorption of such flows in the world's shadow financial system. The existing global financial system shaped by liberalization and deregulation of financial markets have instead ended up generating ever-rising illicit flows and loss in government revenues. As several researchers have noted, economic growth without credible reform could lead to more, not less, capital flight, as the increase in incomes would simply finance the increased accumulation of foreign assets. Hence, prudent macroeconomic policies such as lower fiscal deficits, reduced monetary expansion, positive real rates of interest, and an appropriately valued exchange rate are crucial to improving the attractiveness of domestic investments relative to the illicit transfer of capital abroad in search of better risk-adjusted rates of return. However, sound economic policies also need to be complemented by strengthened institutions, the rule of law, and better governance if policymakers are to curtail illicit financial flows on a lasting basis.

According to the United Nations' Millennium Development Goals (MDGs), $348 billion will be needed to cover MDG costs by 2010 and $529 billion by 2015. In fact, the United Nations report *World Economic Situation and Prospects 2010* notes that a large gap still separates Africa from its MDGs. By all accounts, official donor aid commitments will probably fall well short of the required funding of MDGs leaving open the serious possibility that related targets will recede even further. Hence, if the problem of illicit flows is not addressed as a matter of high priority, the poor will likely experience a further decline in access to basic services in the face of grinding poverty. The time is right for African countries to not only implement strong economic and governance measures to curtail illicit flows but to impress upon the G-20 the need to correct their failures in oversight and regulation that have facilitated the absorption of illicit flows and contributed to the current economic crisis.

VI. Conclusions

This paper uses two well-established models, the World Bank Residual (CED) model and the Trade Misinvoicing model (Gross Excluding Reversals or GER method using bilateral IMF Direction of Trade Statistics) to estimate the volume of illicit flows from African countries. We put forward arguments why the traditional model used by Ndikumana and Boyce may seriously understate illicit outflows because they "overcorrect" by treating all reversals as if they are genuine. The following are the major findings of this paper:

- In spite of the differences in the methodology of estimating illicit flows, our findings corroborate Ndikumana and Boyce in that the stock of private assets held abroad by Sub-Saharan Africans exceed the combined stock of the region's external debt making it a net creditor to the world. Over the period 1970-2008, Africa lost US$854 billion in cumulative capital flight—enough to not only wipe out the region's total outstanding external debt but leave US$600 billion for poverty alleviation and economic growth.

- While the overwhelming bulk of this loss in capital through illicit channels over the period 1970-2008 was from Sub-Saharan African countries, there are significant disparities in the regional pattern of illicit flows. The West and Central Africa region, which includes Nigeria, is by far the dominant driver of illicit flows from the Sub-Saharan region. Nigeria's influence is also behind illicit flows from the group of "fuel exporters". However, the lack of data related to countries in other groups actually overstates the proportion of West and Central Africa in illicit outflows. Hence, the long-term evolution of illicit flows from the different regions of Africa need to be interpreted with caution in light of these data gaps.

- Illicit flows from Africa grew at an average rate of 11.9 percent per annum in real terms over the 39-year period. In fact, illicit flows grew in real terms in every single decade except in the 1990s when real rates declined across every region.

- Sub-Saharan Africa registered the highest growth rates in over 30 years during the period 2000-2008 underpinned by high commodity prices, improved macroeconomic policies, and structural reforms in a number of countries. The acceleration in growth was mainly driven by the oil-producing countries with capacity increases in Angola and the Republic of Congo and new production in Mauritania. However, during the last nine years of the study 2000-2008, when Sub-Saharan Africa enjoyed its strongest period of sustained economic growth, the pace of illicit flows from the region also accelerated relative to previous decades. Some of the acceleration in illicit outflows was undoubtedly driven by oil price increases and increased opportunities to misinvoice trade that typically accompany increasing trading volumes. The rates of outflow in illicit capital for West and Central Africa (20.4 percent) as well as Fuel-exporters (21.8 percent) over the entire period 1970-2008 reflect substantial outflows from Nigeria and Sudan.

- We also analyzed trends in illicit flows in relation to GDP, population, and official development assistance (ODA). The results need to be interpreted with caution because some of the estimates, particularly for the earlier period, are biased downwards due to missing data. The paper finds that the ratios for 2000-2008 take a sharp dip because of the much faster rates of growth during this period even though IFFs have actually increased substantially over this nine-year span.

- Past studies have also shown that Sub-Saharan Africa has lost a huge amount of capital through illicit flows. Measuring the total cumulative volume of capital flight over a period as percent of end-period GDP, Hermes and Lensink (1992) found that the burden of capital flight as a percent of GDP (61 percent) was higher for Sub-Saharan Africa than for Latin America (22 percent). Ndikumana and Boyce found that total capital flight from Sub-Saharan Africa over the period 1970 to 2004 accounted for nearly 82 percent of the total

regional GDP in 2004. By way of comparison, this study found that Africa as a whole (which includes the North African countries Algeria, Egypt, Libya, Morocco, and Tunisia) lost about 56 percent of its total 2008 GDP through illicit flows over the 39-year period in question. As growth picked up significantly in the most recent decade driven by the boom in oil and commodity prices, the illicit flows to GDP ratios have started to come down but it would be erroneous to conclude that this is a harbinger of lower illicit flows in relation to the size of African economies.

- The North Africa region (comprising of Algeria, Egypt, Libya, Morocco, and Tunisia) lost more than $1,767 in investable capital per capita over the 39-year period with Fuel-exporters and Southern Africa following closely behind at $1,570 and $1,334 per capita, respectively. Again, except for the dip in the 1990s, the loss of illicit funds per capita has been steadily increasing over the period across different regions of Africa in spite of the high rates of population growth prevalent throughout Africa.

- The ratio of illicit flows to official development assistance provides a somewhat misleading picture of the seriousness of the issue of capital flight from Africa. For the region as a whole, the ratio hovers at around 2 to 1 for most of the historical period although for some regions like North Africa and West and Central Africa, the ratio exceeded 3 to 1 in the 1980s and 2000s. The comparatively low ratios belie the fact that while illicit flows are understated for many regions due to missing data, the continent itself is the largest recipient of external aid in the world.

- According to Ndikumana and Boyce (2008), over the period 1970-2004, illicit flows from 40 Sub-Saharan African (SSA) amounted to $420 billion in 2004 dollars. We adopted a conservative approach to estimating capital flight in that we omitted a country from the total if we deemed that its data were unreliable or if some of the Direction of Trade data were incomplete. While we found that Africa as a whole lost US$374 billion in real 2004 dollars over the same period 1970-2004, extending the period to 2008 sharply increased to cumulative total to US$637 billion (see Statistical Appendix).

- We rank African countries by the size of cumulative illicit flows from 1970-2004 deflated based on 2004 dollars and compare our results with those of Ndikumana and Boyce. In spite of the above difference in sample and significant data issues, 15 of the top 20 countries with cumulative illicit outflows (Angola, Republic of Congo, Cameroon, Côte d'Ivoire, Ethiopia, Gabon, Ghana, Madagascar, Mozambique, Nigeria, South Africa, Sudan, Tanzania, Zambia, and Zimbabwe) are identified by both studies.

- Both studies place Nigeria at the top of the list of countries with the highest cumulative illicit flows over the period 1970 to 2004. However, while the Ndikumana and Boyce paper estimates less illicit flows from South Africa, the continent's largest economy, than from comparatively smaller economies such as Cameroon and Côte d'Ivoire, we find that illicit flows from South Africa was the fifth highest (after Nigeria, Egypt, Algeria, and Morocco in descending order).

- Of the remaining five countries on our list (Egypt, Algeria, Morocco, Tunisia, and Kenya) illicit flows from each of the first three are much higher than any of the remaining five countries included in the Ndikumana and Boyce paper (Democratic Republic of Congo, Uganda, Sierra Leone, Rwanda, and Burkina Faso in descending order of magnitude). Illicit flows from Kenya are higher than any of the last four remaining countries in the Ndikumana and Boyce study.

- There is no question that illicit flows are understated due to the reasons pointed out in Section II. Hence, we attempted to correct for some of the factors responsible for the underestimation while clearly recognizing the limitations of such approximations. As a result of these adjustments, total illicit flows from Africa over the period 1970-2008 more than doubled from US$854 billion to US$1.8 trillion.

- Staggering as this amount is, the estimate still does not include illicit flows generated due to smuggling, trade in narcotics and contraband, violations of intellectual property rights, human trafficking, sex trade, and other illegal activities. It is not surprising why donor-driven efforts to spur economic development and reduce poverty have been underachieving in Africa and other parts of the developing world. Policy measures must be taken to address the factors underlying illicit outflows. In addition, African countries must impress upon the G-20 the need for better transparency and tighter oversight of international banks and offshore financial centers that absorb these flows.

References

Ajayi, S. Ibi and Mohsin S. Khan, Editors, 2000, *External Debt and Capital Flight in Sub-Saharan Africa*, International Monetary Fund, Washington DC.

Almounsor, Abdullah 2005, *A Development Comparative Approach to Capital Flight: the Case of the Middle East and North Africa, 1970-2002* in Capital Flight and Capital Controls in Developing Countries, Edited by Gerald A. Epstein, pp. 234-261, Edward Elgar, Cheltenham, United Kingdom.

Baker, Raymond W., 2005, *Capitalism's Achilles Heel, Dirty Money and How to Renew the Free-Market System*, John Wiley & Sons, Inc., Hoboken, New Jersey, United States.

Bhagwati, Jagdish N., 1967, *Fiscal Policies, the Faking of Foreign Trade Declarations and the Balance of Payments*, Bulletin of the Oxford University Institute of Statistics, February.

Bhagwati, Jagdish N, 1964, *On the Under-Invoicing of Imports*, Bulletin of the Oxford University, Institute of Economics and Statistics, 26, pp. 389-97.

Bhagwati, Jagdish, Anne Krueger, C. Wibulswasdi**,** 1974, *Capital Flight from LDCs: A Statistical Analysis*, Illegal Transactions in International Trade (Ed.) J.N. Bhagwati, North Holland, and Amsterdam.

Cerra, Valerie, Rishi, Meenakshi , and Saxena, Sweta C. 2005, *Robbing the Riches: Capital Flight, Institutions, and Instability,* IMF Working Paper (WP/05/199, October, 2005).

Chang, P.H. Kevin, and Robert E. Cumby, 1991, *Capital Flight in Sub-Saharan African Countries*, in Ishrat Husain and John Underwood, eds. African External Finance in the 1990s, World Bank, pp. 162-184, Washington, DC.

Collier, P., A. Hoeffler, and C. Pattillo, 2001, *Flight Capital as a Portfolio Choice*, World Bank Economic Review, 15(1):55-80, Washington DC.

Cuddington, J., 1986, *Capital Flight: Estimates, Issues, and Explanations*, Princeton Studies in International Finance, No. 58.

Dooley, Michael, P., 1986, *Country Specific Risk Premiums, Capital Flight and Net Investment Income Payments in Selected Developing Countries*, International Monetary Fund, Departmental Memorandum, Washington DC.

Dooley, Michael, W. Helkie, R. Tyron, and J. Underwood, 1986, *An Analysis of External Debt Positions in Eight Developing Countries through 1990*, Journal of Developing Economics, pp. 283-318.

Dooley, Michael P., and Kenneth M. Kletzer, 1994, *Capital Flight, External Debt and Domestic Policies*, NBER Working Paper 4793 (Cambridge, Massachusetts: National Bureau of Economic Research).

Dornbusch, Rudiger, 1990, *Capital Flight: Theory, Measurement and Policy Issues*, Occasional Paper No. 2 (Washington: Inter-American Development Bank).

Fischer, Stanley, Ernesto Hernández-Catá, and Mohsin S. Khan, 1998, *Africa: This Is a Turning Point*? Paper presented at the American Economic Association meeting, Chicago, January 3–5.

Gulati, Ravi, *A Note on Trade Misinvoicing*, in Capital Flight and Third World Debt, Lessard, Donald and John Williamson (eds.), Institute for International Economics, Washington DC.

Kar, Dev and Devon Cartwright-Smith, 2008, *Illicit Financial Flows from Developing Countries: 2002-2006*, Global Financial Integrity, Washington DC, December.

