

Discussion Paper

Illicit Financial Flows from the Least Developed Countries: 1990–2008

May 2011

United Nations Development Programme

POVERTY REDUCTION AND DEMOCRATIC GOVERNANCE





Illicit Financial Flows from the Least Developed Countries: 1990-2008

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LIST OF ACRONYMS AND ABBREVIATIONS

BOP	Balance of Payments
CA	Current Account
CED	Change in External Debt
CIS	Commonwealth of Independent States
CPI	Corruption Perceptions Index
CSR	Customs Reform
DOTS	Direction of Trade Statistics
FDI	Foreign Direct investment
GDP	Gross Domestic Product
GE	Government Expenditure
GER	Gross Excluding Reversals
GFI	Global Financial Integrity
HNWI	High-Net-Worth Individuals
IFF	Illicit Financial Flows
IFT	Informal Funds Transfer
IG	Inclusive Growth
IMF	International Monetary Fund
LLDCs	Landlocked Developing Countries
LDCs	Least Developed Countries
LR	Legal Reform
MDGs	Millennium Development Goals
OECD	Organisation for Economic Cooperation and Development
ODA	Official Development Assistance
PL	Political Leadership
REER	Real Effective Exchange Rate
SIDS	Small Island Developing States
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UN DESA	United Nations Department of Economic and Social Affairs

EXECUTIVE SUMMARY

This paper explores the scale and composition of illicit financial flows from the 48 Least Developed Countries (LDCs). Illicit financial flows involve the cross-border transfer of the proceeds of corruption, trade in contraband goods, criminal activities and tax evasion. In recent years, considerable interest has arisen over the extent to which such flows may have a detrimental impact on development and governance in both developed and developing countries alike.

This issue has been recognised by the UN as important for development and achievement of the Millennium Development Goals (MDGs). Illicit capital flight, where it occurs, is a major hindrance to the mobilisation of domestic resources for development. In many cases, it significantly reduces the volume of resources available for investment in the MDGs and productive capacities. Through the United Nations, the international community has committed to strengthen national and multilateral efforts to address it. As the deadline for achievement of the MDGs draws closer, it is vital to understand more about the nature of this problem and to explore possible policy solutions, especially for those countries furthest off-track towards the MDGs.

The study's indicative results find that illicit financial flows from the LDCs have increased from US\$9.7 billion in 1990 to US\$26.3 billion in 2008 implying an inflation-adjusted rate of increase of 6.2 percent per annum. Conservative (lower-bound) estimates indicate that illicit flows have increased from US\$7.9 billion in 1990 to US\$20.2 billion in 2008. The top ten exporters of illicit capital account for 63 percent of total outflows from the LDCs while the top 20 account for nearly 83 percent. Trade mispricing accounts for the bulk (65-70 percent) of illicit outflows from the LDCs, and the propensity for mispricing has increased along with increasing external trade. Empirical research on illicit flows indicates that there are three types of factors driving illicit flows — macroeconomic, structural, and governance-related.

The ratio of illicit outflows to Gross Domestic Product (GDP) averages about 4.8 percent but there is wide variation among LDCs. Of the top 10 countries with the highest illicit flows to GDP ratio, four are small island countries, two are landlocked, and four are neither. In some LDCs, losses through illicit capital flows outpace monies received in official development assistance (ODA).

Estimating illicit flows from some LDCs is problematic because the underlying macroeconomic or partner-country trade data are either non-existent or spotty due to widespread on-going or recent conflict and/or weak statistical capacity. Complete macroeconomic and partner-country trade data were available for 34 LDCs, while 11 report partial data to the IMF and 3 are non-reporters. The report thus presents an estimate of illicit flows from some of the non-reporting and partially reporting countries based on the assumption that illicit flows from these countries are in the same proportion to GDP as are outflows from other reporting LDCs with complete data.

The results of this study are indicative but demonstrate a clear need for further research in this area given the scale of the development challenges which currently face the Least Developed Countries and the need to 'think outside the box' and find innovative development solutions.

The paper presents a number of useful measures LDCs may wish to consider to curtail the generation and transmission of illicit financial flows. The international community must also play its part. However, even where policy measures are well designed and targeted, lasting improvements in this area can only be achieved when there is the sufficient political will and leadership to tackle corruption and some of the root causes of illicit financial flows.

For the Least Developed Countries, policy recommendations include measures to address trade mispricing through for instance systematic customs reform and the adoption of transfer pricing regulations with commensurate increase in enforcement capacity. The implementation of specialised software which helps governments to identify possible incidences of transfer pricing may also be useful to some governments. Measures to reform the tax base through the progressive strengthening and widening of the tax base in order to reduce dependence on indirect taxes which are more difficult to manage and have built-in incentives for tax

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evasion may also be beneficial. Ultimately tax is the most sustainable source of finance for development and the long-term goal of poor countries must be to replace foreign aid dependency with tax self-sufficiency. However taxation reform must be seen as equitable and fair and must not unduly burden the poorest.

The international community must also support LDCs' efforts to curtail the illicit outflow of capital. This includes specific measures to support LDCs to improve the systematic exchange of tax information between governments on non-resident individuals and corporations while the adoption of globally consistent regulations for transfer pricing could encourage multinational companies to modify their behaviour towards more transparency and accountability. The UN's Model Income Tax Treaty refers to the importance of automatic exchange of information between national tax authorities in different jurisdictions. In order to stem tax avoidance by multinational corporations, the international community could support the development of an international accounting standard requiring that all multi-national corporations report sales, profits, and taxes paid in all jurisdictions in their audited annual reports and tax returns.

UNDP stands ready to support LDCs and other developing countries in their efforts to curtail illicit financial flows in support of the MDGs. In particular, it can support countries to exchange practical information, experience and lessons learned on ways to tackle this problem.

1. INTRODUCTION

This paper explores the possible scale and composition of illicit financial flows from the 48 Least Developed Countries (LDCs). Illicit financial flows involve the cross-border transfer of the proceeds of corruption, trade in contraband goods, criminal activities, and tax evasion.¹ In recent years, considerable intellectual interest has arisen over the extent to which such flows may have development, governance or other consequences for both developed and developing countries (e.g., Baker (2005); Ndikumana and Boyce (2008), among others).

The paper has been commissioned by UNDP as a contribution to the United Nations IV High Level Conference on the LDCs in 2011.² Its objective is to assess the extent to which illicit financial flows may represent a significant problem in some LDCs, and if so, to consider more broadly the policy options available to governments and the international community to curtail such flows. It is intended to stimulate further public policy discussion and its results are indicative only given numerous difficulties associated with robust data collection and divergent views over which methodological approach best captures the true scale of illicit financial flows.

The outcome document from the United Nations 2010 Summit on the Millennium Development Goals (MDGs) recognises the importance of this issue for development and the MDGs and commits the international community to “implement measures to curtail illicit financial flows at all levels, enhancing disclosure practices and promoting transparency in financial information.”³ The recommendations made in the outcome document of 2010 are in line with the UN’s Monterrey Consensus and Doha Declaration, which recognise the importance of domestic resource mobilisation in countries’ efforts to raise more resources for the MDGs and commits governments to address the problem of illicit financial flows through multilateral and national efforts.⁴

Since the 1960s, the UN has recognised the particular weaknesses, vulnerabilities and development challenges faced by the LDCs. There are currently 48 countries classified by the United Nations as LDCs, 33 of which are in Sub-Saharan Africa, 14 in Asia and one in Latin America and the Caribbean.⁵ Many LDCs share similar structural characteristics, for instance 16 LDCs are landlocked, 10 are small islands, while 22 are neither (Appendix III, Table 1). LDCs satisfy three separate criteria: (i) an income per capita of less than US\$905 per annum (ii) a low level of ‘human assets’ based on indicators of nutrition, health, education and literacy (iii) and a high degree of economic vulnerability measured in relation to population size and remoteness, dependency on agriculture, forestry and fisheries, exposure to natural disasters, export concentration and instability in exports.⁶ The three criteria together seek to capture the multifaceted nature of development and underscore the many diverse challenges faced by the world’s poorest governments to develop their economies and improve the lives of — and opportunities for — their citizens. For several reasons, many LDCs are lagging behind in achieving the UN’s MDG targets.

Intuitively, one can argue that the outflow of illicit capital may hamper governments’ abilities to marshal resources for economic development, to fund important social programmes, and to bring better balance between government expenditures and tax revenues. In addition, illicit flows are typically absorbed into developed country banks and offshore financial centres. This paper also explores the issue of potential net resource transfers out of LDCs — the very same group identified by the United Nations as

1 For a comprehensive definition of illicit financial flows see *Illicit Financial Flows from Developing Countries: 2002-2006*, Dev Kar and Devon Cartwright-Smith, December 2008, Global Financial Integrity, Washington DC. The IMF is helping member countries combat illicit financial flows (reference IMF Press Release No. 10/82 dated March 12, 2010: www.imf.org/external/np/sec/pr/2010/pr1082.htm)

2 See IV United Nations Conference on the Least Developed Countries, 9-13 May, Istanbul, Turkey: www.un.org/wcm/content/site/ldc/home

3 United Nations General Assembly Resolution: Keeping the promise: United to achieve the Millennium Development Goals, October 19, 2010.

4 United Nations Doha Declaration on Financing for Development, 2008, para. 20.

5 For further information, see: United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UNOHRLLS), www.unohrlls.org/en/ldc/related/62/

6 For more details, refer to: UNOHRLLS, Criteria for Identification of LDCs: www.unohrlls.org/en/ldc/related/59/

WHY LDCs ARE VULNERABLE TO ILLICIT FLOWS

most in need of special support measures from the international community to develop. While the magnitude of the problem of net resource transfers varies from one LDC to the next, there is strong evidence that net transfers from the group are significant and present a serious challenge for fostering economic development.

The plan of the paper is as follows. Section 2 provides an overview of the characteristics of LDCs and how certain structural characteristics can facilitate illegal capital flight. Section 3 begins with a brief overview of the methodology of estimating illicit flows referring readers to Appendix I for details. Section 4 analyses the volume and pattern of illicit financial flows and key indicators (such as the ratio of illicit flows to GDP and to official development assistance, ODA) in order to capture the impact of these flows on LDCs. The net cumulative resource transfers from LDCs over the period 1990–2008 is also analysed by estimating the relevant capital inflows and outflows of LDCs as recorded in their balance of payments and comparing the totality of net recorded transfers against unrecorded outflows of illicit capital. Section 5 reviews some of the main drivers behind illicit financial flows. Section 6 presents a brief overview of the policy steps that LDCs could consider in order to curtail the outflows of illicit capital while the final section draws the main policy conclusions of the study.

2. WHY LEAST DEVELOPED COUNTRIES ARE VULNERABLE TO ILLICIT FLOWS

In his Keynote Address at a senior Policy Seminar on Implications of Capital Flight for Macroeconomic Management and Growth in Sub-Saharan Africa, South African Reserve Bank, October 2007, Prof. Njuguna Ndung'u, Governor, Central Bank of Kenya noted that:

Paradoxically, the accumulation of external liabilities in the region is mirrored by massive outflows of resources in the form of capital flight — the voluntary exit of private residents' own capital for safe haven away from the continent. The latest estimates published by UNCTAD suggest that capital flight from Sub-Saharan Africa is fast approaching half a trillion dollars, more than twice the size of its aggregate external liabilities.

While Governor Ndung'u was referring to developing countries in Sub-Saharan Africa, most LDCs share certain characteristics which may be facilitating the cross-border transfer of illicit capital. A lower domestic savings rate relative to more developed emerging market countries mean that they are even more dependent upon external sources of capital to finance economic development and to fund poverty reduction efforts. Some researchers have also found a significant link between the growth of external debt and capital flight — the so-called revolving door effect.⁷

On the one hand, most LDCs have poorly diversified economies and rely extensively on a few commodities to generate revenues, which are in turn subject to large price fluctuations internationally. On the other, LDCs tend to import a wide variety of goods due to the poor diversification of domestic industry. Customs duties on imports and on extractive mineral exports (where applicable) therefore contribute significantly to government revenues particularly given that direct income taxes are low due to a narrow tax base. This has led the IMF to conclude that: "For the foreseeable future, in any event, the central lesson is clear: for many developing countries, and especially the poorest of them, tariff revenue will continue to be a core component of government finances for many years to come".⁸

⁷ See, for example, *External Debt and Capital Flight in the Indian Economy*, Niranjana Chipalkatti and Meenakshi Rishi, Oxford Development Studies, Vol. 29, No. 1, 2001 and *Congo's Odious debt: External Borrowing and Capital Flight in Zaire*, Leonce Ndikumana and James K. Boyce, Development and Change, Vol. 29 (1998).

⁸ *Changing Customs: Challenges and Strategies for the Reform of Customs Administration*, Editor Michael Keen, International Monetary Fund, 2003. See also, *Policies, Enforcement, and Customs Evasion: Evidence from India*, Prachi, Mishra, Arvind Subramanian, and Peter Topalova, IMF Research Department, Working Paper No. WP/07/60, March 2007, International Monetary Fund.

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The IMF report notes that smuggling, defined as importation or exportation contrary to the law and without paying (or underpaying) applicable duties, will continue as long as tariffs are levied. The continuing importance of trade taxes in developing countries, particularly in the LDCs, thus creates a significant risk of smuggling.⁹

Furthermore, LDCs typically have limited fiscal space to mitigate the impact of crises on the poor (such as increasing joblessness), nor the resources to launch large-scale new investments in infrastructure to stimulate the economy when there is an economic downturn. Additionally, significant fiscal deficits may spur the tax evasion component of illicit financial flows because higher deficits signal to private markets and high net worth individuals that taxes would probably have to be raised to close the revenue gap in the near future. The threat of higher taxes may result in larger tax evasion through illicit financial flows from LDCs into tax havens. However, as Sheets (1997) and others have noted, the empirical evidence on the adverse impact of fiscal deficits on illegal capital flight is not very clear.¹⁰

There are other drivers of illicit financial flows from LDCs that are by no means unique to them. Kar (2011) found that a skewed and worsening distribution of income can drive illicit flows because of the expanding number of higher net worth individuals in economies with a relatively narrow tax base and weaker or more corrupt tax collection agencies compared to those operating in developed countries. The high net worth individuals then resort to the cross-border transfer of illicit capital in order to not only shield their growing assets from applicable taxes but to accumulate, in a clandestine manner, wealth far in excess of what declared incomes could have generated.¹¹

The other important driver of illicit flows is the size of the underground economy. A recent comprehensive study of the underground economy by the World Bank found that it is quite large in many LDCs (see Appendix III, Table 8).¹² These estimates are likely to be understated because they typically do not include criminal activities such as burglary and robbery or trade in contraband goods such as drugs. Nevertheless, available empirical evidence point to the fact that the underground economy in LDCs can be a significant driver of illicit financial flows.

3. METHODOLOGICAL APPROACH

3.1 Method of Estimating Illicit Flows

A study on illicit financial flows by the Norwegian Ministry of Foreign Affairs (2009) notes, that illicit flows cannot be measured fully accurately because by nature, illicit flows are extremely difficult to define and measure. Moreover, there are alternative approaches to estimating such flows.¹³ However, a common feature in many recent studies which aim to quantify illicit flows is that they have used the World Bank Residual model adjusted for trade mispricing (see Appendix I for details on the methodology). This same approach underlies the present study.

The World Bank Residual model captures the gap between a country's source and use of funds which should equalise in a perfect world. In practice, if the source of funds exceeds the country's use of funds, this implies that the unaccounted-for capital has leaked

9 Op. cit., Page 8 and Box 1.1, page 9.

10 *Capital Flight from the Countries in Transition: Some Empirical Evidence*, Nathan Sheets, Journal of Economic Policy Reform, January 1996.

11 *An Empirical Study on the transfer of black money from India: 1948-2008*, Dev Kar, Economic and Political Weekly, Vol. 46, No. 15, April 9–15, 2011. See also, *Capitalism's Achilles Heel: Dirty Money and How to Renew the Free-Market System*, Raymond W. Baker, John Wiley & Sons, Inc., 2005.

12 *Shadow Economies All over the World: New Estimates from 162 Countries from 1999 to 2007*, Friedrich Schneider, Andreas Buehn, Claudio E. Montenegro, Polic Research Working Paper No. 5356, Development Research Group, World Bank, July 2010. See also, *The Size of Shadow Economies in 145 Countries from 1999 to 2003*, Friedrich Schneider, Brown Journal of Economics, Vol. XI, Issue 2, Winter/Spring 2005.

13 Tax Havens and Development: Status, Analysis and Measures, 2009.

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out of the country's external accounts or balance of payments. In this case, the residual or gap between recorded source of funds (inflows of loans plus net foreign direct investment) and use of funds (financing the current account deficit plus changes in central bank reserves) amounts to an unrecorded outward transfer of capital from the country. It is assumed that such cross-border transfers of capital involve illicit funds because there is no reason why transfers of legitimate capital should go unrecorded.

The World Bank Residual model estimates are then adjusted for illicit flows arising out of trade mispricing. Numerous researchers such as Nandi (1995), Chipalkatti and Rishi (2001), Schneider (2003), Gunter (2004), Ndikumana and Boyce (2008) and others have argued that foreign assets can be acquired by over-invoicing imports and under-invoicing exports. The manipulation of trade invoices also occurs in industrialised countries.

Note that inflows of illicit capital into a country can also be detected. For example, certain trade restrictions can provide the incentive to under-invoice imports in order to lower customs duties payable or exports can be over-invoiced in order to collect on export subsidies. For reasons enumerated in Appendix I, the methodology used in this study only focuses on the estimation of illicit outflows and does not net out illicit inflows from outflows. The main reason why only gross illicit outflows are estimated is that a netting of illicit flows does not necessarily present a net benefit to the country. Because illicit inflows are also unrecorded, governments cannot tax the funds nor use them directly for economic development purposes. Indeed, illicit inflows can amount to a loss of funds for the government as illustrated by the example just cited. This is the main difference between the method traditionally used and the one used in this study.

There are alternative methods for estimating illicit financial flows or illegal capital flight and several studies such as Eggerstedt, Hall, and Wijnbergen (1993) commissioned by the World Bank, Schneider (2003) and, Norwegian Ministry of Foreign Affairs (2009), have noted that there is no consensus as regards the most appropriate or accurate methodology for estimating these flows. Part of the problem in estimating capital flight is that researchers tend to look at different aspects of the phenomena and therefore use varying definitions of flight capital. If, for example, "normal" or legal capital flight is also included then such measures would differ from what is considered to be purely illegal or illicit financial flows.

Economists have long studied trade mispricing as a conduit for the cross-border transfer of illicit capital beginning with the seminal studies carried out by Bhagwati, Krueger, and others.¹⁴ Since then, many economists such as Gunter (2003), Ndikumana and Boyce (2008) and others have estimated illegal capital flight by adjusting the World Bank Residual model estimates for trade mispricing. A few economists have however questioned the use of bilateral trade databases to estimate trade mispricing. The main concern has been that the compilation of trade statistics is so fraught with serious problems of measurement that bilateral trade statistics are not sufficiently reliable to estimate illicit financial flows. Box 1 however casts doubt over such legitimate concerns. Consequently, the World Bank Residual model adjusted for trade mispricing has withstood the test of time as one of the most widely used methods to estimate illegal capital flight.

3.2 Data Issues Specific to LDCs

Estimating illicit flows from some LDCs is problematic because the underlying macroeconomic or partner-country trade data are either non-existent or spotty due to widespread on-going or recent conflict (e.g. Afghanistan, Cambodia, Democratic Republic of Congo, Eritrea, Liberia, Somalia, Sudan) and/or weak statistical capacity in some countries (Bhutan, Burkina Faso, Burundi, the Central African Republic, Chad, the Comoros, Equatorial Guinea, Ethiopia, Guinea-Bissau, Kiribati, Malawi, Mauritania, Nepal, Samoa, São Tomé and Príncipe, Timor-Leste, Tuvalu, and Zambia). As a result, complete macroeconomic and partner-country trade data were available only for 34 LDCs, while 11 report partial data to the IMF and three are non-reporters (Kiribati, Timor-Leste, and Tuvalu). While the three small non-reporters are unlikely to significantly alter the country rankings or the volume and pattern of illicit flows from the group as a whole, it is possible that larger countries with partial data (such as Afghanistan and Somalia) would

¹⁴ See, for example, *Illegal Transactions in International Trade*, Jagdish N. Bhawati (Editor), North-Holland/American Elsevier, 1974.

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Box 1. Bilateral Trade Statistics, Trade Mispricing, and Illicit Financial Flows

The IMF is charged with the responsibility for developing the guidelines for the compilation of balance of payments statistics and to provide technical assistance to member countries in the compilation of these statistics. This report has used the “IMF Committee on Balance of Payments Statistics Annual Report 2009” (IMF Committee Report) combined with field experience in the compilation of official trade statistics. In principle, at the global level, the combined surpluses and deficits in the individual accounts of the balance of payments for all countries and international organisations should cancel out (i.e. equal zero) but in practice the data do not sum to zero. The measurement differences arise from incomplete coverage of transactions, inaccurate or inconsistent recording of transactions by the compiling countries (or the reporters), different classification or timing of transactions, and other measurement errors and discrepancies. The resultant global imbalances are monitored by the Committee because they provide an indication of where measurement weaknesses lie in the accounts.

Table 1. Global Transactions and Balances on Current Account, 2002-2008

Global BOP Item	US\$ billion							Average
	2002	2003	2004	2005	2006	2007	2008	2002-07
Current account balance	-97.8	-20.0	55.0	103.4	253.6	403.3	298.1	116.2
Goods								
Credit	6,393.6	7,466.9	9,069.3	10,375.0	11,993.6	13,866.8	16,014.7	9,860.9
Debit	6,381.2	7,421.8	9,046.4	10,330.4	11,885.2	13,692.3	15,857.5	9,792.9
Balance on goods	12.4	45.1	22.9	44.6	108.4	174.5	157.2	68.0
Services								
Credit	1,639.9	1,889.4	2,285.4	2,549.8	2,888.4	3,454.5	3,858.6	2,451.2
Debit	1,637.6	1,868.4	2,218.9	2,457.0	2,735.6	3,224.6	3,649.4	2,357.0
Balance on services	2.2	20.9	66.5	92.7	152.8	229.9	209.2	94.2
(in percent)								
Current account / Gross CA transactions	0.5	0.1	0.2	0.3	0.7	0.9	0.6	0.5
Goods balance /Gross goods transactions	0.1	0.3	0.1	0.2	0.5	0.6	0.5	0.3
Services balance / Gross services transactions	0.1	0.6	1.5	1.9	2.7	3.4	2.8	2.0

Source: IMF Committee on Balance of Payments Statistics Annual Report 2009, Statistics Department, IMF.

In this paper, only bilateral trade data discrepancies that are equal to or greater than 10 percent of exports for each country are accepted as a conservative estimate of probable illicit outflows. It is hard to see how trade data discrepancies which are larger than 10 percent of exports can be attributed to errors in compiling trade data in light of the Committee’s findings. The trade mispricing model estimates illicit flows based on bilateral trade in goods only as reliable data related to the services trade are not available for most countries on a bilateral basis. In this context, the estimation of illicit flows due to mispricing is missing a huge component — that of services. Hence, overall estimates of illicit flows are likely to be significantly understated as trade in services becomes more important in a globalised world economy and as multinationals play a bigger role in providing services.

