Global Financial Integrity

Illicit Financial Flows from Developing Countries: 2004-2013

Dev Kar and Joseph Spanjers

December 2015

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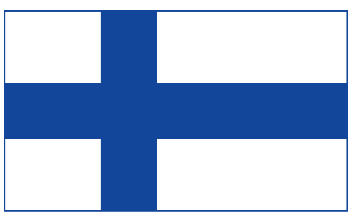
Global Financial Integrity wishes to thank the Government of Finland for supporting this project.



We are pleased to present our report, ***Illicit Financial Flows from Developing Countries: 2004-2013***. This is the seventh in our annual series estimating the country-level and aggregated global volume of illicit money being siphoned out of poor and emerging market nations. This year our report shows that ***illicit outflows of capital have cracked the $1 trillion plateau.*** Indeed, due to more refined data analysis, we see that the trillion dollar figure was originally breached in 2011 and has moved higher in each succeeding year.

2015 was the "year of development" in which the international community came together not once but twice to adopt far-reaching and highly ambitious documents that, together, outline a 15-year global plan to lift all people out of poverty. The mantra continuously uttered by national delegates in the years-long preparatory process leading to the plenary meetings in Ethiopia in July (for the Financing for Development Conference) and in New York in September (for the Sustainable Development Goals) was "trillions not billions," which referred to the belief that in order for developing countries to eliminate poverty it will take trillions of dollars in social investments. This adds to the significance of illicit flows breaking the trillion dollar mark.

To its credit, the global community included a pledge in both the Addis Ababa Action Agenda and the Global Goals (as the two documents are called) to "significantly curtail illicit financial flows." This represents the first time all the world's governments agreed that IFFs are a problem that needs to be addressed in order for significant progress to be made toward eliminating poverty. As the Addis document put it, steps taken to "curb illicit financial flows will be integral to our efforts" to build strong economies.

Moving forward, the challenge for governments will be to progress from the aspiration contained in the documents to implementation of real-world policies and plans to begin to curtail illicit flows. How will governments generate trillions not billions? It is well understood among all governments, rich and poor, that Official Development Assistance (i.e. foreign aid) will not provide nearly enough to reach that level of funding. Foreign direct investment will provide something of a bridge to reach funding targets but still will not provide enough to help countries reach the 17 goals and 169 targets included in the Global Goals. That leaves retained revenues and tax revenues in developing countries as the key source of funds.

Research shows that developing countries collect significantly lower levels of tax, as a percentage of GDP, than do wealthier states. This will need to change under the current circumstances and with the high bar established in the two development agreements. One way for poor states to collect more revenue is to close the so-called "policy gap." That is, put in place laws and regulations that close loopholes, eliminate contradictory statues, and establish new categories of activity to tax in order to make the revenue system more efficient and fair. The second way to collect more revenue is to close the "compliance gap." For this governments must make efforts to improve the technical capability and efficiency of various departments to ensure proper amounts of tax are paid by those who owe it. The findings of this report are extremely valuable to governments seeking to close the compliance gap.

Our analysis shows that, of the $1 trillion in illicit flows leaving poor nations annually, ***over 83 percent is due to trade misinvoicing.*** Simply put, each year over $800 billion in illicit trade exits developing countries. While the total value of this trade would not be applied to development programs, the tax associated with this illicit activity could be allocated to various poverty alleviation efforts. Given the trade volume, revenue could be in the hundreds of billions of dollars. This is the low-hanging fruit governments can capture quickly with the proper technology and sufficient focus. Curtailing even a small portion of these illicit flows would have a catalytic impact on a government's ability to address the needs of its most vulnerable people. It is our view that addressing the trade misinvoicing challenge should be the initial focus of all developing country governments.

We thank the Government of Finland for its substantial interest in and financial support of our work. Without its generous backing this report would not have been possible. And, as always, we look forward to comments and ideas to help us make this annual study a useful document for journalists, researchers, and policymakers around the world.

Raymond W. Baker
President
Global Financial Integrity

December 9, 2015

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Executive Summary

This report, the latest in a series of annual reports by Global Financial Integrity (GFI), provides estimates of the illicit flow of money out of the developing world—hereafter referred to as illicit financial flows (IFFs) or illicit outflows—from 2004 to 2013, the most recent ten years for which data are available.

The study finds that during this ten-year period, the developing world as a whole lost US$7.8 trillion (see Table X1). In real terms, **these flows increased at 6.5 percent per annum** (see Chart 2). After a slowdown during the global financial crisis, illicit outflows have been rising, topping US$1 trillion since 2011 and reaching a new peak of **US$1.1 trillion in 2013** (see Table X1).

Table X1. Illicit Financial Flows from Developing Countries, by Region, 2004-2013 (in billions of U.S. dollars, nominal)

Region	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average Share
Sub-Saharan Africa	32.5	51.9	56.4	77.0	78.6	85.0	78.0	74.3	66.7	74.6	675.0	8.6%
Asia	174.6	191.9	209.1	236.5	277.5	277.1	381.7	361.1	456.7	482.0	3,048.3	38.8%
Developing Europe	107.3	118.4	133.8	190.6	233.8	204.9	221.8	295.5	242.5	250.4	1,998.9	25.5%
MENA+AP	29.9	31.0	33.3	57.4	80.3	51.9	53.0	81.1	68.2	70.3	556.5	7.1%
Western Hemisphere	120.9	131.4	111.0	137.7	157.8	128.1	172.0	195.8	201.8	212.8	1,569.3	20.0%
All Developing Countries	**465.3**	**524.6**	**543.5**	**699.1**	**828.0**	**747.0**	**906.6**	**1,007.7**	**1,035.9**	**1,090.1**	**7,847.9**	.

GFI measures illicit financial outflows using two sources: 1) deliberate trade misinvoicing (gross excluding reversals or GER) and 2) leakages in the balance of payments (hot money narrow or HMN). **Trade misinvoicing is the primary measurable means for shifting funds out of developing countries illicitly.** Over the ten-year time period of this study, an **average of 83.4 percent of illicit financial outflows were due to the fraudulent misinvoicing of trade** (see Table X2, Chart 7).

This report nearly triples the number of countries—from 19 to 56—for which a more precise trade misinvoicing calculation is used by comparing those countries' trade to that of individual advanced economies, rather than to advanced economies as a group or to the world as a whole. Data on trade between individual developing and advanced countries are preferable to trade data showing flows between the former and an aggregate of the latter. This is because traders do not misinvoice exports or imports vis-à-vis a group. They always misinvoice their transactions relative to a specific country. So an "advanced country" group is nothing but a statistical artifact—no such group exists in the minds of traders.

This expansion revises the aggregate illicit flows figures upwards compared to GFI's two most recent annual reports; for example, the total IFF figure for 2012 has risen 4.5 percent since our most recent publication (see Table A). Aside from the expanded coverage, no other methodological changes were introduced in this report relative to GFI's two most recent annual updates. Changes in the IFF estimates presented herein are otherwise due to regular revisions of the underlying data by country statistical agencies and the IMF.

Table X2: Illicit Financial Flows from Developing Countries, by Component, 2004-2013
(in billions of U.S. dollars, nominal)

Component	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Trade Misinvoicing Outflows (GER)	433.0	449.2	482.0	602.8	698.8	587.6	708.2	867.5	839.6	878.2
Hot Money Narrow Outflows (HMN)	32.3	75.4	61.6	96.3	129.2	159.5	198.5	140.2	196.3	212.0
Total IFFs	465.3	524.6	543.5	699.1	828.0	747.0	906.6	1,007.7	1,035.9	1,090.1

Asia remains the region of the developing world with the most significant volume of IFFs, comprising some 38.8 percent of the developing world total over the ten years of this study. Asia is followed by the Developing Europe region (25.5 percent), the Western Hemisphere (20.0 percent), Sub-Saharan Africa (8.6 percent), and the MENA+AP (Middle East, North Africa, Afghanistan, and Pakistan) region at 7.1 percent (see Chart 3).

Similarly, Asia saw the fastest growth rate in IFFs from 2004 to 2013, registering an average annual increase of 8.6 percent over that period. Developing Europe and the MENA+AP regions followed (each increasing at an average annual rate of 7.0 percent) and were in turn followed by the Western Hemisphere (3.4 percent) and Sub-Saharan Africa (3.0 percent; see Chart 2).

Sub-Saharan Africa tops the list when IFFs are scaled as a percentage of gross domestic product (GDP), with illicit financial outflows averaging 6.1 percent of the region's GDP. Developing Europe follows at 5.9 percent of GDP, Asia at 3.8 percent, the Western Hemisphere at 3.6 percent, and MENA+AP at 2.3 percent (see Table E).

The report also compares IFFs to official development assistance (ODA) and foreign direct investment (FDI). **IFFs have exceeded those measures—combined—for seven of the ten years of this study.** Despite these substantial recorded inflows, the continued growth of unrecorded, illicit outflows has a pernicious impact on development aspirations in many countries. For example: for every dollar of ODA that entered the developing world in 2012, ten dollars flowed out illicitly.

Given the particularly high level of illicit flows due to trade misinvoicing, this report includes a special section that examines the phenomenon in the context of trade based money laundering (TBML) in drug-producing and/or drug-trafficking states. By comparing trade misinvoicing figures to total trade in drug-producing and drug-trafficking states, there are indications that **drug traffickers may be using trade misinvoicing to shift ill-gotten gains.**

This year, IFFs became part of development orthodoxy in the UN's Sustainable Development Goals and at the Financing for Development Conference in Addis Ababa. World leaders still have much to do to curb the opacity in the global financial system that facilitates these outflows. GFI recommends a number of steps that governments and other international regulators can take to develop greater financial transparency and curtail illicit outflows.

Beneficial Ownership

- Governments should establish public registries of verified beneficial ownership information on all legal entities, and all banks should know the true beneficial owner(s) of any account opened in their financial institution.

Anti-Money Laundering

- Government authorities should adopt and fully implement all of the Financial Action Task Force's anti-money laundering recommendations; laws already in place should be strongly enforced.

Country-by-Country Reporting

- Policymakers should require multinational companies to publicly disclose their revenues, profits, losses, sales, taxes paid, subsidiaries, and staff levels on a country-by-country basis.

Tax Information Exchange

- All countries should actively participate in the worldwide movement towards the automatic exchange of tax information as endorsed by the OECD and the G20.

Trade Misinvoicing

- Customs agencies should treat trade transactions involving a tax haven with the highest level of scrutiny.
- Governments should significantly boost their customs enforcement by equipping and training officers to better detect intentional misinvoicing of trade transactions, particularly through access to real-time world market pricing information at a detailed commodity level.

Sustainable Development

- The indicator for SDG goal 16.4 should be country-level estimates of illicit outflows related to misinvoiced trade and other sources based on currently available data, and the International Monetary Fund or another qualified international institution should conduct and publish the analysis annually.
- Governments should sign on to the Addis Tax Initiative to further support efforts to curb IFFs as a key component of the development agenda.