Kar, Dev, Devon Cartwright-Smith, and Ann Hollingshead, 2010, *The Absorption of Illicit Financial Flows from Developing Countries: 2002-2006*, Global Financial Integrity, Washington DC, (forthcoming).

Kar, Dev, 1986, *Currency Invoicing and Exchange Conversion in International Trade*, Papers in International Financial Statistics, PIFS/86/1, International Monetary Fund, February 14, 1986, Washington, DC.

Hermes, Niels, and Robert Lensink, 1992. *The Magnitude and Determinants of Capital Flight: The Case for Six Sub-Saharan African Countries*, De Economist, Vol. 140, No. 4, pp. 515–30.

Hermes, Niels, and Robert Lensink, 2001, *Capital Flight and the Uncertainty of Government Policies*, Economics Letters, Vol. 71, No. 3, pp. 377–81.

International Monetary Fund, 2006, *Annual Report on Exchange Arrangements and Exchange Restrictions*, 2006, Washington DC.

Kant, Chander, 1996, *Foreign Direct Investment and Capital Flight*, Princeton Studies in International Finance, No. 80, April.

Khan, Mohsin S., and Nadeem Ul Haque, 1985, *Foreign Borrowing and Capital Flight: A Formal Analysis*, *Staff Papers*, International Monetary Fund, Vol. 32 (December).

Khan, Moshin and N. Ul Haque, 1987, *Capital Flight from Developing Countries*, Finance and Development, March, pp. 2-5.

Le, Quan V., and Meenakshi Rishi, 2006, *Corruption and Capital Flight: An Empirical Assessment*, International Economic Journal, Vol. 20, No. 4, pp. 523-540, December.

Lessard, Donald and John Williamson eds**.,** 1984, *Capital Flight and Third World Debt*, Washington DC, Institute for International Economics.

Morgan Guaranty Trust Company, 1986, *LDC Capital Flight*, *World Financial Markets*, March, pp. 13-15.

Motala, John, 1997, *Statistical Discrepancies in the World Current Account*, Finance and Development, International Monetary Fund, March 1997, Vol. 34, No. 1.

Ndikumana, Léonce and James K. Boyce, 2008, *New Estimates of Capital Flight from Sub-Saharan African Countries: Linkages with External Borrowing and Policy Options*, University of Massachusetts, Amherst, April.

Ndikumana, Léonce and James K. Boyce, 2003, *Public debts and private assets: explaining capital flight from Sub-Saharan African countries*, World Development, 31 (1): 107-130.

Ndung'u, Njuguna, 2007, *Keynote Address by Governor, Central Bank of Kenya* at the Senior Policy Seminar on Implications of Capital Flight for Macroeconomic Management and Growth in Sub-Saharan Africa, South African Reserve Bank, October.

NGO Documents for the Earth Summit, 1992, *Treaty 15: Capital Flight and Corruption Treaty*, Non-Governmental Organization Alternative Treaties at the 1992 Global Forum.

Schineller, Lisa, 1997, *An Econometric Model of Capital Flight from Developing Countries*, Federal Reserve Board, International Finance Discussion Paper No. 579.

Schneider, Benu, 2003, *Measuring Capital Flight: Estimates and Interpretations*, Working Paper No. 194, Overseas Development Institute, London, United Kingdom, March.

World Economic Situation and Prospects 2010, Development Policy and Analysis Division, United Nations, New York.

Varman-Schneider, B., 1991, *Capital Flight from Developing Countries*, Westview Press, Boulder, Colorado, USA.

Walter, Ingo, 1987, *The Mechanisms of Capital Flight*, in Lessard, Donald R. and Williamson, J., Capital Flight and Third World Debt, Institute for International Economics.

World Bank, 1985, *World Development Report*, Washington DC, Oxford University Press for the World Bank.

Illicit Financial Flows from Africa:
Hidden Resource for Development

Dev Kar and Devon Cartwright-Smith

Statistical Appendix

TABLE 1 - Africa: Classification of Countries *(Source: World Economic Outlook, IMF)*

Geographic Regions	
Africa (53)	
North Africa (5)	**Sub-Sahara (Contd.)**
Algeria	**West and Central Africa (23)**
Morocco	Benin
Tunisia	Burkina Faso
Egypt	Cameroon
Libya	Cape Verde
Sub-Sahara (48)	Central African Republic
Horn of Africa (5)	Chad
Djibouti	Congo, Republic of
Eritrea	Côte d'Ivoire
Ethiopia	Equatorial Guinea
Somalia	Gabon
Sudan	Gambia, The
Great Lakes (6)	Ghana
Burundi	Guinea
Congo, Dem. Rep. of	Guinea-Bissau
Kenya	Liberia
Rwanda	Mali
Tanzania	Mauritania
Uganda	Niger
Southern Africa (14)	Nigeria
Angola	São Tomé and Príncipe
Botswana	Senegal
Comoros	Sierra Leone
Lesotho	Togo
Madagascar	
Malawi	
Mauritius	
Mozambique	
Namibia	
Seychelles	
South Africa	
Swaziland	
Zambia	
Zimbabwe	
Other Economic Groups	
Fuel (8)	**Nonfuel Primary Commodity Exporters (13)**
Algeria	Burkina Faso
Angola	Burundi
Chad	Congo, Dem. Rep. Of
Congo, Republic Of	Guinea
Equatorial Guinea	Guinea-Bissau
Gabon	Malawi
Nigeria	Mali
Sudan	Mauritania
	Mozambique
	Namibia
	Sierra Leone
	Zambia
	Zimbabwe

[1] Source: World Economic Outlook, IMF.

TABLE 2 - Africa: Illicit Financial Flows (CED): 1970-2008 ($US millions) *(Source: Global Financial Integrity estimates)*

Africa (CED)	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Algeria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,661.3	1,657.3	666.4
Angola	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	124.5
Botswana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Burkina Faso	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	63.8	0.0
Burundi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cameroon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	417.5	258.8	519.2
Cape Verde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central African Rep.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	0.0	5.0
Chad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.1	70.7	27.6
Comoros	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Congo, Dem. Rep. Of	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Congo, Republic Of	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	152.4
Côte D'Ivoire	0.0	0.0	0.0	0.0	0.0	173.0	121.8	467.8	343.7	0.0
Djibouti	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Egypt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,530.6	520.6	1,700.9
Equatorial Guinea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.4	29.2	42.4
Gabon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	148.6	512.5
Gambia, The	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6
Ghana	0.0	0.0	0.0	0.0	0.0	19.5	0.0	184.0	95.6	127.6
Guinea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Guinea-Bissau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kenya	0.0	0.0	0.0	0.0	0.0	0.0	22.2	23.0	82.0	0.0
Lesotho	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	18.1	20.0
Liberia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	169.1
Libya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madagascar	0.0	0.0	0.0	0.0	248.4	9.5	0.0	565.9	0.0	44.7
Malawi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.8	0.0	0.0
Mali	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.8	0.0	0.0
Mauritania	0.0	0.0	0.0	0.0	0.0	0.0	104.8	32.3	54.0	0.0
Mauritius	0.0	0.0	0.0	0.0	0.0	0.0	56.9	0.0	0.0	0.0
Morocco	0.0	0.0	0.0	0.0	0.0	668.9	0.0	424.1	0.0	0.0
Mozambique	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	0.0	0.0	0.0	0.0	14.1	43.1	0.0	0.0	270.9	0.0
Nigeria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,056.3	497.3	0.0
Rwanda	0.0	0.0	0.0	0.0	0.0	0.0	15.9	32.7	0.0	17.9
São Tomé & Príncipe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	13.2
Senegal	0.0	0.0	0.0	0.0	13.0	1.5	10.6	172.7	46.2	0.0
Seychelles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Leone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0
Somalia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	32.6	0.0
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sudan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	442.0	421.5	607.2
Swaziland	0.0	0.0	0.0	0.0	35.2	24.3	16.9	30.2	22.2	0.0
Tanzania	0.0	0.0	0.0	0.0	0.0	0.0	286.0	539.3	631.1	0.0
Togo	0.0	0.0	0.0	0.0	110.3	0.0	47.2	148.3	243.1	132.7
Tunisia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	511.8	260.8	89.4
Uganda	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Zambia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	588.1
Zimbabwe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	227.8	0.0
Total	**0.0**	**0.0**	**0.0**	**0.0**	**421.0**	**941.9**	**682.3**	**13,637.1**	**6,037.0**	**5,583.4**
North Africa	0.0	0.0	0.0	0.0	0.0	668.9	0.0	8,127.8	2,438.6	2,456.7
SSA	0.0	0.0	0.0	0.0	421.0	273.0	682.3	5,509.3	3,598.4	3,126.7
Horn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	553.4	483.3	649.6
Lakes	0.0	0.0	0.0	0.0	0.0	0.0	324.1	595.0	713.1	17.9
Southern	0.0	0.0	0.0	0.0	283.6	36.0	73.9	692.9	273.0	652.8
West	0.0	0.0	0.0	0.0	137.4	237.0	284.3	3,668.0	2,128.9	1,806.4
CFA	0.0	0.0	0.0	0.0	137.4	217.6	179.5	1,388.4	1,475.8	1,473.9
Fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,207.6	2,825.3	1,966.1
Nonfuel	0.0	0.0	0.0	0.0	0.0	0.0	104.8	253.9	350.5	588.1