ILLICIT FLOWS AND THE LEAST DEVELOPED COUNTRIES

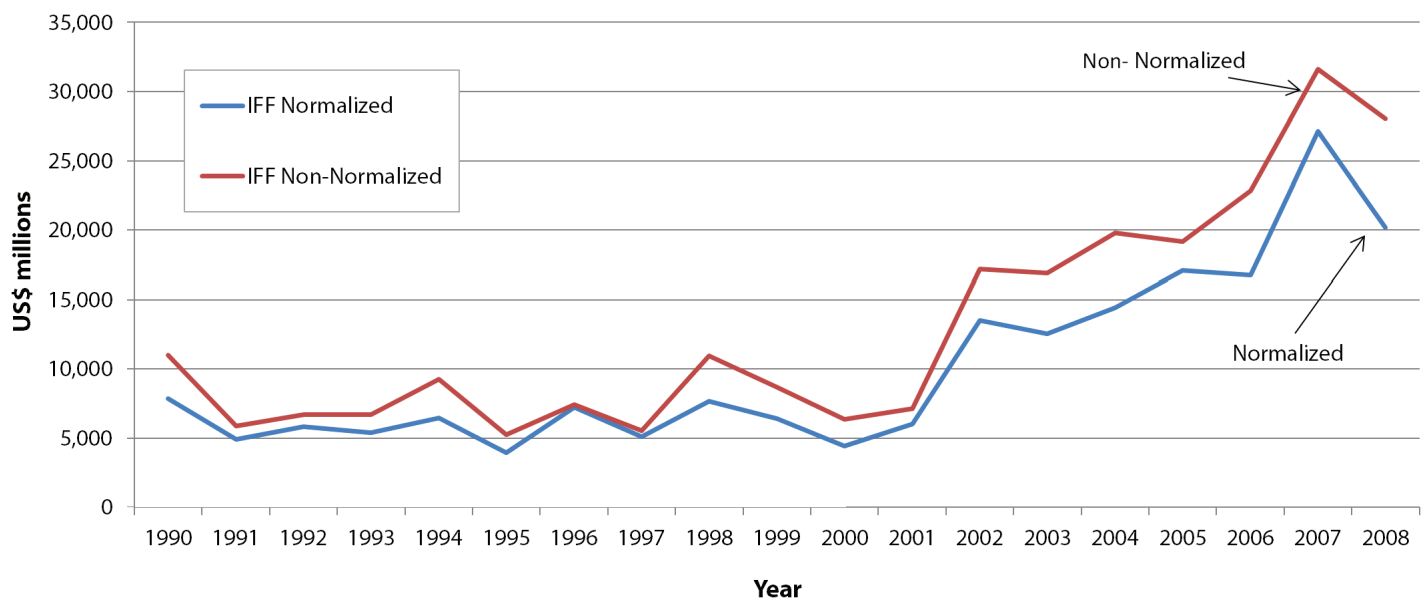
have modified these findings. In order to correct for this understatement, the report presents an estimate of illicit flows from some of the non-reporting and partially reporting countries (which at least report GDP data) based on the assumption that illicit flows from these countries are in the same proportion to GDP as are outflows from other reporting LDCs with complete data.

4. ILLICIT FLOWS AND THE LEAST DEVELOPED COUNTRIES

The following indicative observations can be drawn based on the estimates of illicit flows using the World Bank Residual model adjusted for trade mispricing presented in Appendix III, Tables 1-7:

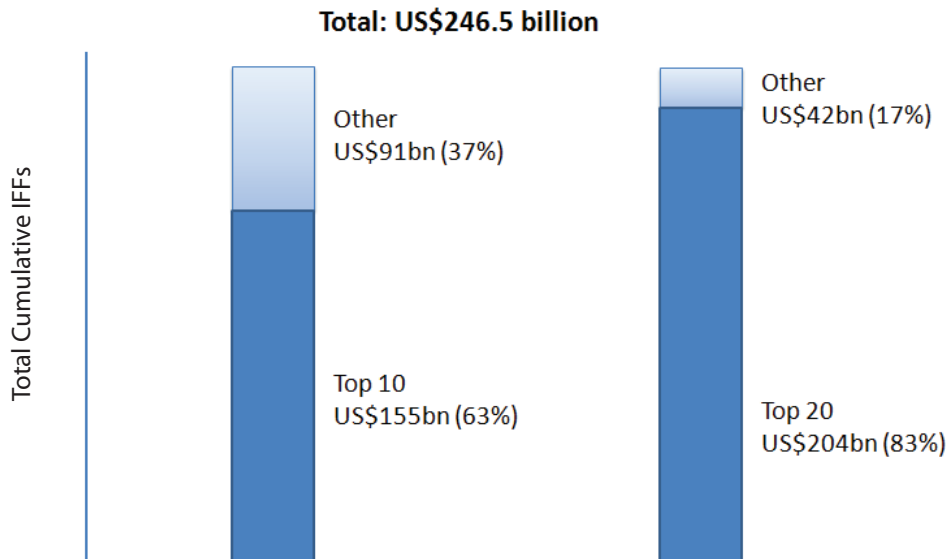
1. Data on balance of payments and bilateral trade reported by 45 LDCs to the IMF (including 26 that report only partial data) show that the upper-bound estimate of illicit flows have increased from US\$9.7 billion in 1990 to US\$26.3 billion in 2008 when measured in current prices (Chart 1) (see Appendix I for full details on the methodology used to estimate these flows). GDP-based adjustments for illicit flows based on the remaining non-reporting LDCs indicate that total outflows of illicit capital increased from US\$11.0 billion in 1990 to US\$28.1 billion in 2008. To calculate more conservative or normalised estimates, model results are subjected to two conditional filters — (i) that countries must show illicit outflows in the majority of years between 1990 and 2008 and that (ii) illicit outflows must be equal to or greater than 10 percent of exports of goods. On this conservative basis, but adjusted for missing data based on GDP shares, illicit flows have increased from US\$7.9 billion in 1990 to US\$20.2 billion in 2008. Chart 1 shows that the robust and conservative estimates of illicit flows have moved in tandem over this 19-year period.
2. It is likely that illicit outflows from countries that report data would dominate those that do not because the latter are mostly smaller economies. In fact, Chart 2 shows that the top ten LDC exporters of illicit capital account for 63.0 percent of total outflows from the group while the top 20 LDCs account for 83.0 percent of such outflows.

Chart 1: Illicit Financial Flows from LDCs (Normalized and Non-Normalized), 1990-2008 (in US\$ millions)



ILLICIT FLOWS AND THE LEAST DEVELOPED COUNTRIES

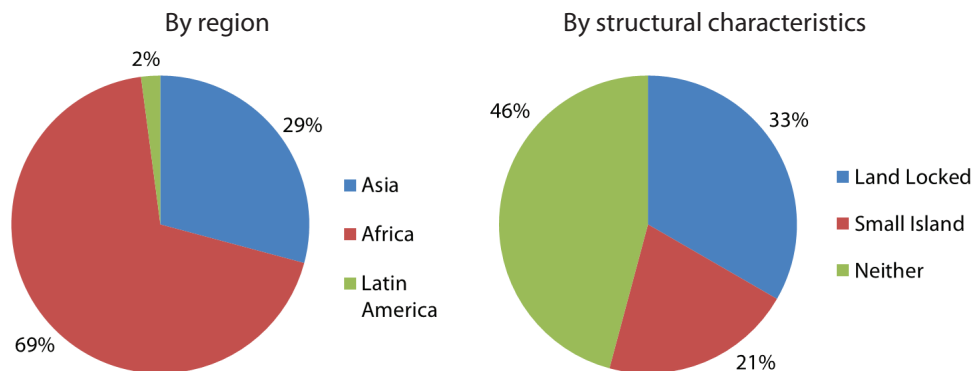
Chart 2: The Top 10 and Top 20 LDCs in Illicit Financial Flows from the Group, Cumulative 1990-2008: Non-normalized or Robust Estimate*



* Adjusted for missing data (Appendix III, Table 3); shares are rounded to the nearest percent.

3. The regional pattern of illicit flows from LDCs needs to be interpreted with caution owing to missing data most of which are in Sub-Saharan Africa. Based on available data, Chart 3 shows that African LDCs accounted for 69 percent of total illicit flows, followed by Asia (29 percent) and Latin America (2 percent). This pattern of illicit flows mainly reflects the geographical distribution of LDCs, most of which are in Africa. The distribution by structural characteristics shows that landlocked LDCs account for 33 percent of total illicit outflows while the small island LDCs account for 21 percent leaving those that are neither to make up the bulk (46 percent). This distribution of illicit flows by structural characteristics mainly reflects the fact that of the 20 LDCs with the largest illicit outflows (accounting for 83 percent of total outflows from all LDCs), the top two (Bangladesh and Angola) and six others are neither landlocked nor small islands while 12 are landlocked LDCs. There are no small island LDCs in this list of the top 20 exporters of illicit capital however these countries are also extremely small.
4. Using the slope of the logarithmic trend line, illicit flows (estimated on a robust basis) have increased at a nominal rate of 8.8 percent per annum over the period 1990 to 2008. Deflating the series by the U.S. producer price line, illicit outflows have increased in real terms by about 6.2 percent per annum over this period, which is obtained by deflating the series by U.S. producer prices and calculating the slope of the logarithmic trend line.
5. On average, for all LDCs, trade mispricing accounts for roughly 65-70 percent of total illicit outflows while unrecorded leakages from the balance of payments account for the remainder; the range depends upon how one estimates illicit flows (Appendix III, Tables 3 and 4). Over the period 1990-2008, trade mispricing in LDCs has increased at a real rate of 5.8 percent per annum compared to the real rate of growth in LDC trade of 9.5 percent indicating that, in the absence of significant improvements in governance, the propensity to misprice trade has grown along with increasing external trade. The propensity to misprice trade is likely to grow in an environment where anti-

Chart 3: Distribution of Cumulative IFFs from LDCs, 1990-2008 (in percent)*



* Robust (or non-normalized) estimates adjusted for missing data (total US\$246.5 billion)

corruption capacities, as well as transparency and accountability mechanisms to curtail illicit financial flows and stop leakages of resources are very weak.¹⁵

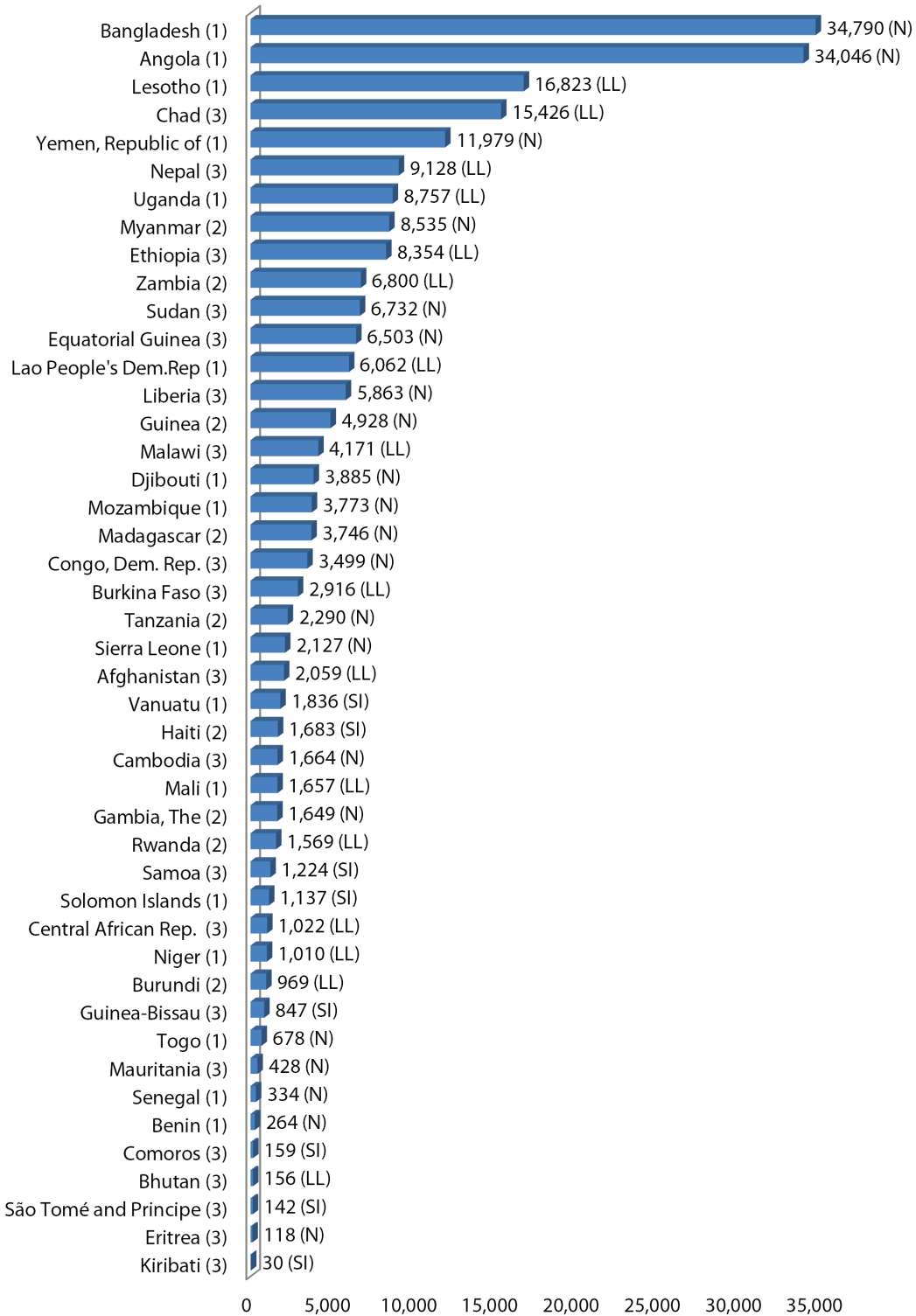
- Slightly more than 79 percent of cumulative illicit flows from landlocked as well as small island LDCs over the period 1990-2008 occur through trade mispricing (Appendix III, Table 2). While one can see that the high figure for trade mispricing in small island LDCs is probably related to trade openness, the corresponding high estimate for landlocked countries seems to be counterintuitive. This is not necessarily so. While it is true that landlocked countries have no direct access to ports for international shipment of goods, they nevertheless trade heavily with neighboring countries (such as Lesotho-South Africa, Nepal-India, Bhutan-Nepal, Bhutan-India, etc.). Opportunities for mispricing trade abound where weak customs administration operate in remote and porous borders. LDCs that are neither small islands nor landlocked account for the bulk (slightly more than 84 percent) of illicit flows through the balance of payments for the group of LDCs as a whole. However, within the group that are neither small islands nor landlocked, Appendix III Table 2 shows that the conduit for the transfer of illicit capital is more evenly distributed between balance of payments leakages (CED of 56.8 percent) and trade mispricing (GER of 43.2 percent).¹⁶
- Keeping in mind that data on 14 LDCs are spotty or entirely missing and assuming that illicit outflows from countries in conflict such as Afghanistan and Somalia do not disturb the rankings, Chart 4 shows that the top ten exporters of illicit capital during the period 1990-2008 are Bangladesh (cumulative outflow US\$34.8 billion), Angola (US\$34.0 billion), Lesotho (US\$16.8 billion), Chad (US\$15.4 billion), Yemen (US\$12.0 billion), Nepal (US\$9.1 billion), Uganda (US\$8.8 billion), Myanmar (US\$8.5 billion), Ethiopia (US\$8.4 billion), Zambia (US\$6.8 billion) and Sudan at US\$6.7 billion. Of this list of LDCs with the ten highest levels of illicit outflows, six (Chad, Ethiopia, Lesotho, Nepal, Uganda, and Zambia) are landlocked while four (Angola, Bangladesh, Myanmar, and Yemen) are neither small islands nor landlocked.
- The ratio of illicit flows to GDP for 39 LDCs (which include 14 countries with partner-country based trade data but no comprehensive balance of payments statistics) indicate that the ratio fluctuates significantly from year

¹⁵ Op. cit., footnote 8.

¹⁶ See Appendix I for details on methodology. The balance of payments leakages are estimated based on the World Bank Residual Model using change in external debt (CED) as a source of funds. These estimates are then adjusted for trade mispricing implying illicit outflows only which is the gross excluding reversals (GER) method.

ILLICIT FLOWS AND THE LEAST DEVELOPED COUNTRIES

Chart 4: Cumulative IFFs from LDCs by country, 1990-2008 (US\$ million)



(1) With full data, 1990-2008 for both CED and GER, (2) With almost full data, 1990-2008 (missing 5 years or less).

(3) With partial data. (4) Somalia, Tuvalu, Timor-Leste are not ranked because of missing data in all years.

LL=Landlocked; SI=Small Island; N=Neither

ILLICIT FLOWS AND THE LEAST DEVELOPED COUNTRIES

to year.¹⁷ The main reason is that the series on illicit flows from LDCs is non-stationary or exhibits random-walk characteristics. Broadly speaking, the average ratio of illicit flows to GDP for the group of LDCs has tended to come down from about 6.2 percent in 1990 to about 3.6 percent in 2001 although there were some significant jumps in 1994 and 1998. Since 2002 when the ratio hit nearly 7.9 percent, it again started on a downward trend up to 2008 when it stood at about 4.6 percent. The downward trend in the ratio of illicit flows to GDP is mainly a result of faster rates of economic growth and not due to falling illicit outflows.

9. On average, the ratio of illicit flows to GDP for 39 LDCs that report data (including those for which sufficient partial outflows could be calculated) for the period 1990-2008 is about 4.8 percent (Chart 5). This ratio is probably significantly understated in light of the significant lack of data for nine LDCs. The ranking of LDCs in terms of the ratio of illicit flows to GDP is subject to the further caveat that countries with missing data such as Afghanistan and Somalia may have changed the order. Available data indicates that there is little correlation between the rankings based on volume of flows and those based on percent of GDP—only two countries Chad (ranked number one at 27.3 percent of GDP) and Angola (ranked number nine at 10.9 percent of GDP) figure in the top ten LDCs shown in Chart 4 and 5. Chart 5 shows that illicit outflows as percent of GDP are higher than the average of 4.8 percent in the case of 26 out of 39 countries ranked. In terms of the structural characteristics of the LDCs with the top ten illicit flows to GDP ratios, four are small island countries (Samoa, São Tomé and Príncipe, Solomon Islands, and Vanuatu), two are landlocked (Chad and the Lao People's Democratic Republic), and four are neither (Angola, Equatorial Guinea, the Gambia, and Sierra Leone).
10. LDCs are major recipients of official external aid, receiving approximately 24.1 percent of total ODA flows in 2009 (OECD-DAC 2010). Yet, over the period 1990-2008, the ratio for the group averaged about 0.6—that is for every dollar received in ODA, 60 cents exit the country in illicit flows.¹⁸ Of course, there are sharp variations among LDCs with loss of illicit capital outpacing ODA in the most egregious cases as follows—Equatorial Guinea (16.7 to 1), Angola (5.6 to 1), Myanmar (4.7 to 1), Chad (2.9 to 1), Yemen (2.7 to 1), Vanuatu (2.0 to 1), Samoa (1.7 to 1), the Gambia (1.5 to 1), Bangladesh (1.4 to 1), and the Lao People's Democratic Republic and Nepal (both at 1.1 to 1). While other LDCs with illicit financial flows to ODA ratios at or below 1 may give the impression that the overall utilisation of aid is effective or that governance is not an issue, in reality these countries are large recipients of external aid while illicit outflows are probably understated due to lack of data or other reasons (e.g., illicit flows are cash-based).
11. Chart 6 analyses the net cumulative resource transfer from LDCs to the rest of the world over the period 1990-2008 by estimating the relevant capital inflows and outflows from LDCs as recorded in countries' balance of payments. The totality of net recorded transfers (inflows and outflows) is then compared to unrecorded outflows of illicit capital. Cumulative inflows and outflows from LDCs vis-à-vis the rest of the world (keeping signs intact) can be estimated as:

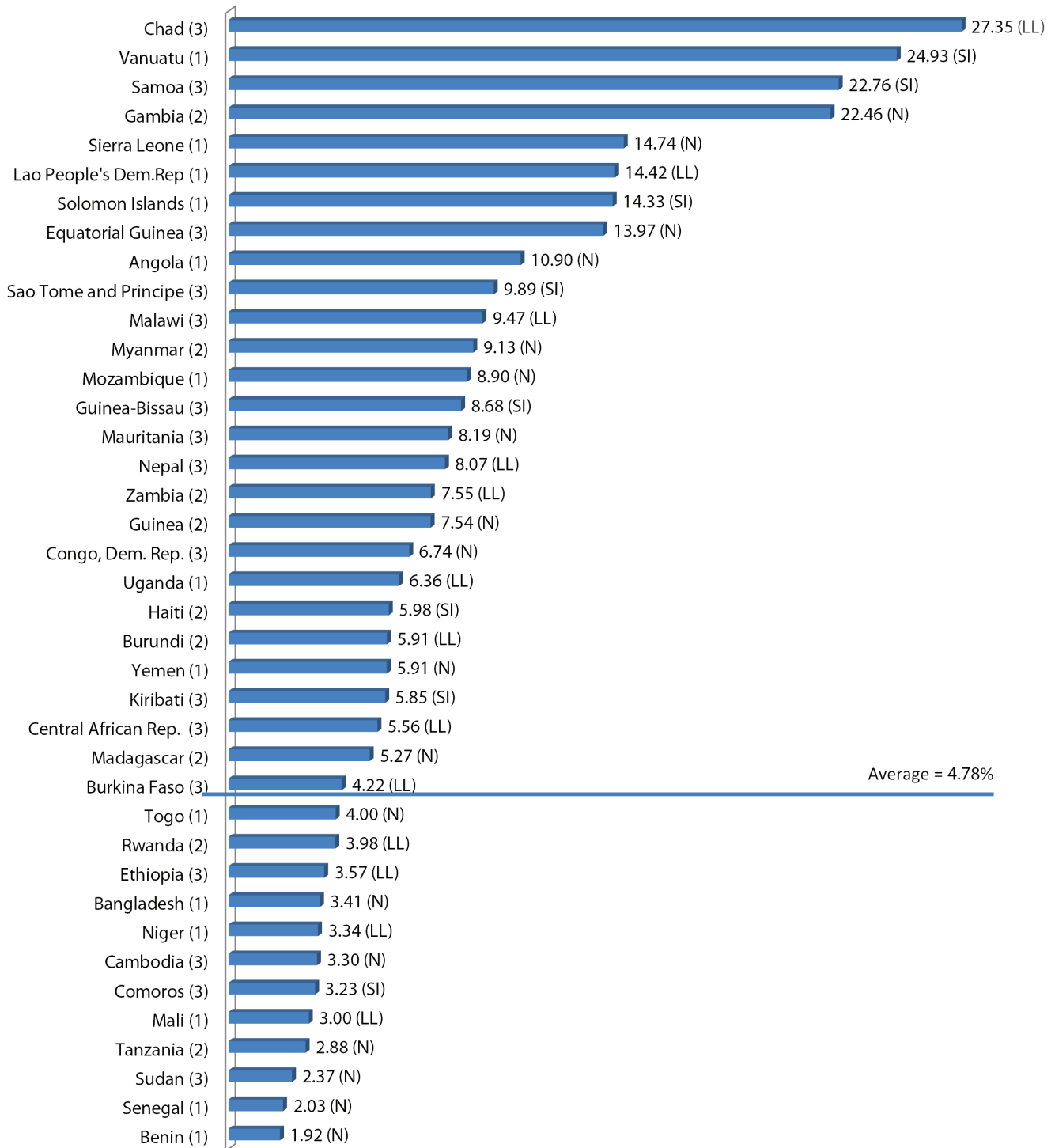
$$\begin{aligned} \text{Net recorded transfers} &= \text{Net Financial Account Balance, FDI, New loans, Repayments of principal (+US\$94 billion)} \\ &+ \text{Remittances (+US\$118 billion)} \\ &- \text{Debt Service payments (US\$162 billion)} \\ &= \text{+US\$50 billion (inflow)} \end{aligned}$$
12. If illicit outflows of US\$246 billion are 'netted-out', LDCs show a net resource transfer of about US\$197 billion into the rest of the world (mainly developed countries) over this period. This is a serious loss of resources which may be accentuating the development challenge in many LDCs.