The massive outflows of illicit capital shown in this study are likely to adversely impact domestic resource mobilization and hamper sustainable economic growth. As such, it is necessary to consider the role of illicit outflows in any discussion of the development equation. We should not only look at the volume of resources flowing into developing countries but also the illicit leakages of capital from the balance of payments and trade misinvoicing. Governments and international organizations must strengthen policy and increase cooperation to combat this scourge.

I. Introduction

1. The corrosive impact illicit financial flows (IFFs) have on economic progress and poverty alleviation efforts became part of development orthodoxy in 2015. In July, the Addis Ababa Action Agenda of the Third International Conference on Financing for Development was adopted and commits all nations to "redouble efforts to substantially reduce illicit financial flows by 2030, with a view to eventually eliminating them."[1] Furthermore, noting the report of the High Level Panel on Illicit Financial Flows from Africa,[2] the Addis Action Agenda invites "appropriate international institutions and regional organizations to publish estimates of the volume and composition of illicit financial flows."[3] Global Financial Integrity's *Illicit Financial Flows from Developing Countries: 2004-2013* is just that: an estimate of the volume and composition of illicit financial flows at the country level and disaggregated by type.

2. The United Nations adopted the Sustainable Development Goals (SDGs) in September, which includes, in Goal 16.4, a target that countries will "by 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime."[4] This statement, coupled with that seen in the Addis Action Agenda, underscores the international community's recognition of the severity of the illicit flows challenge and its embrace of efforts to tackle illicit flows in order to promote development and vigorous societies.

3. IFFs are illegal movements of money or capital from one country to another. GFI classifies such flows as illicit if the funds crossing borders are illegally earned, transferred, and/or utilized.[5] If the flow breaks a law at any point, it is illicit.

4. The primary tool for transferring IFFs is trade misinvoicing—according to this report, trade misinvoicing accounted for 83.4 percent of measurable IFFs on average (see Chart 7), an average of US$654.7 billion per year. The misinvoicing of trade is accomplished by misstating the value or volume of an export or import on a customs invoice. Trade misinvoicing is a form of trade-based money laundering made possible by the fact that trading partners write their own trade documents, or arrange to have the documents prepared in a third country (typically a tax haven), a method known as re-invoicing. Fraudulent manipulation of the price, quantity, or quality of a good or service on an invoice allows criminals, corrupt government officials, and commercial tax evaders to shift vast amounts of money across international borders quickly, easily, and nearly always undetected.

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1 "Resolution Adopted by the General Assembly on 27 July 2015: Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda)," United Nations General Assembly Resolution (New York, NY: United Nations, August 17, 2015), 8, http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/69/313.

2 "Report of the High Level Panel on Illicit Financial Flows from Africa" (UNECA, February 26, 2015), http://www.uneca.org/sites/default/files/publications/iff_main_report_english.pdf.

3 "Addis Ababa Action Agenda," 8.

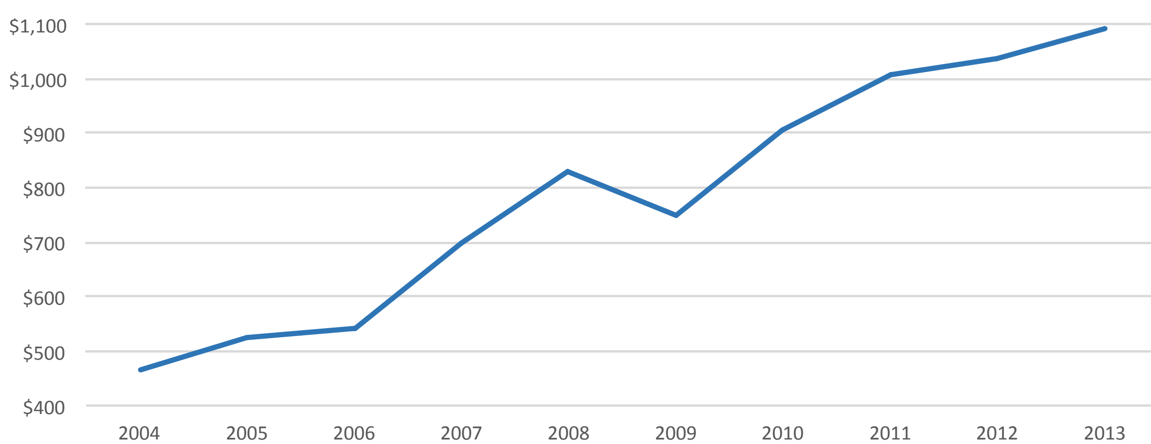
4 "Goal 16: Promote Just, Peaceful and Inclusive Societies," *United Nations Sustainable Development Goals,* 16, accessed November 1, 2015, http://www.un.org/sustainabledevelopment/peace-justice/.

5 "Issues: Illicit Financial Flows," *Global Financial Integrity,* November 2, 2015, http://www.gfintegrity.org/issue/illicit-financial-flows/

5. This study only covers misinvoicing of goods trade. We do not include estimates of misinvoicing involving services trade due to the lack of bilateral trade data on services, which has been a growing component of world trade. This is an important reason why these estimates of illicit flows from developing countries are likely to be under- rather than over-stated.

6. By their nature, IFFs are typically intended to be hidden. Given this, even those types of illicit flows that can be measured can be difficult to estimate with complete precision. Additionally, there are some forms of illicit flows that cannot be picked up using available economic data and methods. For example, cash transactions, same-invoice faking, misinvoicing in services and intangibles, and hawala transactions are simply not registered directly in available economic data. Thus, we characterize the estimates presented here as likely to be very conservative. Nonetheless, they fill a critical gap in the literature and amply demonstrate the scale of the problem.

Chart 1. Illicit Financial Outflows (HMN+GER), All Developing Countries, 2004-2013
(in billions of nominal U.S. dollars)



7. The volume of illicit outflows is staggering and expanding quickly. Growing at an average annual rate of 6.5 percent and topping US$1 trillion since 2011 (see Chart 1), IFFs are a development challenge that merits serious attention and action from domestic and international policymakers towards improving financial transparency.

II. Methodology

1. GFI presents figures in this report for the two main conduits of illicit financial flows from developing countries: a) the misinvoicing of trade (GER) and b) leakages from the balance of payments (HMN).

2. GFI measures trade misinvoicing using the Gross Excluding Reversals (GER) methodology. In essence, this methodology highlights gaps between a country's reported exports and imports vis-à-vis the world. This examination of gaps in trade statistics to quantify capital flight and tax evasion dates back to the 1960s in academic economic literature.[6] In this report, two related sub-variants of the GER methodology are employed: the "bilateral advanced economies" calculation and the "world aggregate" calculation. These variants are discussed at length in the methodological appendix. GFI has used this blended technique since 2013.[7]

3. This report calculates trade misinvoicing for 56 of 149 developing countries using the "bilateral advanced economy" method, nearly tripling the number of countries for which this more accurate calculation is made relative to GFI's previous reports.[8] For all but two of the countries joining this group, trade misinvoicing figures have been revised upwards compared to GFI's Illicit Financial Flows from Developing Countries: 2003-2012 (hereafter referred to as the *2014 IFF Update*),[9] sometimes drastically (see Appendix Table 7). This upward revision is to be expected: the "world aggregate" calculation tends to understate total misinvoicing, for reasons more fully discussed in the methodological appendix. A comparison of the illicit outflows figures presented in last year's report with this year's estimates is presented in Table A; note the upward revision at the aggregate level for all years but 2009.[10]

Table A. Illicit Financial Flows from Developing Countries: Current (2015) and Previous (2014) Estimates
(in billions of nominal U.S. dollars or in percent)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2015 HMN+GER	465.3	524.6	543.5	699.1	828.0	747.0	906.6	1,007.7	1,035.9	1,090.1
2014 HMN+GER	380.8	489.0	502.8	593.5	793.4	748.3	821.9	968.7	991.2	
Nominal Difference	84.4	35.6	40.7	105.7	34.5	-1.3	84.7	39.1	44.7	
Percent Difference	**22.2%**	**7.3%**	**8.1%**	**17.8%**	**4.4%**	**-0.2%**	**10.3%**	**4.0%**	**4.5%**	

6 Jagdish N. Bhagwati, "On the Underinvoicing of Imports," in *Illegal Transactions in International Trade*, ed. Jagdish N. Bhagwati (Amsterdam: North-Holland Publishing Company, 1974), 138–47.

7 Dev Kar and Brian LeBlanc, *Illicit Financial Flows from Developing Countries: 2002-2011* (Washington, DC: Global Financial Integrity, 2013); Dev Kar and Joseph Spanjers, *Illicit Financial Flows from Developing Countries: 2003-2012* (Washington, DC: Global Financial Integrity, 2014).

8 As compared to GFI's *2014 IFF Update,* where this version of the methodology was used for 19 countries. See: Kar and Spanjers, IFFs: 2003-2012, 27.

9 Kar and Spanjers, *IFFs: 2003-2012.*

10 This drop in in 2009 is likely due to the exclusion of HMN figures from Saudi Arabia and the United Arab Emirates, which each had extremely high HMN totals in 2009. See footnote 11 for more on the exclusion.

4. The GER methodology departs from most academic literature in that it does not "net out" illicit inflows (i.e., import under-invoicing and/or export over-invoicing) from illicit outflows (i.e., import over-invoicing and/or export under-invoicing). The focus on outflows reflects the premise that illicit inflows do not make up for the capital lost due to illicit outflows, as they generally cannot be taxed or used to drive growth in the official private sector. On the contrary, illicit inflows tend to drive illicit outflows in a vicious circle. Illicit inflows often reflect activities that deprive developing countries of customs duties (particularly in the case of import under-invoicing), facilitate crime and corruption, and flow into the underground economy. GFI views "net" illicit financial flows as analogous to "net crime," a clearly illogical concept.

5. Balance of payments leakages, as measured using the "hot money narrow" (HMN) approach, are measured by the net errors and omissions term in the balance of payments. In this report, we do not include HMN values for Saudi Arabia, the United Arab Emirates, or Qatar. These countries were omitted due to their large sovereign wealth funds and abnormally high net errors and omissions to financial account balance ratio, indicating possible errors in reporting sovereign wealth fund activity.[11]

6. Some discrepancies in the trade misinvoicing (GER) and balance of payment leakages (HMN) figures reflect statistical errors in the reporting that underlies the official data. However, such measurement errors are probably on the decline as the capacity, experience, and training among developing world customs agencies and statistical compilers has increased. Any overstatement in illicit flows due to statistical errors is almost certainly offset by all the other factors that these official calculations simply cannot capture: bulk cash transfers, same-invoice faking, misinvoicing in services and intangibles, and hawala transactions. It is unlikely that developing countries accidentally omitted over US$1 trillion from their economies in 2013.

[11] Previously, these countries were merely omitted from GFI's top ten ranking, but remained included in the appendix and totals. In this report, these values are omitted entirely for consistency. Please see the methodological appendix for further information.