Africa (CED)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Algeria	80.6	0.0	90.6	0.0	0.0	2,360.1	3,669.6	2,247.1	391.1	198.7
Angola	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Benin	0.0	0.0	0.0	0.0	0.0	102.2	83.0	171.6	0.0	178.7
Botswana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	316.9	0.0	0.0
Burkina Faso	0.0	0.0	0.0	0.0	0.0	32.8	63.3	110.5	0.0	26.9
Burundi	0.0	0.0	0.0	0.0	0.0	53.7	46.2	112.6	0.0	31.1
Cameroon	20.5	0.0	0.0	0.0	0.0	0.0	505.7	0.0	0.0	246.4
Cape Verde	0.0	0.0	0.0	0.0	3.0	0.0	19.2	16.5	0.0	0.0
Central African Rep.	0.0	14.9	7.6	0.0	0.0	52.3	33.9	77.7	0.0	0.0
Chad	0.0	0.0	0.0	19.1	0.0	7.3	32.6	34.5	75.6	0.0
Comoros	0.0	0.0	0.0	3.7	0.0	9.1	13.2	14.2	0.0	0.0
Congo, Dem. Rep. Of	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Congo, Republic Of	287.3	0.0	269.4	0.0	292.7	827.1	0.0	606.4	0.0	101.3
Côte D'Ivoire	1,093.9	0.0	0.0	0.0	0.0	1,215.0	1,553.1	1,229.3	0.0	541.7
Djibouti	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Egypt	3,770.6	1,453.7	3,502.6	2,878.4	852.8	3,181.2	3,242.8	4,533.3	2,290.0	0.0
Equatorial Guinea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	0.0	587.7	1,294.5	467.7	330.9	970.4	487.4	1,143.0	151.2	0.0
Gabon	107.7	0.0	156.8	215.6	110.8	196.2	0.0	424.0	0.0	304.6
Gambia, The	0.0	0.0	25.1	0.0	23.9	25.8	29.5	60.2	1.5	47.9
Ghana	289.2	0.0	0.0	7.1	110.0	0.0	435.3	403.1	0.0	106.7
Guinea	0.0	0.0	0.0	0.0	0.0	0.0	159.0	267.2	0.0	0.0
Guinea-Bissau	0.0	0.0	0.0	0.0	0.0	0.0	0.6	62.0	16.1	0.0
Kenya	12.2	0.0	0.0	28.5	0.0	576.5	382.1	831.8	0.0	0.0
Lesotho	36.5	20.9	54.7	26.1	10.0	20.4	10.1	90.6	28.1	67.8
Liberia	161.1	204.6	128.6	37.3	124.7	212.5	268.0	191.3	0.0	0.0
Libya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madagascar	0.0	0.0	10.1	0.0	0.0	225.4	273.1	480.9	0.0	0.0
Malawi	0.0	0.0	0.0	0.0	0.0	28.0	76.7	115.3	0.0	35.8
Mali	42.5	0.0	0.0	12.2	106.3	15.5	71.7	94.0	0.0	0.0
Mauritania	0.0	0.0	0.0	0.0	0.0	52.5	111.5	123.7	0.0	0.0
Mauritius	0.0	0.0	1.6	0.0	0.0	42.1	57.1	47.0	0.0	0.0
Morocco	307.4	0.0	10.1	0.0	0.0	1,260.5	1,643.1	3,179.7	486.6	556.1
Mozambique	0.0	0.0	0.0	0.0	0.0	1,151.6	185.3	192.9	0.0	0.0
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	5.8	0.0	0.0	0.0	0.0	154.9	81.5	55.8	0.0	0.0
Nigeria	2,733.6	1,543.4	0.0	2,053.1	44.0	3,455.5	4,426.4	7,307.5	1,187.5	2,289.1
Rwanda	0.0	0.0	0.0	1.0	15.7	26.0	6.0	45.3	0.0	0.0
São Tomé & Príncipe	19.8	0.0	0.0	0.0	4.0	0.0	0.0	9.8	5.4	18.5
Senegal	0.0	0.0	0.0	0.0	0.0	0.0	295.5	376.0	0.0	0.0
Seychelles	0.0	0.0	0.0	0.0	9.6	8.4	27.1	17.7	0.0	0.0
Sierra Leone	0.0	13.2	0.0	0.0	0.0	66.9	147.6	171.8	0.0	25.3
Somalia	0.0	278.8	0.0	68.0	0.0	6.0	22.7	84.8	0.0	0.0
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sudan	818.3	173.1	594.8	157.5	1,019.2	630.6	608.5	1,434.9	0.0	1,679.0
Swaziland	0.0	0.0	0.0	0.0	0.0	21.7	73.9	128.9	82.4	90.5
Tanzania	570.6	117.9	0.0	348.8	0.0	1,566.7	0.0	229.0	102.7	0.0
Togo	0.0	0.0	0.0	0.0	0.0	83.6	90.5	168.2	0.0	0.0
Tunisia	0.0	0.0	0.0	0.0	0.0	548.3	553.0	670.8	0.0	0.0
Uganda	45.7	7.4	62.8	33.8	195.3	186.2	177.3	380.4	0.0	0.0
Zambia	0.0	0.0	0.0	0.0	0.0	263.4	947.7	747.2	0.0	0.0
Zimbabwe	164.8	0.0	1.1	0.0	0.0	111.3	235.0	270.9	0.0	216.9
Total	**10,568.2**	**4,415.7**	**6,210.4**	**6,358.1**	**3,253.0**	**19,747.7**	**21,145.7**	**29,276.4**	**4,818.1**	**6,763.2**
North Africa	4,158.6	1,453.7	3,603.4	2,878.4	852.8	7,350.1	9,108.6	10,631.0	3,167.6	754.9
SSA	6,409.6	2,962.0	2,607.1	3,479.7	2,400.2	12,397.5	12,037.2	18,645.4	1,650.4	6,008.3
Horn	818.3	1,039.6	1,889.2	693.2	1,350.1	1,606.9	1,118.7	2,662.7	151.2	1,679.0
Lakes	628.5	125.3	62.8	412.1	211.0	2,409.1	611.4	1,599.0	102.7	31.1
Southern	201.3	20.9	67.6	29.9	19.5	1,881.5	1,899.2	2,422.6	110.5	411.0
West	4,761.5	1,776.1	587.5	2,344.5	819.5	6,500.1	8,407.9	11,961.2	1,286.0	3,887.2
CFA	1,557.8	14.9	433.8	246.9	509.8	2,686.9	2,811.4	3,410.0	91.7	1,399.6
Fuel	4,027.5	1,716.5	1,111.5	2,445.3	1,466.8	7,476.7	8,737.2	12,054.4	1,654.1	4,572.7
Nonfuel	207.3	13.2	1.1	12.2	106.3	1,775.8	2,044.5	2,268.1	16.1	336.0

Africa (CED)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Algeria	2,190.6	1,312.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angola	730.5	446.7	391.6	343.2	553.1	353.9	2,162.4	0.0	400.6	0.0
Benin	36.1	0.0	0.0	1.6	48.5	0.0	0.0	0.0	0.0	0.0
Botswana	0.0	0.0	0.0	0.0	99.2	139.4	0.0	130.6	174.8	196.6
Burkina Faso	31.4	0.0	32.9	0.0	14.2	0.0	0.0	0.0	0.0	0.0
Burundi	0.0	0.0	0.0	0.0	15.7	18.7	0.0	0.0	32.9	0.6
Cameroon	583.0	0.0	399.7	0.0	1,521.4	1,787.0	0.0	0.0	492.4	0.0
Cape Verde	16.1	14.0	0.0	0.0	0.0	32.8	0.0	0.0	0.0	17.6
Central African Rep.	0.0	39.3	0.0	12.6	0.0	0.0	0.0	0.0	0.0	0.0
Chad	73.5	38.8	0.0	0.0	49.9	0.0	0.0	0.0	0.0	0.0
Comoros	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Congo, Dem. Rep. Of	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Congo, Republic Of	320.8	0.0	0.0	0.0	0.0	81.0	0.0	0.0	0.0	167.8
Côte D'Ivoire	1,280.7	0.0	0.0	0.0	0.0	919.9	618.3	0.0	0.0	0.0
Djibouti	0.0	54.8	16.3	45.7	37.2	42.8	25.9	0.0	16.8	0.0
Egypt	0.0	417.6	0.0	0.0	1,898.4	818.2	0.0	0.0	1,337.8	2,015.1
Equatorial Guinea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	0.0
Ethiopia	530.6	554.4	6.1	15.8	361.0	79.1	0.0	150.6	116.2	0.0
Gabon	625.5	191.4	0.0	0.0	354.1	396.5	235.0	101.2	0.0	0.0
Gambia, The	51.9	11.8	28.3	19.4	11.7	6.9	0.0	0.0	0.0	0.0
Ghana	257.8	0.0	0.0	0.0	334.2	239.0	216.3	0.0	242.8	0.0
Guinea	112.1	0.0	0.0	96.6	45.1	0.0	0.0	181.6	0.0	0.0
Guinea-Bissau	48.5	0.0	0.0	0.0	23.3	6.4	0.0	0.0	0.0	0.0
Kenya	755.3	240.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lesotho	128.6	271.4	30.0	0.0	82.4	0.0	0.0	0.0	0.0	0.0
Liberia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Libya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madagascar	195.2	15.4	0.0	0.0	3.4	0.0	0.0	0.0	216.8	205.7
Malawi	27.7	0.0	0.0	0.0	4.5	218.5	56.0	0.0	402.6	182.7
Mali	69.7	0.0	31.9	0.0	0.0	11.1	0.0	0.0	0.0	0.0
Mauritania	179.3	61.4	0.0	0.0	64.9	122.3	93.8	25.9	0.0	0.0
Mauritius	0.0	0.0	0.0	0.0	27.7	201.1	3.2	0.0	8.5	0.0
Morocco	1,205.6	0.0	0.0	0.0	315.4	915.5	538.2	0.0	77.5	0.0
Mozambique	0.0	0.0	98.8	0.0	1,615.9	0.0	0.0	0.0	605.1	0.0
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	24.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nigeria	6,415.2	1,363.3	2,382.8	1,671.0	1,861.1	0.0	0.0	0.0	0.0	1,994.3
Rwanda	13.1	0.0	0.0	0.0	137.9	70.5	0.0	0.0	18.3	0.0
São Tomé & Príncipe	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	50.7
Senegal	188.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.4	0.0
Seychelles	25.9	11.6	0.0	14.0	74.7	32.0	0.0	0.0	1.2	0.0
Sierra Leone	56.5	86.5	94.5	78.9	0.0	0.0	0.0	0.0	58.9	0.0
Somalia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	542.9	0.0	0.0	0.0
Sudan	1,034.8	0.0	0.0	142.2	460.7	161.8	0.0	0.0	0.0	0.0
Swaziland	47.9	94.3	0.0	34.3	25.6	0.0	0.0	142.8	0.0	57.4
Tanzania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Togo	8.8	0.0	0.0	0.0	113.6	0.0	0.0	0.0	14.4	0.0
Tunisia	108.8	158.6	0.0	0.0	283.0	619.6	0.0	0.0	0.0	232.6
Uganda	151.6	16.0	0.8	0.0	91.9	0.0	0.0	0.0	0.0	0.0
Zambia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.4	0.0
Zimbabwe	244.0	0.0	31.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**17,778.5**	**5,400.1**	**3,545.1**	**2,475.1**	**10,529.7**	**7,273.8**	**4,491.9**	**732.7**	**4,437.5**	**5,121.0**
North Africa	3,505.1	1,888.9	0.0	0.0	2,496.8	2,353.2	538.2	0.0	1,415.3	2,247.7
SSA	14,273.4	3,511.2	3,545.1	2,475.1	8,032.9	4,920.6	3,953.7	732.7	3,022.2	2,873.3
Horn	1,565.4	609.1	22.4	203.7	858.9	283.6	25.9	150.6	219.0	0.0
Lakes	919.9	256.3	0.8	0.0	245.5	89.2	0.0	0.0	51.2	0.6
Southern	1,404.2	839.4	552.0	391.5	2,486.5	944.8	2,764.4	273.4	1,842.1	642.4
West	10,383.8	1,806.4	2,970.0	1,880.0	4,442.0	3,602.9	1,163.4	308.7	909.9	2,230.4
CFA	3,290.8	269.5	464.4	14.1	2,125.0	3,201.9	853.3	101.2	590.1	167.8
Fuel	11,391.0	3,352.7	2,774.4	2,156.4	3,278.9	993.2	2,397.4	101.2	400.6	2,162.0
Nonfuel	769.2	147.9	289.7	175.5	1,783.7	377.0	149.8	207.5	1,132.0	183.3