17 Note that of the partial data reporters listed in Appendix III, Table 1, six countries have only reported data for a few years during the period 1990-2008 so that they could not be ranked or analysed.

18 The paper does not provide estimates of illicit flows to ODA ratios by country because such estimates are misleading for many LDCs due to missing or incomplete data.

ILLICIT FLOWS AND THE LEAST DEVELOPED COUNTRIES

Chart 5: Illicit Flows from LDCs as percent of GDP, Average 1990-2008)

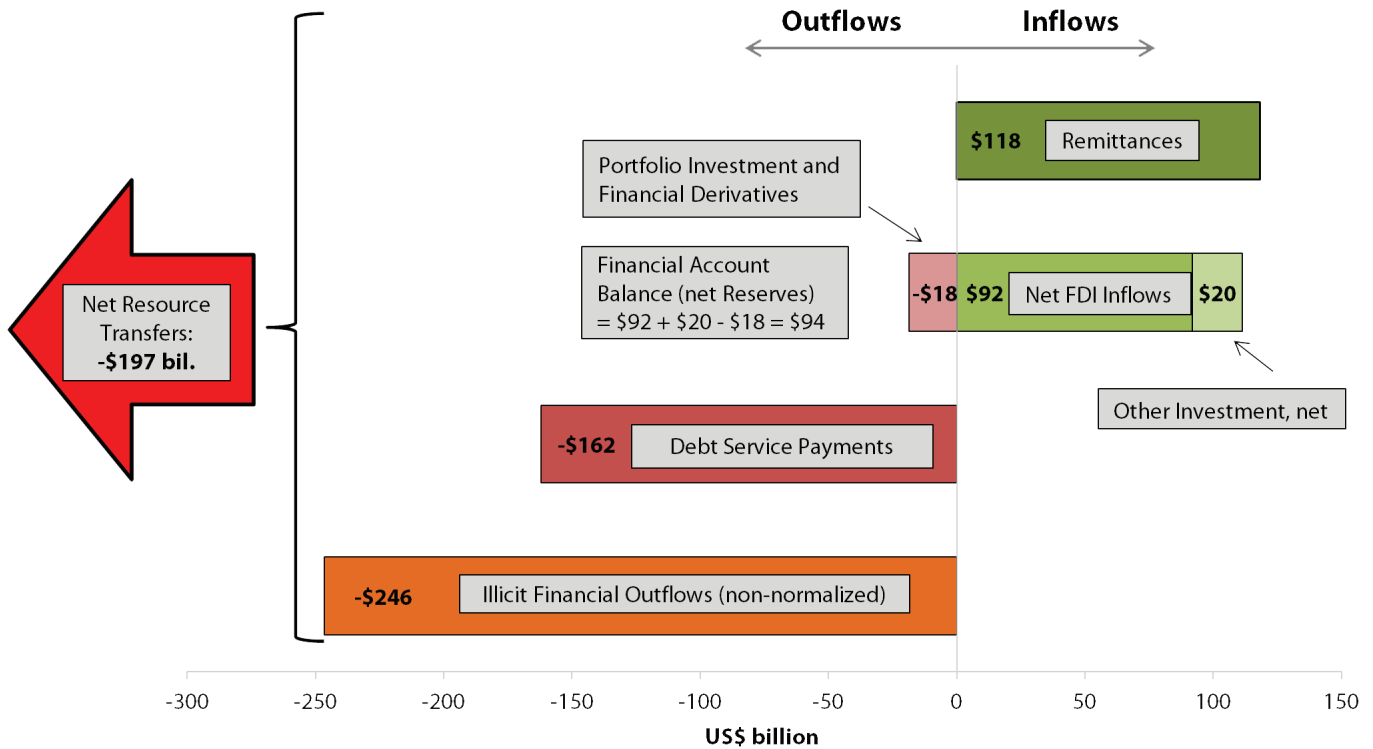


(1) With full data, 1990-2008 for both CED and GER, (2) With almost full data, 1990-2008 (missing 5 years or less). (3) With partial data (4) Somalia, Tuvalu, Timor-Leste are not ranked because of missing data in all years and five others are not ranked because of significant data gaps.

LL=Landlocked; SI=Small Island; N=Neither

DRIVERS AND DYNAMICS OF ILLICIT FINANCIAL FLOWS

Chart 6: Net Recorded Transfers and Net Resource Transfers Least Developed Countries, 1990-2008 (cumulative, US\$ billion)



5. THE DRIVERS AND DYNAMICS OF ILLICIT FINANCIAL FLOWS

The policy recommendations for curbing illicit financial flows from a country must necessarily flow from an in-depth study of the drivers and dynamics of these flows that are specific to each individual country. This section analyses the broad drivers and dynamics of illicit financial flows based on empirical research and is followed by an overview of policy measures governments may wish to consider in order to restrict the generation and cross-border transmission of such capital.

Empirical research on illicit financial flows (see Appendix II) indicate that the factors that drive such flows can be broadly classified into three categories — macroeconomic, structural, and governance-related (Chart 7). Unstable macroeconomic policies that generate high fiscal deficits, high and variable rates of inflation, exchange rate overvaluation (as indicated by the real effective exchange rate or REER), negative real rates of return on assets, etc., have been extensively cited by Nandi (1995), Sheets (1996), Schineller (1997), Chipalkatti and Rishi (2001) and others as important drivers of legal capital flight which involve transfers of mainly short-term portfolio capital by the private sector. In contrast, other research (e.g. Kar 2011) on illicit financial flows from India suggests that macroeconomic drivers are unlikely to act as major drivers of illicit flows of capital.

5.1 Macroeconomic Factors

Owners of illicit capital, which comprise of the proceeds of crime, bribery, kickbacks, asset stripping, tax evasion, and illegal activities such as drug trafficking, are typically more interested in hiding their wealth than in maximising rates of return. They are

DRIVERS AND DYNAMICS OF ILLICIT FINANCIAL FLOWS

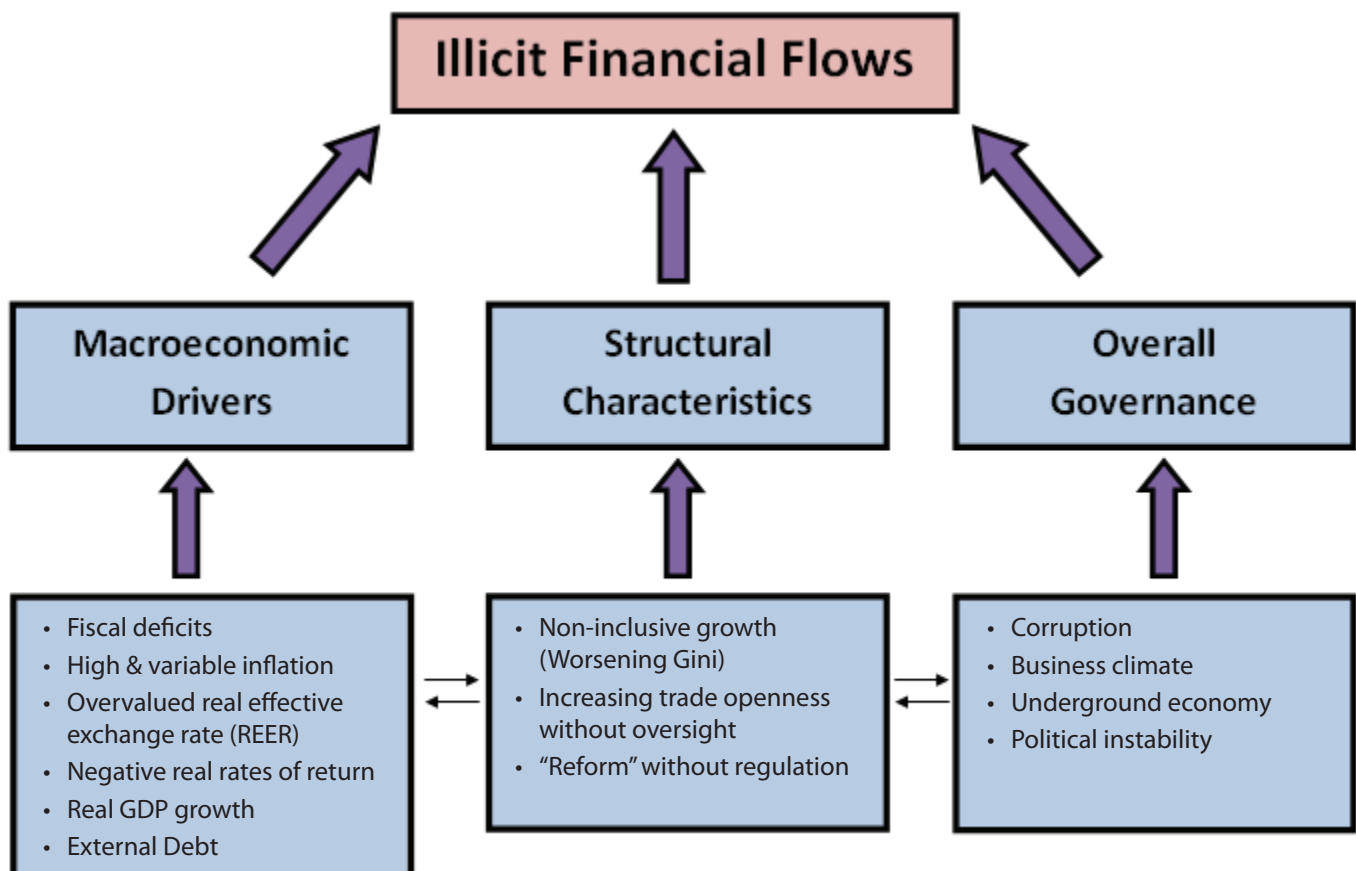
also not likely to be worried about future taxation implied by a rising government budget deficit. That said, overall macroeconomic conditions do impact a country's overall business climate which prompts domestic businesses to retain more capital at home while attracting foreign direct investment into the country. Ultimately, whether macroeconomic factors drive illicit flows is an empirical question which needs to be settled within the context of specific country case studies.

5.2 Structural Issues

Illicit flows are much more likely to be driven by structural factors like rising income inequality, faster rates of (non-inclusive) economic growth, increasing trade openness without adequate regulatory oversight, etc. Where economic growth is non-inclusive, it may worsen the distribution of income and the resulting larger number of high net worth individuals may seek to evade higher taxes if overall governance does not improve.

Hence, fiscal policy measures to fund a social safety system, combined with investment in health, education and infrastructure need to be implemented so that growth benefits all income groups and not just a privileged minority. At the same time, tax reform needs to focus on widening the tax base and improving compliance (with an eye on equity) in order to reduce the tax evasion component of illicit flows. However, tax reform alone will not succeed in curtailing tax evasion if the quality of government services does not improve, that is if tax payers feel that they are not getting their money's worth in terms of better infrastructure and better access to health, education, and social services.

Chart 7: Factors Driving Illegal Financial Flows



POLICY MEASURES TO CURTAIL ILLICIT FLOWS

5.3 Governance and Corruption

Corruption distorts public policies in that resources are allocated not based on efficiency or internal rates of return but in favor of those who are willing and/or able to bribe or pay kickbacks to public officials. Weak governance spawns public corruption and encourages corporate malfeasance. Public corruption typically involves the abuse of authority or trust for private benefit. But this is a temptation indulged in not only by government officials but also by rent-seekers in private enterprises and nonprofit organisations. In general, poor governance provides greater latitude for corruption, both in the public and private sectors, so long as the corrupt are convinced that they are likely to get away with the loot. The misallocation of resources also hurts the private sector because infrastructure tends to get neglected even as the corrupt enrich themselves at the expense of the state. The impact on the poor is particularly harmful because the siphoning of funds reduces resources for social programmes and investments in the MDGs.

The state of governance and the extent and type of corruption will vary considerably from one LDC to the next depending upon institutional weaknesses, cultural and historical propensities, economic structure and policies, state of bureaucracy, etc. Hence, the policies needed to strengthen governance and curtail the generation of illicit funds would also vary depending on these factors.

5.4 Interactions Between the Three Types of Drivers

There is a complex dynamic interaction between the three main types of drivers which is represented in Chart 7 by arrows between the boxes but the level of complexity goes far beyond what can be depicted through simple linear equations. For instance, overvalued exchange rates often stimulate the growth of parallel or black market exchange rates which in turn spur the growth in underground economic activities, worsen corruption, and further skew the distribution of income. Of course, there are strong interactions between macroeconomic conditions and the overall business climate, and between the business climate and overall governance. Growth-promoting economic policies such as sustainable fiscal deficits, low and stable rates of inflation, attractive rates of return on financial assets, etc., can attract FDI into the country while unstable economic policies with severe macroeconomic imbalances can discourage such investments. Corruption such as bribery and kickbacks in awarding government or private contracts can impose high overhead costs of doing business reducing the country's capacity to attract FDI. In short, interactions among these three main categories of drivers can act to stimulate further illicit flows and in rare cases act to dampen them (as when growth-enhancing macroeconomic policies improve the business climate and encourages more businesses to retain capital domestically).

6. POLICY MEASURES TO CURTAIL ILLICIT FLOWS

The objective is not to be exhaustive with regard to the various methods used to generate and transfer illicit funds. Rather, a policy matrix is presented which provides an overview of some of the main governance-related policy measures which may be of interest to LDCs which wish to implement policies and procedures to curb illicit outflows of capital. While illicit financial flows are not incurred solely via weaknesses in government institutions and policies, a discussion of certain salient aspects of governance-related issues is nevertheless useful.

An important feature of the policy matrix is that apart from Political Leadership (PL1) which is assigned the highest priority, the other measures listed are not arranged in any order of importance or priority; this would need to be determined in the context of the major drivers of illicit flows from specific countries. For instance, if trade mispricing is the major driver of illicit flows and not leakages from the balance of payments, it would be necessary to assign a higher priority to customs reform over other measures which may be seen as playing a supporting role. The reason why political leadership (PL1) is accorded the highest importance is that it determines the ownership and sustainability of a programme to improve governance in any country — not only LDCs.

POLICY MEASURES TO CURTAIL ILLICIT FLOWS

Having established the political will to fight corruption and improve overall governance, policymakers must then analyse all the major sources of the generation of illicit capital within the country because in general, illicit capital must be generated first before it can be transferred abroad. Trade mispricing is an exception and this issue is addressed first because it is the major source of illicit capital from most developing countries, including LDCs.

6.1 Trade Mispricing

Trade mispricing is a practice where both the generation and transmission of illicit funds overlap in that when goods and services are mispriced, the transmission of related illicit funds is automatically built-in although the physical transfer of illicit funds may take place at a different date relative to the trade transaction. From a policy perspective, the near-simultaneity between generation and cross-border transmission of illicit funds offers possible large rewards because regulations and oversight can target the mechanics of trade mispricing in order to curtail the transmission at the same time. The other positive spinoff is that the curtailment of trade mispricing would also tighten one of the primary spigots for the financing of hawala transactions.¹⁹ While trade mispricing mainly involves the corporate sector, government imports can and typically do involve corrupt officials demanding bribes or kickbacks in the awarding of the contracted imports. With reference to the policy matrix, the appropriate policy measures to address trade mispricing would range from political leadership (PL1), government expenditure control (transparency and accountability related to trade, GE1, GE2), customs reform measures (CSR1 through CSR7, CR1 through CR10 as applicable), and legal reform (LR1 through LR5).

Note that curtailing trade mispricing does not just involve the customs administration. As the IMF notes: “In order to deal effectively with corruption, at the outset there must be a commitment from the government to address the problem.”²⁰ As noted at the outset, there is no question that the overall tenor for improving governance is set by example from the political leadership.

Hence, efforts to curtail illicit financial flows should focus on strengthening legal institutions and provisions against corruption, while relevant regulatory agencies need to be empowered to exercise adequate oversight over the transactions and operations of the financial system, the customs authorities, multinational and domestic companies, and the collection of direct and indirect taxes (see policies under legal reform LR1 through LR5 in Table 2). Other measures would include efforts to improve enforcement of existing laws and rules that apply in private markets or those that apply to civil service. The timely implementation of application laws provides a signal to the public that an independent judiciary is determined to enforce laws in a fair, transparent, and expeditious manner.

However, it is very difficult to completely choke off trade mispricing for two reasons. First, the estimates of trade mispricing presented in this study relate only to mispricing involving merchandise goods. The IMF’s Direction of Trade Statistics (DOTS) database does not include trade in services on a bilateral basis. As trade in services increases (related to call centres, back office processing, consulting or knowledge-based services, IT-services, etc.), the opportunities for mispricing also increase. Second, combating mispricing in services trade is difficult because information on comparable or “world norm” prices are almost non-existent. Traders in services can easily make the argument that their specific transaction involves a unique service in some way. Often, however, there are no comparable benchmarks to counter such arguments. Hence, the growing specialisation and volume of trade in services along with large data and information gaps make it difficult for regulatory agencies to monitor and penalise significant mispricing of such transactions. LDCs would need to work closely with the multilateral institutions in order to start the compilation of detailed data on trade in services on a bilateral basis.

19 The hawala system system is one of the informal funds transfer (IFT) systems that exist under different names in various regions of the world. For details on how the system operates and could be regulated, see Regulatory Frameworks For Hawala and Other Remittance Systems, Monetary and Financial Systems Department. International Monetary Fund Washington, DC, 2005. See, for example, Underground Banking: Legitimate Remittance Network or Money Laundering System?, Rob McCusker, Trends and Issues in Crime and Criminal Justice, Australian Institute of Criminology, Australian Government, No. 300, July 2005, for an analysis of the link between trade mispricing and hawala transactions.

20 Reference Op. cit., IMF (2003), footnote 8.

POLICY MEASURES TO CURTAIL ILLICIT FLOWS

Table 2: Policy Matrix to Curtail Illicit Financial Flows from LDCs

Type of Policy (Index Ref.)	Nature of action	Impact on Illicit Flows	Countries that implemented
Political Leadership			
Demonstration effect (PL1)	Leadership through example	CED and GER	Low corruption countries
Liberalisation/Deregulation			
Price subsidies (LD1)	Review, eliminate or improve targeting	Underground/CED	Russia, India, CIS countries
Subsidised lending (LD2)	Minimise directed lending or improve targeting	Underground/CED	CIS countries, India, and other countries
Government guarantees (LD3)	Shift towards more private non-guaranteed	CED	Georgia, and other CIS countries
Natural monopolies (LD4)	Introduce more competition/better regulate monopolies	CED or GER	Russia, India, CIS countries, and other countries
Capital account liberalisation (LD5)	Eliminate or minimise restrictions which invite circumvention	GER	India, developed, and emerging markets
Tax Reform			
Tax exemptions (TR1)	Rationalise, streamline, minimise, or eliminate	CED and GER	India, developed and emerging markets
Tax administration (TR2)	Strengthen through recruitment and training of staff	CED and GER	India, many countries
Tax statistics (direct & indirect) (TR3)	Improve scope, timeliness, and reliability of tax data	CED and GER	India, many countries
Direct taxes (TR4)	Widen net or incidence, lower rates, use technology	CED	Singapore; India, other countries
Indirect taxes (TR5)	Rationalise, streamline, minimise, or eliminate	CED	Singapore; India, other countries
Transfer pricing (TR6)	Strengthen transfer pricing assessment capacity	GER	Developed countries
Government Expenditures			
Government contracting (GE1)	Arms-length, transparency of contract awards and rules	CED or GER	Many countries
Expenditures (GE2)	Improve controls and implement best practices	CED or GER	Many countries
Civil Service Reform			
Reform (CSR1)	Mix traditional service with more technocrats	Possibly CED	Developed countries
Reform (CSR2)	Implement staff training to improve service delivery	Unclear; perhaps CED	Many countries
Reform (CSR3)	Implement whistle-blower laws w/no fear of retribution	CED	Unknown
Reform (CSR4)	Reduce unnecessary staffing	CED	Many countries
Reform (CSR5)	Implement strong action against rent-seeking culture	CED	Many countries
Reform (CSR6)	Expand government e-services to minimise bribery		Unknown
Reform (CSR7)	Website dissemination of start-to-finish service statistics		Unknown

POLICY MEASURES TO CURTAIL ILLICIT FLOWS

Table 2: Policy Matrix to Curtail Illicit Financial Flows from LDCs

Type of Policy (Index Ref.)	Nature of action	Impact on Illicit Flows	Countries that implemented
Customs Reform			
Reform (CR1)	Real time monitoring of transaction prices	GER	Guatemala (under review)
Reform (CR2)	Tariff reform; minimise remaining quantitative barriers	GER	India, many countries
Reform (CR3)	Remove ad-hoc exemptions from customs duties	GER	India, many countries
Reform (CR4)	Streamlining clearance and document control procedures	CED and GER	India, many countries
Reform (CR5)	Streamline payment and collection procedures	CED	Many countries
Reform (CR6)	Post-release verification and audit	GER	India, many countries
Reform (CR7)	Rationalise customs duty exemptions and relief	GER	Many countries
Reform (CR8)	Better, more efficient, computerisation of procedures	GER	Many countries
Reform (CR9)	Ownership of reform efforts by customs management	GER and CED	Many countries
Reform (CR10)	Regular audit of customs valuation and procedures	GER and CED	Many countries
Inclusive Growth			
Social spending (IG1)	Better targeted subsidies and penalties for abuse	CED	India, many countries
Spending on education (IG2)	Increasing funding for rural and urban schools for poor	CED	Many countries
Spending on health (IG3)	Subsidising health care for low income households	CED	India, many countries
Spending on immunisation (IG4)	Free immunisation programme for children: income test	CED	India, other emerging market countries
Spending on sanitation (IG5)	Increased expenditures on sanitation	CED	China, other emerging markets
Spending on rural infrastructure (IG6)	Better access to drinking water, rural electrification, etc.	CED	China and other emerging markets
Legal Reform			
Greater transparency (LR1)	Applies to all rules, laws, and processes: easy to understand	CED and GER	New Zealand and others
Improve timeliness (LR2)	Reduce backlog in court cases; create small claims courts	CED and GER	Developed countries
Quality of lawyers (LR3)	Improve law schools and training/ internship opportunities	CED and GER	Many countries
Corporate law (LR4)	Consistent, transparent, and expeditious application	CED and GER	Developed countries
Demonstration effect (LR5)	Prosecute high profile cases in a fair and transparent manner	CED and GER	Singapore and others

POLICY MEASURES TO CURTAIL ILLICIT FLOWS

In the meantime, the policies recommended in this paper are related to trade in goods. There is a greater need to strictly monitor trade in goods with wide variations in characteristics (heterogeneous goods) than goods that have the same or uniform characteristics (homogenous goods). Price monitoring in real time would allow customs officials to check the declared price of goods being transacted against world “norm” or benchmark prices (policy measure CR1). Significant deviations between the declared price and world norm prices for the good in question would alert customs of a possible mispricing.

Software systems exist which monitor the accuracy of trade transaction prices in real time.²¹ With such systems, the values and quantities declared on customs invoice declarations are monitored and compared to the world “norm” price for a specific commodity or merchandise, taken as the arms-length price prevailing in free markets. This may assist customs officials to identify where money is moved across borders through false invoicing of import or export transactions. Money is moved out of a country by under-invoicing exports or over-invoicing imports. Money is moved into a country by over-invoicing exports or under-invoicing imports.