III. Results: Illicit Financial Flows from Developing Countries

1. This section presents our latest estimates of illicit outflows from developing countries. Trends and patterns are discussed globally and by region, a ranking of the top 10 sources by volume is produced, and illicit flows are compared to official development aid (ODA) and foreign direct investment (FDI) to the developing world.

2. Estimates are reported in nominal terms (not adjusted for inflation). However, growth rates are calculated using real values.[12]

3. As noted previously, estimates of illicit outflows are likely to be understated, as economic methods—based on data currently available—cannot detect same-invoice faking, misinvoicing in services and intangibles, cash transfers, and hawala transactions.

A. Overview

4. Illicit flows have grown unchecked over the last decade, rising at an average rate of 6.5 percent a year from 2004 to 2013.[13] Beginning in 2011, measurable IFFs from the developing world have topped US$1 trillion, reaching a total of US$1.1 trillion in 2013 (see Table B).

5. As shown in Chart 1, illicit outflows fell in 2009 in the immediate aftermath of the global financial crisis that began in the previous year. Since then, illicit outflows have continued to grow steadily, increasing by US$159.6 billion in 2010 and gaining another US$101.1 in 2011 (See Table B). However, illicit outflows increased by just over US$80 billion over the two years through 2013.

Table B. Illicit Financial Flows from Developing Countries, by Region, 2004-2013
(in billions of nominal U.S. dollars or average share of total illicit flows)

Region	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average Share
Sub-Saharan Africa	32.5	51.9	56.4	77.0	78.6	85.0	78.0	74.3	66.7	74.6	675.0	8.6%
Asia	174.6	191.9	209.1	236.5	277.5	277.1	381.7	361.1	456.7	482.0	3,048.3	38.8%
Developing Europe	107.3	118.4	133.8	190.6	233.8	204.9	221.8	295.5	242.5	250.4	1,998.9	25.5%
MENA+AP	29.9	31.0	33.3	57.4	80.3	51.9	53.0	81.1	68.2	70.3	556.5	7.1%
Western Hemisphere	120.9	131.4	111.0	137.7	157.8	128.1	172.0	195.8	201.8	212.8	1,569.3	20.0%
All Developing Countries	**465.3**	**524.6**	**543.5**	**699.1**	**828.0**	**747.0**	**906.6**	**1,007.7**	**1,035.9**	**1,090.1**	**7,847.9**	.

[12] The U.S. Producer Price Index is used for deflation to real figures, sourced from: International Monetary Fund, "International Financial Statistics (IFS)," [Online Database], accessed May 6, 2015, http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=169393.

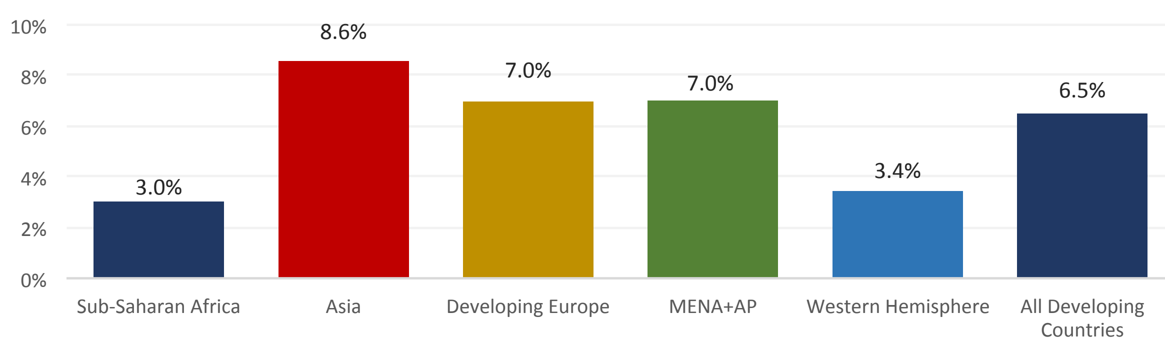
[13] Log linear trend rate of growth, adjusted for inflation

6. The significant decline in the growth rate of illicit outflows in 2012 was probably caused by a slowdown in the rate of economic growth of developing countries.[14] As lower economic growth is typically accompanied by declining trading volumes, the overall volume of trade misinvoicing declines as a result of fewer opportunities to misinvoice. Moreover, a slowdown in economic growth reduces other financial flows, such as new loans contracted and lower foreign direct investment and inflows of portfolio capital. The result is that there is a lower volume of unrecorded flows. That being said, we expect the 2013 total to be revised upwards in next year's report, as more data are reported by developing countries to the IMF.

B. Regional Analysis of Growth Rates and Percent Shares

7. Of the five regions presented in this report, Asia registered the highest annual growth rate, averaging some 8.6 percent over the ten-year period. Following Asia were Developing Europe, MENA+AP (the Middle East, North Africa, Afghanistan, and Pakistan), Western Hemisphere, and Sub-Saharan Africa (see Chart 2). Compared with the *2014 IFF Update*, Sub-Saharan Africa's growth rate has dropped significantly; it was previously the second-fastest growing region.[15] This decline does not reflect a revised assessment of the severity of the IFFs problem in Sub-Saharan Africa. Rather, the lower growth reported here simply reflects the shift from a starting year of 2003 in the *2014 IFF Update* to 2004 in this report. Following some decline in nominal IFFs in that region from 2009 to 2012, IFFs resurged sharply in 2013 (see Table B). The growth rate in MENA+AP has also slowed considerably in comparison to the *2014 IFF Update*, though it remains higher than the developing country average.

Chart 2. Growth Rate of Illicit Flows, By Region, 2004-2013
(log linear trend rate of growth, real values adjusted for inflation)

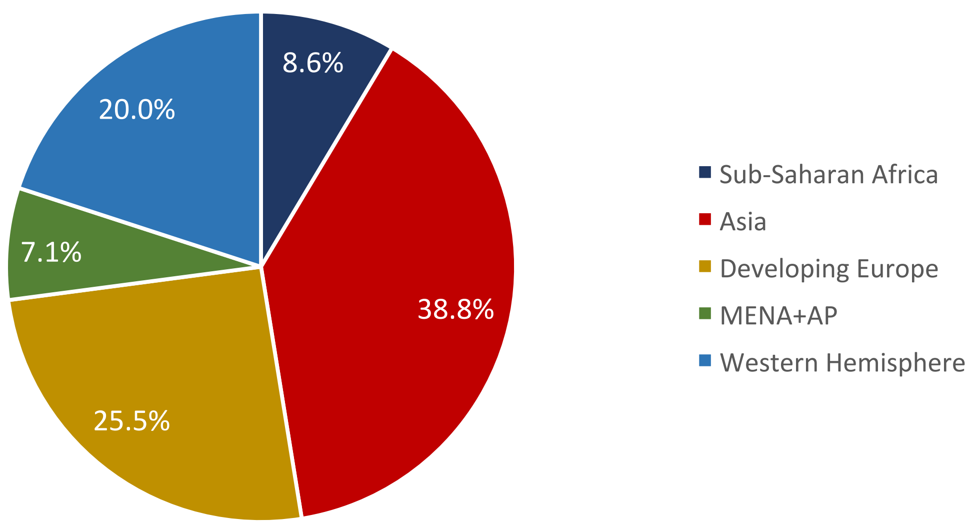


[14] See "Gross domestic product, constant prices: percent change" for "Emerging market and developing economies" and "China" in: International Monetary Fund, "World Economic Outlook Database: October 2015 Edition," [Online Database], (October 6, 2015), http://www.imf.org/external/pubs/ft/weo/2015/02/weodata/index.aspx.

[15] Kar and Spanjers, *IFFs: 2003-2012*, 8.

8. Asia continues to be the largest contributor to gross illicit outflows, providing 38.8 percent of the developing world total from 2004-2013. It is followed by Developing Europe at 25.5 percent, the Western Hemisphere at 20.0 percent, Sub-Saharan Africa at 8.6 percent, and MENA+AP countries at 7.1 percent (see Chart 3).

Chart 3. Cumulative Illicit Financial Flows by Region, 2004-2013
(as a percent of total nominal illicit outflows)



9. The outsize presence of Asia in these figures is, unsurprisingly, driven by outflows from mainland China—the leading source of illicit outflows for 8 of the 10 years covered by this study. However, major resource drainage from India, Malaysia, Thailand, and Indonesia also boosted the region's global ranking in illicit outflows. The Developing Europe region is dominated by Russia, which surpassed China's total in both 2008 and 2011. Mexico and Brazil account for much of the Western Hemisphere total.

10. As a share of global IFFs, regional totals for Developing Europe and MENA+AP have remained relatively stable over the 10 year time period. However, some notable changes have occurred in the other regional groupings. Sub-Saharan Africa's share dropped from 11.0 percent of the global total in 2007 to 6.4 percent in 2012, before rising slightly to 6.8 percent in 2013. The Western Hemisphere's share has dropped from 26.0 percent in 2004 to 19.5 percent in 2013. Asia has taken over much of the pie, quickly rising from a low of 33.5 percent of the total in 2008 (still higher than the share of any other region at any time in this study) to 44.2 percent in 2013.

C. Top Source Countries

11. In this report, as with previous global updates on illicit flows from GFI, we rank the countries with the top average illicit financial outflows during the 10-year period of the study. Compared with the *2014 IFF Update*,[16] there has been very little fluctuation in the top ten grouping, with all countries in the top ten remaining. The top six countries have also stayed in the same order. South Africa made the largest jump from the tenth to the seventh spot, surpassing Nigeria to become the largest IFF source country on the African continent. Thailand and Indonesia traded spots, with Thailand moving ahead of Indonesia. Nigeria has dropped from the ninth to the tenth spot (see Table C).

Table C. Illicit Financial Outflows from the Top Ten Source Economies, 2004-2013 (in millions of nominal U.S. dollars or in percent)

Rank	Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
1	China, Mainland	81,517	82,537	88,381	107,435	104,980	138,864	172,367	133,788	223,767	258,640	1,392,276	139,228
2	Russian Federation	46,064	53,322	66,333	81,237	107,756	125,062	136,622	183,501	129,545	120,331	1,049,772	104,977
3	Mexico	34,239	35,352	40,421	46,443	51,505	38,438	67,450	63,299	73,709	77,583	528,439	52,844
4	India	19,447	20,253	27,791	34,513	47,221	29,247	70,337	85,584	92,879	83,014	510,286	51,029
5	Malaysia	26,591	35,255	36,554	36,525	40,779	34,416	62,154	50,211	47,804	48,251	418,542	41,854
6	Brazil	15,741	17,171	10,599	16,430	21,926	22,061	30,770	31,057	32,727	28,185	226,667	22,667
7	South Africa	12,137	13,599	12,864	27,292	22,539	29,589	24,613	23,028	26,138	17,421	209,219	20,922
8	Thailand	7,113	11,920	11,429	10,348	20,486	14,687	24,100	27,442	31,271	32,971	191,768	19,177
9	Indonesia	18,466	13,290	15,995	18,354	27,237	20,547	14,646	18,292	19,248	14,633	180,710	18,071
10	Nigeria	1,680	17,867	19,160	19,335	24,192	26,377	19,376	18,321	4,998	26,735	178,040	17,804
Total of Top 10		262,994	300,565	329,526	397,912	468,623	479,289	622,435	634,524	682,086	707,765	4,885,718	488,572
Top 10 as Percent of Total		56.5%	57.3%	60.6%	56.9%	56.6%	64.2%	68.7%	63.0%	65.8%	64.9%	62.3%	.
Developing World Total		465,269	524,588	543,524	699,145	827,959	747,026	906,631	1,007,744	1,035,904	1,090,130	7,847,921	784,792

12. The top ten group emphasizes Asia's dominance as the top exporter of illicit capital: five of the top ten countries are located in the region. The Western Hemisphere and Sub-Saharan Africa regions are each represented by two countries, with Russia alone representing Developing Europe in the top ten. (Kazakhstan and Turkey, also members of the Developing Europe group, come in 11th and 12th, respectively). Iraq, in the 16th spot, is the MENA+AP country with the highest average illicit outflows.