Africa (CED)	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
Algeria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17,526
Angola	152.2	206.9	2,155.0	2,454.5	1,987.0	4,257.5	2,707.0	7,416.9	2,458.4	29,178
Benin	0.0	0.0	120.0	0.0	0.0	0.0	0.0	0.0	0.0	873
Botswana	181.2	26.1	571.4	527.9	768.1	498.9	655.1	243.7	0.0	4,530
Burkina Faso	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	395
Burundi	0.0	0.0	87.0	80.8	27.9	0.0	0.0	0.0	0.0	507
Cameroon	0.0	0.0	314.0	872.3	0.0	0.0	0.0	0.0	0.0	7,938
Cape Verde	0.0	2.9	0.0	2.8	0.0	0.0	38.0	0.0	26.1	189
Central African Rep.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	253
Chad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	478
Comoros	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45
Congo, Dem. Rep. Of	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Congo, Republic Of	488.1	0.0	1,032.5	1,202.1	1,483.3	66.5	1,829.3	0.0	0.0	9,238
Côte D'Ivoire	0.0	0.0	590.6	1,696.1	1,297.8	0.0	1,335.1	914.7	0.0	15,392
Djibouti	0.0	17.4	93.7	89.1	77.2	36.7	106.3	216.8	12.3	889
Egypt	0.0	0.0	1,685.8	4,308.4	6,256.7	0.0	8,617.9	9,328.5	4,191.3	73,333
Equatorial Guinea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Eritrea	31.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	118
Ethiopia	0.0	0.0	1,141.2	686.6	0.0	0.0	0.0	277.8	0.0	9,508
Gabon	678.3	115.0	375.4	1,158.8	1,369.7	1,667.0	0.0	0.0	0.0	9,445
Gambia, The	0.0	0.0	0.0	73.0	32.2	0.0	54.8	31.6	0.0	558
Ghana	0.0	0.0	490.2	363.4	0.0	0.0	0.0	0.0	17.7	3,939
Guinea	0.0	0.0	72.7	103.0	0.0	0.0	0.0	109.5	0.0	1,147
Guinea-Bissau	0.0	0.0	55.4	52.5	34.1	0.0	0.0	0.0	0.0	299
Kenya	0.0	0.0	507.5	540.2	0.0	0.0	0.0	0.0	0.0	4,002
Lesotho	0.0	0.0	121.2	92.1	105.3	0.0	0.0	110.6	198.5	1,546
Liberia	0.0	0.0	0.0	0.0	137.3	0.0	110.0	0.0	0.0	1,744
Libya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Madagascar	0.0	0.0	0.0	92.8	0.0	0.0	0.0	0.0	0.0	2,588
Malawi	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	1,186
Mali	0.0	0.0	0.0	0.0	56.6	0.0	0.0	0.0	0.0	610
Mauritania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,026
Mauritius	0.0	198.6	0.0	8.6	0.0	0.0	0.0	0.0	0.0	652
Morocco	0.0	0.0	478.2	2,451.5	0.0	0.0	2,351.6	2,766.2	0.0	19,636
Mozambique	0.0	0.0	0.0	0.0	368.7	0.0	0.0	0.0	0.0	4,218
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Niger	0.0	0.0	60.2	105.0	0.0	0.0	0.0	0.0	0.0	816
Nigeria	6,335.8	2,846.5	5,135.4	9,750.6	12,333.2	15,162.7	18,739.8	28,597.5	43,638.0	185,821
Rwanda	0.0	0.0	4.6	21.6	0.0	0.0	0.0	0.0	0.0	426
São Tomé & Príncipe	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	151
Senegal	0.0	0.0	74.5	0.0	0.0	0.0	0.0	0.0	0.0	1,262
Seychelles	3.6	0.0	0.0	83.3	11.5	105.9	365.2	334.3	0.0	1,126
Sierra Leone	0.0	0.0	55.5	115.1	24.2	0.0	0.0	0.0	0.0	1,002
Somalia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	520
South Africa	975.2	10,338.8	4,137.9	1,147.8	0.0	0.0	0.0	0.0	0.0	17,143
Sudan	0.0	0.0	221.1	1,083.8	1,001.7	0.0	0.0	341.4	1,686.8	14,721
Swaziland	0.0	0.0	249.7	154.4	152.2	0.0	48.0	303.3	0.0	1,836
Tanzania	0.0	0.0	596.9	0.0	1,010.7	0.0	0.0	0.0	0.0	6,000
Togo	0.0	0.0	68.4	28.6	0.0	0.0	0.0	0.3	0.0	1,258
Tunisia	0.0	917.5	2,475.8	2,327.2	224.4	0.0	1,300.7	1,717.2	0.0	12,999
Uganda	0.0	0.0	171.9	481.7	218.6	0.0	0.0	0.0	583.1	2,804
Zambia	0.0	0.0	71.8	0.0	539.9	0.0	0.0	756.1	94.2	4,046
Zimbabwe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,564
Total	**8,846.2**	**14,669.6**	**23,219.4**	**32,155.6**	**29,518.2**	**21,795.3**	**38,258.8**	**53,466.4**	**52,906.3**	**476,480**
North Africa	0.0	917.5	4,639.9	9,087.1	6,481.0	0.0	12,270.2	13,812.0	4,191.3	123,495
SSA	8,846.2	13,752.2	18,579.5	23,068.5	23,037.1	21,795.3	25,988.6	39,654.4	48,715.1	352,985
Horn	31.8	17.4	1,456.0	1,859.6	1,078.8	36.7	106.3	836.0	1,699.1	25,756
Lakes	0.0	0.0	1,368.0	1,124.2	1,257.2	0.0	0.0	0.0	583.1	13,739
Southern	1,312.2	10,770.4	7,309.4	4,561.4	3,932.7	4,862.3	3,775.3	9,164.8	2,751.2	69,656
West	7,502.2	2,964.3	8,446.2	15,523.3	16,768.3	16,896.3	22,107.0	29,653.6	43,681.7	243,834
CFA	1,166.4	115.0	2,691.0	5,115.3	4,241.5	1,733.5	3,164.4	915.0	0.0	48,256
Fuel	7,654.5	3,168.4	8,919.5	15,649.9	18,174.9	21,153.7	23,276.1	36,355.8	47,783.1	266,405
Nonfuel	0.0	0.0	344.6	351.3	1,051.4	0.0	0.0	865.6	94.2	16,001

TABLE 3 - Africa: Illicit Financial Flows (GER): 1970-2008 ($US millions) *(Source: Global Financial Integrity estimates)*

Africa (GER)	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Algeria	20.5	0.0	0.0	60.1	64.4	145.1	101.0	0.0	769.1	54.7
Angola	0.0	65.9	27.4	0.0	42.2	0.0	0.0	0.0	0.0	0.0
Benin	6.3	1.4	8.9	13.6	26.9	13.4	0.7	0.0	28.2	16.2
Botswana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Burkina Faso	11.7	12.5	10.7	0.0	26.8	12.5	0.0	6.1	6.6	52.9
Burundi	6.6	14.8	5.4	1.2	0.0	38.8	10.6	14.3	20.7	42.4
Cameroon	18.8	31.9	24.3	42.8	48.4	91.5	45.7	34.8	128.7	23.3
Cape Verde	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.5	5.1	0.3
Central African Rep.	10.1	4.0	1.8	12.4	9.4	10.0	24.0	23.3	25.8	8.5
Chad	28.9	23.0	22.1	24.5	39.5	48.1	0.0	0.0	0.0	0.0
Comoros	9.2	3.3	2.2	4.4	6.0	9.4	0.0	0.0	0.0	0.0
Congo, Dem. Rep. Of	103.8	0.0	177.2	125.6	140.7	157.1	495.5	378.6	696.1	693.1
Congo, Republic Of	37.7	29.5	17.4	45.1	41.1	68.7	52.0	42.2	196.2	0.0
Côte D'Ivoire	59.0	55.5	85.5	69.3	91.5	153.9	116.2	370.9	356.5	259.2
Djibouti	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Egypt	0.0	91.0	44.3	0.0	0.0	0.0	0.0	0.0	717.6	1,522.5
Equatorial Guinea	0.0	0.0	0.0	0.0	5.3	0.0	0.0	3.3	0.0	0.0
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	8.7	9.4	19.3	13.3	0.0	0.0	0.0	0.0	0.0	0.0
Gabon	39.7	8.0	60.1	147.1	194.9	186.4	0.0	0.0	86.6	0.0
Gambia, The	7.3	3.6	5.2	6.9	11.4	16.9	16.9	9.5	15.3	38.4
Ghana	38.2	18.8	34.3	28.7	51.5	48.7	0.0	65.1	145.2	0.0
Guinea	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Guinea-Bissau	4.0	3.0	3.0	11.0	13.2	19.8	15.3	0.7	0.0	13.5
Kenya	7.5	30.9	60.2	51.2	143.2	168.5	139.0	96.0	31.4	0.0
Lesotho	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liberia	64.4	90.4	105.0	260.1	136.2	155.8	166.8	156.9	391.8	694.9
Libya	0.0	0.0	0.0	0.0	0.0	0.0	231.8	7.6	0.0	0.0
Madagascar	11.5	22.5	23.5	19.0	49.3	82.0	8.7	93.3	91.2	80.2
Malawi	38.6	48.0	55.1	71.0	87.6	130.2	101.4	117.0	170.1	165.2
Mali	14.2	5.0	12.9	25.4	28.2	3.6	0.0	0.0	0.0	9.6
Mauritania	18.5	25.0	17.2	0.0	17.6	0.0	0.0	0.0	0.0	0.0
Mauritius	8.6	9.8	28.9	40.3	64.2	98.1	83.1	104.7	151.4	144.0
Morocco	61.9	15.2	54.2	48.9	195.0	322.4	74.3	66.0	38.3	64.8
Mozambique	59.9	22.8	72.7	105.3	181.7	283.7	0.0	133.1	0.0	0.0
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	13.7	10.1	7.1	2.7	0.0	0.0	0.0	0.0	0.0	27.1
Nigeria	120.4	198.8	130.9	192.3	393.7	408.6	1,271.2	1,082.1	1,787.7	1,156.1
Rwanda	9.3	9.2	11.2	7.4	11.5	36.7	35.2	31.6	87.9	69.5
São Tomé & Príncipe	2.7	0.0	0.0	0.4	0.2	2.3	1.0	1.3	0.0	0.0
Senegal	0.0	4.1	1.8	17.0	0.0	34.7	0.0	47.2	8.5	0.0
Seychelles	2.6	5.1	2.4	6.3	7.6	9.6	12.9	14.6	15.8	17.1
Sierra Leone	33.7	37.5	27.6	108.2	98.0	55.6	45.5	76.7	49.1	102.8
Somalia	7.7	1.4	7.9	8.3	0.0	0.0	11.6	7.7	5.7	0.0
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sudan	37.1	51.5	56.7	43.8	129.6	124.6	25.3	0.0	98.1	0.0
Swaziland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tanzania	68.4	111.3	50.1	50.3	70.5	217.4	52.1	13.8	111.3	58.9
Togo	15.4	3.7	7.7	16.9	4.7	19.2	35.7	18.7	0.0	12.7
Tunisia	3.8	7.5	0.0	19.6	85.2	112.3	119.8	125.8	61.1	163.5
Uganda	26.0	37.5	28.6	21.6	27.4	26.3	0.0	0.0	30.3	113.7
Zambia	128.4	134.6	98.4	44.5	0.0	86.6	22.5	14.8	31.2	0.0
Zimbabwe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**1,173.2**	**1,257.3**	**1,409.3**	**1,766.4**	**2,546.1**	**3,398.3**	**3,315.5**	**3,158.2**	**6,358.4**	**5,605.3**
North Africa	86.2	113.7	98.4	128.5	344.6	579.8	526.9	199.4	1,586.1	1,805.6
SSA	1,087.1	1,143.6	1,310.8	1,638.0	2,201.5	2,818.5	2,788.6	2,958.7	4,772.3	3,799.7
Horn	53.5	62.3	83.9	65.5	129.6	124.6	36.9	7.7	103.8	0.0
Lakes	221.6	203.7	332.8	257.3	393.2	644.8	732.3	534.2	977.6	977.6
Southern	258.7	312.0	310.6	290.8	438.4	699.5	228.6	477.5	459.6	406.5
West	553.2	565.7	583.5	1,024.4	1,240.4	1,349.6	1,790.8	1,939.3	3,231.3	2,415.6
CFA	259.5	191.6	263.4	427.7	529.9	661.8	289.5	547.1	837.1	423.0
Fuel	284.4	376.6	314.6	512.8	910.7	981.5	1,449.4	1,127.6	2,937.7	1,210.8
Nonfuel	427.7	303.2	480.2	492.2	593.7	788.0	690.8	741.3	973.7	1,079.6