In parallel, LDCs could undertake to implement a programme of customs reform on a systematic basis (policy measures CR1 through CR10). The efficacy of changes in trade policy is linked to the effectiveness and competence of customs administrations and the willingness of countries to reform and modernise that department. The reform of customs administration must not only be backed by the commitment of the government but must be strongly supported by senior management within customs. Preferably, the senior management of customs must itself be involved in the design and implementation of customs reform. Ownership of the reform programme is crucial to the sustainability of these policies.

The issue of transfer pricing is complex. Researchers such as Leiti (2009), Baistrocchi (2005) and others have noted that developing countries need to be more effectively integrated into the international taxation regime.²² They have called for strengthened tax administration (consistent with TR2 and TR6), improved exchange of tax information between governments and the adoption of globally consistent regulations for transfer pricing (again consistent with TR6) as well as the use of Advance Pricing Agreements with the objective of simplifying the negotiation and monitoring of transfer pricing practices. According to the observations of Leiti and others, the simple adoption of transfer pricing regulations together with commensurate increase in enforcement capacity will encourage multinational companies to modify their transfer pricing policies towards more transparency and accountability. As such, the international community also has a supportive role to play through supporting and promoting the implementation of best practices in this area.

Additional measures which could be taken by both national authorities in LDCs and the international community include requiring that the parties conducting a sale of goods or services in a cross-border transaction sign a statement in the commercial invoice certifying that no trade mispricing in an attempt to avoid duties or taxes has taken place and that the transaction is priced using the arms-length principle of the Organisation for Economic Cooperation and Development (OECD).²³

6.2 Reducing Bribery and Kickbacks in Government Contracts

Certain types of government expenditures offer more opportunities for public officials to receive bribes and kickbacks than others. In fact, research indicates that public corruption impacts the composition of government expenditures. For instance, large bribes tend to be available on goods supplied by oligopolistic firms or where the goods produced involve high-technology making it difficult to determine “world norm prices” (such as specialised armaments — the offsetting policy measure would be GE1 and GE2).

The policy measures needed to address bribes and kickbacks in government contracts include greater transparency and accountability in the contracting process (policy measure GE1). The procedures and rules for bidding on government contracts

21 See for instance: International Price Profiling System (IIPS).

22 See, for example, The Role of Transfer Pricing in Illicit Financial Flows from Developing Countries, Carlos A. Leiti, paper presented at a World Bank Seminar on Illicit Financial Flows, September 2009.

23 See: OECD, Arm’s Length Range, July 2010: www.oecd.org/dataoecd/41/23/45765058.pdf

POLICY MEASURES TO CURTAIL ILLICIT FLOWS

should be transparent, as should be information regarding the contracts awarded. LDCs should follow international best practices in the area of government contracting (policy measure GE2). The overall objective should be to continually seek to increase, within each government expenditure category, the share of publicly productive but privately non-lucrative projects relative to those that are publicly unproductive but privately lucrative.

6.3 *Tax Reform and Overall Governance*

It is not true that high tax burdens necessarily lead to corruption — in fact some of the countries with the highest tax burdens (e.g., Scandinavian countries, Canada) have strong overall governance. So it is not just a matter of the overall level of tax but a question of how citizens see the government as a provider of high-quality goods and services at a reasonable cost delivered in an accountable and transparent manner. If citizens feel that their tax dollars are put to good use in that they receive value for their tax dollars, then tax burden, even at a relatively higher rate, not only becomes bearable but tax compliance is higher. In contrast, larger sections of the population, particularly high-net-worth individuals (HNWIs), may feel that they are shouldering an unfair share of the tax burden if government services are poor, the infrastructure is inadequate, or if a larger portion of government direct taxes is actually derived from a narrow tax base (i.e., there are many “free riders” in the system — those, say in the informal economy, who benefit from government goods and services without being in the tax net; offsetting policy measure TR4). In such an economy, tax avoidance and evasion is higher.

So tax reform based on a widening of the tax base and applicable to a broad group of tax payers is not only fair but will ensure greater tax compliance than a proliferation of indirect taxes that are unwieldy to manage, costly to administer, and have large built-in incentives for evasion (see policy measure TR5). The potential for further tax reform and rationalisation (primarily through broadening the direct tax base and reducing the range of indirect taxes) should be explored in policy discussions with multilateral institutions which will help to reduce the size of the underground economy, curtail illicit capital outflows, and improve overall governance. Taxation reform must be seen as fair, and must not unduly burden the poorest sections of the population.

The international community also has an important role to support LDCs to improve the systematic exchange of tax information between governments on non-resident individuals and corporations. Frequently, national tax authorities are constrained by national borders and collecting tax revenue has been difficult. Additionally, bank secrecy and other confidentiality laws in many jurisdictions (such as tax havens and international financial centres) prevent disclosure of relevant information by financial institutions to government authorities. More can be done to ensure that all nations, developing and developed, collect a fair amount of tax from both individuals and corporations. Governments could mandate financial institutions to provide relevant government authorities with data on income, gains, and property paid to non-resident individuals, corporations, and trusts.

In order to stem tax avoidance by multinational corporations, the international community could support the development of an international accounting standard requiring that all multi-national corporations report sales, profits, and taxes paid in all jurisdictions in their audited annual reports and tax returns. Tax avoidance is facilitated by the lack of transparency in the way many multinational corporations report and publish their accounts. Improving transparency in the accounts of multinational corporations could help tackle tax avoidance.

6.4 *Rule of Law and Governance*

Other measures to improve overall governance include strengthening the rule of law by improving the timeliness, fairness, and independence of court decisions, setting up an independent and impartial judicial system headed by judges of the highest personal integrity, and enhancing the transparency and accountability of government services (policy measures LR1 through LR5). The question is not so much as the promulgation of new laws but the fair, transparent, and timely implementation of existing laws.

CONCLUDING REMARKS

6.5 *Inclusive Growth*

As earlier noted, worsening distribution of income may act as a driver of illicit outflows from LDCs. The proliferation of high-net-worth individuals coupled with weaknesses in the tax system and overall governance gives rise to incentives for the hidden accumulation of wealth and the subsequent cross-border transfer of illicit capital. Hence, governments need to ensure that the faster rates of economic growth benefit all sections of society including those at the lower income quintiles. However, greater government expenditures targeted to benefit the poor are also prone to bribery and misappropriation of funds not only by corrupt government officials but also by middle men. Hence, policy measures indicated in the matrix IG1 through IG6 must be dovetailed by other governance measures (LD1, LD2, TR1, GE2, CSR1 through CSR7, LR1, LR2, and LR5) through redistributive policies that are aimed at lifting the poor, adding to productive capacity, and improving the country's income distribution.

7. CONCLUDING REMARKS

This paper argues that certain structural characteristics such as low domestic savings and the resulting aid dependence and growth in external debt may be driving illicit flows in some LDCs. The poorest developing countries will continue to rely on tariff revenues as a major source of revenues given weak domestic taxation, and as long as such duties are levied, smuggling will continue. In addition, the significant fiscal deficits in many LDCs may well be driving tax evasion as higher deficits signal to private markets that direct and indirect taxes may have to increase in the medium term in order to close the gap. Even higher rates of economic growth achieved by some LDCs in recent years could act as a driver of illicit capital if growth is not accompanied by a better distribution of income.

The method used to estimate illicit financial flows from LDCs is based on the World Bank Residual model adjusted for trade mispricing—a methodology widely used among economists. This approach was modified in two important ways. First, illicit inflows are not netted out of outflows. Second, a higher and lower estimate of illicit flows for each LDC was derived corresponding, respectively, to those that do not meet certain conditions and those that do.

Based on this methodology, the study found that illicit financial flows from many LDCs are significant, both in US dollar terms and as a percent of GDP. In some LDCs, illicit financial flows outpace ODA. The results are indicative given difficulties associated with reliable data collection and the fact that various methodological approaches exist to measure and quantify illicit flows. Nevertheless, given the scale of the development challenges which face the LDCs, these preliminary results demonstrate a clear need for further work in this area, especially by the LDCs themselves in collaboration with relevant multilateral bodies. UNDP stands ready to support LDCs and other developing countries in their efforts to curtail illicit financial flows in support of the MDGs. In particular, it can support countries to exchange practical information, experience and lessons learned on ways to tackle this problem.

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APPENDIX

Appendix I

Methodology

Appendix II

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Appendix III

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Table 7: Least Developed Countries (LDCs) and the size of their Shadow Economy as a percent of GDP

APPENDIX I: METHODOLOGY

(i) Overview

The basic methodology used in this study to estimate illicit financial flows from LDCs is well established. However, there is a difference in the treatment of illicit inflows between the models presented in this paper and those traditionally used by economists. The rationale is discussed here in summary version.

In short, estimates of illicit flows are derived from the World Bank Residual Model (based on change in external debt or CED) which are then adjusted for trade misinvoicing based on the gross excluding reversals or GER method. The CED model is intuitively appealing — sources of funds exceeding recorded uses of funds reflect unrecorded outflows. Sources of funds include increases in net external indebtedness of the public sector and the net inflow of foreign direct investment. Uses of funds include financing the current account deficit and additions to reserves. In this broad macroeconomic framework, illicit outflows (inflows) exist when the source of funds exceeds (falls short of) the uses of funds. Thus:

$$\leftarrow \text{Source of Funds} \rightarrow \quad \text{Minus} \quad \leftarrow \text{Use of Funds} \rightarrow$$

$$\mathbf{K} = [\Delta \text{ External Debt} + \text{FDI (net)}] \quad - \quad [\text{CA Deficit} + \Delta \text{ Reserves}]$$

For reasons explained below, both the CED and GER adjustments only considers gross illicit outflows. Thus, when the use of funds exceeds the source, that is when there are inward transfers of illicit capital, the CED method sets those inflows to zero for that year. In contrast, economists have typically netted out illicit inflows from outflows under the Traditional method.

The CED model estimates are then adjusted for trade mispricing, which has been long recognised as a major conduit for capital flight. The underlying rationale is that residents can shift money abroad illicitly by over-invoicing imports and under-invoicing exports. In order to capture such illegal transactions, a developing country's exports to the world (valued free-on-board (f.o.b.) in US dollars) are compared to what the world reports as having imported from that country, after adjusting for the cost of insurance and freight. Similarly, a country's imports from the world net of freight and insurance are compared to what the world reports it has exported to that country. The CED estimates are adjusted by trade misinvoicing estimates derived according to the following formula:

$$\mathbf{K} = [\mathbf{X}_i] - \mathbf{M}_j/\beta + [\mathbf{M}_i/\beta] - \mathbf{X}_j$$

Misinvoicing is assumed to take place through both exports (\mathbf{X}) and imports (\mathbf{M}). Specifically, the exports of goods f.o.b. from country i (\mathbf{X}_i) is compared to the imports recorded by country j (\mathbf{M}_j) after adjusting for insurance and freight; the factor β adjusts the c.i.f. value to f.o.b. value which is taken to be 10 percent, in accordance with the practice in the Direction of Trade Statistics. On the import side, imports of country (\mathbf{M}_i) are converted to f.o.b. value and then compared to what country (j) reports as having exported to country (i) (\mathbf{X}_j). Illicit outflows from country (i) will be indicated if the exports of country (i) are understated relative to the reporting of partner country's (j 's) imports and/or if country (i)'s imports are overstated with respect to partner country (j)'s exports to country (i), after adjusting for the cost of freight and insurance.

Comparisons based on bilateral trade data may well indicate export overstatement or import understatement. That is, the discrepancies have the wrong signs and reflect "inward" capital flight. Researchers have tended to net out such inflows from the gross figures, thus reducing gross capital outflows by the amount of inward capital flight indicated by the data. In contrast, the estimates of trade mispricing used in this paper are based on the gross excluding reversals (GER) method. In this method, only periods with export under-invoicing and import over-invoicing are considered to be illicit outflows. Periods of illicit inflows are set to zero as in the CED method discussed above. The reasons for rejecting the Traditional method of estimating capital flight are discussed below.

As both the World Bank Residual and the Trade Misinvoicing model based on Direction of Trade Statistics yield estimates of illicit inflows as well as outflows, two conditional filters on CED and GER estimates are used in order to capture likely cases of illicit financial outflows. This process of filtering, or normalisation, yields a conservative estimate of illicit flows from a country, while estimates that do not pass through the filters provide the robust end of the range of possible values. The first filter only includes countries with illicit inflows in most years during the period under study (1990-2008). If model estimates indicate outflows of illicit capital from a country in just nine out of the 19 years, that country is rejected as a likely exporter of illicit capital for this period. Once the first filter accepts a country as an exporter of illicit capital, the second filter tests whether estimates of illicit outflows are greater than or equal to 10 percent of that country's exports valued f.o.b. The second filter's minimum threshold on size ensures that illicit flows less than 10 percent of exports are attributed to spurious data issues while those passing the threshold are counted as capital flight. The 10 percent of illicit flows to exports filter (to rule out measurement errors) needs to be seen against the fact that global discrepancies in bilateral trade statistics amount to just 1.18 percent of global goods transactions (Box 1).

(ii) Limitations of economic models

A common feature of economic models is that they rely on official statistics which cannot capture transfers of illicit capital occurring through drug and other contraband trade, smuggling, same-invoice faking, illegal hawala transactions, and other illicit activities such as human trafficking and sex trade. For instance, the GER adjustment method attempts to capture trade mispricing by comparing customs invoices filed by trading partners in partner countries. The DOTS method of estimating export under-invoicing and import over-invoicing cannot capture mispricing within the same invoice which allows these discrepancies to remain hidden within an invoice through word-of-mouth collusion among buyers and sellers. Therefore, the adjustment method based on bilateral trade data comparisons cannot pick up illicit flows resulting from same-invoice faking. Several studies, such as Baker (2005), have found that illicit flows through same-invoice faking are at least as large if not larger than those involving mispricing between partner-country invoices.

Apart from the difficulty of capturing illicit flows generated through a host of illegal activities discussed above, the adjustments for trade misinvoicing remains incomplete. This is because the DOTS maintained by the IMF which permit such adjustments to be made do not cover trade in services on a bilateral basis. Hence, misinvoicing adjustments pertain strictly to goods only. Yet, it is possible that trade in services offers incentives to misinvoicing at least as large as in trade in goods due mainly to the difficulty of pricing services across different countries on a comparable basis. In sum, economic models cannot capture all illicit flows due to a variety of reasons and therefore in all likelihood significantly understate their volume. The extent of this understatement will vary depending upon the importance of the latent factors that drive illicit flows to and from a country. For instance, there may be sizeable illicit inflows into a country that has become a major corridor for drug trafficking which requires large infusions of cash to finance transactions.

(iii) Reasons for not 'netting-out' illicit capital inflows from illicit capital outflows

This paper has opted not to automatically net out so-called illicit capital "inflows" from outflows. The rationale is discussed below.

The recent Euro zone crisis and media reports on capital flight from Greece and some other countries (e.g., Italy, Portugal, and Spain) raise a number of questions as to how illicit flows are estimated using economic models. Estimates of capital flight according to the Traditional method (World Bank Residual model adjusted for trade misinvoicing and netting out inflows from outflows) indicate that Greece and other countries have received huge illicit **inflows** running into billions of dollars. Yet, the governments facing the financial crisis could not tap one dollar of these so-called inflows to stave off the dire situation. In fact, over the decade ending 2009, Greece lost an estimated US\$160 billion in unrecorded transfers through its balance of payments while illicit inflows, mainly as a result of the misinvoicing in customs declarations, totaled around US\$96 billion. Little, if any, of those massive illicit

inflows could be used by the Greek government to stave off the financial crisis. The underlying rationale for netting out inflows is flawed for several other reasons.

First, the traditional models of capital flight cannot capture genuine reversals of capital flight. Netting out inflows from outflows is only warranted if inflows represent a return of flight capital such that a subsequent gain in capital offsets the original loss. A return of flight capital typically follows credible economic reform on a sustained basis and may be detected in a significant increase in *recorded* FDI or *recorded* inflows of private portfolio capital. In contrast, the inflows indicated by the World Bank Residual model whether adjusted for trade misinvoicing or not, are also *unrecorded*. Why would an investor smuggle in capital from abroad if that capital in fact represents a genuine return of flight capital? As the Indian and Chinese experience shows, outward transfers of illicit capital could come back to a country through a process known as “round tripping.”²⁴ But these inflows would *not* be captured by the capital flight models as estimates with a negative sign. Instead, round tripping would show up as an uptick in *recorded* FDI. While intuitively it may make sense to net out the return of flight capital from outflows, it would be practically impossible to implement because we cannot apportion recorded aggregate inflows between new investments and the return of flight capital. Economists may be able to discern flight reversal if recorded inflows increase after economic reform or improved governance, but they cannot estimate how much of those inflows are actual reversals.

Second, as the inflows indicated by models of illicit flows are unrecorded, they cannot be taxed or utilised directly by the government for economic development. Often, these so-called inflows are themselves driven by illicit activities such as smuggling to evade import duties or value-added tax (VAT). Moreover, illicit inflows can also be generated by the over-invoicing of exports to collect on VAT refunds as in some Latin American countries. Moreover, the Residual model adjusted for trade misinvoicing on a net basis (i.e., under- and over-invoicing on the export and import side are simply added to arrive at a net figure, which is the Traditional method) shows that illicit flows in recent years are insignificant for certain Latin American countries with a serious drug-trafficking problem. Does that mean economists can advise the Colombian or Guatemalan governments that they need not worry about illicit flows because they are so small on a net basis? On the contrary, illicit flows may be harmful in *both* directions — outflows represent a near-permanent loss of scarce capital while inflows stimulate growth of the underground economy. Indeed, there are arguments that adding illicit flows together rather than netting them out would provide a more realistic picture of the adverse impact on an economy. These complex considerations demonstrate a clear need to study illicit inflows in more depth.

24 Reference, for example, *Capital Flight and Capital Controls in Developing Countries*, Edited by Gerald A. Epstein, Edward Elgar, Cheltenham, UK and Northampton, MA, USA, for a wider discussion of rund-tripping in the context of China.

APPENDIX II: A BLOCK RECURSIVE DYNAMIC SIMULATION MODEL OF ILLICIT FLOWS

This section sets forth a dynamic simulation model to examine the complex interactions between macroeconomic, structural, and governance factors that drive illicit flows from LDCs. The model has two parts — an upper block of five equations that examines the interactions between fiscal and monetary policies and a single-equation lower block that seeks to explain the behaviour of illicit outflows from the country in question. The upper block presents a test of the thesis that government expenditures tend to respond faster to inflation than do government revenues because government outlays are typically subject to inflation adjustment while taxpayers seek to defer tax liabilities in an inflationary environment (thereby allowing inflation to reduce tax burdens). If the resulting deficits are largely financed through central bank credits (or quantitative easing), this leads to an expansion of the money supply which not only generates further inflation but widens the fiscal deficit in a vicious cycle. The purpose of the upper block of equations is to examine whether macroeconomic conditions (emerging through the interactions between fiscal and monetary policies) resulting in government deficits, inflation, and inflationary expectations help to explain illicit flows from LDCs.

The simulated inflation and the fiscal deficit resulting from dynamic simulation in the upper block of the model are then used in conjunction with certain structural and governance variables to explain the behaviour of illicit flows in the lower block. The model as a whole is block-recursive in that it seeks to explain only the macroeconomic portion in a fully endogenous upper block of equations while it treats structural and governance factors as exogenous. This is because structural factors like income inequality, faster growth rates and overall governance as represented by a measure of the underground economy, are almost impossible to model endogenously. Likewise, the exchange rate valuation index (REER) and the income distribution measure (Gini) are extremely difficult to model endogenously and are therefore handled exogenously.

The upper block of equations analysing the relationship between government deficits and the inflationary process is based on an earlier version developed by Bijan Aghevli and Moshin Khan of the IMF. The model is modified significantly so that it is applicable to LDCs where capital flight is a significant and continuing issue. The fully endogenous upper block of the model consists of five equations explaining the behavior of the price level, government expenditures, government revenues, money supply, and inflationary expectations. Each equation of the model would need to be tested and the coefficients determined so that dynamic simulations can be carried out for the LDC in question.

Of course, researchers would face a serious challenge simulating such a model for many LDCs due to inadequate data or gaps in existing data series. Nevertheless, such a model can be simulated for a handful of LDCs and valuable lessons can be drawn regarding how the three sets of drivers interact to drive illicit flows from those countries.

$$\begin{aligned}
 \log P_t &= -\alpha\beta_0 - \alpha\beta_1 \log Y_t + \alpha\beta_2 \pi_t - (1-\alpha) \log (M/P)_{t-1} + \log M_t \\
 \log G_t &= a_0 + a_1 \log Y_t + a_2 \log P_t \\
 \log R_t &= \lambda_0 + \lambda_1 \log GDP_t \\
 \log M_t &= b_0 + b_1 \log (G-R)_t \\
 \pi_t &= \mu \Delta \log P_t + (1-\mu) \pi_{t-1} \\
 \psi_t &= f([\bar{G}_t - \bar{R}_t], \bar{\Delta P}_t, \text{Reform}, \text{REER}, \text{Underground}_{t-1}, \text{TradeOpenness}, \dot{Y}_t, \text{Gini})
 \end{aligned}$$

APPENDIX

The variables in the above model are P , the wholesale price index (WPI), Y , the real GDP, G and R the central government expenditures and revenues respectively, M the money supply, π_t the expected rate of inflation, $Reform$, a dummy variable for LDCs that have implemented macroeconomic reform (with zero for the pre-reform period and one for the post-reform years), ψ_t are illicit outflows based on the CED+GER method, $\hat{G}_t - \hat{R}_t$ and $\hat{\Delta P}_t$ are the simulated government expenditures, simulated government revenues, and simulated inflation respectively so that $[\hat{G}_t - \hat{R}_t]$ is the simulated fiscal deficit. The other variables in the model are \dot{Y}_t , the real rate of economic growth, Trade Openness (defined as the ratio of exports and imports of goods and services to GDP which captures the impact of trade liberalization on growth of the traded sector), REER, the real effective exchange rate which is a proxy for exchange rate valuation based on competitiveness vis-à-vis partner countries, Gini, a measure of income distribution, and Underground, a measure of the size of the Underground economy which serves as a proxy for the overall state of governance in the country.

APPENDIX III

Table 1: Least Developed Countries (LDCs) and their Data Availability

Countries/Region	Data Availability, 1990-2008			Structural Characteristics		
	Complete	Partial	None	Landlocked (LL)	Small Island (SI)	Neither LL nor SI
Africa (33)						
Angola	x					x
Benin	x					x
Burkina Faso		x		x		
Burundi	x			x		
Central African Rep.		x		x		
Chad	x			x		
Comoros	x				x	
Congo, Dem. Rep.	x					x
Djibouti	x					x
Equatorial Guinea	x					x
Eritrea		x				x
Ethiopia	x			x		
Gambia, The	x					x
Guinea	x					x
Guinea-Bissau		x			x	
Lesotho		x		x		
Liberia	x					x
Madagascar	x					x
Malawi		x		x		
Mali	x			x		
Mauritania	x					x
Mozambique	x					x
Niger	x			x		
Rwanda	x			x		
São Tomé and Príncipe	x				x	
Senegal	x					x
Sierra Leone	x					x
Somalia		x				x
Sudan	x					x
Tanzania	x					x
Togo	x					x
Uganda	x			x		
Zambia	x			x		

Table 1: Least Developed Countries (LDCs) and their Data Availability

Countries/Region	Data Availability, 1990-2008			Structural Characteristics		
	Complete	Partial	None	Landlocked (LL)	Small Island (SI)	Neither LL nor SI
Asia (14)						
Afghanistan		x		x		
Bangladesh	x					x
Bhutan			x	x		
Cambodia	x					x
Kiribati			x		x	
Lao People's Dem. Rep.	x			x		
Myanmar		x				x
Nepal	x			x		
Samoa		x			x	
Solomon Islands	x				x	
Timor-Leste			x		x	
Tuvalu			x		x	
Vanuatu	x				x	
Yemen	x					x
Latin America & the Caribbean (1)						
Haiti	x				x	

Table 2: Cumulative Illicit Outflows (Non-normalized) from LDCs by Structural Characteristics*, 1990-2008, in US\$ millions

Structural Characteristic	CED	GER	Total	Percentage Distributions			
				within group		within total LDCs*	
				% CED	% GER	% CED	% GER
Landlocked (LL)	11845.6	45101.0	56946.6	20.8	79.2	14.4	44.4
Small Island (SI)	1003.1	3794.2	4797.3	20.9	79.1	1.2	3.7
Neither LL nor SI	69168.8	52678.7	121847.5	56.8	43.2	84.3	51.9
Total LDCs*	82017.6	101573.8	183591.4	44.7	55.3	100.0	100.0

* The 17 countries for which CED calculations were estimated using GDP are not included in this table.