[16] Ibid., 13.

13. The top ten countries account for a significant 62.3 percent of the global illicit financial outflows identified in this study. Chart 4 illustrates the percent of total illicit outflows each of the top ten countries held each year of this study. The heat map found in Chart 5 presents the top countries within the global context.

Chart 4. Top Ten Source Countries of Illicit Flows, 2004-2013
(in percent share of developing world total)

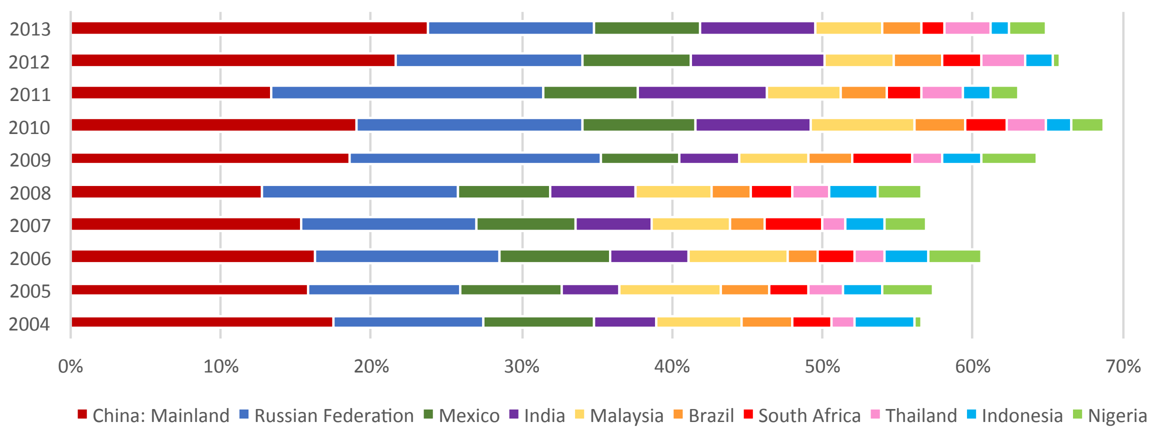
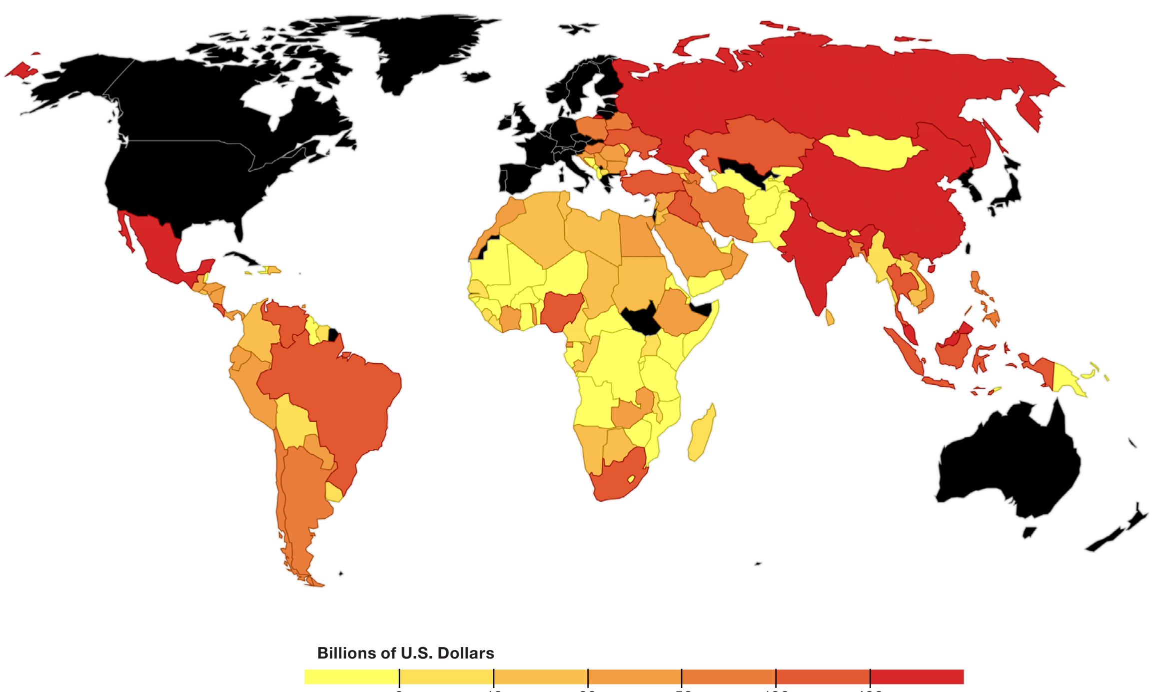


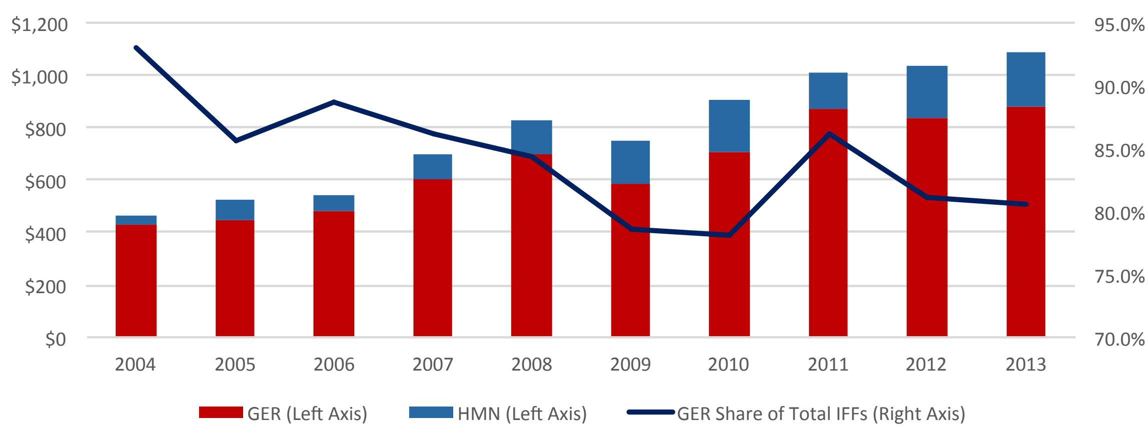
Chart 5. Heat Map, Cumulative Illicit Financial Flows from Developing Countries, 2004-2013
(in billions of nominal U.S. dollars)



D. Share of HMN & GER in Total IFFs

14. Trade misinvoicing (GER) dominates measurable illicit outflows, averaging 83.4 percent of total illicit outflows during the years 2004 to 2013. However, there has been a noticeable growth in the hot money narrow (HMN) estimate of balance of payment leakages over those years as well. Though initially only accounting for 6.9 percent of illicit outflows in 2004, HMN rose to 19.4 percent of illicit flows by 2013. Although GER as a share of total IFFs has decreased in the last ten years, Chart 6 shows that trade misinvoicing has still roughly doubled from 2004 to 2013 and continues to be on an upward trajectory.

Chart 6: Share of GER in Total Illicit Financial Outflows, 2004-2013
(in billions of nominal U.S. dollars, or in percent)



15. GER can be broken down further into its components of export under-invoicing and import over-invoicing. While export under-invoicing accounted for 65.9 percent of total illicit outflows in 2004, that share has fallen steadily to just 37.9 percent in 2013. This fall in export under-invoicing as a method to transfer funds has been offset by a sharp increase in unrecorded balance of payments transfers (from 6.9 percent to 19.4 percent of total outflows) and in import over-invoicing (increasing from 27.2 percent to 42.6 percent of total outflows) over the ten year period (see Table D).

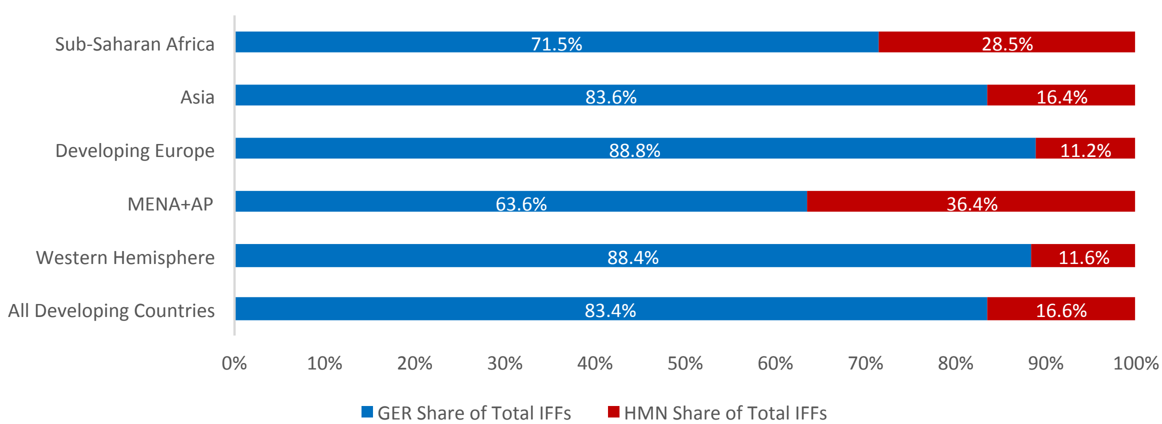
Table D. Components of Illicit Financial Outflows
(in percent of total illicit financial outflows)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average
Import Over-Invoicing	27.2	26.3	27.4	26.7	26.2	24.8	28.6	34.6	38.1	42.6	31.5
Export Under-Invoicing	65.9	59.3	61.3	59.6	58.2	53.9	49.5	51.5	42.9	37.9	52.0
Hot Money Narrow	6.9	14.4	11.3	13.8	15.6	21.3	21.9	13.9	18.9	19.4	16.6

16. Both export under-invoicing and import over-invoicing lead to an understatement of corporate profits. For example, the former undervalues export sales while the latter raises import costs, lowering corporate while shifting a significant portion abroad. There may be an added incentive to over-invoice imports as import taxes have declined due to trade-based globalization. Governments in developing countries have been increasingly relying on corporate and other direct taxes to offset the loss in revenues. If the marginal duty rate on imports is lower than the corporate tax rate, private businesses can still profit by over-invoicing imports as long as the higher import costs reduce corporate taxes more than they increase the additional duties payable.