Africa (GER)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Algeria	0.0	781.1	1,000.1	0.0	218.1	623.3	1,167.7	0.0	0.0	413.8
Angola	0.0	22.8	7.1	20.1	12.0	14.7	11.5	19.1	28.2	1.9
Benin	3.9	4.4	8.0	10.9	0.0	0.0	32.2	3.4	0.0	23.5
Botswana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Burkina Faso	27.3	27.2	43.1	40.8	43.8	39.8	38.8	75.6	47.0	25.0
Burundi	99.9	21.3	78.5	40.6	6.7	24.5	24.2	53.1	93.6	86.6
Cameroon	273.5	694.6	779.5	630.7	1,156.6	1,169.3	981.3	1,079.2	162.1	555.0
Cape Verde	0.0	1.9	0.4	0.0	0.0	0.0	0.3	0.0	0.1	0.0
Central African Rep.	0.0	32.1	25.4	27.3	41.1	19.4	54.4	2.8	3.0	7.6
Chad	0.0	0.5	0.2	0.9	0.0	0.1	0.0	0.1	0.7	0.0
Comoros	0.0	4.7	0.0	0.5	0.0	0.4	0.0	0.0	0.0	0.0
Congo, Dem. Rep. Of	833.4	1,205.0	877.3	245.8	673.4	648.2	502.1	669.3	729.7	240.0
Congo, Republic Of	0.0	104.4	151.4	414.6	173.8	0.0	19.3	411.4	136.2	212.5
Côte D'Ivoire	100.2	0.0	402.9	379.3	76.5	193.6	264.8	213.9	122.8	78.0
Djibouti	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Egypt	1,797.8	1,925.1	1,602.0	1,296.9	1,789.5	3,626.1	1,131.4	2,208.9	1,495.0	1,669.8
Equatorial Guinea	0.0	0.0	0.1	2.1	0.1	0.0	0.0	0.4	0.1	1.4
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	125.8	12.1	59.5	33.4	35.6	6.1	13.9	30.3	0.0	5.4
Gabon	62.1	154.4	301.6	266.0	295.8	78.5	31.1	32.0	25.8	35.1
Gambia, The	44.1	8.1	7.4	7.5	7.8	7.7	8.1	9.9	13.3	20.7
Ghana	218.9	0.0	319.8	36.0	52.4	109.8	0.0	34.5	102.8	40.1
Guinea	0.0	0.0	1.3	0.4	0.7	0.0	0.2	0.0	4.6	6.8
Guinea-Bissau	0.0	0.0	0.0	1.7	2.5	2.1	1.9	2.0	4.2	2.0
Kenya	0.0	0.0	0.0	0.0	0.0	83.8	77.3	134.4	0.0	195.9
Lesotho	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liberia	593.3	645.0	730.9	465.0	386.1	415.6	378.5	532.1	951.7	1,862.4
Libya	0.0	1,070.4	0.0	1,164.6	128.9	106.8	0.0	0.0	0.0	0.0
Madagascar	2.9	119.7	54.1	20.1	1.9	15.1	43.9	64.0	50.2	58.4
Malawi	207.7	143.1	112.3	170.8	138.7	170.7	111.5	134.7	211.9	273.9
Mali	30.2	20.6	92.2	17.2	0.0	0.0	0.9	0.0	68.4	101.2
Mauritania	0.0	75.2	38.9	0.0	0.0	6.6	0.0	17.5	0.0	89.1
Mauritius	218.9	158.1	82.3	81.3	107.8	119.3	83.4	106.6	212.5	282.1
Morocco	12.0	2.3	87.2	57.1	20.6	155.0	190.4	121.2	331.6	580.5
Mozambique	0.0	99.5	5.9	6.5	6.5	0.0	3.5	3.0	0.1	142.5
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	173.4	101.0	43.3	63.4	86.4	83.1	100.5	105.4	138.9	90.5
Nigeria	986.2	112.9	465.1	2,794.3	1,181.4	1,508.4	3,325.0	996.2	873.7	2,349.6
Rwanda	115.2	47.1	88.9	84.2	92.8	98.7	115.5	143.9	175.3	125.7
São Tomé & Príncipe	0.0	0.2	0.1	0.0	0.0	2.1	0.3	0.6	0.0	3.2
Senegal	24.4	38.1	0.0	117.2	84.9	67.4	162.6	44.2	16.5	125.1
Seychelles	19.9	31.7	42.1	16.1	29.2	29.6	44.8	49.7	84.3	0.0
Sierra Leone	53.7	66.0	38.1	64.7	21.8	0.0	8.7	17.3	78.1	94.0
Somalia	18.6	57.3	0.0	29.8	24.4	38.6	40.1	4.2	4.2	7.9
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sudan	128.1	18.8	68.8	62.8	23.4	18.1	133.2	0.0	77.0	44.6
Swaziland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tanzania	32.0	68.5	116.3	63.2	41.6	93.6	62.7	79.4	107.9	199.1
Togo	9.6	85.5	76.4	67.5	53.2	32.1	84.0	2.2	38.9	23.4
Tunisia	241.6	356.5	47.5	227.6	0.0	0.0	0.0	36.9	73.2	302.6
Uganda	271.2	0.2	0.0	0.2	0.0	0.1	0.0	0.0	0.0	18.1
Zambia	326.1	422.3	162.1	243.1	308.8	507.8	141.7	330.1	335.3	1,110.4
Zimbabwe	0.0	1,005.4	828.8	519.7	395.6	464.7	501.6	634.3	260.8	702.7
Total	**7,051.9**	**9,745.5**	**8,846.8**	**9,792.0**	**7,720.6**	**10,580.9**	**9,893.4**	**8,403.6**	**7,059.6**	**12,208.1**
North Africa	2,051.4	4,135.4	2,736.8	2,746.3	2,157.2	4,511.1	2,489.6	2,367.0	1,899.8	2,966.7
SSA	5,000.5	5,610.1	6,110.0	7,045.7	5,563.4	6,069.8	7,403.8	6,036.5	5,159.8	9,241.4
Horn	272.6	88.2	128.3	126.0	83.4	62.7	187.2	34.5	81.3	57.9
Lakes	1,351.6	1,342.3	1,161.0	434.1	814.5	948.9	781.8	1,080.2	1,106.4	865.4
Southern	775.4	2,007.3	1,294.6	1,078.3	1,000.6	1,322.4	941.9	1,341.3	1,183.2	2,572.0
West	2,600.9	2,172.4	3,526.0	5,407.4	3,664.9	3,735.7	5,492.9	3,580.6	2,788.9	5,746.2
CFA	704.6	1,263.0	1,924.1	2,039.6	2,014.7	1,685.4	1,771.7	1,972.6	764.7	1,280.2
Fuel	1,176.4	1,195.0	1,994.4	3,560.7	1,904.6	2,243.1	4,687.8	1,459.2	1,141.7	3,059.0
Nonfuel	1,578.3	3,085.7	2,278.5	1,351.3	1,598.7	1,864.5	1,335.0	1,936.7	1,833.6	2,874.1

Africa (GER)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Algeria	1,323.5	240.6	535.3	873.8	488.7	1,864.7	2,469.7	275.8	843.4	0.0
Angola	24.9	15.7	3.6	4.3	0.0	0.0	0.3	28.8	0.2	0.2
Benin	0.0	68.0	56.6	0.0	21.3	38.3	0.0	81.3	9.8	13.2
Botswana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Burkina Faso	60.4	115.2	406.6	76.7	26.1	41.4	93.5	1.5	22.5	25.2
Burundi	72.5	63.7	72.8	81.1	43.6	146.8	59.9	39.8	58.6	8.4
Cameroon	135.2	76.3	0.0	162.8	364.9	376.9	317.7	338.3	297.4	294.3
Cape Verde	4.8	4.0	9.1	6.6	7.8	6.9	9.8	116.6	7.2	7.8
Central African Rep.	7.9	153.2	131.1	14.4	9.2	10.2	72.0	74.8	24.2	25.8
Chad	0.0	0.1	0.3	0.0	0.0	1.7	0.7	40.5	0.0	0.0
Comoros	0.0	0.0	0.0	0.0	39.0	0.1	0.0	6.5	6.2	1.2
Congo, Dem. Rep. Of	484.1	29.6	0.7	0.1	0.0	0.0	0.0	0.0	0.0	4.2
Congo, Republic Of	0.0	42.4	198.3	0.0	362.2	589.2	80.3	81.8	95.0	95.8
Côte D'Ivoire	458.7	379.6	23.8	156.7	610.6	410.6	0.0	33.0	156.3	48.3
Djibouti	0.0	0.0	8.6	9.7	11.8	13.9	41.4	16.3	19.2	20.4
Egypt	2,338.8	468.6	2,557.0	1,925.3	1,924.5	2,067.9	2,412.7	1,846.2	1,865.7	1,550.2
Equatorial Guinea	0.7	0.0	0.0	0.1	2.5	1.7	0.0	5.5	0.0	0.1
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	58.8	95.3	2.9	48.7	0.0	67.8	38.4	0.0	125.8	372.4
Gabon	37.4	41.3	38.4	37.2	17.0	62.0	0.0	13.6	14.1	15.6
Gambia, The	14.8	16.3	9.1	12.2	99.1	130.7	135.5	145.2	98.5	79.5
Ghana	2.0	444.9	316.5	7.3	10.0	12.6	16.2	13.0	19.5	20.7
Guinea	2.2	0.8	372.1	335.0	0.0	17.5	126.1	275.5	185.7	262.7
Guinea-Bissau	2.5	1.4	1.6	3.2	3.5	4.5	4.7	16.4	6.0	6.6
Kenya	214.4	188.2	0.0	267.1	86.2	162.1	131.8	40.4	131.8	74.9
Lesotho	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liberia	28.4	1.3	3.2	19.6	12.1	8.3	0.8	2.0	0.0	0.0
Libya	42.8	0.0	8.0	22.8	0.0	38.1	0.0	0.0	1,413.5	7.8
Madagascar	101.1	103.8	114.9	132.4	196.6	263.6	297.4	396.0	455.8	478.5
Malawi	207.2	129.8	48.3	57.4	66.3	35.5	0.0	5.2	0.1	2.3
Mali	122.0	134.3	151.9	182.8	212.4	240.7	273.2	309.7	334.8	362.3
Mauritania	14.6	3.1	13.1	22.3	12.8	22.5	28.2	37.8	42.7	45.1
Mauritius	333.3	153.0	177.6	231.0	73.9	87.5	196.4	147.4	207.5	142.0
Morocco	378.8	571.5	975.0	1,234.8	1,342.2	1,715.3	1,804.3	1,935.2	2,576.5	1,052.6
Mozambique	5.2	148.8	133.8	152.0	277.4	58.5	0.0	64.9	20.4	0.0
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	81.0	73.9	0.0	20.6	0.0	1.1	0.0	94.8	101.7	154.3
Nigeria	2,956.9	5,210.1	2.6	8.2	0.0	17.0	7.7	3.7	21.6	20.9
Rwanda	56.5	122.9	56.1	22.9	25.8	32.7	34.0	33.3	42.8	46.1
São Tomé & Príncipe	0.0	0.0	0.0	0.2	0.0	0.6	0.0	1.1	0.0	0.0
Senegal	39.1	34.1	0.0	0.0	25.9	7.1	0.0	0.0	0.0	0.0
Seychelles	92.0	93.8	86.5	31.2	62.7	30.4	40.3	41.2	63.7	80.2
Sierra Leone	67.2	126.7	196.5	31.3	139.5	138.5	146.2	169.5	114.2	97.2
Somalia	6.8	12.4	11.5	13.0	14.6	17.8	26.0	30.1	26.6	28.1
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,176.7	3,384.2
Sudan	7.5	2.5	1.5	2.9	8.3	8.6	0.0	0.0	0.0	0.0
Swaziland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tanzania	9.1	0.0	39.1	43.3	52.3	62.5	72.4	20.7	43.9	91.9
Togo	0.0	0.0	37.6	42.1	44.6	58.3	2.2	73.1	25.2	50.6
Tunisia	270.4	0.0	0.0	143.4	139.6	333.1	2.0	570.0	0.0	917.7
Uganda	0.3	0.3	0.2	1.1	0.0	18.7	2.0	19.2	0.2	1.4
Zambia	1,030.5	151.2	429.2	85.5	262.1	160.1	0.0	0.0	107.7	318.7
Zimbabwe	531.8	607.0	761.4	418.7	508.1	241.3	1,370.5	612.3	448.5	245.5
Total	**11,626.4**	**10,125.7**	**7,992.4**	**6,941.7**	**7,604.9**	**9,625.4**	**10,314.2**	**8,057.8**	**11,211.4**	**10,455.0**
North Africa	4,354.3	1,280.7	4,075.3	4,200.1	3,894.9	6,019.1	6,688.6	4,627.3	6,699.1	3,528.3
SSA	7,272.1	8,845.0	3,917.1	2,741.6	3,710.0	3,606.4	3,625.5	3,430.5	4,512.3	6,926.7
Horn	73.1	110.2	24.5	74.2	34.7	108.2	105.8	46.4	171.7	420.9
Lakes	837.0	404.7	169.0	415.5	207.9	422.7	300.1	153.4	277.4	226.8
Southern	2,326.2	1,403.0	1,755.2	1,112.5	1,486.1	877.2	1,904.8	1,302.1	2,486.7	4,652.8
West	4,035.8	6,927.1	1,968.5	1,139.3	1,981.4	2,198.2	1,314.9	1,928.6	1,576.6	1,626.2
CFA	944.9	1,119.9	1,046.2	696.5	1,700.1	1,843.8	844.3	1,164.2	1,087.1	1,092.1
Fuel	4,351.0	5,552.8	779.9	926.5	878.7	2,544.9	2,558.7	449.7	974.4	132.6
Nonfuel	2,600.3	1,511.8	2,588.1	1,446.1	1,551.7	1,107.4	2,102.3	1,532.5	1,341.2	1,378.2