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Table 3: Least Developed Countries (LDCs) Normalized Illicit Financial Flows in US\$ millions or percent

County ¹		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Afghanistan	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angola	Total	730.5	446.7	391.6	343.2	553.1	0.0	2,162.4	0.0	400.6	0.0	0.0
	CED	730.5	446.7	391.6	343.2	553.1	0.0	2,162.4	0.0	400.6	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bangladesh	Total	1,113.3	226.2	0.0	423.3	939.7	426.5	655.7	608.2	1,868.7	2,299.8	1,117.3
	CED	1,113.3	226.2	0.0	423.3	939.7	0.0	0.0	0.0	1,085.3	978.8	0.0
	GER	0.0	0.0	0.0	0.0	0.0	426.5	655.7	608.2	783.4	1,321.1	1,117.3
Benin	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bhutan	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Burkina Faso	Total	51.4	103.5	404.9	138.6	23.9	0.0	129.8	47.4	0.0	0.0	129.4
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	51.4	103.5	404.9	138.6	23.9	0.0	129.8	47.4	0.0	0.0	129.4
Burundi	Total	68.1	69.9	69.4	78.3	32.4	142.6	58.0	38.6	58.6	9.0	12.5
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	68.1	69.9	69.4	78.3	32.4	142.6	58.0	38.6	58.6	9.0	12.5
Cambodia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	101.9	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	101.9	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central African Rep.	Total	163.6	213.9	114.7	14.3	15.7	0.0	27.1	16.6	90.3	81.9	87.9
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	163.6	213.9	114.7	14.3	15.7	0.0	27.1	16.6	90.3	81.9	87.9
Chad	Total	300.7	261.4	297.1	305.6	272.9	297.2	263.8	311.2	305.0	321.2	310.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	300.7	261.4	297.1	305.6	272.9	297.2	263.8	311.2	305.0	321.2	310.0
Comoros	Total	5.0	3.3	5.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	5.0	3.3	5.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0
Congo, Dem. Rep.	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Djibouti	Total	34.5	132.3	96.1	148.1	151.9	124.7	115.1	90.8	129.0	138.2	119.3
	CED	0.0	54.8	16.3	45.7	37.2	42.8	25.9	0.0	16.8	0.0	0.0
	GER	34.5	77.5	79.9	102.4	114.7	81.9	89.1	90.8	112.2	138.2	119.3
Equatorial Guinea	Total	0.0	0.0	0.0	0.0	0.0	40.0	127.4	117.6	0.0	0.0	128.6
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	40.0	127.4	117.6	0.0	0.0	128.6

¹ List of observed countries for CED is as follows: Angola, Bangladesh, Benin, Burundi, Cambodia, Djibouti, the Gambia, Guinea, Haiti, the Lao People's Democratic Republic, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, the Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Sudan, United Republic of Tanzania, Togo, Uganda, Vanuatu, Yemen, Zambia. The remaining 18 countries of the LDC group were missing significant data, and were adjusted with an implied CED estimate.

APPENDIX

Table 3: contd.

County ¹		2001	2002	2003	2004	2005	2006	2007	2008	Cumulative IFF	Average IFFs
Afghanistan	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Angola	Total	0.0	2,155.0	2,454.5	1,982.1	4,257.5	0.0	7,805.5	0.0	23,682.7	1,973.6
	CED	0.0	2,155.0	2,454.5	1,982.1	4,257.5	0.0	7,805.5	0.0	23,682.7	1,973.6
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bangladesh	Total	1,112.9	3,330.2	2,933.1	3,085.7	1,704.5	4,598.7	3,211.4	4,537.3	34,192.6	1,899.6
	CED	0.0	2,080.9	1,257.5	787.0	0.0	2,532.1	1,400.4	2,296.6	15,120.9	1,260.1
	GER	1,112.9	1,249.3	1,675.6	2,298.7	1,704.5	2,066.6	1,811.0	2,240.7	19,071.7	1,362.3
Benin	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bhutan	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Burkina Faso	Total	164.9	120.1	101.0	282.1	322.2	353.7	325.5	203.9	2,902.2	181.4
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	164.9	120.1	101.0	282.1	322.2	353.7	325.5	203.9	2,902.2	181.4
Burundi	Total	0.0	5.2	0.0	0.0	14.8	119.8	22.2	24.8	824.2	51.5
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	5.2	0.0	0.0	14.8	119.8	22.2	24.8	824.2	51.5
Cambodia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	101.9	101.9
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	101.9	101.9
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central African Rep.	Total	28.2	77.9	13.6	0.0	14.5	0.0	0.0	0.0	960.1	68.6
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	28.2	77.9	13.6	0.0	14.5	0.0	0.0	0.0	960.1	68.6
Chad	Total	438.8	1,537.0	1,567.2	1,635.0	1,734.2	1,561.4	1,710.0	1,908.0	15,337.9	807.3
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	438.8	1,537.0	1,567.2	1,635.0	1,734.2	1,561.4	1,710.0	1,908.0	15,337.9	807.3
Comoros	Total	20.3	9.3	5.9	15.4	16.1	26.3	25.6	15.3	152.6	12.7
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	20.3	9.3	5.9	15.4	16.1	26.3	25.6	15.3	152.6	12.7
Congo, Dem. Rep.	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Djibouti	Total	221.6	266.3	301.5	291.6	271.5	413.2	495.4	344.3	3,885.3	204.5
	CED	17.4	93.7	89.1	77.2	36.7	106.3	216.8	0.0	876.6	62.6
	GER	204.2	172.6	212.4	214.4	234.7	306.9	278.6	344.3	3,008.7	158.4
Equatorial Guinea	Total	450.4	0.0	0.0	754.8	902.0	908.0	1,590.3	0.0	5,019.0	557.7
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	450.4	0.0	0.0	754.8	902.0	908.0	1,590.3	0.0	5,019.0	557.7

Note: “..” Indicates an estimates could not be generated due to missing data. There are 511 instances of annual missing data within the 48 countries over the 19 years.

Source: Staff estimates, Global Financial Integrity, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 3: Least Developed Countries (LDCs) Normalized Illicit Financial Flows in US\$ millions or percent

County ¹		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Eritrea	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	Total	55.5	96.0	20.8	51.4	0.0	75.3	62.0	0.0	200.2	248.9	94.5
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	55.5	96.0	20.8	51.4	0.0	75.3	62.0	0.0	200.2	248.9	94.5
Gambia	Total	133.9	119.5	166.0	18.8	106.6	147.2	140.8	147.9	107.2	76.3	29.8
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	133.9	119.5	166.0	18.8	106.6	147.2	140.8	147.9	107.2	76.3	29.8
Guinea	Total	121.7	0.0	416.1	299.3	215.2	0.0	77.7	235.7	125.0	123.7	204.7
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	121.7	0.0	416.1	299.3	215.2	0.0	77.7	235.7	125.0	123.7	204.7
Guinea-Bissau	Total	14.9	10.1	6.8	2.9	12.1	51.7	31.5	23.5	49.0	6.1	49.4
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	14.9	10.1	6.8	2.9	12.1	51.7	31.5	23.5	49.0	6.1	49.4
Haiti	Total	233.3	148.8	62.8	98.2	0.0	62.5	89.8	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	233.3	148.8	62.8	98.2	0.0	62.5	89.8	0.0	0.0	0.0	0.0
Kiribati	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lao People's Dem. Rep.	Total	277.8	54.9	0.0	110.3	136.8	0.0	43.8	0.0	127.2	343.7	0.0
	CED	244.9	54.9	0.0	39.5	0.0	0.0	0.0	0.0	127.2	263.3	0.0
	GER	32.8	0.0	0.0	70.8	136.8	0.0	43.8	0.0	0.0	80.4	0.0
Lesotho	Total	569.0	648.6	744.8	727.6	711.8	836.2	850.1	856.1	795.7	720.9	652.6
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	569.0	648.6	744.8	727.6	711.8	836.2	850.1	856.1	795.7	720.9	652.6
Liberia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madagascar	Total	182.3	98.1	105.2	124.8	145.1	237.1	162.2	210.4	150.9	117.3	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	182.3	98.1	105.2	124.8	145.1	237.1	162.2	210.4	150.9	117.3	0.0
Malawi	Total	157.0	207.2	108.3	103.6	0.0	0.0	48.5	160.2	45.9	65.2	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	157.0	207.2	108.3	103.6	0.0	0.0	48.5	160.2	45.9	65.2	0.0
Mali	Total	0.0	0.0	0.0	88.5	100.5	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	88.5	100.5	0.0	0.0	0.0	0.0	0.0	0.0
Mauritania	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

¹ List of observed countries for CED is as follows: Angola, Bangladesh, Benin, Burundi, Cambodia, Djibouti, the Gambia, Guinea, Haiti, the Lao People's Democratic Republic, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, the Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Sudan, United Republic of Tanzania, Togo, Uganda, Vanuatu, Yemen, Zambia. The remaining 18 countries of the LDC group were missing significant data, and were adjusted with an implied CED estimate.

APPENDIX

Table 3: contd.

County ¹		2001	2002	2003	2004	2005	2006	2007	2008	Cumulative IFF	Average IFFs
Eritrea	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	Total	565.5	332.2	96.0	541.2	814.8	1,389.8	1,306.2	2,129.5	8,080.1	475.3
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	565.5	332.2	96.0	541.2	814.8	1,389.8	1,306.2	2,129.5	8,080.1	475.3
Gambia	Total	17.3	18.7	10.9	27.9	19.8	23.6	30.2	32.8	1,375.2	72.4
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	17.3	18.7	10.9	27.9	19.8	23.6	30.2	32.8	1,375.2	72.4
Guinea	Total	115.2	116.2	182.6	178.7	262.5	422.4	743.7	305.7	4,146.2	243.9
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	115.2	116.2	182.6	178.7	262.5	422.4	743.7	305.7	4,146.2	243.9
Guinea-Bissau	Total	61.8	41.6	0.0	22.0	28.8	12.2	231.4	34.0	689.8	38.3
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	61.8	41.6	0.0	22.0	28.8	12.2	231.4	34.0	689.8	38.3
Haiti	Total	0.0	0.0	0.0	40.0	0.0	116.5	95.7	123.5	1,071.1	107.1
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	40.0	0.0	116.5	95.7	123.5	1,071.1	107.1
Kiribati	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lao People's Dem. Rep.	Total	0.0	624.1	0.0	151.5	94.2	892.7	1,884.4	1,201.4	5,942.7	457.1
	CED	0.0	624.1	0.0	151.5	94.2	892.7	1,688.6	1,010.1	5,191.0	471.9
	GER	0.0	0.0	0.0	0.0	0.0	0.0	195.8	191.3	751.7	107.4
Lesotho	Total	563.1	567.3	796.8	1,031.6	1,049.6	1,067.3	1,304.9	1,545.0	16,039.2	844.2
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	563.1	567.3	796.8	1,031.6	1,049.6	1,067.3	1,304.9	1,545.0	16,039.2	844.2
Liberia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madagascar	Total	0.0	309.5	209.3	365.4	201.1	0.0	0.0	287.3	2,906.1	193.7
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	309.5	209.3	365.4	201.1	0.0	0.0	287.3	2,906.1	193.7
Malawi	Total	135.5	112.1	182.6	159.3	474.6	410.7	493.9	402.8	3,267.4	204.2
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	135.5	112.1	182.6	159.3	474.6	410.7	493.9	402.8	3,267.4	204.2
Mali	Total	0.0	0.0	279.0	101.8	218.0	212.7	0.0	247.2	1,247.6	178.2
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	279.0	101.8	218.0	212.7	0.0	247.2	1,247.6	178.2
Mauritania	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: “..” Indicates an estimates could not be generated due to missing data. There are 511 instances of annual missing data within the 48 countries over the 19 years.

Source: Staff estimates, Global Financial Integrity, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 3: Least Developed Countries (LDCs) Normalized Illicit Financial Flows in US\$ millions or percent

County ¹		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Mozambique	Total	246.2	271.9	130.4	55.4	67.4	63.6	0.0	71.2	39.6	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	246.2	271.9	130.4	55.4	67.4	63.6	0.0	71.2	39.6	0.0	0.0
Myanmar	Total	440.1	197.6	508.5	528.8	754.2	218.5	255.1	390.7	308.4	373.0	0.0
	CED	224.8	197.6	442.3	350.5	754.2	0.0	0.0	262.6	0.0	373.0	0.0
	GER	215.3	0.0	66.2	178.3	0.0	218.5	255.1	128.0	308.4	0.0	0.0
Nepal	Total	197.7	177.3	278.8	252.7	371.8	425.1	582.2	777.6	487.8	307.4	519.3
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	197.7	177.3	278.8	252.7	371.8	425.1	582.2	777.6	487.8	307.4	519.3
Niger	Total	80.0	73.6	139.1	46.0	25.2	0.0	94.2	0.0	79.9	89.9	56.3
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	80.0	73.6	139.1	46.0	25.2	0.0	94.2	0.0	79.9	89.9	56.3
Rwanda	Total	46.5	121.7	173.9	97.5	17.3	0.0	85.5	14.3	70.6	31.3	29.1
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	46.5	121.7	173.9	97.5	17.3	0.0	85.5	14.3	70.6	31.3	29.1
Samoa	Total	11.0	8.5	25.5	53.0	59.4	50.4	52.5	47.0	56.2	40.6	50.1
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	11.0	8.5	25.5	53.0	59.4	50.4	52.5	47.0	56.2	40.6	50.1
São Tomé and Príncipe	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senegal	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Leone	Total	66.6	123.6	197.5	26.8	134.9	131.5	140.8	169.5	105.6	87.8	110.9
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	66.6	123.6	197.5	26.8	134.9	131.5	140.8	169.5	105.6	87.8	110.9
Solomon Islands	Total	0.0	0.0	21.9	43.2	27.3	31.4	24.8	47.3	75.2	28.0	21.5
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	21.9	43.2	27.3	31.4	24.8	47.3	75.2	28.0	21.5
Somalia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sudan	Total	148.0	63.1	0.0	0.0	0.0	0.0	194.3	0.0	275.5	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	148.0	63.1	0.0	0.0	0.0	0.0	194.3	0.0	275.5	0.0	0.0
Tanzania, United Rep. of	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Timor-Leste	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

¹ List of observed countries for CED is as follows: Angola, Bangladesh, Benin, Burundi, Cambodia, Djibouti, the Gambia, Guinea, Haiti, the Lao People's Democratic Republic, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, the Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Sudan, United Republic of Tanzania, Togo, Uganda, Vanuatu, Yemen, Zambia. The remaining 18 countries of the LDC group were missing significant data, and were adjusted with an implied CED estimate.

APPENDIX

Table 3: contd.

County ¹		2001	2002	2003	2004	2005	2006	2007	2008	Cumulative IFF	Average IFFs
Mozambique	Total	0.0	85.1	0.0	0.0	0.0	294.0	0.0	0.0	1,324.8	132.5
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	85.1	0.0	0.0	0.0	294.0	0.0	0.0	1,324.8	132.5
Myanmar	Total	0.0	1,167.8	975.1	508.7	0.0	907.9	0.0	0.0	7,534.4	538.2
	CED	0.0	1,167.8	975.1	0.0	0.0	907.9	0.0	0.0	5,655.8	565.6
	GER	0.0	0.0	0.0	508.7	0.0	0.0	0.0	0.0	1,878.6	234.8
Nepal	Total	251.6	433.8	393.8	418.8	519.5	666.1	441.0	451.6	7,953.6	418.6
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	251.6	433.8	393.8	418.8	519.5	666.1	441.0	451.6	7,953.6	418.6
Niger	Total	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	750.9	75.1
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	750.9	75.1
Rwanda	Total	52.6	49.8	42.1	220.9	34.5	32.6	127.1	195.5	1,443.0	80.2
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	52.6	49.8	42.1	220.9	34.5	32.6	127.1	195.5	1,443.0	80.2
Samoa	Total	50.0	58.5	83.4	77.8	112.5	114.5	139.7	133.7	1,224.3	64.4
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	50.0	58.5	83.4	77.8	112.5	114.5	139.7	133.7	1,224.3	64.4
São Tomé and Príncipe	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senegal	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Leone	Total	24.1	53.6	44.5	40.6	32.0	0.0	53.4	0.0	1,543.6	90.8
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	24.1	53.6	44.5	40.6	32.0	0.0	53.4	0.0	1,543.6	90.8
Solomon Islands	Total	27.9	27.9	37.4	69.4	87.4	95.5	135.3	137.8	939.2	55.2
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	27.9	27.9	37.4	69.4	87.4	95.5	135.3	137.8	939.2	55.2
Somalia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sudan	Total	395.7	271.4	0.0	0.0	0.0	0.0	0.0	0.0	1,348.0	224.7
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	395.7	271.4	0.0	0.0	0.0	0.0	0.0	0.0	1,348.0	224.7
Tanzania, United Rep. of	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Timor-Leste	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: “..” Indicates an estimates could not be generated due to missing data. There are 511 instances of annual missing data within the 48 countries over the 19 years.

Source: Staff estimates, Global Financial Integrity, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 3: Least Developed Countries (LDCs) Normalized Illicit Financial Flows in US\$ millions or percent

County ¹		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Togo	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tuvalu	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Uganda	Total	29.4	0.0	132.9	137.6	229.4	254.2	320.5	519.9	500.2	477.4	595.6	
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	GER	29.4	0.0	132.9	137.6	229.4	254.2	320.5	519.9	500.2	477.4	595.6	
Vanuatu	Total	15.4	15.5	28.7	34.9	21.5	10.9	18.1	43.0	79.7	47.1	97.6	
	CED	10.1	11.5	14.0	11.5	21.5	10.9	10.0	13.9	33.5	5.3	34.9	
	GER	5.3	4.1	14.7	23.4	0.0	0.0	8.1	29.1	46.2	41.8	62.6	
Yemen	Total	854.2	522.6	442.0	567.6	624.8	0.0	0.0	0.0	205.2	0.0	0.0	
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	GER	854.2	522.6	442.0	567.6	624.8	0.0	0.0	0.0	205.2	0.0	0.0	
Zambia	Total	265.3	145.0	424.7	155.0	0.0	121.8	0.0	94.3	119.9	0.0	0.0	
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	GER	265.3	145.0	424.7	155.0	0.0	121.8	0.0	94.3	119.9	0.0	0.0	
Cumulative observed CED		2,323.7	991.5	864.1	1,213.7	2,305.7	53.6	2,198.4	276.5	1,765.2	1,620.4	34.9	
CED adjustment for missing data		1,265.2	346.0	341.0	336.6	721.8	187.8	427.3	83.4	700.1	361.0	32.8	
Cumulative CED adjustment for missing data		3,588.9	1,337.5	1,205.1	1,550.2	3,027.6	241.4	2,625.7	360.0	2,465.3	1,981.4	67.8	
Cumulative GER		4,289.3	3,569.3	4,649.6	3,861.7	3,450.3	3,694.6	4,615.3	4,762.3	5,193.9	4,414.5	4,381.6	
CED+GER		6,613.0	4,560.8	5,513.7	5,075.4	5,756.1	3,748.3	6,813.7	5,038.8	6,959.2	6,034.8	4,416.6	
CED+GER adjusted		7,878.2	4,906.8	5,854.7	5,411.9	6,477.9	3,936.1	7,241.0	5,122.3	7,659.2	6,395.9	4,449.4	
WEO GDP all LDC		140,604.0	143,007.0	146,744.0	148,877.0	145,651.0	150,584.0	156,617.0	164,403.0	163,653.0	168,533.0	175,606.0	
Adj CED+GER/GDP		5.60	3.43	3.99	3.64	4.45	2.61	4.62	3.12	4.68	3.80	2.53	
All developing countries IFFs		(normalized)										369,296	
LDC/All developing countries												1.2	
GER share of Total LDC		54.45	72.74	79.42	71.36	53.26	93.87	63.74	92.97	67.81	69.02	98.48	
CED share of Total LDC		45.55	27.26	20.58	28.64	46.74	6.13	36.26	7.03	32.19	30.98	1.52	
Normalized with Projection												2000	
All developing countries IFFs		(normalized)										Millions USD	369,296
All developing countries GDP												Billions USD	32,115
ALL Normalized/All GDP													1.15

¹ List of observed countries for CED is as follows: Angola, Bangladesh, Benin, Burundi, Cambodia, Djibouti, the Gambia, Guinea, Haiti, the Lao People's Democratic Republic, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, the Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Sudan, United Republic of Tanzania, Togo, Uganda, Vanuatu, Yemen, Zambia. The remaining 18 countries of the LDC group were missing significant data, and were adjusted with an implied CED estimate.

APPENDIX

Table 3: contd.

County ¹		2001	2002	2003	2004	2005	2006	2007	2008	Cumulative IFF	Average IFFs
Togo	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tuvalu	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uganda	Total	564.0	50.5	0.0	515.5	225.7	417.7	674.1	1,405.9	7,050.6	414.7
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	564.0	50.5	0.0	515.5	225.7	417.7	674.1	1,405.9	7,050.6	414.7
Vanuatu	Total	57.4	57.2	44.8	158.5	151.8	178.6	306.8	464.5	1,832.3	96.4
	CED	17.6	20.1	0.0	5.5	0.0	0.0	5.1	0.0	225.5	15.0
	GER	39.8	37.1	44.8	153.0	151.8	178.6	301.7	464.5	1,606.8	94.5
Yemen	Total	361.6	0.0	0.0	0.0	1,252.3	0.0	660.8	2,226.1	7,717.2	771.7
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	361.6	0.0	0.0	0.0	1,252.3	0.0	660.8	2,226.1	7,717.2	771.7
Zambia	Total	308.8	118.7	416.3	464.7	1,312.7	0.0	689.9	0.0	4,637.2	356.7
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	308.8	118.7	416.3	464.7	1,312.7	0.0	689.9	0.0	4,637.2	356.7
Cumulative observed CED		35.0	6,141.6	4,776.2	3,003.2	4,388.4	4,439.0	11,116.5	3,306.7	50,854.3	2,676.5
CED adjustment for missing data		56.7	1,509.5	1,293.5	1,275.3	955.2	1,528.4	2,611.6	1,795.1	15,828.5	833.1
Cumulative CED adjustment for missing data		91.7	7,651.1	6,069.7	4,278.6	5,343.6	5,967.4	13,728.1	5,101.7	15,828.5	833.1
Cumulative GER		5,954.0	5,855.3	6,462.2	10,137.8	11,740.6	10,796.9	13,387.9	15,051.3	126,268.7	6,645.7
CED+GER		5,989.0	11,996.9	11,238.3	13,141.1	16,129.0	15,236.0	24,504.4	18,358.0	177,123.0	9,322.3
CED+GER adjusted		6,045.7	13,506.4	12,531.9	14,416.4	17,084.2	16,764.4	27,116.0	20,153.1	192,951.5	10,155.3
WEO GDP all LDC		178,105.0	194,628.0	222,754.0	258,376.0	302,533.0	356,586.0	432,616.0	545,285.0	4,195,162.0	220,798.0
Adj CED+GER/GDP		3.39	6.94	5.63	5.58	5.65	4.70	6.27	3.70	average	4.44
All developing countries IFFs		410,898	386,756	578,816	700,530	782,838	914,685	1,117,283	1,264,343		
LDC/All developing countries		1.5	3.5	2.2	2.1	2.2	1.8	2.4	1.6	average	2.0
GER share of Total LDC		98.48	43.35	51.57	70.32	68.72	64.40	49.37	74.69		70.4
CED share of Total LDC		1.52	56.65	48.43	29.68	31.28	35.60	50.63	25.31		29.6
Normalized with Projection		2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
All developing countries IFFs		410,898	386,756	578,816	700,530	782,838	914,685	1,117,283	1,264,343	1,300,983	782,643
All developing countries GDP		31,906	33,213	37,335	42,002	45,435	49,159	55,397	61,208	57,925	44,569
ALL Normalized/All GDP		1.29	1.16	1.55	1.67	1.72	1.86	2.02	2.07	2.25	1.67

Note: “..” Indicates an estimates could not be generated due to missing data. There are 511 instances of annual missing data within the 48 countries over the 19 years.