17. Each region tends to have different distributions of GER and HMN, but GER still dominates in each one. The regions where trade misinvoicing has the strongest relative effect are the Western Hemisphere and Developing Europe, each with an average of just shy of 89 percent of its outflows stemming from fraudulent invoicing (see Chart 7). Asia comes next with 83.6 percent, followed by Sub-Saharan Africa at 71.5 percent and MENA+AP at 63.6 percent.[17] Overall, GER represents 83.4 percent of total IFFs.

Chart 7. Regional Illicit Flows; Shares Related to HMN & GER Components, 2004-2013
(in percent shares over decade)



E. Illicit Financial Outflows & Gross Domestic Product

18. Part of the reason IFFs vary across countries is that the scale of overall economic activity varies across countries. To account for the likelihood that large countries can be expected be expected to experience large outflows solely due to their size, we examine the IFF estimates

[17] The MENA+AP region in the *2014 IFF Update* was dominated by HMN. Due to the exclusion of HMN data from Saudi Arabia, the United Arab Emirates, and Qatar (discussed in the methodological appendix), trade misinvoicing now appears to be the dominant form of illicit outflows in this region.

as a percentage of GDP. That ratio provides a different perspective on IFFs than volume alone, one that can indicate the potential impacts of IFFs on individual economies. For developing countries as a whole, IFFs as a percentage of GDP has been falling consistently since 2004, save for a slight bump in 2007 (see Table E). After peaking at 5.0 percent of developing world GDP in 2004, IFFs have declined to 3.7 percent of GDP in 2013. In other words, since 2004, the developing world's combined GDP has grown at a faster rate than illicit financial outflows. However, illicit flows continue to hover at over 3.5 percent of developing world GDP, representing a major challenge—or opportunity—for development. Moreover, IFFs amount to a much higher share of overall economic activity for many developing countries.

Table E. Illicit Financial Flows to GDP[18]
(in percent of GDP)

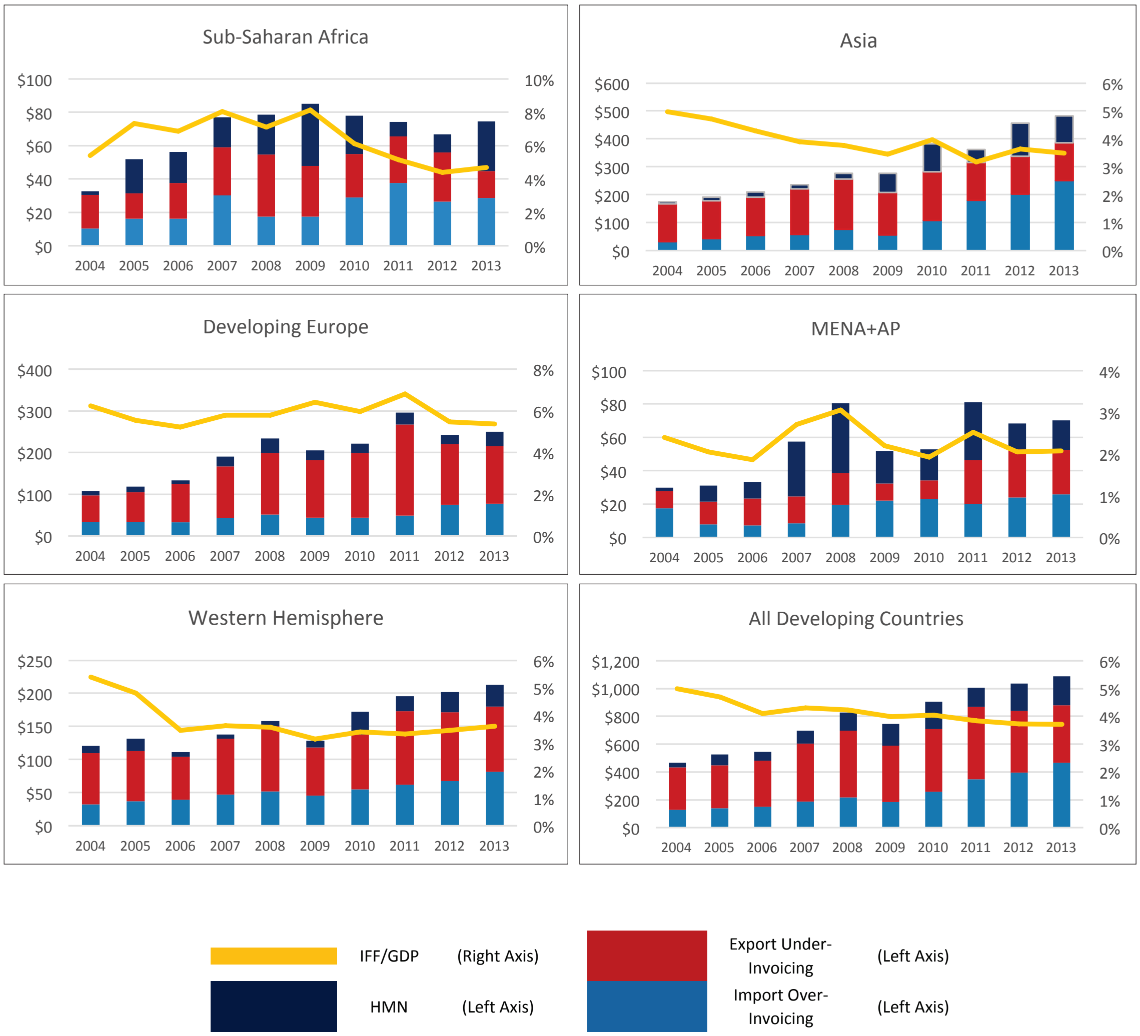
Region	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Average
Sub-Saharan Africa	5.4	7.3	6.9	8.0	7.1	8.1	6.1	5.2	4.4	4.7	6.1
Asia	5.0	4.7	4.3	3.9	3.8	3.4	4.0	3.2	3.6	3.5	3.8
Developing Europe	6.2	5.5	5.2	5.8	5.8	6.4	6.0	6.8	5.5	5.4	5.9
MENA+AP	2.4	2.0	1.9	2.7	3.1	2.2	1.9	2.5	2.0	2.1	2.3
Western Hemisphere	5.4	4.8	3.5	3.6	3.6	3.1	3.4	3.3	3.5	3.6	3.6
All Developing Countries	5.0	4.7	4.1	4.3	4.2	4.0	4.0	3.8	3.7	3.7	4.0

19. The regional picture changes when IFFs are examined relative to the size of regional economies. The largest shift comes from Sub-Saharan Africa. Although that region is the second smallest source of illicit flows in nominal volume terms, its IFFs are the largest relative to its GDP (6.1 percent) when compared with other regions' ratios (see Chart 8). Moreover, Asia (the undisputed leader in illicit flows in terms of dollar volume) drops to the middle of the pack with an average IFF to GDP ratio of 3.8 percent.

[18] GDP data sourced from: International Monetary Fund, "World Economic Outlook Database: April 2015 Edition," [Online Database], (April 14, 2015), https://www.imf.org/external/pubs/ft/weo/2015/01/weodata/index.aspx; supplemented with Aruba and Somalia GDP data from: World Bank, "World Development Indicators," [Online Database], accessed October 25, 2015, http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators.

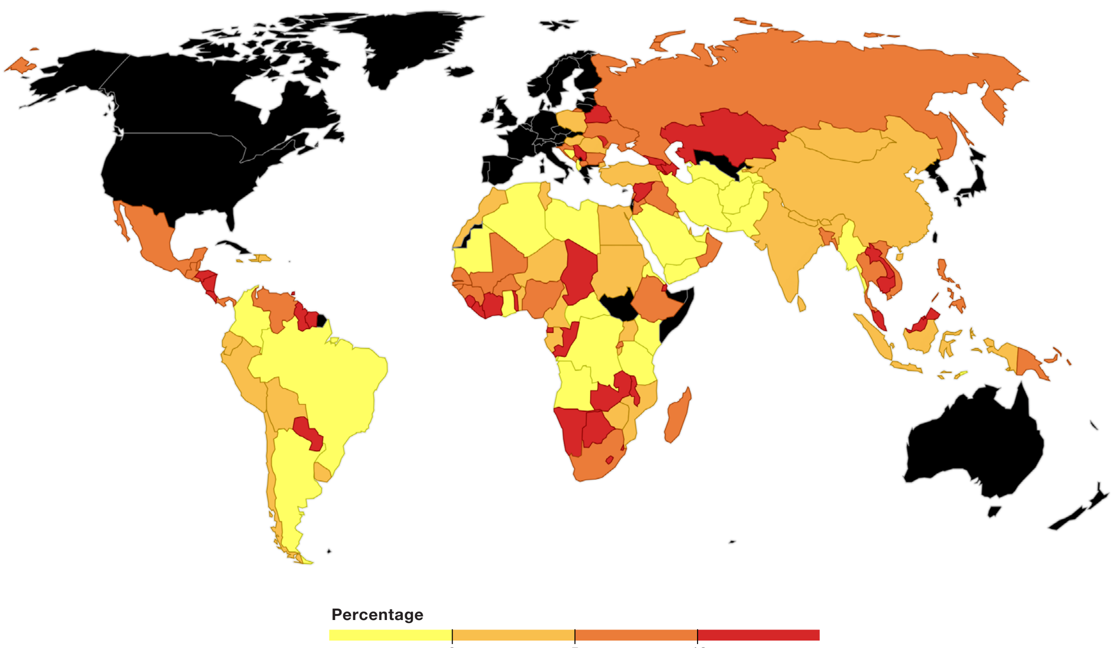
Chart 8. Components of Nominal Illicit Financial Flows & Illicit Financial Flows to GDP by Region, 2004-2013

(in billions of nominal U.S. dollars or in percent of GDP)



20. The comparison to GDP can also be viewed at a country by country level, which GFI studied in a recent report for a selection of countries.[19] This report presents a heat map that breaks down countries with ratios below two percent, between two and five percent, between five and ten percent, and those above 10 percent (see Chart 9). Illicit flows are very likely debilitating for those economies with very high IFF-to-GDP ratios.

Chart 9. Heat Map, Average Illicit Financial Outflows to GDP, 2004-2013
(in percent GDP)



F. Illicit Outflows, Development Aid, and Foreign Direct Investment

21. Illicit financial outflows exceeded combined official development assistance (ODA)[20] and inward foreign direct investment (FDI)[21] in all developing countries for all but three years of the 2004-2013 time period.[22] Against the many resources these countries might accumulate through ODA and FDI, unrecorded, illicit outflows are even more significant (see Chart 10).