Africa (GER)	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
Algeria	0.0	1,642.6	456.3	24.1	689.1	0.0	427.4	0.0	0.0	**17,574.1**
Angola	110.3	0.9	0.5	0.9	167.9	0.1	0.3	0.4	0.5	**632.7**
Benin	59.1	0.0	0.0	0.0	53.4	38.1	0.0	0.0	0.0	**641.2**
Botswana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Burkina Faso	29.9	32.0	32.8	44.9	58.8	67.1	81.4	100.9	115.1	**1,980.4**
Burundi	13.1	0.0	6.4	2.6	0.0	32.3	119.5	29.1	34.7	**1,568.7**
Cameroon	517.6	333.5	111.5	279.7	0.0	0.0	0.0	0.0	0.0	**11,578.1**
Cape Verde	7.5	5.9	16.3	13.3	17.5	21.1	25.6	30.0	34.6	**363.1**
Central African Rep.	26.3	29.1	31.5	39.8	53.7	59.1	72.7	89.9	102.5	**1,369.8**
Chad	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	**232.3**
Comoros	1.4	1.5	1.8	1.9	2.7	3.2	3.8	4.5	5.6	**119.8**
Congo, Dem. Rep. Of	3.2	3.5	4.2	3.9	3.7	7.6	0.0	6.8	6.5	**10,150.1**
Congo, Republic Of	843.9	1,161.0	0.0	918.3	2,982.1	34.4	38.5	42.0	45.6	**9,764.1**
Côte D'Ivoire	0.0	81.4	0.0	605.2	936.0	1,502.7	949.4	566.4	66.2	**10,434.5**
Djibouti	23.1	24.9	26.3	31.9	38.6	42.3	49.9	59.6	65.7	**503.7**
Egypt	1,321.8	1,311.4	1,059.3	1,340.3	1,751.1	2,089.7	2,618.0	3,061.8	3,495.6	**57,923.7**
Equatorial Guinea	4.6	0.2	0.3	4.0	17.0	0.1	0.6	4.5	0.0	**54.8**
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Ethiopia	65.0	681.6	307.9	88.9	36.3	769.8	1,097.9	1,233.8	1,647.2	**7,111.4**
Gabon	18.3	21.5	23.8	29.1	36.1	41.1	47.1	55.6	61.6	**2,616.1**
Gambia, The	2.4	1.7	2.0	2.8	2.9	3.2	4.6	6.3	7.4	**1,040.5**
Ghana	25.2	25.8	28.5	36.5	79.5	53.3	66.8	84.4	93.3	**2,700.4**
Guinea	250.2	300.6	1.9	161.0	451.7	528.8	771.9	1,019.3	1,261.4	**6,346.6**
Guinea-Bissau	7.6	8.4	9.1	11.5	15.8	17.2	21.4	26.3	30.2	**297.6**
Kenya	27.4	77.7	0.0	53.8	222.8	72.4	90.2	110.4	126.0	**3,296.7**
Lesotho	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Liberia	71.7	1.1	0.6	1.8	6.0	2.7	3.3	3.7	4.7	**9,354.2**
Libya	73.3	27.3	17.6	41.6	16.9	46.6	51.2	58.7	73.2	**4,649.8**
Madagascar	21.3	23.5	128.1	65.9	784.2	451.5	1,636.0	117.4	717.9	**7,397.1**
Malawi	1.9	0.1	0.1	0.6	1.6	7.5	2.4	0.2	0.2	**3,226.2**
Mali	398.4	429.7	458.3	512.1	576.3	623.7	693.8	775.8	841.8	**8,063.5**
Mauritania	51.8	57.3	62.4	78.9	104.5	117.9	145.5	180.8	206.6	**1,553.4**
Mauritius	6.0	15.9	0.0	110.7	25.9	0.0	0.0	0.0	36.1	**4,129.5**
Morocco	132.8	360.7	169.7	322.5	722.8	3,440.1	0.0	132.7	28.1	**21,394.5**
Mozambique	0.0	3.6	191.0	69.2	0.0	0.0	336.9	127.8	0.0	**2,715.9**
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Niger	143.5	49.4	0.0	0.0	88.5	0.5	0.8	0.7	1.1	**1,858.3**
Nigeria	0.0	2,915.9	0.0	0.0	2,657.5	3,373.3	4,165.6	5,392.3	6,810.4	**54,898.3**
Rwanda	52.2	57.9	62.9	79.6	103.9	119.4	158.0	183.0	208.9	**2,895.9**
São Tomé & Príncipe	0.0	0.1	0.2	1.1	0.0	0.0	0.0	0.0	0.5	**18.3**
Senegal	0.0	10.5	0.0	0.0	0.0	15.8	0.0	0.0	0.0	**926.2**
Seychelles	44.4	81.9	209.6	149.0	54.8	62.8	76.7	94.5	108.8	**1,945.5**
Sierra Leone	11.7	12.9	14.0	17.6	22.0	26.4	32.1	40.2	45.5	**2,526.4**
Somalia	32.9	35.5	38.5	48.8	64.6	73.2	90.4	112.3	128.1	**1,086.6**
South Africa	0.0	68.6	972.8	0.0	3,072.0	4,545.8	9,301.3	18,337.0	18,397.8	**59,256.2**
Sudan	0.0	0.0	0.0	0.0	43.6	169.8	129.7	824.0	399.3	**2,739.1**
Swaziland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Tanzania	0.0	0.0	0.0	110.1	135.3	81.5	0.0	247.6	282.6	**2,960.5**
Togo	9.0	152.8	71.9	231.6	73.2	177.5	0.0	0.0	0.0	**1,657.2**
Tunisia	1.6	0.0	0.0	0.0	0.0	0.0	0.0	157.3	180.2	**4,699.7**
Uganda	59.6	19.5	3.4	135.1	231.9	351.5	444.5	657.3	1,108.6	**3,656.0**
Zambia	0.0	101.6	0.0	388.1	555.5	1,287.4	461.4	667.4	50.9	**10,506.3**
Zimbabwe	279.3	343.9	655.0	0.0	298.6	326.7	1,752.8	210.4	240.2	**15,165.7**
Total	**4,749.6**	**10,514.6**	**5,176.7**	**6,058.8**	**17,256.5**	**20,684.9**	**25,969.4**	**34,853.4**	**37,071.4**	**377,580.7**
North Africa	1,529.6	3,341.9	1,702.9	1,728.5	3,179.9	5,576.4	3,096.7	3,410.6	3,777.1	**106,241.7**
SSA	3,220.1	7,172.6	3,473.7	4,330.3	14,076.6	15,108.6	22,872.7	31,442.8	33,294.3	**271,339.0**
Horn	121.0	742.0	372.7	169.6	183.1	1,055.1	1,368.0	2,229.6	2,240.3	**11,440.9**
Lakes	155.7	158.6	76.9	385.2	697.7	664.5	812.2	1,234.3	1,767.3	**24,527.9**
Southern	464.6	641.5	2,159.0	786.4	4,963.1	6,685.0	13,571.6	19,559.6	19,558.1	**105,094.8**
West	2,478.9	5,630.6	865.1	2,989.2	8,232.7	6,703.9	7,120.9	8,419.3	9,728.6	**130,275.4**
CFA	2,058.3	2,309.5	739.4	2,676.2	4,890.9	2,577.3	1,905.6	1,662.2	1,264.3	**51,474.2**
Fuel	977.2	5,742.1	481.1	976.6	6,593.2	3,618.8	4,809.2	6,318.9	7,317.4	**88,511.6**
Nonfuel	1,047.3	1,293.5	1,435.2	1,290.5	2,088.5	3,042.5	4,419.0	3,185.1	2,833.2	**64,100.9**

TABLE 4 - Africa: Real Illicit Financial Flows (CED+GER): 1970-2008 ($US millions 2004 deflated)
(Source: Global Financial Integrity estimates and Ndikumana & Boyce (2008))

Africa (CED+GER - 2004)	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Algeria	0.4	0.0	0.0	1.4	1.7	4.4	3.5	2,661.3	1,690.0	669.0
Angola	0.0	1.3	0.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Benin	0.1	0.0	0.2	0.3	0.7	0.4	0.0	6.7	1.2	125.3
Botswana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Burkina Faso	0.2	0.2	0.2	0.0	0.7	0.4	0.0	19.3	64.1	2.5
Burundi	0.1	0.3	0.1	0.0	0.0	1.2	0.4	0.6	0.9	2.0
Cameroon	0.3	0.6	0.5	1.0	1.3	2.8	1.6	418.8	264.3	520.4
Cape Verde	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0
Central African Rep.	0.2	0.1	0.0	0.3	0.3	0.3	0.8	10.3	1.1	5.4
Chad	0.5	0.4	0.5	0.6	1.1	1.5	0.0	48.1	70.7	27.6
Comoros	0.2	0.1	0.0	0.1	0.2	0.3	0.0	0.0	0.0	0.0
Congo, Dem. Rep. Of	1.9	0.0	3.6	2.9	3.8	4.8	17.0	14.7	29.6	33.2
Congo, Republic Of	0.7	0.6	0.4	1.0	1.1	2.1	1.8	1.6	38.3	152.4
Côte D'Ivoire	1.1	1.1	1.8	1.6	2.4	177.7	125.8	482.2	358.8	12.4
Djibouti	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Egypt	0.0	1.8	0.9	0.0	0.0	0.0	0.0	4,530.6	551.1	1,773.9
Equatorial Guinea	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	0.2	0.2	0.4	0.3	0.0	0.0	0.0	84.4	29.2	42.4
Gabon	0.7	0.2	1.2	3.4	5.2	5.7	0.0	0.0	152.3	512.5
Gambia, The	0.1	0.1	0.1	0.2	0.3	0.5	0.6	0.4	0.7	24.4
Ghana	0.7	0.4	0.7	0.7	1.4	20.9	0.0	186.5	101.8	127.6
Guinea	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Guinea-Bissau	0.1	0.1	0.1	0.3	0.4	0.6	0.5	0.0	0.0	0.6
Kenya	0.1	0.6	1.2	1.2	3.8	5.2	27.0	26.7	83.4	0.0
Lesotho	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	18.1	20.0
Liberia	1.2	1.8	2.2	5.9	3.6	4.8	5.7	6.1	16.7	202.4
Libya	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.3	0.0	0.0
Madagascar	0.2	0.4	0.5	0.4	249.8	12.0	0.3	569.6	3.9	48.6
Malawi	0.7	0.9	1.1	1.6	2.3	4.0	3.5	40.3	7.2	7.9
Mali	0.3	0.1	0.3	0.6	0.8	0.1	0.0	98.8	0.0	0.5
Mauritania	0.3	0.5	0.4	0.0	0.5	0.0	104.8	32.3	54.0	0.0
Mauritius	0.2	0.2	0.6	0.9	1.7	3.0	59.8	4.1	6.4	6.9
Morocco	1.1	0.3	1.1	1.1	5.2	678.7	2.6	426.7	1.6	3.1
Mozambique	1.1	0.4	1.5	2.4	4.9	8.7	0.0	5.2	0.0	0.0
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	0.3	0.2	0.1	0.1	14.1	43.1	0.0	0.0	270.9	1.3
Nigeria	2.2	3.8	2.7	4.4	10.5	12.5	43.7	2,098.4	573.4	55.4
Rwanda	0.2	0.2	0.2	0.2	0.3	1.1	17.1	33.9	3.7	21.3
São Tomé & Príncipe	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	6.2	13.2
Senegal	0.0	0.1	0.0	0.4	13.0	2.6	10.6	174.6	46.6	0.0
Seychelles	0.0	0.1	0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.8
Sierra Leone	0.6	0.7	0.6	2.5	2.6	1.7	1.6	10.0	2.1	4.9
Somalia	0.1	0.0	0.2	0.2	0.0	0.0	0.4	27.3	32.9	0.0
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sudan	0.7	1.0	1.2	1.0	3.5	3.8	0.9	442.0	425.7	607.2
Swaziland	0.0	0.0	0.0	0.0	35.2	24.3	16.9	30.2	22.2	0.0
Tanzania	1.3	2.2	1.0	1.1	1.9	6.6	287.8	539.9	635.8	2.8
Togo	0.3	0.1	0.2	0.4	110.5	0.6	48.4	149.0	243.1	133.3
Tunisia	0.1	0.1	0.0	0.4	2.3	3.4	4.1	516.6	263.4	97.3
Uganda	0.5	0.7	0.6	0.5	0.7	0.8	0.0	0.0	1.3	5.5
Zambia	2.3	2.6	2.0	1.0	0.0	2.6	0.8	0.6	6.2	588.1
Zimbabwe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	227.8	0.0
Total	**21.5**	**24.4**	**28.9**	**40.3**	**488.9**	**1,045.8**	**796.3**	**13,759.8**	**6,307.7**	**5,852.2**
North Africa	1.6	2.2	2.0	2.9	9.2	686.6	18.1	8,135.5	2,506.1	2,543.3
SSA	19.9	22.1	26.9	37.3	479.7	359.2	778.2	5,624.3	3,801.5	3,308.9
Horn	1.0	1.2	1.7	1.5	3.5	3.8	1.3	553.7	487.7	649.6
Lakes	4.1	3.9	6.8	5.9	10.5	19.7	349.3	615.8	754.7	64.8
Southern	4.7	6.0	6.4	6.6	295.3	57.4	81.7	711.4	292.6	672.3
West	10.1	11.0	12.0	23.4	170.5	278.3	345.9	3,743.3	2,266.4	1,922.2
Fuel	5.2	7.3	6.5	11.7	24.3	30.0	49.8	5,251.5	2,950.4	2,024.1
Nonfuel	7.8	5.9	9.9	11.2	15.8	24.1	128.5	282.7	391.9	639.8
N&B Totals	2,749.7	1,310.2	494.9	8,852.0	4,279.0	-674.5	3,119.5	17,734.5	13,320.3	7,075.3