Source: Staff estimates, Global Financial Integrity, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 4: Least Developed Countries (LDCs) Non-Normalized Illicit Financial Flows in US\$ millions or percent

County ¹		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Afghanistan	Total	413.3	173.3	288.4	757.6	81.7	140.3	0.0	0.0	0.0	0.0	0.0
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	413.3	173.3	288.4	757.6	81.7	140.3	..	..	..	..	..
Angola	Total	730.5	446.7	391.6	353.3	556.1	353.9	2,162.4	63.6	424.4	790.8	1,023.6
	CED	730.5	446.7	391.6	343.2	553.1	353.9	2,162.4	0.0	400.6	0.0	152.2
	GER	0.0	0.0	0.0	10.2	3.0	0.0	0.0	63.6	23.8	790.8	871.3
Bangladesh	Total	1,179.4	269.3	95.7	573.6	1,182.2	426.5	655.7	608.2	1,868.7	2,299.8	1,117.3
	CED	1,113.3	226.2	0.0	423.3	939.7	0.0	0.0	0.0	1,085.3	978.8	0.0
	GER	66.1	43.1	95.7	150.4	242.5	426.5	655.7	608.2	783.4	1,321.1	1,117.3
Benin	Total	36.1	93.2	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	36.1	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	0.0	93.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bhutan	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	..	..	..	..	..	..	..	..	..	..	..
Burkina Faso	Total	51.4	103.5	404.9	138.6	23.9	13.3	129.8	47.4	0.0	0.0	129.4
	CED	..	..	..	..	..	..	..	..	..	..	0.0
	GER	51.4	103.5	404.9	138.6	23.9	13.3	129.8	47.4	0.0	0.0	129.4
Burundi	Total	68.1	69.9	69.4	78.3	48.1	161.3	58.0	38.6	58.6	9.6	12.5
	CED	0.0	0.0	0.0	0.0	15.7	18.7	..	..	..	0.6	0.0
	GER	68.1	69.9	69.4	78.3	32.4	142.6	58.0	38.6	58.6	9.0	12.5
Cambodia	Total	0.0	0.0	0.0	0.0	0.0	266.8	110.0	0.0	101.9	146.5	234.9
	CED	..	..	0.0	0.0	0.0	266.8	110.0	0.0	101.9	23.3	7.6
	GER	..	..	..	..	..	..	..	0.0	0.0	123.2	227.3
Central African Rep.	Total	163.6	253.2	114.7	26.8	15.7	0.0	27.1	16.6	90.3	81.9	87.9
	CED	0.0	39.3	0.0	12.6	0.0	..	..	..	..	..	..
	GER	163.6	213.9	114.7	14.3	15.7	0.0	27.1	16.6	90.3	81.9	87.9
Chad	Total	300.7	300.2	297.1	305.6	322.8	297.2	263.8	311.2	305.0	321.2	310.0
	CED	..	38.8	0.0	0.0	49.9	..	..	..	..	..	..
	GER	300.7	261.4	297.1	305.6	272.9	297.2	263.8	311.2	305.0	321.2	310.0
Comoros	Total	9.4	3.3	5.2	0.1	4.9	0.1	0.0	0.0	0.0	0.0	1.3
	CED	4.4	0.0	0.0	0.0	0.0	0.0	..	..	..	..	..
	GER	5.0	3.3	5.2	0.1	4.9	0.1	..	..	..	..	1.3
Congo, Dem. Rep.	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	202.1	283.3	335.9
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	..	..	..	..	..	0.0	0.0	0.0	202.1	283.3	335.9
Djibouti	Total	34.5	132.3	96.1	148.1	151.9	124.7	115.1	90.8	129.0	138.2	119.3
	CED	..	54.8	16.3	45.7	37.2	42.8	25.9	0.0	16.8	0.0	0.0
	GER	34.5	77.5	79.9	102.4	114.7	81.9	89.1	90.8	112.2	138.2	119.3
Equatorial Guinea	Total	0.0	0.0	0.0	0.5	0.0	40.0	127.4	117.6	38.0	0.0	128.6
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	0.0	0.0	0.0	0.5	0.0	40.0	127.4	117.6	38.0	0.0	128.6

¹ List of observed countries for CED is as follows: Angola, Bangladesh, Benin, Burundi, Cambodia, Djibouti, The Gambia, Guinea, Haiti, Lao People's Dem. Rep, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Sudan, Tanzania, Togo, Uganda, Vanuatu, Yemen, Zambia. The remaining 18 countries of the LDC group were missing significant data, and were adjusted with an implied CED estimate.

APPENDIX

Table 4: contd.

County ¹		2001	2002	2003	2004	2005	2006	2007	2008	Cumulative IFF	Average IFFs
Afghanistan	Total	0.0	0.0	0.0	203.9	0.0	0.0	0.0	0.0	2,058.6	294.1
	CED	..	..	..	..	..	..	..	..	0.0	..
	GER	..	..	..	203.9	0.0	0.0	0.0	0.0	2,058.6	294.1
Angola	Total	206.9	2,786.9	3,375.6	1,982.1	4,377.0	2,970.2	7,805.5	3,245.0	34,046.1	1,791.9
	CED	206.9	2,155.0	2,454.5	1,982.1	4,257.5	2,707.0	7,805.5	3,245.0	30,347.8	1,785.2
	GER	0.0	631.8	921.1	0.0	119.6	263.2	0.0	0.0	3,698.3	369.8
Bangladesh	Total	1,112.9	3,330.2	2,933.1	3,085.7	1,704.5	4,598.7	3,211.4	4,537.3	34,790.5	1,831.1
	CED	0.0	2,080.9	1,257.5	787.0	0.0	2,532.1	1,400.4	2,296.6	15,120.9	1,260.1
	GER	1,112.9	1,249.3	1,675.6	2,298.7	1,704.5	2,066.6	1,811.0	2,240.7	19,669.5	1,035.2
Benin	Total	4.4	82.8	0.0	29.4	0.0	0.0	0.0	0.0	263.9	44.0
	CED	0.0	82.8	0.0	29.4	0.0	0.0	0.0	0.0	166.3	41.6
	GER	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.6	48.8
Bhutan	Total	0.0	0.0	0.0	0.0	0.0	0.0	156.2	0.0	156.2	156.2
	CED	..	..	..	..	..	0.0	156.2	0.0	156.2	156.2
	GER	..	..	..	..	..	..	..	..	0.0	..
Burkina Faso	Total	164.9	120.1	101.0	282.1	322.2	353.7	325.5	203.9	2,915.5	171.5
	CED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..
	GER	164.9	120.1	101.0	282.1	322.2	353.7	325.5	203.9	2,915.5	171.5
Burundi	Total	0.0	5.2	82.7	27.3	14.8	119.8	22.2	24.8	969.2	53.8
	CED	0.0	..	80.8	27.3	0.0	0.0	0.0	0.0	143.1	28.6
	GER	0.0	5.2	1.9	0.0	14.8	119.8	22.2	24.8	826.1	48.6
Cambodia	Total	114.8	146.1	86.4	123.0	66.0	90.4	176.7	0.0	1,663.6	138.6
	CED	58.9	146.1	86.4	123.0	66.0	90.4	176.7	0.0	1,257.2	104.8
	GER	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	406.4	135.5
Central African Rep.	Total	28.2	77.9	13.6	9.8	14.5	0.0	0.0	0.0	1,021.7	68.1
	CED	..	..	..	..	..	..	..	..	51.9	25.9
	GER	28.2	77.9	13.6	9.8	14.5	0.0	0.0	0.0	969.8	64.7
Chad	Total	438.8	1,537.0	1,567.2	1,635.0	1,734.2	1,561.4	1,710.0	1,908.0	15,426.5	811.9
	CED	..	..	..	..	..	..	..	..	88.6	44.3
	GER	438.8	1,537.0	1,567.2	1,635.0	1,734.2	1,561.4	1,710.0	1,908.0	15,337.9	807.3
Comoros	Total	20.3	9.3	5.9	15.4	16.1	26.3	25.6	15.3	158.6	10.6
	CED	..	..	..	..	..	..	..	..	4.4	4.4
	GER	20.3	9.3	5.9	15.4	16.1	26.3	25.6	15.3	154.2	10.3
Congo, Dem. Rep.	Total	343.3	349.2	499.4	538.0	539.8	408.1	0.0	0.0	3,499.2	388.8
	CED	..	..	..	..	..	..	..	..	0.0	..
	GER	343.3	349.2	499.4	538.0	539.8	408.1	0.0	0.0	3,499.2	388.8
Djibouti	Total	221.6	266.3	301.5	291.6	271.5	413.2	495.4	344.3	3,885.3	204.5
	CED	17.4	93.7	89.1	77.2	36.7	106.3	216.8	0.0	876.6	62.6
	GER	204.2	172.6	212.4	214.4	234.7	306.9	278.6	344.3	3,008.7	158.4
Equatorial Guinea	Total	450.4	58.8	15.3	754.8	902.0	908.0	1,590.3	1,371.4	6,503.2	464.5
	CED	..	..	..	..	..	..	..	..	0.0	..
	GER	450.4	58.8	15.3	754.8	902.0	908.0	1,590.3	1,371.4	6,503.2	464.5

Note: “..” Indicates an estimates could not be generated due to missing data. There are 511 instances of annual missing data within the 48 countries over the 19 years.

Source: Staff estimates, Global Financial Integrity, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 4: Least Developed Countries (LDCs) Non-Normalized Illicit Financial Flows in US\$ millions or percent

County ¹		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Eritrea	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	0.0	31.8
	CED	..	..	..	..	..	..	0.0	0.0	86.0	0.0	31.8
	GER	..	..	..	..	..	..	..	..	..	..	..
Ethiopia	Total	55.5	96.0	20.8	51.4	0.0	75.3	62.0	0.0	200.2	248.9	94.5
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	55.5	96.0	20.8	51.4	0.0	75.3	62.0	..	200.2	248.9	94.5
Gambia	Total	133.9	132.5	192.6	39.6	118.1	154.0	140.8	147.9	107.2	76.3	29.8
	CED	..	13.0	26.6	20.8	11.5	6.8	0.0	0.0	..	..	..
	GER	133.9	119.5	166.0	18.8	106.6	147.2	140.8	147.9	107.2	76.3	29.8
Guinea	Total	233.8	17.5	416.1	396.0	260.3	43.4	77.7	417.3	125.0	123.7	204.7
	CED	112.1	0.0	0.0	96.6	45.1	0.0	0.0	181.6	0.0	0.0	0.0
	GER	121.7	17.5	416.1	299.3	215.2	43.4	77.7	235.7	125.0	123.7	204.7
Guinea-Bissau	Total	14.9	10.1	6.8	2.9	12.1	51.7	31.5	23.5	49.0	6.1	49.4
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	14.9	10.1	6.8	2.9	12.1	51.7	31.5	23.5	49.0	6.1	49.4
Haiti	Total	339.2	148.8	81.6	98.2	0.0	62.5	92.6	60.6	8.0	68.6	6.3
	CED	105.9	0.0	18.7	0.0	..	0.0	2.9	53.5	8.0	68.6	0.0
	GER	233.3	148.8	62.8	98.2	0.0	62.5	89.8	7.1	0.0	0.0	6.3
Kiribati	Total	1.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	1.3	3.7	0.0	..	..	..	..	..	..	..	..
Lao People's Dem. Rep.	Total	277.8	61.3	5.8	110.3	136.8	2.2	43.8	31.5	127.2	343.7	0.0
	CED	244.9	54.9	0.0	39.5	0.0	0.0	0.0	0.0	127.2	263.3	0.0
	GER	32.8	6.4	5.8	70.8	136.8	2.2	43.8	31.5	0.0	80.4	0.0
Lesotho	Total	697.6	745.6	774.8	727.6	794.2	836.2	850.1	856.1	795.7	720.9	652.6
	CED	128.6	97.0	30.0	0.0	82.4	0.0	0.0	0.0	0.0	0.0	0.0
	GER	569.0	648.6	744.8	727.6	711.8	836.2	850.1	856.1	795.7	720.9	652.6
Liberia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	..	..	..	..	..	..	..	..	..	..	..
Madagascar	Total	377.6	113.5	105.2	124.8	148.5	237.1	162.2	210.4	367.7	323.0	6.4
	CED	195.2	15.4	0.0	0.0	3.4	0.0	0.0	0.0	216.8	205.7	0.0
	GER	182.3	98.1	105.2	124.8	145.1	237.1	162.2	210.4	150.9	117.3	6.4
Malawi	Total	157.0	207.2	108.3	103.6	34.4	218.6	104.5	160.2	448.5	247.9	6.6
	CED	..	..	..	..	4.5	218.5	56.0	0.0	402.6	182.7	0.0
	GER	157.0	207.2	108.3	103.6	30.0	0.1	48.5	160.2	45.9	65.2	6.6
Mali	Total	90.1	0.0	65.3	88.5	100.5	53.3	0.0	0.0	0.0	0.0	0.0
	CED	69.7	0.0	31.9	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0
	GER	20.4	0.0	33.5	88.5	100.5	42.3	0.0	0.0	0.0	0.0	0.0
Mauritania	Total	179.3	61.4	0.0	0.0	64.9	122.3	0.0	0.0	0.0	0.0	0.0
	CED	179.3	61.4	0.0	0.0	64.9	122.3	..	..	0.0	..	..
	GER	..	..	..	..	..	..	..	..	..	..	..

¹ List of observed countries for CED is as follows: Angola, Bangladesh, Benin, Burundi, Cambodia, Djibouti, The Gambia, Guinea, Haiti, Lao People's Dem. Rep, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Sudan, Tanzania, Togo, Uganda, Vanuatu, Yemen, Zambia. The remaining 18 countries of the LDC group were missing significant data, and were adjusted with an implied CED estimate.

APPENDIX

Table 4: contd.

County ¹		2001	2002	2003	2004	2005	2006	2007	2008	Cumulative IFF	Average IFFs
Eritrea	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	117.8	58.9
	CED	..	..	..	..	..	..	..	..	117.8	58.9
	GER	..	..	..	..	..	..	..	..	0.0	..
Ethiopia	Total	565.5	332.2	96.0	541.2	814.8	1,389.8	1,580.2	2,129.5	8,354.1	491.4
	CED	..	..	..	..	0.0	0.0	274.1	0.0	274.1	274.1
	GER	565.5	332.2	96.0	541.2	814.8	1,389.8	1,306.2	2,129.5	8,080.1	475.3
Gambia	Total	17.3	18.7	82.1	60.6	19.8	78.2	66.6	32.8	1,648.8	86.8
	CED	..	..	71.2	32.7	0.0	54.6	36.5	0.0	273.6	30.4
	GER	17.3	18.7	10.9	27.9	19.8	23.6	30.2	32.8	1,375.2	72.4
Guinea	Total	115.2	188.9	285.6	178.7	262.5	422.4	853.2	305.7	4,927.8	259.4
	CED	0.0	72.7	103.0	..	..	..	109.5	0.0	720.7	103.0
	GER	115.2	116.2	182.6	178.7	262.5	422.4	743.7	305.7	4,207.1	221.4
Guinea-Bissau	Total	61.8	96.9	57.8	55.6	28.8	19.0	235.4	34.0	847.3	44.6
	CED	0.0	55.3	52.3	33.6	0.0	6.7	4.0	0.0	152.0	30.4
	GER	61.8	41.6	5.5	22.0	28.8	12.2	231.4	34.0	695.3	36.6
Haiti	Total	2.1	10.1	116.4	40.0	67.0	261.5	95.7	123.5	1,682.7	93.5
	CED	0.0	0.0	84.4	0.0	27.2	145.1	0.0	0.0	514.2	57.1
	GER	2.1	10.1	31.9	40.0	39.8	116.5	95.7	123.5	1,168.5	73.0
Kiribati	Total	0.0	0.0	0.0	14.5	0.5	1.1	0.0	8.7	29.8	5.0
	CED	..	..	..	..	..	..	..	..	0.0	..
	GER	..	..	..	14.5	0.5	1.1	0.0	8.7	29.8	5.0
Lao People's Dem. Rep.	Total	0.0	624.1	0.0	159.9	94.2	957.8	1,884.4	1,201.4	6,062.0	378.9
	CED	0.0	624.1	0.0	151.5	94.2	892.7	1,688.6	1,010.1	5,191.0	471.9
	GER	0.0	0.0	0.0	8.4	0.0	65.0	195.8	191.3	871.0	67.0
Lesotho	Total	563.1	688.5	888.9	1,136.9	1,049.6	1,067.3	1,415.5	1,561.8	16,823.0	885.4
	CED	0.0	121.2	92.1	105.3	0.0	0.0	110.6	16.8	783.8	87.1
	GER	563.1	567.3	796.8	1,031.6	1,049.6	1,067.3	1,304.9	1,545.0	16,039.2	844.2
Liberia	Total	0.0	0.0	0.0	990.6	940.5	1,620.5	1,827.3	484.6	5,863.5	1,172.7
	CED	..	..	..	138.6	0.0	136.1	0.0	0.0	274.7	137.3
	GER	..	..	..	852.0	940.5	1,484.4	1,827.3	484.6	5,588.8	1,117.8
Madagascar	Total	23.9	309.5	302.2	365.4	201.1	80.1	0.0	287.3	3,745.8	208.1
	CED	0.0	0.0	92.8	0.0	0.0	..	..	..	729.4	121.6
	GER	23.9	309.5	209.3	365.4	201.1	80.1	0.0	287.3	3,016.4	167.6
Malawi	Total	135.5	114.4	182.6	159.3	474.6	410.7	493.9	402.8	4,170.5	219.5
	CED	0.0	2.3	..	..	..	..	..	..	866.5	144.4
	GER	135.5	112.1	182.6	159.3	474.6	410.7	493.9	402.8	3,304.1	173.9
Mali	Total	65.0	45.0	279.0	169.4	218.0	212.7	23.4	247.2	1,657.5	127.5
	CED	0.0	0.0	0.0	67.6	0.0	0.0	0.0	0.0	180.3	45.1
	GER	65.0	45.0	279.0	101.8	218.0	212.7	23.4	247.2	1,477.2	113.6
Mauritania	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	428.0	107.0
	CED	..	..	..	..	..	..	..	..	428.0	107.0
	GER	..	..	..	..	..	..	..	..	0.0	..

Note: “..” Indicates an estimates could not be generated due to missing data. There are 511 instances of annual missing data within the 48 countries over the 19 years.

Source: Staff estimates, Global Financial Integrity, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 4: Least Developed Countries (LDCs) Non-Normalized Illicit Financial Flows in US\$ millions or percent

County ¹		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Mozambique	Total	246.2	271.9	229.2	55.4	1,683.3	63.6	6.1	71.2	644.7	0.0	9.0
	CED	0.0	0.0	98.8	0.0	1,615.9	0.0	0.0	0.0	605.1	0.0	0.0
	GER	246.2	271.9	130.4	55.4	67.4	63.6	6.1	71.2	39.6	0.0	9.0
Myanmar	Total	440.1	233.8	508.5	528.8	782.4	218.5	255.1	390.7	308.4	445.2	174.5
	CED	224.8	197.6	442.3	350.5	754.2	0.0	0.0	262.6	0.0	373.0	41.3
	GER	215.3	36.3	66.2	178.3	28.2	218.5	255.1	128.0	308.4	72.2	133.2
Nepal	Total	197.7	177.3	278.8	252.7	371.8	425.1	582.2	777.6	487.8	437.8	519.3
	CED	..	..	..	..	..	..	0.0	0.0	0.0	130.4	0.0
	GER	197.7	177.3	278.8	252.7	371.8	425.1	582.2	777.6	487.8	307.4	519.3
Niger	Total	104.5	73.6	139.1	46.0	25.2	11.0	94.2	24.6	79.9	89.9	56.3
	CED	24.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	80.0	73.6	139.1	46.0	25.2	11.0	94.2	24.6	79.9	89.9	56.3
Rwanda	Total	59.6	121.7	173.9	97.5	17.3	70.5	85.5	14.3	88.8	31.3	29.1
	CED	13.1	0.0	0.0	0.0	..	70.5	0.0	0.0	18.3	0.0	0.0
	GER	46.5	121.7	173.9	97.5	17.3	0.0	85.5	14.3	70.6	31.3	29.1
Samoa	Total	11.0	8.5	25.5	53.0	59.4	50.4	52.5	47.0	56.2	40.6	50.1
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	11.0	8.5	25.5	53.0	59.4	50.4	52.5	47.0	56.2	40.6	50.1
São Tomé and Príncipe	Total	6.9	0.0	0.0	2.6	2.5	1.8	2.5	5.0	18.1	49.7	0.0
	CED	..	..	..	..	..	..	..	0.0	18.1	49.7	0.0
	GER	6.9	0.0	0.0	2.6	2.5	1.8	2.5	5.0	..	..	..
Senegal	Total	188.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.4	0.0	0.0
	CED	188.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.4	0.0	0.0
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sierra Leone	Total	123.1	210.1	292.0	105.6	134.9	131.5	140.8	169.5	164.5	87.8	110.9
	CED	56.5	86.5	94.5	78.9	0.0	0.0	0.0	0.0	58.9	0.0	0.0
	GER	66.6	123.6	197.5	26.8	134.9	131.5	140.8	169.5	105.6	87.8	110.9
Solomon Islands	Total	13.9	2.0	21.9	116.9	32.4	46.4	24.8	47.3	89.6	74.5	21.5
	CED	11.8	0.0	0.0	73.7	5.1	14.9	0.0	0.0	14.3	46.5	0.0
	GER	2.1	2.0	21.9	43.2	27.3	31.4	24.8	47.3	75.2	28.0	21.5
Somalia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	..	..	..	..	..	..	..	..	..	..	..
Sudan	Total	148.0	63.1	2.4	0.0	49.1	0.0	194.3	36.1	275.5	0.0	72.9
	CED	..	..	..	..	..	..	0.0	0.0	0.0	0.0	0.0
	GER	148.0	63.1	2.4	0.0	49.1	0.0	194.3	36.1	275.5	0.0	72.9
Tanzania, United Rep. of	Total	156.2	292.2	42.6	76.4	25.3	0.0	0.0	0.0	44.1	88.9	0.0
	CED	..	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GER	156.2	292.2	42.6	76.4	25.3	0.0	0.0	0.0	44.1	88.9	0.0
Timor-Leste	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	..	..	..	..	..	..	..	..	..	..	..