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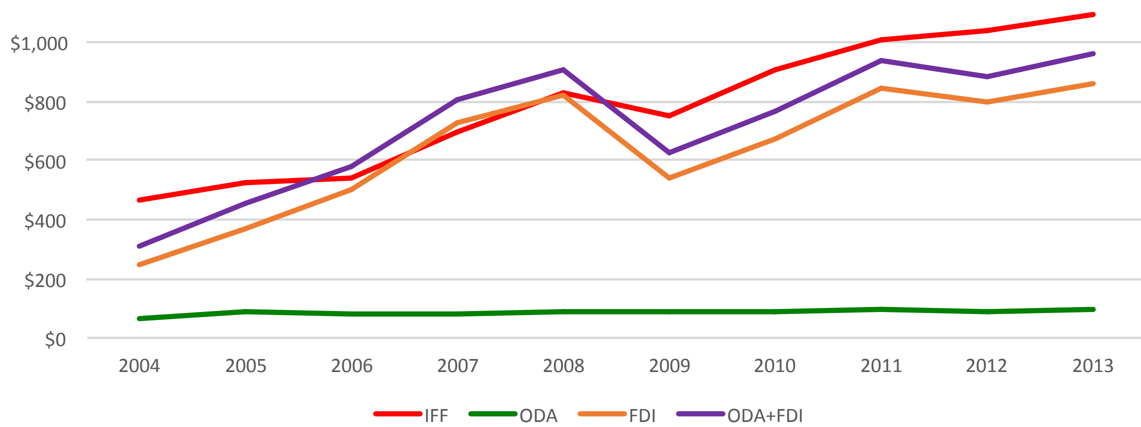
[19] Joseph Spanjers and Håkon Frede Foss, "Illicit Financial Flows and Development Indices: 2008-2012" (Washington, DC: Global Financial Integrity, June 2015), http://www.gfintegrity.org/report/illicit-financial-flows-and-development-indices-2008-2012/.

[20] "OECD Data," [Online Database], *Organisation for Economic Co-Operation and Development*, accessed November 4, 2015, https://data.oecd.org/.

[21] International Monetary Fund, "Balance of Payments Statistics"; supplemented by: "UNCTAD Statistics," [Online Database], *United Nations Conference on Trade and Development*, accessed November 4, 2015, http://unctad.org/en/Pages/Statistics.aspx.

[22] ODA and FDI figures are compiled and summed to create world and regional aggregates for the countries and groupings used in this report. No OECD, IMF, World Bank, or UN regional aggregates were used.

Chart 10. Illicit Financial Flows, Official Development Assistance, and Foreign Direct Investment, 2004-2013
(in billions of nominal U.S. dollars)



22. Taken together, growth of ODA and FDI (6.8 percent a year) just barely outpaced the change in IFFs (6.5 percent a year) between 2004 and 2013. Most of that growth came from increased FDI, as ODA to developing countries has stagnated over the period.

23. US$1.1 trillion flowed illicitly out of developing countries in 2013, while those countries received US$99.3 billion in ODA. For every development-targeted dollar entering the developing world in 2013, over US$10 exited illicitly. This has held true since 2010, underscoring the fact that illicit financial outflows remain central to the development equation. Effective domestic resource mobilization depends on their curtailment.

IV. Trade-Based Money Laundering in Major Drug-Producing and/or Drug-Transit Countries

1. This section assesses the evidence of illicit outflows (i.e., export under-invoicing and/or import over-invoicing) from countries that are major drug producers and/or serve as transit points for drug trafficking. Other things equal, we might expect IFFs to comprise a larger share of total trade for countries producing and otherwise trafficking illegal drugs than in other countries with correspondingly less such illicit activity. However, that would only turn out to be the case if the proceeds of drug trafficking are actually laundered through deliberate misinvoicing of traded goods (as opposed to, for example, services or cash). Table F presents estimates of illicit outflows due to trade misinvoicing as a percentage of total trade for a list of countries identified by the U.S. Department of State as major drug producers and/or transit areas.

2. Trade-based money laundering (TBML) relies on a country's external trade to move illicit funds both into and out of that country. Trade misinvoicing is a form of TBML. In a landmark 2006 study, the Financial Action Task Force (FATF) defined TBML as "the process of disguising the proceeds of crime and moving value through the use of trade transactions in an attempt to legitimize their illicit origins."[23] The main objective of criminal organizations and terrorist financiers who use TBML is to hide the source of illicit funds by absorbing the funds back into the official economy.

3. A 2012 GFI study on China, which was reviewed in The Economist, pointed out that the round-tripping of illicit funds sourced from a tax haven like the British Virgin Islands could be an elaborate form of TBML.[24] A subsequent report by FATF in 2012 concluded that "the rapid growth in the global economy has made international trade an increasingly attractive avenue to move illicit funds through financial transactions associated with the trade in goods and services."[25]

4. The estimates in Table F allow for a number of interesting observations. To the extent that TBML is captured by trade misinvoicing, the difference in the ratio of misinvoicing to total trade between drug trafficking/transit countries and the other developing countries is quite pronounced. For 15 of the 22 trafficking or transit countries (68 percent of sample), trade misinvoicing outflows to total trade (exports + imports) are well above the developing country average of 6.7 percent. These countries are marked by an asterisk in Table F.

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[23] Financial Action Task Force, "Trade Based Money Laundering" (Paris, France: Financial Action Task Force (FATF), June 23, 2006), 3, http://www.fatf-gafi.org/media/fatf/documents/reports/Trade%20Based%20Money%20Laundering.pdf.

[24] Dev Kar and Sarah Freitas, *Illicit Financial Flows from China and the Role of Trade Misinvoicing* (Washington, DC: Global Financial Integrity, 2012).

[25] Financial Action Task Force, "APG Typology Report on Trade Based Money Laundering" (Paris, France: Financial Action Task Force (FATF), July 20, 2012), 4, http://www.fatf-gafi.org/media/fatf/documents/reports/Trade_Based_ML_APGReport.pdf.

Table F. Trade Misinvoicing Outflows to Total Trade for Major Illicit Drug-Producing and/or Drug-Transit Countries
(in percent of total trade)

Country	Average Trade Misinvoicing Outflows / Total Trade, 2004-2013	Drug Producer
Afghanistan, Islamic Republic of	3.0%	Producer
Bahamas, The	51.3% *	.
Belize	12.0% *	.
Bolivia	0.9%	Producer
Colombia	1.7%	Producer
Costa Rica	49.5% *	.
Dominican Republic	5.1%	.
Ecuador	7.5% *	.
El Salvador	12.2% *	.
Guatemala	9.4% *	.
Haiti	1.9%	.
Honduras	45.4% *	.
India	10.3% *	.
Jamaica	7.8% *	.
Lao People's Democratic Republic	9.7% *	Small Producer
Mexico	7.4% *	Producer
Myanmar	0.4%	Producer
Nicaragua	48.8% *	.
Pakistan	0.0%	Small Producer
Panama	22.4% *	.
Peru	6.8% *	Producer
Venezuela, Republica Bolivariana de	7.6% *	.
Drug Producing and/or Trafficking Countries (listed above)	**8.8%**	.
All Developing Countries	**6.7%**	.

Note: Starred countries have a higher ratio than the average for all developing countries
Sources: Country List (U.S. Department of State, International Narcotics Control Strategy Report),[26] IFFs (GFI), GDP (IMF World Economic Outlook)[27]

5. Another observation is that TBML seems to be more evident in drug transit countries than in drug producing countries (e.g. Afghanistan and Colombia). This observation is subject to the caveat that there may not be a clear demarcation between drug producing and drug transit countries—a producer of one or more drugs may be a transit point for other drugs. But if we were to largely abstract from such overlaps on the assumption that the country is largely known as a major producer of drugs rather than a transit point for them, the estimates shown in Table F indicate that transit countries, where traffickers are very active, tend to resort to TBML more than producers. The table shows that while misinvoicing as a share of total trade in producer countries is relatively low (e.g., five percent in Afghanistan, two percent in Colombia), in drug transit countries like the Bahamas, Jamaica, Guatemala, Honduras, India, and Panama, the corresponding shares range from around 10 to 50 percent.

[26] "International Narcotics Control Strategy Report: Volume I, Drug and Chemical Control" (Washington, DC: Bureau of International Narcotics and Law Enforcement Affairs, United States Department of State, March 2015), 5, 28, http://www.state.gov/documents/organization/239560.pdf.

[27] International Monetary Fund, "WEO Database: April 2015."

V. Policy Recommendations

A. Overview

1. Illicit financial flows from developing countries are largely facilitated by continued opacity in the global financial system. This opacity reveals itself in many well-known ways: tax havens and secrecy jurisdictions, anonymous trusts and shell companies, bribery, and corruption. There are countless techniques to launder dirty money, including the misinvoicing of trade (TBML in this context), which is used to shift proceeds of criminal activity across national borders.

2. Though policy environments vary from country to country, there are best practices that all countries should adopt and promote at international and regional forums and institutions, including the G20, the G8, the United Nations, the World Bank, the IMF, the OECD, and the African Union. This section highlights those best practices and suggests further steps domestic and international regulators could take to curtail illicit financial flows.

B. Anti-Money Laundering

3. At a minimum, all countries should comply with the Financial Action Task Force Recommendations to combat money laundering and terrorist financing. The most recent update to those recommendations was released in 2012, introducing new priority areas on corruption and tax crimes.[28]

4. Despite good intentions and good policy, actually stopping money laundering often comes down to enforcement. Regulators and law enforcement officials must strongly enforce all anti-money laundering laws and regulations already on the books. This includes prosecuting criminal charges against and imposing appropriate penalties upon employees of financial intuitions who are culpable of allowing money laundering to occur.

C. Beneficial Ownership of Legal Entities

5. Countries and international institutions should require or support meaningful confirmation of beneficial ownership in all banking and securities accounts in order to address the problems posed by anonymous companies and other legal entities. Information on the ultimate, true, human owner(s) of all corporations and other legal entities should be disclosed upon formation, updated regularly, and made freely available to the public in central registries.

6. In 2015, the European Union adopted legislation requiring each EU Member State to create registers of beneficial ownership information by May 2017 that are freely accessible by law

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[28] Financial Action Task Force, "The FATF Recommendations: International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation" (Paris, France: FATF, February 2012), http://www.fatf-gafi.org/topics/fatfrecommendations/documents/fatf-recommendations.html.

enforcement authorities and financial institutions, and available to third parties that can demonstrate a legitimate interest in the information. Nothing prevents EU Member states from creating entirely open registries, however, and a few countries both within and outside the EU have already committed to doing so, including the UK, Denmark, Norway and the Ukraine. However, progress by G20 countries towards meeting their High Level Principles on Beneficial Ownership Transparency (adopted by the G20 in November 2014) has been poor.[29] There are indications that other countries, especially those seeking the return of stolen assets, now recognize the negative impacts of anonymous companies as well. GFI urges countries to commit to the creation of public registries of corporate beneficial ownership information and to engage with countries already in the process of implementing public registers to learn from their challenges and successes.