Africa (CED+GER - 2004)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Algeria	80.6	51.5	167.1	0.0	22.5	2,434.8	3,826.4	2,247.1	391.1	282.0
Angola	0.0	1.5	0.5	1.8	1.2	1.8	1.5	2.9	5.0	0.4
Benin	0.2	0.3	0.6	1.0	0.0	102.2	87.3	172.1	0.0	183.4
Botswana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	316.9	0.0	0.0
Burkina Faso	1.5	1.8	3.3	3.6	4.5	37.5	68.5	122.2	8.4	31.9
Burundi	5.6	1.4	6.0	3.6	0.7	56.6	49.4	120.7	16.7	48.5
Cameroon	36.0	45.8	59.6	56.0	119.2	140.1	637.5	166.1	28.9	358.2
Cape Verde	0.0	0.1	0.0	0.0	3.0	0.0	19.3	16.5	0.0	0.0
Central African Rep.	0.0	17.0	9.5	2.4	4.2	54.7	41.2	78.1	0.5	1.5
Chad	0.0	0.0	0.0	19.2	0.0	7.3	32.6	34.5	75.7	0.0
Comoros	0.0	0.3	0.0	3.8	0.0	9.1	13.2	14.2	0.0	0.0
Congo, Dem. Rep. Of	47.0	79.5	67.1	21.8	69.4	77.7	67.4	103.0	129.9	48.3
Congo, Republic Of	287.3	6.9	280.9	36.8	310.6	827.1	2.6	669.7	24.2	144.1
Côte D'Ivoire	1,099.6	0.0	30.8	33.7	7.9	1,238.2	1,588.7	1,262.3	21.9	557.4
Djibouti	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Egypt	3,872.1	1,580.7	3,625.2	2,993.6	1,037.3	3,615.7	3,394.7	4,873.2	2,556.1	336.2
Equatorial Guinea	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.3
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	7.1	588.5	1,299.0	470.7	334.6	971.1	489.3	1,147.6	151.2	1.1
Gabon	111.2	10.2	179.9	239.2	141.3	205.6	4.2	428.9	4.6	311.6
Gambia, The	2.5	0.5	25.7	0.7	24.7	26.7	30.6	61.7	3.9	52.1
Ghana	301.6	0.0	24.5	10.3	115.4	13.2	435.3	408.4	18.3	114.8
Guinea	0.0	0.0	0.1	0.0	0.1	0.0	159.1	267.2	0.8	1.4
Guinea-Bissau	0.0	0.0	0.0	0.1	0.3	0.2	0.8	62.3	16.9	0.4
Kenya	12.2	0.0	0.0	28.5	0.0	586.6	392.4	852.5	0.0	39.4
Lesotho	36.5	20.9	54.7	26.1	10.0	20.4	10.1	90.6	28.1	67.8
Liberia	194.6	247.2	184.5	78.6	164.5	262.3	318.8	273.2	169.4	375.0
Libya	0.0	70.6	0.0	103.4	13.3	12.8	0.0	0.0	0.0	0.0
Madagascar	0.2	7.9	14.2	1.8	0.2	227.3	279.0	490.7	8.9	11.8
Malawi	11.7	9.4	8.6	15.2	14.3	48.5	91.7	136.1	37.7	91.0
Mali	44.2	1.4	7.1	13.8	106.3	15.5	71.8	94.0	12.2	20.4
Mauritania	0.0	5.0	3.0	0.0	0.0	53.3	111.5	126.4	0.0	17.9
Mauritius	12.4	10.4	7.9	7.2	11.1	56.4	68.3	63.4	37.8	56.8
Morocco	308.0	0.2	16.8	5.1	2.1	1,279.0	1,668.7	3,198.4	545.6	673.0
Mozambique	0.0	6.6	0.4	0.6	0.7	1,151.6	185.8	193.4	0.0	28.7
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	15.6	6.7	3.3	5.6	8.9	164.9	95.0	72.0	24.7	18.2
Nigeria	2,789.2	1,550.8	35.6	2,301.2	165.8	3,636.2	4,872.8	7,460.8	1,343.0	2,762.1
Rwanda	6.5	3.1	6.8	8.5	25.3	37.8	21.5	67.4	31.2	25.3
São Tomé & Príncipe	19.8	0.0	0.0	0.0	4.0	0.3	0.0	9.9	5.4	19.2
Senegal	1.4	2.5	0.0	10.4	8.8	8.1	317.4	382.8	2.9	25.2
Seychelles	1.1	2.1	3.2	1.4	12.6	12.0	33.1	25.4	15.0	0.0
Sierra Leone	3.0	17.6	2.9	5.7	2.2	66.9	148.8	174.5	13.9	44.3
Somalia	1.0	282.5	0.0	70.7	2.5	10.6	28.1	85.4	0.7	1.6
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sudan	825.6	174.4	600.0	163.0	1,021.6	632.7	626.4	1,434.9	13.7	1,688.0
Swaziland	0.0	0.0	0.0	0.0	0.0	21.7	73.9	128.9	82.4	90.5
Tanzania	572.4	122.4	8.9	354.4	4.3	1,577.9	8.4	241.3	121.9	40.1
Togo	0.5	5.6	5.8	6.0	5.5	87.5	101.8	168.6	6.9	4.7
Tunisia	13.6	23.5	3.6	20.2	0.0	548.3	553.0	676.5	13.0	60.9
Uganda	61.0	7.5	62.8	33.8	195.3	186.2	177.3	380.4	0.0	3.6
Zambia	18.4	27.9	12.4	21.6	31.8	324.2	966.7	798.0	59.7	223.6
Zimbabwe	164.8	66.3	64.5	46.1	40.8	167.0	302.3	368.5	46.4	358.4
Total	**10,966.0**	**5,058.4**	**6,887.3**	**7,227.6**	**4,048.9**	**21,015.4**	**22,474.1**	**30,569.7**	**6,074.6**	**9,221.0**
North Africa	4,274.3	1,726.5	3,812.8	3,122.3	1,075.2	7,890.6	9,442.9	10,995.3	3,505.8	1,352.1
SSA	6,691.7	3,332.0	3,074.6	4,105.3	2,973.7	13,124.8	13,031.3	19,574.4	2,568.8	7,868.9
Horn	833.7	1,045.4	1,899.1	704.4	1,358.7	1,614.4	1,143.8	2,668.0	165.6	1,690.7
Lakes	704.7	213.9	151.6	450.7	295.0	2,522.8	716.4	1,765.3	299.7	205.3
Southern	245.1	153.3	166.6	125.6	122.7	2,039.9	2,025.7	2,629.0	321.1	928.8
West	4,908.2	1,919.4	857.2	2,824.6	1,197.4	6,947.7	9,145.4	12,512.2	1,782.4	5,044.1
Fuel	4,093.9	1,795.3	1,264.1	2,761.4	1,663.2	7,745.5	9,366.6	12,279.0	1,857.3	5,188.5
Nonfuel	296.3	216.7	175.5	132.2	271.1	1,999.2	2,223.8	2,566.2	342.5	914.7
N&B Totals	12,453.5	12,022.4	838.7	8,009.6	9,432.0	19,164.1	11,912.7	28,339.8	8,661.7	16,543.7