¹ List of observed countries for CED is as follows: Angola, Bangladesh, Benin, Burundi, Cambodia, Djibouti, The Gambia, Guinea, Haiti, Lao People's Dem.Rep, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Sudan, Tanzania, Togo, Uganda, Vanuatu, Yemen, Zambia. The remaining 18 countries of the LDC group were missing significant data, and were adjusted with an implied CED estimate.

APPENDIX

Table 4: contd.

County ¹		2001	2002	2003	2004	2005	2006	2007	2008	Cumulative IFF	Average IFFs
Mozambique	Total	15.4	85.1	9.7	88.3	0.0	294.0	0.0	0.0	3,773.0	251.5
	CED	0.0	0.0	0.0	88.3	0.0	0.0	0.0	0.0	2,408.1	602.0
	GER	15.4	85.1	9.7	0.0	0.0	294.0	0.0	0.0	1,364.9	97.5
Myanmar	Total	236.7	1,167.8	1,012.7	713.2	210.1	907.9	0.0	0.0	8,534.5	502.0
	CED	0.0	1,167.8	975.1	204.6	210.1	907.9	..	..	6,111.7	470.1
	GER	236.7	0.0	37.6	508.7	0.0	0.0	0.0	0.0	2,422.8	173.1
Nepal	Total	251.6	965.6	543.1	534.5	519.5	693.3	661.2	451.6	9,128.3	480.4
	CED	..	531.8	149.3	115.7	0.0	27.2	220.2	0.0	1,174.7	195.8
	GER	251.6	433.8	393.8	418.8	519.5	666.1	441.0	451.6	7,953.6	418.6
Niger	Total	0.0	60.2	171.7	33.7	0.0	0.0	0.0	0.0	1,010.0	72.1
	CED	0.0	60.2	105.0	0.0	0.0	0.0	0.0	0.0	189.7	63.2
	GER	0.0	0.0	66.7	33.7	0.0	0.0	0.0	0.0	820.3	63.1
Rwanda	Total	52.6	53.6	62.9	220.9	34.5	32.6	127.1	195.5	1,569.5	82.6
	CED	0.0	3.8	20.8	0.0	0.0	0.0	0.0	0.0	126.4	25.3
	GER	52.6	49.8	42.1	220.9	34.5	32.6	127.1	195.5	1,443.0	80.2
Samoa	Total	50.0	58.5	83.4	77.8	112.5	114.5	139.7	133.7	1,224.3	64.4
	CED	..	..	..	0.0	0.0	0.0	0.0	0.0	0.0	..
	GER	50.0	58.5	83.4	77.8	112.5	114.5	139.7	133.7	1,224.3	64.4
São Tomé and Príncipe	Total	8.9	5.2	6.2	6.0	14.7	5.0	6.0	0.8	142.0	8.9
	CED	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	69.2	23.1
	GER	8.9	3.9	6.2	6.0	14.7	5.0	6.0	0.8	72.8	5.2
Senegal	Total	0.0	62.0	0.0	0.0	0.0	0.0	0.0	0.0	333.6	111.2
	CED	0.0	62.0	0.0	0.0	0.0	0.0	0.0	0.0	333.6	111.2
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..
Sierra Leone	Total	24.1	109.1	159.6	64.7	32.0	0.0	53.4	12.9	2,126.5	118.1
	CED	0.0	55.5	115.1	24.2	0.0	0.0	0.0	0.0	570.0	71.2
	GER	24.1	53.6	44.5	40.6	32.0	0.0	53.4	12.9	1,556.6	86.5
Solomon Islands	Total	27.9	27.9	37.4	96.6	87.4	95.5	135.3	137.8	1,136.9	59.8
	CED	0.0	0.0	0.0	27.2	0.0	0.0	0.0	0.0	193.6	27.7
	GER	27.9	27.9	37.4	69.4	87.4	95.5	135.3	137.8	943.3	49.6
Somalia	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..
	CED	..	..	..	..	..	..	..	..	0.0	..
	GER	..	..	..	..	..	..	..	..	0.0	..
Sudan	Total	395.7	492.5	1,083.8	1,001.7	143.9	79.0	1,216.2	1,478.3	6,732.5	420.8
	CED	0.0	221.1	1,083.8	1,001.7	0.0	0.0	376.4	1,478.3	4,161.3	832.3
	GER	395.7	271.4	0.0	0.0	143.9	79.0	839.8	0.0	2,571.1	197.8
Tanzania, United Rep. of	Total	0.0	607.9	0.0	956.5	0.0	0.0	0.0	0.0	2,290.2	254.5
	CED	0.0	607.9	0.0	956.5	0.0	0.0	0.0	0.0	1,564.4	782.2
	GER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	725.8	103.7
Timor-Leste	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..
	CED	..	..	..	..	..	..	..	..	0.0	..
	GER	..	..	..	..	..	..	..	..	0.0	..

Note: “..” Indicates an estimates could not be generated due to missing data. There are 511 instances of annual missing data within the 48 countries over the 19 years.

Source: Staff estimates, Global Financial Integrity, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 4: Least Developed Countries (LDCs) Non-Normalized Illicit Financial Flows in US\$ millions or percent

County ¹		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Togo	Total	8.8	4.8	0.0	8.4	113.6	0.0	0.0	0.0	14.4	0.0	0.0	
	CED	8.8	0.0	..	0.0	113.6	0.0	0.0	0.0	14.4	0.0	0.0	
	GER	0.0	4.8	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tuvalu	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	CED	..	..	..	..	..	..	..	..	..	..	..
	GER	..	..	..	..	..	..	..	..	..	..	..
Uganda	Total	29.4	16.0	133.8	137.6	321.2	254.2	320.5	519.9	500.2	477.4	595.6	
	CED	..	16.0	0.8	0.0	91.9	0.0	0.0	0.0	0.0	0.0	0.0	
	GER	29.4	0.0	132.9	137.6	229.4	254.2	320.5	519.9	500.2	477.4	595.6	
Vanuatu	Total	15.4	15.5	28.7	34.9	24.0	11.1	18.1	43.0	79.7	47.1	97.6	
	CED	10.1	11.5	14.0	11.5	21.5	10.9	10.0	13.9	33.5	5.3	34.9	
	GER	5.3	4.1	14.7	23.4	2.5	0.3	8.1	29.1	46.2	41.8	62.6	
Yemen	Total	2,170.6	522.6	530.2	567.6	891.0	0.0	0.0	0.0	1,739.7	223.6	0.0	
	CED	1,316.4	0.0	88.2	0.0	266.2	0.0	0.0	0.0	1,534.5	223.6	0.0	
	GER	854.2	522.6	442.0	567.6	624.8	0.0	0.0	0.0	205.2	0.0	0.0	
Zambia	Total	265.3	145.0	424.7	155.0	0.0	121.8	0.0	94.3	152.4	0.0	50.4	
	CED	0.0	0.0	..	..	..	..	..	0.0	32.4	0.0	0.0
	GER	265.3	145.0	424.7	155.0	0.0	121.8	0.0	94.3	119.9	0.0	50.4	
Cumulative observed CED		4,770.0	1,280.7	1,253.7	1,483.7	4,643.9	1,137.1	2,367.2	511.6	4,772.0	2,551.5	236.1	
CED adjustment for missing data		1,265.2	346.0	341.0	336.6	721.8	187.8	427.3	83.4	700.1	361.0	32.8	
Cumulative CED adjustment for missing data		6,035.3	1,626.7	1,594.7	1,820.2	5,365.8	1,324.9	2,794.5	595.1	5,472.1	2,912.5	268.9	
Cumulative GER		4,955.6	4,241.8	5,118.0	4,867.9	3,915.1	3,949.5	4,623.9	4,930.3	5,502.0	5,772.8	6,102.2	
CED+GER		9,725.7	5,522.5	6,371.7	6,351.6	8,559.0	5,086.6	6,991.2	5,441.9	10,274.1	8,324.3	6,338.3	
CED+GER adjusted		10,990.9	5,868.5	6,712.7	6,688.2	9,280.9	5,274.4	7,418.5	5,525.3	10,974.1	8,685.4	6,371.1	
WEO GDP all LDC		140,604.0	143,007.0	146,744.0	148,877.0	145,651.0	150,584.0	156,617.0	164,403.0	163,653.0	168,533.0	175,606.0	
Adj CED+GER/GDP		7.82	4.10	4.57	4.49	6.37	3.50	4.74	3.36	6.71	5.15	3.63	
All developing countries IFFs		(non-normalized)										383,813	
LDC/All developing countries												1.7	
GER share of Total LDC		45.09	72.28	76.24	72.78	42.18	74.88	62.33	89.23	50.14	66.47	95.78	
CED share of Total LDC		54.91	27.72	23.76	27.22	57.82	25.12	37.67	10.77	49.86	33.53	4.22	
Normalized with Projection												2000	
All developing countries IFFs		(normalized)										Millions USD	369,296
All developing countries GDP												Billions USD	32,115
ALL Normalized/All GDP													1.15

¹ List of observed countries for CED is as follows: Angola, Bangladesh, Benin, Burundi, Cambodia, Djibouti, The Gambia, Guinea, Haiti, Lao People's Dem. Rep, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Sudan, Tanzania, Togo, Uganda, Vanuatu, Yemen, Zambia. The remaining 18 countries of the LDC group were missing significant data, and were adjusted with an implied CED estimate.

APPENDIX

Table 4: contd.

County ¹		2001	2002	2003	2004	2005	2006	2007	2008	Cumulative IFF	Average IFFs
Togo	Total	18.9	68.4	81.8	0.0	0.0	0.0	0.0	359.2	678.1	75.3
	CED	0.0	68.4	28.6	0.0	0.0	0.0	0.0	0.0	233.7	46.7
	GER	18.9	0.0	53.2	0.0	0.0	0.0	0.0	359.2	444.4	88.9
Tuvalu	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..
	CED	..	..	..	..	..	..	..	..	0.0	..
	GER	..	..	..	..	..	..	..	..	0.0	..
Uganda	Total	564.0	250.8	552.5	783.4	225.7	417.7	674.1	1,982.9	8,757.0	460.9
	CED	0.0	200.3	515.3	268.0	0.0	0.0	0.0	577.0	1,669.2	238.5
	GER	564.0	50.5	37.2	515.5	225.7	417.7	674.1	1,405.9	7,087.8	393.8
Vanuatu	Total	57.4	57.2	45.5	158.5	151.8	178.6	306.8	464.5	1,835.7	96.6
	CED	17.6	20.1	0.7	5.5	0.0	0.0	5.1	..	226.1	14.1
	GER	39.8	37.1	44.8	153.0	151.8	178.6	301.7	464.5	1,609.6	84.7
Yemen	Total	434.4	233.9	112.1	66.8	1,252.3	347.5	660.8	2,226.1	11,979.3	798.6
	CED	72.8	233.9	0.0	0.0	0.0	129.8	0.0	0.0	3,865.4	483.2
	GER	361.6	0.0	112.1	66.8	1,252.3	217.7	660.8	2,226.1	8,113.8	624.1
Zambia	Total	308.8	203.5	416.3	1,014.0	1,312.7	328.2	1,448.0	359.2	6,799.7	425.0
	CED	0.0	84.8	0.0	549.3	0.0	0.0	758.1	96.3	1,520.9	304.2
	GER	308.8	118.7	416.3	464.7	1,312.7	328.2	689.9	262.9	5,278.7	329.9
Cumulative observed CED		373.6	8,697.8	7,405.6	6,623.7	4,691.7	7,593.1	12,904.5	8,720.0	82,017.6	4,316.7
CED adjustment for missing data		56.7	1,509.5	1,293.5	1,275.3	955.2	1,528.4	2,611.6	1,795.1	15,828.5	833.1
Cumulative CED adjustment for missing data		430.3	10,207.3	8,699.1	7,899.1	5,646.9	9,121.5	15,516.1	10,515.1	97,846.0	5,149.8
Cumulative GER		6,728.6	6,954.1	8,193.2	11,870.9	13,539.5	13,728.7	16,084.4	17,551.9	148,630.5	7,822.7
CED+GER		7,102.2	15,651.9	15,598.7	18,494.7	18,231.1	21,321.8	28,988.9	26,271.9	230,648.1	12,139.4
CED+GER adjusted		7,158.9	17,161.4	16,892.3	19,770.0	19,186.4	22,850.2	31,600.5	28,067.0	246,476.6	12,972.5
WEO GDP all LDC		178,105.0	194,628.0	222,754.0	258,376.0	302,533.0	356,586.0	432,616.0	545,285.0	4,195,162.0	220,798.0
Adj CED+GER/GDP		4.02	8.82	7.58	7.65	6.34	6.41	7.30	5.15	average	5.67
All developing countries IFFs		466,615	442,360	619,981	770,900	828,576	1,051,457	1,284,919	1,440,167		
LDC/All developing countries		1.5	3.9	2.7	2.6	2.3	2.2	2.5	1.9	average	2.4
GER share of Total LDC		93.99	40.52	48.50	60.05	70.57	60.08	50.90	62.54	average	65.0
CED share of Total LDC		6.01	59.48	51.50	39.95	29.43	39.92	49.10	37.46	average	35.0
Normalized with Projection		2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
All developing countries IFFs		410,898	386,756	578,816	700,530	782,838	914,685	1,117,283	1,264,343	1,300,983	782,643
All developing countries GDP		31,906	33,213	37,335	42,002	45,435	49,159	55,397	61,208	57,925	44,569
ALL Normalized/All GDP		1.29	1.16	1.55	1.67	1.72	1.86	2.02	2.07	2.25	1.67

Note: “..” Indicates an estimates could not be generated due to missing data. There are 511 instances of annual missing data within the 48 countries over the 19 years.

Source: Staff estimates, Global Financial Integrity, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

Table 5: Illicit Financial Outflows from the Least Developed Countries (LDCs), 1990-2008: Non-Normalized IFFs as a percent of GDP

Country ¹	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Angola	7.11	4.48	5.10	6.34	13.70	6.99	33.09	0.83	6.52	12.85	11.21
Bangladesh	3.87	0.86	0.30	1.74	3.30	1.08	1.58	1.40	4.18	4.94	2.37
Benin	1.84	4.69	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00
Burkina Faso	1.66	3.30	12.06	4.33	1.24	0.56	5.02	1.93	0.00	0.00	4.91
Burundi	6.02	5.99	6.41	8.34	5.20	16.13	6.67	3.96	6.56	1.18	1.76
Cambodia	0.00	0.00	0.00	0.00	0.00	7.80	3.16	0.00	3.28	4.18	6.43
Central African Rep.	10.40	16.90	7.67	2.05	1.83	0.00	2.71	1.69	8.72	7.88	9.59
Chad	18.63	18.77	17.83	20.99	27.36	20.55	16.42	20.14	17.48	20.90	22.32
Comoros	3.75	1.33	1.97	0.05	2.66	0.06	0.00	0.00	0.00	0.00	0.65
Congo, Dem. Rep.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.25	6.56	7.81
Equatorial Guinea	0.00	0.00	0.00	0.34	0.00	23.67	46.14	22.36	8.63	0.00	10.35
Ethiopia	0.46	0.72	0.15	0.59	0.00	0.93	0.73	0.00	2.58	3.27	1.20
Gambia	46.02	37.86	57.84	10.56	32.19	40.41	35.20	36.07	25.47	17.66	7.05
Guinea	8.77	0.58	12.67	12.08	7.69	1.17	2.01	11.03	3.48	3.57	6.58
Guinea-Bissau	3.20	2.22	1.70	0.69	2.90	6.51	3.55	4.24	11.79	1.43	10.66
Haiti	34.26	16.76	15.31	16.10	0.00	2.22	3.19	1.79	0.21	1.65	0.16
Kiribati	4.50	8.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lao People's Dem. Rep.	30.36	5.69	0.47	7.92	8.45	0.12	2.24	1.71	9.78	24.17	0.00
Madagascar	12.25	4.24	3.51	3.70	4.99	7.50	4.06	5.93	9.84	8.68	0.16
Malawi	9.08	9.40	6.01	5.00	2.87	15.65	4.58	6.02	25.61	13.96	0.38
Mali	3.28	0.00	2.27	3.08	4.66	1.89	0.00	0.00	0.00	0.00	0.00
Mauritania	14.78	4.42	0.00	0.00	4.93	8.65	0.00	0.00	0.00	0.00	0.00
Mozambique	6.98	10.00	11.04	2.57	74.78	2.77	0.19	1.87	14.88	0.00	0.21
Myanmar	15.79	9.84	18.95	16.85	18.99	3.98	5.15	8.39	4.78	5.25	1.96
Nepal	5.08	4.16	7.20	6.08	8.56	9.01	11.98	14.72	9.29	8.10	9.06
Niger	4.21	3.16	5.93	2.07	1.62	0.62	5.01	1.42	4.04	4.69	3.37
Rwanda	2.39	6.63	8.92	5.19	1.45	5.69	6.37	0.79	4.60	1.74	1.69
São Tomé and Príncipe	5.72	0.00	0.00	2.04	1.86	1.71	1.86	5.39	25.20	63.74	0.00
Samoa	7.12	5.68	15.55	31.36	44.31	24.45	23.88	19.65	23.11	18.30	23.31

¹ This list of LDC countries represents the 39 countries for which we were able to construct a 19-year series of IFF to GDP ratio. Nine countries were dropped due to data issues. Thus, the aggregate annual group IFF totals will differ from the 48 country LDC totals in Appendix table 3.

Source: Staff estimates, *Global Financial Integrity*, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

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Table 5: contd.

Country ¹	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average of outflow
Angola	11.21	2.32	24.48	24.19	10.01	14.29	6.58	13.17	3.82	10.90
Bangladesh	2.37	2.36	6.72	5.38	5.22	2.79	7.05	4.34	5.37	3.41
Benin	0.00	0.17	2.95	0.00	0.73	0.00	0.00	0.00	0.00	1.92
Burkina Faso	4.91	5.81	3.73	2.40	5.82	5.89	5.82	4.79	2.46	4.22
Burundi	1.76	0.00	0.82	13.90	4.11	1.85	13.04	2.28	2.12	5.91
Cambodia	6.43	2.88	3.41	1.86	2.31	1.05	1.24	2.03	0.00	3.30
Central African Rep.	9.59	3.02	7.83	1.19	0.77	1.07	0.00	0.00	0.00	5.56
Chad	22.32	25.64	77.04	57.18	36.98	29.47	24.76	24.37	22.74	27.35
Comoros	0.65	9.22	3.68	1.82	4.25	4.15	6.50	5.50	2.86	3.23
Congo, Dem. Rep.	7.81	6.66	6.30	8.79	8.20	7.47	4.65	0.00	0.00	6.74
Equatorial Guinea	10.35	25.94	2.74	0.52	14.40	10.98	9.45	12.65	7.44	13.97
Ethiopia	1.20	7.18	4.47	1.20	5.38	6.62	9.16	8.08	7.98	3.57
Gambia	7.05	4.14	5.00	22.26	15.10	4.29	15.39	10.23	4.00	22.46
Guinea	6.58	3.79	5.89	8.29	4.87	8.94	14.55	20.52	6.77	7.54
Guinea-Bissau	10.66	12.60	23.75	15.34	13.66	5.36	3.20	37.36	4.69	8.68
Haiti	0.16	0.06	0.29	3.93	1.13	1.55	5.48	1.63	1.88	5.98
Kiribati	0.00	0.00	0.00	0.00	14.46	0.45	1.03	0.00	6.47	5.85
Lao People's Dem. Rep.	0.00	0.00	35.50	0.00	6.73	3.45	26.87	44.59	22.61	14.42
Madagascar	0.16	0.53	7.04	5.52	8.37	3.99	1.45	0.00	3.04	5.27
Malawi	0.38	7.89	4.32	7.61	6.07	17.31	13.06	14.85	10.25	9.47
Mali	0.00	2.15	1.35	6.29	3.40	3.97	3.47	0.33	2.82	3.00
Mauritania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.19
Mozambique	0.21	0.38	2.02	0.20	1.55	0.00	4.08	0.00	0.00	8.90
Myanmar	1.96	3.65	17.23	9.67	6.75	1.75	6.26	0.00	0.00	9.13
Nepal	9.06	4.27	15.98	8.58	7.35	6.35	7.67	6.40	3.59	8.07
Niger	3.37	0.00	2.90	6.49	1.16	0.00	0.00	0.00	0.00	3.34
Rwanda	1.69	3.14	3.20	3.41	10.53	1.33	1.05	3.39	4.17	3.98
São Tomé and Príncipe	0.00	11.75	5.71	6.36	5.56	12.79	3.98	4.15	0.47	9.89
Samoa	23.31	22.10	21.89	25.21	20.59	27.64	25.16	26.77	26.38	22.76

¹ This list of LDC countries represents the 39 countries for which we were able to construct a 19-year series of IFF to GDP ratio. Nine countries were dropped due to data issues. Thus, the aggregate annual group IFF totals will differ from the 48 country LDC totals in Appendix table 3.

Source: Staff estimates, *Global Financial Integrity*, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

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Table 5: Illicit Financial Outflows from the Least Developed Countries (LDCs), 1990-2008: Non-Normalized IFFs as a percent of GDP

Country ¹	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Senegal	3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65	0.00	0.00
Sierra Leone	18.94	26.93	42.94	13.73	14.79	15.08	14.95	19.94	24.47	13.13	17.19
Solomon Islands	6.68	0.90	8.39	40.18	9.07	11.04	5.32	9.71	21.03	15.96	5.22
Sudan	6.05	2.29	0.07	0.00	1.12	0.00	2.15	0.31	2.43	0.00	0.59
Tanzania, United Rep. of	3.27	5.25	0.83	1.60	0.50	0.00	0.00	0.00	0.47	0.92	0.00
Togo	0.49	0.27	0.00	0.60	10.40	0.00	0.00	0.00	0.94	0.00	0.00
Uganda	0.64	0.87	4.86	4.44	8.40	4.56	5.45	8.49	7.61	7.95	9.61
Vanuatu	9.14	7.72	13.73	17.47	10.26	4.47	6.94	15.75	29.43	17.02	34.73
Yemen	17.17	3.56	2.95	2.61	3.18	0.00	0.00	0.00	27.52	2.93	0.00
Zambia	7.19	4.35	13.01	4.83	0.00	3.56	0.00	2.44	4.77	0.00	1.58
LDC Group IFFs (Non-Norm)	8,585	4,549	5,212	4,731	7,581	3,985	6,026	4,495	9,349	7,465	5,566
LDC Group GDP	139,136	141,006	143,814	146,445	143,087	147,820	153,723	158,498	160,723	165,218	171,975
LDC IFF/GDP	6.17	3.23	3.62	3.23	5.30	2.70	3.92	2.84	5.82	4.52	3.24
All developing World Cumulative IFF millions	...	...	...	...	...	...	...	...	...	...	383,813
All developing World Cumulative GDP billions	...	...	...	...	...	...	...	...	...	...	32115.35
All developing World IFF/GDP	...	...	...	...	...	...	...	...	...	...	1.20

¹ This list of LDC countries represents the 39 countries for which we were able to construct a 19-year series of IFF to GDP ratio. Nine countries were dropped due to data issues. Thus, the aggregate annual group IFF totals will differ from the 48 country LDC totals in Appendix table 3.

Source: Staff estimates, *Global Financial Integrity*, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

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Table 5: contd.