D. Automatic Exchange of Financial Information

7. All countries should actively participate in the G20 and OECD-endorsed global movement toward the automatic exchange of financial information. Ninety-six countries have committed to implementing the OECD/G20 standard by the end of 2018, which represents some progress from this time last year, when 89 countries had committed. The OECD and G20 must ensure that developing countries, and especially the least developed countries, are able to participate in the process, even if that requires providing them with the necessary technical assistance.

E. Country-by-Country Reporting

8. All countries should require multinational corporations to publicly disclose their revenues, profits, losses, sales, taxes paid, subsidiaries, and staff levels on a country-by-country basis as a means of detecting and deterring abusive tax avoidance practices. As part of the Base Erosion and Profit Shifting (BEPS) initiative, the G20 countries and the OECD countries agreed in November 2015 to take the necessary measures to require their large, multinational companies to provide such reporting on a country-by-country basis. Unfortunately, the agreement only requires that the information be provided by the parent of the multinational company to its home tax authority. Other countries' tax authorities will be able to access the information only through official treaty requests, and therefore only where such treaties are in place. GFI strongly recommends that countries require their companies to provide public country-by-country reporting so that the information can be analyzed by legislators responsible for fixing the profit-shifting problems that such reporting will help identify. Since legislators alone will not have enough qualified people to adequately analyze the information necessary to make informed policy changes, publicly available country-by-country reporting will also allow experts from academia, civil society and the media to lend their analytical support to the problem.

[29] "Just for Show? Reviewing G20 Promises on Beneficial Ownership" (Transparency International, November 12, 2015), https://www.transparency.org/whatwedo/publication/just_for_show_g20_promises.

F. Curtailing Trade Misinvoicing

9. Trade misinvoicing accounts for a substantial majority of illicit flows over the time period of this study, averaging 83.4 percent of IFFs or US$654.7 billion per year. Curbing trade misinvoicing must necessarily be a major focus for policymakers around the world.

10. Governments should significantly boost customs enforcement by providing appropriate training and equipment to better detect the intentional misinvoicing of trade transactions. One particularly important tool for stopping trade misinvoicing as it happens is access to real-time, commodity-level world market pricing information. This would allow customs officials to tell whether a good is significantly under- or over-priced in comparison to its prevailing world market norm price. This variance could then trigger an audit or another form of further review for the transaction.

11. Given the greater potential for abuse, trade transactions with secrecy jurisdictions should be treated with the highest level of scrutiny by customs, tax, and law enforcement officials. Brazil is an excellent example on this point, subjecting transactions with secrecy jurisdictions and tax havens to a higher tax rate.[30]

G. UN Sustainable Development Goals / Addis Tax Initiative

12. While the SDG document is ambitious—it has 17 goals and 169 targets—the success of the illicit flows target may hinge on the indicator that is associated with it. The indicators, which will not be finalized until March 2016, are the underlying technical measurements that will show if progress is being made on the targets and, subsequently, toward the overall SDG goals. A good indicator for 16.4 would be similar or identical to what GFI publishes each year in this annual update: a country-level estimate of illicit outflows related to misinvoiced trade and from other sources based on currently available data. Preferably, such an assessment would be conducted by the IMF in order to, in the first instance, create an IFF baseline for each country and then, over the longer-term, provide an indication of progress toward curtailing illicit flows. Without a baseline and annual assessments, it is unclear how it could be determined if the international community's vision of significantly reduced illicit flows has been achieved. At the time of writing, the negotiations on this indicator have not reached a point where it can be determined if this level of tracking will be attempted or if it will be done so by a qualified international body.

13. The Addis Tax Initiative (ATI), another agreement reached in 2015, attempts to focus the political will of several countries to address the illicit flows menace.[31] The ATI is the outcome of a side event at this year's Financing for Development Conference agreed upon by over 30

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[30] Walter Stuber, "Brazil: Tax Haven Jurisdictions - Haven or Hell?," *Mondaq*, January 8, 2013, http://www.mondaq.com/brazil/x/215184/Income+Tax/Tax+Haven+Jurisdictions+Haven+Or+Hell.

[31] "Financing for Development Conference: The Addis Tax Initiative - Declaration" (Addis Ababa, Ethiopia: International Tax Compact, July 15, 2015), http://www.taxcompact.net/documents/Addis-Tax-Initiative_Declaration.pdf.

countries and international organizations, and directly links illicit financial flows to domestic resource mobilization, and in turn, to sustainable development.[32] Those governments and organizations have acknowledged that curbing illicit flows is crucial to achieving the SDGs. Germany, the United States, the United Kingdom, and the Netherlands are among the developed nations taking part in the non-binding effort to seek ways to reduce IFFs. Ethiopia, Indonesia, the Philippines, and Tanzania, and other developing countries have said they will strive to curb their losses of revenue (due to IFFs). GFI strongly encourages other countries to sign on to the Addis Tax Initiative and has entered into discussions with many of these governments to determine how the aspiration of the Addis Action Agenda, the SDGs, and the ATI can move to implementation.

32 "Better Tax Systems Crucial for Development," [Press Release] (Addis Ababa, Ethiopia: International Tax Compact, July 15, 2015), http://www.taxcompact.net/documents/Addis-Tax-Initiative_Press-Release.pdf.

VI. Conclusions

1. The estimates presented in this report underscore the severity of the problem illicit financial outflows present to the developing world. The developing world lost US$1.1 trillion in illicit flows in 2013, over ten times the amount of official development aid received by these countries in that year and greater than the total amount of ODA and FDI received. In total, US$7.8 trillion flowed out of these countries illicitly from 2004 to 2013.

2. Illicit outflows from the developing world increased at an annual rate of 6.5 percent in real terms. Growth rates were generally higher in the years prior to the 2008 financial crisis, but illicit flows have continued to climb since. IFFs averaged 4.0 percent of developing countries' GDP from 2004 to 2013.

3. This report also delineates illicit financial outflows from the developing world into five major geographical regions: Sub-Saharan Africa, Asia, Developing Europe, MENA+AP (Middle East, North Africa, Afghanistan, and Pakistan), and the Western Hemisphere.

   - Sub-Saharan Africa accounted for 8.6 percent of cumulative illicit financial flows from the developing world during 2004-2013. There are two Sub-Saharan African countries in the top ten globally: South Africa (7th) and Nigeria (10th). IFFs averaged a sizeable 6.1 percent of the region's GDP over this ten-year period. A significant majority of IFFs from Sub-Saharan Africa—71.5 percent, or a total of US$482.4 billion—were due to trade misinvoicing.

   - Asia accounted for 38.8 percent of cumulative illicit financial flows from the developing world during 2004-2013. There are five Asian countries in the global top ten: China (1st), India (4th), Malaysia (5th), Thailand (8th), and Indonesia (9th). IFFs averaged 3.8 percent of the region's GDP over this ten-year period. Asia's IFFs were primarily driven by trade misinvoicing, which accounted for 83.6 percent of illicit outflows on average (US$2.5 trillion cumulatively).

   - Developing Europe accounted for 25.5 percent of cumulative illicit financial flows from the developing world during 2004-2013. Russia (2nd) is the only country in this region to appear in the global top ten. IFFs averaged 5.9 percent of the region's GDP over this ten-year period. Developing Europe's IFFs are almost exclusively due to trade misinvoicing, which averaged 88.8 percent (US$1.8 trillion cumulatively) of the region's yearly outflows.

   - MENA+AP accounted for 7.1 percent of cumulative illicit financial flows from the developing world during 2004-2013. There are no MENA+AP countries in the global top ten; Iraq is the highest at 16th. IFFs averaged 2.3 percent of the region's GDP over this ten-year period. 63.6 percent of IFFs from MENA+AP were due to trade misinvoicing, totaling US$354.1 billion.

- The Western Hemisphere accounted for 20.0 percent of cumulative illicit financial flows from the developing world during 2004-2013. There are two Western Hemisphere countries in the global top ten: Mexico (3rd) and Brazil (6th). IFFs averaged 3.6 percent of the region's GDP over this ten-year period. Trade misinvoicing accounted for 88.4 percent of illicit outflows from the Western Hemisphere (US$1.4 trillion cumulatively).

4. The top ten source countries of illicit capital accounted for US$4.9 trillion in illicit financial outflows over the ten-year period of this study, 62.3 percent of cumulative IFFs from the entire developing world.

5. Section IV observed that drug-producing and/or drug-transit countries tend to have relatively high ratios of trade misinvoicing outflows to total trade. That provides further evidence that trade misinvoicing is a crucial component of trade-based money laundering, and that drug traffickers may be using trade misinvoicing to shift their ill-gotten profits.

6. GFI recommends a number of policy measures to curtail illicit flows. Broadly, they are related to curbing the opacity in the global financial system, which facilitates these outflows. Measures related to tax haven secrecy, anonymous companies, and money laundering techniques are of particular importance. Specifically, GFI's major policy recommendations to world leaders include:

Beneficial Ownership

- Governments should establish public registries of verified beneficial ownership information on all legal entities, and all banks should know the true beneficial owner(s) of any account opened in their financial institution.

Anti-Money Laundering

- Government authorities should adopt and fully implement all of the Financial Action Task Force's anti-money laundering recommendations; laws already in place should be strongly enforced.

Country-by-Country Reporting

- Policymakers should require multinational companies to publicly disclose their revenues, profits, losses, sales, taxes paid, subsidiaries, and staff levels on a country-by-country basis.

Tax Information Exchange

- All countries should actively participate in the worldwide movement towards the automatic exchange of tax information as endorsed by the OECD and the G20.

Trade Misinvoicing

- Customs agencies should treat trade transactions involving a tax haven with the highest level of scrutiny.

- Governments should significantly boost their customs enforcement by equipping and training officers to better detect intentional misinvoicing of trade transactions, particularly through access to real-time world market pricing information at a detailed commodity level.

Sustainable Development

- The indicator for SDG goal 16.4 should be country-level estimates of illicit outflows related to misinvoiced trade and other sources based on currently available data sets, and the International Monetary Fund or another qualified international institution should conduct and publish the analysis annually.

- Governments should sign on to the Addis Tax Initiative to further support efforts to curb illicit financial flows as a key component of the development agenda.

7. Illicit financial flows must be curtailed if domestic resource mobilization initiatives are to stand any chance of succeeding. National and international policymakers must consider the outsized effect of illicit financial flows on development, and implement appropriate policies. GFI has a strong track record of working with governments, and stands ready to assist in this effort.