Africa (CED+GER - 2004)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Algeria	2,538.0	1,387.5	195.4	379.6	270.2	1,188.8	1,713.0	203.3	656.8	0.0
Angola	737.1	451.5	392.9	345.1	553.1	353.9	2,162.6	21.2	400.8	0.1
Benin	36.1	21.2	20.6	1.6	60.3	24.4	0.0	59.9	7.7	10.9
Botswana	0.0	0.0	0.0	0.0	99.2	139.4	0.0	130.6	174.8	196.6
Burkina Faso	47.2	35.9	181.3	33.3	28.7	26.4	64.9	1.1	17.5	20.8
Burundi	19.0	19.8	26.6	35.2	39.8	112.3	41.6	29.3	78.6	7.4
Cameroon	618.4	23.8	399.7	70.7	1,723.2	2,027.3	220.3	249.3	724.0	242.1
Cape Verde	17.4	15.3	3.3	2.9	4.3	37.2	6.8	85.9	5.6	24.1
Central African Rep.	2.1	87.0	47.9	18.8	5.1	6.5	50.0	55.1	18.9	21.2
Chad	73.5	38.8	0.1	0.0	49.9	1.1	0.5	29.9	0.0	0.0
Comoros	4.4	0.0	0.0	0.0	21.6	0.1	0.0	4.8	4.8	1.0
Congo, Dem. Rep. Of	127.1	9.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Congo, Republic Of	320.8	13.2	72.4	0.0	200.3	456.6	55.7	60.3	74.0	246.5
Côte D'Ivoire	1,401.1	118.1	8.7	68.1	337.7	1,181.7	618.3	24.3	121.8	39.7
Djibouti	0.0	54.8	19.4	49.9	43.7	51.6	54.6	12.0	31.8	16.8
Egypt	613.9	563.4	933.5	836.4	2,962.7	2,136.5	1,673.4	1,360.5	2,790.7	3,290.2
Equatorial Guinea	0.2	0.0	0.0	0.0	1.4	1.1	0.0	4.0	0.0	0.1
Eritrea	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	0.0
Ethiopia	546.0	584.0	7.2	36.9	361.0	122.3	26.6	150.6	214.2	306.3
Gabon	635.3	204.2	14.0	16.2	363.5	436.0	235.0	111.2	11.0	12.9
Gambia, The	55.8	16.8	31.6	24.7	66.5	90.3	94.0	107.0	76.7	65.4
Ghana	258.3	138.4	115.6	3.2	339.7	247.0	227.5	9.5	257.9	17.0
Guinea	112.7	0.3	135.8	242.2	45.1	11.2	87.4	384.6	144.6	216.1
Guinea-Bissau	49.2	0.4	0.6	1.4	25.3	9.3	3.2	12.1	4.7	5.4
Kenya	811.5	298.9	0.0	116.1	47.6	103.3	91.4	29.8	102.6	61.6
Lesotho	128.6	271.4	30.0	0.0	82.4	0.0	0.0	0.0	0.0	0.0
Liberia	7.5	0.4	1.2	8.5	6.7	5.3	0.5	1.5	0.0	0.0
Libya	11.2	0.0	2.9	9.9	0.0	24.3	0.0	0.0	1,100.8	6.5
Madagascar	221.8	47.7	41.9	57.5	112.1	168.1	206.3	291.8	571.7	599.3
Malawi	82.1	40.4	17.6	24.9	41.1	241.1	56.0	3.8	402.6	184.6
Mali	101.8	41.8	87.3	79.4	117.4	164.5	189.5	228.3	260.7	298.0
Mauritania	183.2	62.3	4.8	9.7	72.0	136.7	113.3	53.8	33.3	37.1
Mauritius	87.5	47.6	64.8	100.4	68.6	256.9	139.4	108.6	170.1	116.8
Morocco	1,305.1	177.8	356.0	536.4	1,057.6	2,009.1	1,789.6	1,426.1	2,084.0	865.9
Mozambique	1.4	46.3	147.7	66.0	1,769.3	37.3	0.0	47.8	621.0	0.0
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	45.7	23.0	0.0	8.9	0.0	0.7	0.0	69.8	79.2	126.9
Nigeria	7,191.4	2,984.4	2,383.8	1,674.5	1,861.1	10.8	5.3	2.7	16.9	2,011.5
Rwanda	27.9	38.2	20.5	9.9	152.2	91.3	23.6	24.6	51.6	37.9
São Tomé & Príncipe	4.1	0.0	0.0	0.1	0.0	0.4	0.0	0.8	18.2	50.7
Senegal	198.6	10.6	0.0	0.0	14.3	4.5	0.0	0.0	83.4	0.0
Seychelles	50.1	40.8	31.6	27.5	109.4	51.4	27.9	30.3	50.8	66.0
Sierra Leone	74.1	125.9	166.2	92.5	77.1	88.3	101.4	124.9	147.8	80.0
Somalia	1.8	3.8	4.2	5.6	8.1	11.4	18.0	22.2	20.7	23.1
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	542.9	0.0	916.4	2,783.6
Sudan	1,036.8	0.8	0.5	143.5	465.3	167.3	0.0	0.0	0.0	0.0
Swaziland	47.9	94.3	0.0	34.3	25.6	0.0	0.0	142.8	0.0	57.4
Tanzania	2.4	0.0	14.3	18.8	28.9	39.8	50.2	15.2	34.2	75.6
Togo	8.8	0.0	13.7	18.3	138.2	37.2	1.5	53.8	33.9	41.6
Tunisia	179.8	158.6	0.0	62.3	360.2	831.9	1.4	420.1	0.0	987.4
Uganda	151.7	16.0	0.9	0.5	91.9	11.9	1.4	14.1	0.2	1.1
Zambia	270.5	47.0	156.7	37.2	144.9	102.1	0.0	0.0	116.3	262.2
Zimbabwe	383.6	188.9	309.6	181.9	281.0	153.8	950.5	451.2	349.3	202.0
Total	**20,830.4**	**8,550.7**	**6,463.1**	**5,490.9**	**14,735.2**	**13,410.3**	**11,645.6**	**6,670.5**	**13,168.5**	**13,720.8**
North Africa	4,648.1	2,287.4	1,487.9	1,824.7	4,650.7	6,190.5	5,177.3	3,409.9	6,632.3	5,149.9
SSA	16,182.3	6,263.3	4,975.3	3,666.2	10,084.5	7,219.7	6,468.4	3,260.6	6,536.2	8,570.9
Horn	1,584.6	643.4	31.3	235.9	878.1	352.6	99.3	184.8	352.7	346.2
Lakes	1,139.6	382.2	62.5	180.5	360.4	358.7	208.1	113.0	267.2	187.1
Southern	2,014.8	1,275.9	1,192.8	874.8	3,308.3	1,504.0	4,085.6	1,232.9	3,778.6	4,469.5
West	11,443.2	3,961.7	3,688.7	2,374.9	5,537.7	5,004.4	2,075.3	1,729.9	2,137.7	3,568.0
Fuel	12,533.1	5,080.4	3,059.1	2,558.9	3,764.8	2,615.6	4,172.1	432.6	1,159.5	2,271.1
Nonfuel	1,451.8	618.3	1,234.5	803.7	2,641.7	1,083.0	1,607.9	1,336.8	2,176.5	1,316.9
N&B Totals	24,620.5	21,741.7	24,389.0	17,174.3	16,152.2	12,056.2	11,004.8	6,436.0	10,897.0	2,265.8

Africa (CED+GER - 2004)	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
Algeria	0.0	1,474.3	424.1	23.2	689.1	0.0	459.4	0.0	0.0	26,137.4
Angola	247.2	207.7	2,155.6	2,455.4	2,154.9	4,257.6	2,707.4	7,417.3	2,459.0	29,500.1
Benin	50.9	0.0	120.0	0.0	53.4	39.6	0.0	0.0	0.0	1,188.5
Botswana	181.2	26.1	571.4	527.9	768.1	498.9	655.1	243.7	0.0	4,529.9
Burkina Faso	25.8	28.7	30.5	43.3	58.8	69.7	87.5	112.7	136.2	1,421.2
Burundi	11.3	0.0	92.9	83.3	27.9	33.5	128.5	32.5	41.0	1,175.6
Cameroon	445.6	299.3	417.6	1,142.0	0.0	0.0	0.0	0.0	0.0	11,462.2
Cape Verde	6.5	8.2	15.1	15.7	17.5	21.8	65.5	33.5	67.0	492.9
Central African Rep.	22.6	26.1	29.3	38.3	53.7	61.3	78.2	100.4	121.3	1,071.5
Chad	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	514.2
Comoros	1.2	1.4	1.7	1.9	2.7	3.3	4.1	5.1	6.6	105.9
Congo, Dem. Rep. Of	2.8	3.1	3.9	3.8	3.7	7.9	0.0	7.6	7.6	1,003.2
Congo, Republic Of	1,214.5	1,042.0	1,032.5	2,087.7	4,465.4	102.3	1,870.6	46.9	54.0	16,206.0
Côte D'Ivoire	0.0	73.1	590.6	2,279.7	2,233.7	1,559.1	2,355.6	1,547.3	78.4	21,642.2
Djibouti	19.8	39.7	118.2	119.9	115.8	80.7	160.0	283.4	90.0	1,362.1
Egypt	1,137.7	1,177.0	2,670.4	5,601.0	8,007.8	2,168.1	11,432.0	12,748.3	8,326.6	105,173.3
Equatorial Guinea	4.0	0.2	0.3	3.9	17.0	0.1	0.6	5.1	0.0	38.8
Eritrea	31.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	117.8
Ethiopia	55.9	611.7	1,427.3	772.4	36.3	798.7	1,180.2	1,655.9	1,948.6	16,459.4
Gabon	694.1	134.3	397.6	1,186.8	1,405.8	1,709.6	50.6	62.1	72.9	10,071.0
Gambia, The	2.0	1.5	1.9	75.7	35.1	3.4	59.7	38.6	8.8	1,111.9
Ghana	21.7	23.1	516.7	398.6	79.5	55.3	71.8	94.3	128.0	4,885.6
Guinea	215.3	269.8	74.5	258.3	451.7	548.6	829.8	1,248.0	1,492.3	7,196.9
Guinea-Bissau	6.5	7.5	63.9	63.5	49.9	17.8	23.0	29.4	35.8	492.7
Kenya	23.6	69.7	507.5	592.0	222.8	75.1	96.9	123.3	149.1	5,583.8
Lesotho	0.0	0.0	121.2	92.1	105.3	0.0	0.0	110.6	198.5	1,545.7
Liberia	61.8	1.0	0.5	1.7	143.3	2.8	113.6	4.2	5.6	2,884.2
Libya	63.1	24.5	16.4	40.1	16.9	48.3	55.1	65.6	86.6	1,780.6
Madagascar	18.3	21.1	119.1	156.4	784.2	468.5	1,758.5	131.2	849.3	8,552.3
Malawi	1.6	0.1	2.3	0.6	1.6	7.7	2.5	0.2	0.2	1,645.1
Mali	342.9	385.7	426.0	493.9	632.8	647.1	745.7	866.5	995.9	7,593.1
Mauritania	44.6	51.5	58.0	76.1	104.5	122.3	156.4	202.0	244.3	2,275.5
Mauritius	5.1	212.9	0.0	115.4	25.9	0.0	0.0	0.0	42.7	1,978.1
Morocco	114.3	323.7	635.9	2,762.5	722.8	3,569.3	2,351.6	2,914.4	33.2	33,853.8
Mozambique	0.0	3.2	177.5	66.7	368.7	0.0	362.1	142.7	0.0	5,449.6
Namibia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Niger	123.6	44.3	60.2	105.0	88.5	0.5	0.8	0.7	1.3	1,524.3
Nigeria	6,335.8	5,463.5	5,135.4	9,750.6	14,990.8	18,662.7	23,217.4	34,620.2	51,694.6	217,738.1
Rwanda	45.0	52.0	63.1	98.4	103.9	123.8	169.9	204.4	247.2	1,897.0
São Tomé & Príncipe	0.0	0.1	1.5	1.1	0.0	0.0	0.0	0.0	0.6	155.7
Senegal	0.0	9.4	74.5	0.0	0.0	16.4	0.0	0.0	0.0	1,418.9
Seychelles	41.8	73.5	194.8	226.9	66.3	171.0	447.6	439.8	128.7	2,385.4
Sierra Leone	10.1	11.6	68.5	132.1	46.2	27.4	34.5	44.9	53.8	2,014.3
Somalia	28.3	31.9	35.8	47.1	64.6	75.9	97.2	125.4	151.5	1,321.0
South Africa	975.2	10,400.4	5,041.9	1,147.8	3,072.0	4,716.5	9,998.1	20,480.6	21,764.5	81,840.0
Sudan	0.0	0.0	221.1	1,083.8	1,045.2	176.2	139.4	1,261.7	2,159.1	16,568.0
Swaziland	0.0	0.0	249.7	154.4	152.2	0.0	48.0	303.3	0.0	1,836.1
Tanzania	0.0	0.0	596.9	106.2	1,146.0	84.5	0.0	276.5	334.4	7,356.4
Togo	7.7	137.2	135.2	251.9	73.2	184.1	0.0	0.3	0.0	2,215.6
Tunisia	1.4	917.5	2,475.8	2,327.2	224.4	0.0	1,300.7	1,892.9	213.2	15,155.2
Uganda	51.3	17.5	175.1	612.0	450.6	364.7	477.8	734.2	1,894.5	6,185.6
Zambia	0.0	91.2	71.8	374.3	1,095.4	1,335.7	496.0	1,501.5	154.5	9,347.9
Zimbabwe	240.4	308.7	608.8	0.0	298.6	339.0	1,884.1	235.0	284.2	9,564.4
Total	**12,934.5**	**24,106.7**	**28,030.5**	**37,998.6**	**46,774.6**	**43,256.9**	**66,173.6**	**92,394.3**	**96,761.6**	**715,025.9**
North Africa	1,316.6	3,916.9	6,222.6	10,754.0	9,661.0	5,785.8	15,598.8	17,621.3	8,659.6	182,100.3
SSA	11,617.9	20,189.8	21,807.9	27,244.6	37,113.7	37,471.2	50,574.8	74,773.0	88,102.0	532,925.6
Horn	135.9	683.3	1,802.4	2,023.1	1,261.9	1,131.5	1,576.7	3,326.3	4,349.3	35,828.3
Lakes	134.0	142.3	1,439.4	1,495.6	1,954.9	689.5	873.0	1,378.6	2,673.8	23,201.5
Southern	1,712.1	11,346.2	9,315.9	5,319.7	8,895.8	11,798.3	18,363.6	31,010.9	25,888.3	158,280.5
West	9,635.9	8,017.9	9,250.2	18,406.1	25,001.0	23,851.9	29,761.4	39,057.2	55,190.6	315,615.3
Fuel	8,495.6	8,322.0	9,366.6	16,591.6	24,768.2	24,908.4	28,445.5	43,413.4	56,439.6	316,773.7
Nonfuel	901.4	1,161.0	1,678.5	1,595.8	3,139.9	3,156.8	4,750.0	4,423.0	3,445.8	49,179.3
							N&B Total			K&C Total, SSA
N&B Totals	12,076.0	12,851.7	17,713.4	36,190.9	8,767.0	419,978.7	1970-2004		282,004.7	1970-2004

GLOBAL FINANCIAL INTEGRITY

1319 18TH STREET NW, SUITE 200 • WASHINGTON, DC 20036 USA
TEL: +1 (202) 293-0740 • FAX: +1 (202) 293-1720 • www.gfip.org