Country ¹	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average of outflow
Senegal	0.00	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	2.03
Sierra Leone	17.19	3.01	11.69	16.17	5.95	2.58	0.00	3.21	0.66	14.74
Solomon Islands	5.22	6.92	8.42	11.23	25.77	21.11	20.90	23.09	21.33	14.33
Sudan	0.59	2.96	3.29	6.10	4.62	0.53	0.22	2.61	2.55	2.37
Tanzania, United Rep. of	0.00	0.00	5.61	0.00	7.47	0.00	0.00	0.00	0.00	2.88
Togo	0.00	1.42	4.64	4.89	0.00	0.00	0.00	0.00	12.34	4.00
Uganda	9.61	9.66	4.04	8.36	9.88	2.45	4.20	5.66	13.73	6.36
Vanuatu	34.73	21.50	21.04	14.00	42.16	37.38	39.51	56.30	75.05	24.93
Yemen	0.00	4.41	2.19	0.95	0.48	7.48	1.82	3.05	8.27	5.91
Zambia	1.58	8.59	5.46	9.75	18.88	18.29	3.07	12.55	2.44	7.55
LDC Group IFFs (Non-Norm)	0.0	0.0	0.0	0.0	0.0	40.0	127.4	117.6	0.0	0.0
LDC Group GDP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LDC IFF/GDP	0.0	0.0	0.0	0.0	0.0	40.0	127.4	117.6	0.0	0.0
All developing World Cumulative IFF millions	466,615	442,360	619,981	770,900	828,576	1,051,457	1,284,919	1,440,167	809,865	0.0
All developing World Cumulative GDP billions	31905.71	33212.90	37334.87	42001.86	45434.73	49158.55	55397.16	61207.63	43085.42	0.0
All developing World IFF/GDP	1.46	1.33	1.66	1.84	1.82	2.14	2.32	2.35	1.79	248.9

¹ This list of LDC countries represents the 39 countries for which we were able to construct a 19-year series of IFF to GDP ratio. Nine countries were dropped due to data issues. Thus, the aggregate annual group IFF totals will differ from the 48 country LDC totals in Appendix table 3.

Source: Staff estimates, *Global Financial Integrity*, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

Table 6: Illicit Financial Outflows from the Least Developed Countries (LDC), 1990-2008: ratio IFF/ODA

Country ¹	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Angola	2.7	1.6	1.1	1.2	1.2	0.8	4.7	0.2	1.3	2.0	3.4
Bangladesh	0.6	0.1	0.1	0.4	0.7	0.3	0.5	0.6	1.6	1.9	1.0
Benin	0.1	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Burkina Faso	0.2	0.2	0.9	0.3	0.1	0.0	0.3	0.1	0.0	0.0	0.7
Burundi	0.3	0.3	0.2	0.4	0.2	0.6	0.5	0.7	0.9	0.1	0.1
Cambodia	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.3	0.5	0.6
Central African Rep.	0.7	1.5	0.6	0.2	0.1	0.0	0.2	0.2	0.8	0.7	1.2
Chad	1.0	1.1	1.3	1.4	1.5	1.3	0.9	1.4	1.8	1.7	2.4
Comoros	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Congo, Dem. Rep.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	2.1	1.9
Equatorial Guinea	0.0	0.0	0.0	0.0	0.0	1.2	4.1	4.8	1.7	0.0	6.0
Ethiopia	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.4	0.1
Gambia	1.4	1.3	1.8	0.5	1.7	3.4	3.9	3.8	2.7	2.2	0.6
Guinea	0.8	0.0	0.9	1.0	0.7	0.1	0.3	1.1	0.3	0.5	1.3
Guinea-Bissau	0.1	0.1	0.1	0.0	0.1	0.4	0.2	0.2	0.5	0.1	0.6
Haiti	2.0	0.8	0.8	0.8	0.0	0.1	0.3	0.2	0.0	0.3	0.0
Kiribati	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lao People's Dem. Rep.	1.9	0.4	0.0	0.6	0.6	0.0	0.1	0.1	0.5	1.2	0.0
Madagascar	1.0	0.2	0.3	0.3	0.5	0.8	0.5	0.3	0.8	0.9	0.0
Malawi	0.3	0.4	0.2	0.2	0.1	0.5	0.2	0.5	1.0	0.6	0.0
Mali	0.2	0.0	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Mauritania	0.8	0.3	0.0	0.0	0.2	0.5	0.0	0.0	0.0	0.0	0.0
Mozambique	0.2	0.3	0.2	0.0	1.4	0.1	0.0	0.1	0.6	0.0	0.0
Myanmar	2.7	1.3	4.5	5.3	4.7	1.5	6.6	7.9	4.3	5.5	1.7
Nepal	0.5	0.4	0.6	0.7	0.8	1.0	1.5	1.9	1.2	1.3	1.3
Niger	0.3	0.2	0.4	0.1	0.1	0.0	0.4	0.1	0.3	0.5	0.3
Rwanda	0.2	0.3	0.5	0.3	0.0	0.1	0.2	0.1	0.3	0.1	0.1
São Tomé and Príncipe	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.6	1.8	0.0
Samoa	0.2	0.1	0.5	1.0	1.2	1.2	1.6	1.7	1.6	1.8	1.8

¹ This list of LDC countries represents the 39 countries for which we were able to construct a 19-year series of IFF to GDP ratio. Nine countries were dropped due to data issues. Thus, the aggregate annual group IFF totals will differ from the 48 country LDC totals in Appendix table 3.

Source: Staff estimates, *Global Financial Integrity*, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

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Table 6: contd.

Country ¹	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average of outflow
Angola	11.21	2.32	24.48	24.19	10.01	14.29	6.58	13.17	3.82	10.90
Bangladesh	2.37	2.36	6.72	5.38	5.22	2.79	7.05	4.34	5.37	3.41
Benin	0.00	0.17	2.95	0.00	0.73	0.00	0.00	0.00	0.00	1.92
Burkina Faso	4.91	5.81	3.73	2.40	5.82	5.89	5.82	4.79	2.46	4.22
Burundi	1.76	0.00	0.82	13.90	4.11	1.85	13.04	2.28	2.12	5.91
Cambodia	6.43	2.88	3.41	1.86	2.31	1.05	1.24	2.03	0.00	3.30
Central African Rep.	9.59	3.02	7.83	1.19	0.77	1.07	0.00	0.00	0.00	5.56
Chad	22.32	25.64	77.04	57.18	36.98	29.47	24.76	24.37	22.74	27.35
Comoros	0.65	9.22	3.68	1.82	4.25	4.15	6.50	5.50	2.86	3.23
Congo, Dem. Rep.	7.81	6.66	6.30	8.79	8.20	7.47	4.65	0.00	0.00	6.74
Equatorial Guinea	10.35	25.94	2.74	0.52	14.40	10.98	9.45	12.65	7.44	13.97
Ethiopia	1.20	7.18	4.47	1.20	5.38	6.62	9.16	8.08	7.98	3.57
Gambia	7.05	4.14	5.00	22.26	15.10	4.29	15.39	10.23	4.00	22.46
Guinea	6.58	3.79	5.89	8.29	4.87	8.94	14.55	20.52	6.77	7.54
Guinea-Bissau	10.66	12.60	23.75	15.34	13.66	5.36	3.20	37.36	4.69	8.68
Haiti	0.16	0.06	0.29	3.93	1.13	1.55	5.48	1.63	1.88	5.98
Kiribati	0.00	0.00	0.00	0.00	14.46	0.45	1.03	0.00	6.47	5.85
Lao People's Dem. Rep.	0.00	0.00	35.50	0.00	6.73	3.45	26.87	44.59	22.61	14.42
Madagascar	0.16	0.53	7.04	5.52	8.37	3.99	1.45	0.00	3.04	5.27
Malawi	0.38	7.89	4.32	7.61	6.07	17.31	13.06	14.85	10.25	9.47
Mali	0.00	2.15	1.35	6.29	3.40	3.97	3.47	0.33	2.82	3.00
Mauritania	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.19
Mozambique	0.21	0.38	2.02	0.20	1.55	0.00	4.08	0.00	0.00	8.90
Myanmar	1.96	3.65	17.23	9.67	6.75	1.75	6.26	0.00	0.00	9.13
Nepal	9.06	4.27	15.98	8.58	7.35	6.35	7.67	6.40	3.59	8.07
Niger	3.37	0.00	2.90	6.49	1.16	0.00	0.00	0.00	0.00	3.34
Rwanda	1.69	3.14	3.20	3.41	10.53	1.33	1.05	3.39	4.17	3.98
São Tomé and Príncipe	0.00	11.75	5.71	6.36	5.56	12.79	3.98	4.15	0.47	9.89
Samoa	23.31	22.10	21.89	25.21	20.59	27.64	25.16	26.77	26.38	22.76

¹ This list of LDC countries represents the 39 countries for which we were able to construct a 19-year series of IFF to GDP ratio. Nine countries were dropped due to data issues. Thus, the aggregate annual group IFF totals will differ from the 48 country LDC totals in Appendix table 3.

Source: Staff estimates, *Global Financial Integrity*, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

Table 6: Illicit Financial Outflows from the Least Developed Countries (LDC), 1990-2008: ratio IFF/ODA

Country ¹	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Senegal	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Sierra Leone	2.1	2.0	2.2	0.5	0.5	0.6	0.8	1.4	1.5	1.2	0.6
Solomon Islands	0.3	0.1	0.5	2.1	0.7	1.0	0.6	1.1	2.1	1.9	0.3
Sudan	0.2	0.1	0.0	0.0	0.1	0.0	0.9	0.3	1.3	0.0	0.3
Tanzania, United Rep. of	0.1	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Togo	0.0	0.0	0.0	0.1	0.9	0.0	0.0	0.0	0.1	0.0	0.0
Uganda	0.0	0.0	0.2	0.2	0.4	0.3	0.5	0.6	0.8	0.8	0.7
Vanuatu	0.3	0.3	0.7	1.0	0.6	0.2	0.6	1.6	2.0	1.3	2.1
Yemen	5.4	1.8	2.1	1.8	5.3	0.0	0.0	0.0	4.7	0.5	0.0
Zambia	0.6	0.2	0.4	0.2	0.0	0.1	0.0	0.2	0.4	0.0	0.1
LDC Group IFFs (Non-Norm)	8,584.6	4,549.4	5,212.4	4,730.9	7,581.0	3,985.4	6,026.0	4,495.0	9,349.4	7,465.2	5,566.4
LDC Group GDP	15,385.1	15,234.8	15,643.3	13,639.0	15,273.5	16,001.5	12,977.9	12,122.5	11,876.2	11,503.7	11,536.3
LDC IFF/GDP	0.6	0.3	0.3	0.3	0.5	0.2	0.5	0.4	0.8	0.6	0.5

¹ This list of LDC countries represents the 39 countries for which we were able to construct a 19-year series of IFF to GDP ratio. Nine countries were dropped due to data issues. Thus, the aggregate annual group IFF totals will differ from the 48 country LDC totals in Appendix table 3.

Source: Staff estimates, *Global Financial Integrity*, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 6: contd.

Country ¹	2000	2001	2002	2003	2004	2005	2006	2007	2008	Average of outflow
Senegal	0.00	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	2.03
Sierra Leone	17.19	3.01	11.69	16.17	5.95	2.58	0.00	3.21	0.66	14.74
Solomon Islands	5.22	6.92	8.42	11.23	25.77	21.11	20.90	23.09	21.33	14.33
Sudan	0.59	2.96	3.29	6.10	4.62	0.53	0.22	2.61	2.55	2.37
Tanzania, United Rep. of	0.00	0.00	5.61	0.00	7.47	0.00	0.00	0.00	0.00	2.88
Togo	0.00	1.42	4.64	4.89	0.00	0.00	0.00	0.00	12.34	4.00
Uganda	9.61	9.66	4.04	8.36	9.88	2.45	4.20	5.66	13.73	6.36
Vanuatu	34.73	21.50	21.04	14.00	42.16	37.38	39.51	56.30	75.05	24.93
Yemen	0.00	4.41	2.19	0.95	0.48	7.48	1.82	3.05	8.27	5.91
Zambia	1.58	8.59	5.46	9.75	18.88	18.29	3.07	12.55	2.44	7.55
LDC Group IFFs (Non-Norm)	6,317.5	14,752.4	14,460.6	16,043.8	15,969.6	18,363.6	25,528.8	23,881.3	10,677.0	0.0
LDC Group GDP	12,639.0	15,507.3	21,517.7	22,157.2	21,839.6	24,194.0	27,107.2	30,911.1	17,214.0	0.0
LDC IFF/GDP	0.5	1.0	0.7	0.7	0.7	0.8	0.9	0.8	0.6	0.0

¹ This list of LDC countries represents the 39 countries for which we were able to construct a 19-year series of IFF to GDP ratio. Nine countries were dropped due to data issues. Thus, the aggregate annual group IFF totals will differ from the 48 country LDC totals in Appendix table 3.

Source: Staff estimates, *Global Financial Integrity*, based on official balance of payments and trade data reported to the IMF by member countries and external debt data reported to the World Bank by those countries.

APPENDIX

Table 7: Least Developed Countries (LDCs) and the Size of their Shadow Economy as a Percentage of GDP

Countries/Region	World Rank	Year									Average
		1999	2000	2001	2002	2003	2004	2005	2006	2007	
Africa (33)											
Angola	134	48.8	48.8	48.4	47.4	47.3	47.1	45.0	44.0	42.1	46.54
Benin	141	51.2	50.2	49.8	49.6	49.3	49.5	49.8	49.6	49.1	49.79
Burkina Faso	109	41.3	41.4	41.3	41.4	40.3	40.1	39.7	39.7	39.6	40.53
Burundi	106	39.1	39.5	39.6	39.4	39.6	39.6	39.7	39.6	39.6	39.52
Central African Rep.	128	42.8	42.6	43.1	44.0	46.9	47.3	46.9	45.9	45.1	44.96
Chad	120	45.8	46.2	45.5	45.1	44.2	41.5	41.1	41.7	42.2	43.70
Comoros	102	39.3	39.6	39.0	37.7	37.6	39.0	38.0	38.4	39.4	38.67
Congo, Dem. Rep.	136	47.2	48.0	48.2	48.1	47.1	46.9	46.8	46.8	46.7	47.31
Djibouti	-	-	-	-	-	-	-	-	-	-	-
Equatorial Guinea	69	32.7	32.8	32.0	31.5	31.2	30.8	30.5	30.6	30.1	31.36
Eritrea	107	38.1	40.3	39.4	39.4	40.3	40.6	40.5	41.2	41.4	40.13
Ethiopia	101	40.6	40.3	39.5	39.6	40.1	38.6	37.7	36.3	35.1	38.64
Gambia, The	126	46.1	45.1	44.7	47.1	45.4	43.8	43.6	42.4	40.9	44.34
Guinea	104	39.7	39.6	39.3	38.7	38.8	38.5	38.4	38.9	39.2	39.01
Guinea-Bissau	113	40.4	39.6	39.6	40.7	41.5	41.9	41.7	41.5	41.6	40.94
Lesotho	64	31.7	31.3	31.1	31.0	30.7	30.1	30.2	29.3	28.8	30.47
Liberia	125	44.2	43.2	43.2	43.1	45.0	45.4	44.9	44.5	44.2	44.19
Madagascar	112	40.1	39.6	38.7	44.8	43.4	41.6	40.8	39.8	38.5	40.81
Malawi	116	39.9	40.3	42.5	44.4	43.4	42.5	42.6	41.3	39.4	41.81
Mali	111	42.5	42.3	40.8	40.2	39.9	40.6	40.1	39.9	39.9	40.69
Mauritania	90	35.5	36.1	36.0	35.8	35.8	35.1	34.4	31.7	35.1	35.06
Mozambique	106	41.1	40.3	40.4	39.8	39.8	39.7	38.9	38.6	-	39.83
Niger	108	41.7	41.9	40.9	40.3	39.7	40.7	39.7	38.6	-	40.44
Rwanda	107	40.5	40.3	40.6	39.9	40.7	40.2	39.3	39.1	-	40.08
São Tomé and Príncipe	-	-	-	-	-	-	-	-	-	-	-
Senegal	121	45.0	45.1	44.5	45.1	44.4	43.2	42.3	42.4	41.7	43.74
Sierra Leone	131	48.6	48.6	47.6	45.4	44.8	44.4	44.3	43.6	42.9	45.58
Somalia	-	-	-	-	-	-	-	-	-	-	-
Sudan	-	34.1	-	-	-	-	-	-	-	-	34.10

Source: World Bank estimates in the July 2010 Report: "Shadow Economies All over the World", authored by Friedrich Schneider, Andreas Buehn, and Claudio E. Montenegro.

*Averages are not weighted by GDP and do not include countries for which no data is available.

APPENDIX

Table 7: contd.

Countries/Region	World Rank	Averages*					
		Developing Country	World	25 High Income OECD	Landlocked (LL) LDCs	Small Island (SI) LDCs	Neither LL nor SI LDCs
Africa (33)		36.42	33.01	17.17	39.02	42.40	41.73
Angola	134	↓	↓	↓	↓	↓	↓
Benin	141	↓	↓	↓	↓	↓	↓
Burkina Faso	109	↓	↓	↓	↓	↓	↓
Burundi	106	↓	↓	↓	↓	↓	↓
Central African Rep.	128	↓	↓	↓	↓	↓	↓
Chad	120	↓	↓	↓	↓	↓	↓
Comoros	102	↓	↓	↓	↓	↓	↓
Congo, Dem. Rep.	136	↓	↓	↓	↓	↓	↓
Djibouti	-	↓	↓	↓	↓	↓	↓
Equatorial Guinea	69	↓	↓	↓	↓	↓	↓
Eritrea	107	↓	↓	↓	↓	↓	↓
Ethiopia	101	↓	↓	↓	↓	↓	↓
Gambia, The	126	↓	↓	↓	↓	↓	↓
Guinea	104	↓	↓	↓	↓	↓	↓
Guinea-Bissau	113	↓	↓	↓	↓	↓	↓
Lesotho	64	↓	↓	↓	↓	↓	↓
Liberia	125	↓	↓	↓	↓	↓	↓
Madagascar	112	↓	↓	↓	↓	↓	↓
Malawi	116	↓	↓	↓	↓	↓	↓
Mali	111	↓	↓	↓	↓	↓	↓
Mauritania	90	↓	↓	↓	↓	↓	↓
Mozambique	106	↓	↓	↓	↓	↓	↓
Niger	108	↓	↓	↓	↓	↓	↓
Rwanda	107	↓	↓	↓	↓	↓	↓
São Tomé and Príncipe	-	↓	↓	↓	↓	↓	↓
Senegal	121	↓	↓	↓	↓	↓	↓
Sierra Leone	131	↓	↓	↓	↓	↓	↓
Somalia	-	↓	↓	↓	↓	↓	↓
Sudan	-	↓	↓	↓	↓	↓	↓

Source: World Bank estimates in the July 2010 Report: "Shadow Economies All over the World", authored by Friedrich Schneider, Andreas Buehn, and Claudio E. Montenegro.

*Averages are not weighted by GDP and do not include countries for which no data is available.

APPENDIX

Table 7: Least Developed Countries (LDCs) and the Size of their Shadow Economy as a Percentage of GDP

Countries/Region	World Rank	Year									Average
		1999	2000	2001	2002	2003	2004	2005	2006	2007	
Africa (contd.)											
Tanzania	146	58.6	58.3	57.7	56.9	56.6	56	55.4	54.7	53.7	56.43
Togo	89	34.4	35.1	35.4	34.5	34.9	35	35	34.6	-	34.86
Uganda	118	43.5	43.1	42.9	42.9	42.5	42.4	42.2	41	40.3	42.31
Zambia	135	49.3	48.9	48.3	48.1	47.5	46.8	46.3	45	43.9	47.12
Average	112.9	42.1	42.4	42.1	42.1	42.0	41.7	41.2	40.7	40.8	41.4
Asia (14)											
Afghanistan	-	-	-	-	-	-	-	-	-	-	-
Bangladesh	91	36	35.6	35.5	35.7	35.6	35.5	35.1	34.5	34.1	35.29
Bhutan	58	29.6	29.4	29.2	29.1	28.7	28.7	28.3	28.2	27.7	28.77
Cambodia	139	50.4	50.1	49.6	50	49.2	48.8	47.8	46.8	46	48.74
Kiribati	-	-	-	-	-	-	-	-	-	-	-
Lao People's Dem. Rep.	61	30.9	30.6	30.2	30	29.8	29.4	28.9	28.4	28	29.58
Myanmar	142	51.6	52.6	51.5	50.7	49	49.1	47.8	-	-	50.33
Nepal	96	37.2	36.8	36.7	37.1	36.9	36.8	36.7	36.3	36	36.72
Samoa	-	-	-	-	-	-	-	-	-	-	-
Solomon Islands	82	31.7	33.4	34.5	34.8	34.7	33.8	33.4	33.2	32.7	33.58
Timor-Leste	-	-	-	-	-	-	-	-	-	-	-
Tuvalu	-	-	-	-	-	-	-	-	-	-	-
Vanuatu	-	-	-	-	-	-	-	-	-	-	-
Yemen	52	27.7	27.4	27.3	27.2	27	27	26.6	26.8	26.8	27.09
Average	90.1	36.9	37.0	36.8	36.8	36.4	36.1	35.6	33.5	33.0	36.3
Latin America & the Carribean (1)											
Haiti	145	54.8	55.4	56.1	56.5	56.4	57.4	57.1	57	57.1	56.42
Average	145	54.8	55.4	56.1	56.5	56.4	57.4	57.1	57	57.1	56.42

Source: World Bank estimates in the July 2010 Report: "Shadow Economies All over the World", authored by Friedrich Schneider, Andreas Buehn, and Claudio E. Montenegro.

*Averages are not weighted by GDP and do not include countries for which no data is available.

APPENDIX

Table 7: contd.

Countries/Region	World Rank	Averages*					
		Developing Country	World	25 High Income OECD	Landlocked (LL) LDCs	Small Island (SI) LDCs	Neither LL nor SI LDCs
Africa (contd.)		36.42	33.01	17.17	39.02	42.40	41.73
Tanzania	146	↓	↓	↓	↓	↓	↓
Togo	89	↓	↓	↓	↓	↓	↓
Uganda	118	↓	↓	↓	↓	↓	↓
Zambia	135	↓	↓	↓	↓	↓	↓
Average	112.9						
Asia (14)		36.42	33.01	17.17	39.02	42.40	41.73
Afghanistan	-	↓	↓	↓	↓	↓	↓
Bangladesh	91	↓	↓	↓	↓	↓	↓
Bhutan	58	↓	↓	↓	↓	↓	↓
Cambodia	139	↓	↓	↓	↓	↓	↓
Kiribati	-	↓	↓	↓	↓	↓	↓
Lao People's Dem. Rep.	61	↓	↓	↓	↓	↓	↓
Myanmar	142	↓	↓	↓	↓	↓	↓
Nepal	96	↓	↓	↓	↓	↓	↓
Samoa	-	↓	↓	↓	↓	↓	↓
Solomon Islands	82	↓	↓	↓	↓	↓	↓
Timor-Leste	-	↓	↓	↓	↓	↓	↓
Tuvalu	-	↓	↓	↓	↓	↓	↓
Vanuatu	-	↓	↓	↓	↓	↓	↓
Yemen	52	↓	↓	↓	↓	↓	↓
Average	90.1						
Latin America & the Caribbean (1)		36.42	33.01	17.17	39.02	42.40	41.73
Haiti	145	↓	↓	↓	↓	↓	↓
Average	145						

Source: World Bank estimates in the July 2010 Report: "Shadow Economies All over the World", authored by Friedrich Schneider, Andreas Buehn, and Claudio E. Montenegro.

*Averages are not weighted by GDP and do not include countries for which no data is available.

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