Appendix

Appendix Table 1. Geographical Regions

Sub-Saharan Africa (45)	Asia (25)	Developing Europe (24)	MENA+AP (22)	Western Hemisphere (33)	Advanced Economies (36)
Angola	Bangladesh**	Albania	Algeria^	Antigua and Barbuda	Australia
Benin	Bhutan	Armenia, Republic of*	Afghanistan	Argentina**	Austria
Botswana**†	Brunei Darussalam	Azerbaijan, Republic of**	Bahrain, Kingdom of	Aruba*	Belgium
Burkina Faso	Cambodia**	Belarus*	Djibouti^	Bahamas, The	Canada
Burundi	China, P.R.: Mainland*	Bosnia and Herzegovina	Egypt^	Barbados	Cyprus
Cabo Verde	Fiji	Bulgaria*	Iran, Islamic Republic of	Belize	Czech Republic
Cameroon	India*	Croatia**	Iraq	Bolivia	Denmark
Central African Republic	Indonesia*	Georgia**	Jordan**	Brazil*	Finland
Chad	Kiribati	Hungary**	Kuwait	Chile*	France
Comoros	Lao People's Democratic Republic	Kazakhstan**	Lebanon	Colombia	Germany
Congo, Democratic Republic of	Malaysia*	Kosovo, Republic of	Libya^	Costa Rica**	Greece
Congo, Republic of	Maldives	Kyrgyz Republic	Morocco**^	Dominica	Hong Kong
Cote d'Ivoire*	Mongolia	Macedonia, FYR	Mauritania^	Dominican Republic**	Iceland
Equatorial Guinea	Myanmar	Moldova**	Oman**	Ecuador**	Ireland
Eritrea	Nepal	Montenegro	Pakistan	El Salvador**	Israel
Ethiopia	Papua New Guinea	Poland**	Qatar**	Grenada	Italy
Gabon	Philippines*	Romania**	Saudi Arabia	Guatemala**	Japan
Gambia, The	Samoa	Russian Federation*	Sudan^	Guyana	Korea, Republic of
Ghana	Solomon Islands	Serbia, Republic of	Syrian Arab Republic	Haiti	Latvia
Guinea	Sri Lanka**	Tajikistan	Tunisia**^	Honduras**	Lithuania
Guinea-Bissau	Thailand*	Turkey**	United Arab Emirates	Jamaica**	Luxembourg
Kenya	Timor-Leste, Dem. Rep. of	Turkmenistan	Yemen, Republic of	Mexico**	Malta
Lesotho**†	Tonga	Ukraine**		Nicaragua**	Netherlands
Liberia	Vanuatu	Uzbekistan		Panama**	New Zealand
Madagascar	Vietnam**			Paraguay*	Norway
Malawi				Peru**	Portugal
Mali				St. Kitts and Nevis	San Marino
Mauritius**				St. Lucia	Singapore
Mozambique				St. Vincent and the Grenadines	Slovak Republic
Namibia**†				Suriname	Slovenia
Niger				Trinidad and Tobago	Spain
Nigeria				Uruguay	Sweden
Rwanda				Venezuela, Republica Bolivariana de**	Switzerland
Sao Tome and Principe					Taiwan, Province of China
Senegal**					United Kingdom
Seychelles					United States
Sierra Leone					
Somalia					
South Africa**					
Swaziland**†					
Tanzania					
Togo*					
Uganda					
Zambia*					
Zimbabwe					

* denotes developing countries who report bilaterally to advanced countries, and that calculation was made previously in the *2014 IFF Update* (19 total)
** denotes developing countries who report bilaterally to advanced economies, and that calculation was made for the first time in this report (56 total)
^ denotes North African countries, which, when combined with Sub-Saharan Africa, can generate estimates for the African Continent as a whole.
† indicates a South African Customs Union country for which the trade misinvoicing calculation was estimated as a relative level of South Africa's trade misinvoicing outflows
Note 1: Previously, Latvia and Lithuania were bilateral reporters under the Developing Europe region. They have since been reclassified by the IMF as Advanced Economies.
Note 2: Advanced economies only used for conducting trade misinvoicing estimates
Source: IMF Direction of Trade Statistics

Appendix Table 2. Country Rankings by Largest Average Illicit Financial Flows, 2004-2013 (HMN + GER)
(in millions of U.S. dollars, nominal)

Rank	Country	Average IFF
1	China, P.R.: Mainland	139,228
2	Russian Federation	104,977
3	Mexico	52,844
4	India	51,029
5	Malaysia	41,854
6	Brazil	22,667
7	South Africa	20,922
8	Thailand	19,177
9	Indonesia	18,071
10	Nigeria	17,804
11	Kazakhstan	16,740
12	Turkey	15,450
13	Venezuela, Republica Bolivariana de	12,394
14	Ukraine	11,676
15	Costa Rica	11,346
16	Iraq	10,501
17	Azerbaijan, Republic of	9,500
18	Vietnam	9,293
19	Philippines	9,025
20	Poland	9,002
21	Belarus	8,820
22	Aruba	8,058
23	Argentina	7,654
24	Iran, Islamic Republic of	6,422
25	Hungary	5,706
26	Bangladesh	5,588
27	Chile	5,500
28	Brunei Darussalam	5,066
29	Syrian Arab Republic	4,767
30	Qatar	4,713
31	Honduras	4,694
32	Oman	4,385
33	Peru	4,284
34	Morocco	4,102
35	Serbia, Republic of	4,083
36	Egypt	3,983
37	Paraguay	3,750

Rank	Country	Average IFF
38	Trinidad and Tobago	3,666
39	Romania	3,487
40	Croatia	3,456
41	Nicaragua	3,027
42	Zambia	2,885
43	Saudi Arabia	2,877
44	Kuwait	2,847
45	Ecuador	2,597
46	Ethiopia	2,583
47	Bulgaria	2,477
48	Cote d'Ivoire	2,334
49	Togo	2,229
50	Guatemala	2,179
51	Equatorial Guinea	2,175
52	Panama	2,104
53	Sri Lanka	1,997
54	Lebanon	1,991
55	Bahamas, The	1,773
56	El Salvador	1,744
57	Tunisia	1,684
58	Algeria	1,525
59	Congo, Republic of	1,523
60	Jordan	1,522
61	Cambodia	1,509
62	Georgia	1,495
63	Colombia	1,475
64	Dominican Republic	1,458
65	Namibia	1,392
66	Botswana	1,368
67	Sudan	1,311
68	Libya	1,183
69	Chad	1,076
70	Armenia, Republic of	983
71	Liberia	966
72	Uruguay	956
73	Moldova	908
74	Senegal	803
75	Bahrain, Kingdom of	791

Rank	Country	Average IFF
76	Suriname	760
77	Cameroon	752
78	Uganda	715
79	Myanmar	684
80	Lao People's Democratic Republic	664
81	Malawi	650
82	Jamaica	636
83	Bolivia	627
84	Mauritius	609
85	Swaziland	582
86	Nepal	567
87	Sierra Leone	558
88	Macedonia, FYR	516
89	Madagascar	507
90	Tanzania	482
91	Papua New Guinea	472
92	Mali	469
93	Burkina Faso	426
94	Ghana	401
95	Angola	385
96	Djibouti	375
97	Rwanda	359
98	Lesotho	341
99	Guinea	326
100	Gabon	314
101	Yemen, Republic of	307
102	Guyana	285
103	Zimbabwe	276
104	Fiji	275
105	Montenegro	257
106	Mozambique	243
107	Congo, Democratic Republic of	225
108	Vanuatu	225
109	Pakistan	192
110	Niger	157
111	Benin	149
112	Mongolia	148
113	Samoa	145

Rank	Country	Average IFF
114	Solomon Islands	137
115	Afghanistan, Islamic Republic of	133
116	Haiti	130
117	Belize	129
118	Albania	123
119	Barbados	114
120	Maldives	109
121	Kyrgyz Republic	101
122	Tajikistan	93
123	Gambia, The	90
124	Burundi	87
125	Kenya	83
126	Mauritania	67
127	Guinea-Bissau	62
128	Grenada	54
129	Comoros	54
130	Seychelles	46
131	Cabo Verde	43
132	Bhutan	40
133	Eritrea	38
134	Turkmenistan	36
135	Timor-Leste, Dem. Rep. of	23
136	Bosnia and Herzegovina	20
137	Sao Tome and Principe	18
138	Tonga	17
139	Central African Republic	16
140	St. Lucia	12
141	St. Vincent and the Grenadines	5
142	St. Kitts and Nevis	5
143	Kiribati	5
144	Antigua and Barbuda	5
145	Dominica	**2**
146	Kosovo, Republic of	0
147	Somalia	0
148	United Arab Emirates	0
149	Uzbekistan	.

Note: In this table and in all subsequent appendix tables, a value of "." indicates a missing value due to lack of suitable data.

Appendix Table 3. Illicit Financial Flows from Developing Countries (HMN + GER)
(in millions of U.S. dollars, nominal)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Afghanistan, Islamic Republic of	667	505	159	0	0	0	0	0	0	0	1,331	133
Albania	13	92	107	220	305	0	190	255	36	18	1,234	123
Algeria	751	203	2,259	1,301	3,378	2,131	1,406	187	2,586	1,043	15,246	1,525
Angola	0	574	0	1,641	1,236	0	0	17	326	55	3,850	385
Antigua and Barbuda	16	7	7	4	0	1	0	13	0	0	49	5
Argentina	6,116	4,992	3,747	5,391	9,586	4,179	5,265	9,460	10,634	17,171	76,540	7,654
Armenia, Republic of	403	514	499	806	1,155	926	1,201	1,197	1,285	1,848	9,833	983
Aruba	4,617	6,546	6,876	13,517	16,210	8,154	319	18,461	5,232	647	80,577	8,058
Azerbaijan, Republic of	1,147	2,944	5,634	26,816	7,061	8,410	7,860	7,576	12,815	14,736	94,999	9,500
Bahamas, The	1,098	1,904	1,330	1,622	2,123	1,592	2,197	1,760	1,733	2,368	17,727	1,773
Bahrain, Kingdom of	1,504	2,227	2,281	1,677	30	66	0	0	0	123	7,907	791
Bangladesh	3,347	4,262	3,378	4,098	6,443	6,127	5,409	5,921	7,225	9,666	55,877	5,588
Barbados	574	241	69	66	18	0	86	16	0	67	1,138	114
Belarus	3,593	4,261	5,600	8,325	13,314	8,357	7,911	12,622	12,929	11,284	88,197	8,820
Belize	89	98	91	185	170	141	95	141	146	135	1,291	129
Benin	117	34	0	0	0	0	343	453	465	81	1,493	149
Bhutan	.	.	0	101	0	0	0	44	173	0	318	40
Bolivia	628	363	96	103	0	443	809	0	1,551	2,273	6,267	627
Bosnia and Herzegovina	0	0	0	67	131	0	0	0	0	0	198	20
Botswana	1,144	948	939	1,687	1,464	2,027	1,230	1,430	1,568	1,242	13,680	1,368
Brazil	15,741	17,171	10,599	16,430	21,926	22,061	30,770	31,057	32,727	28,185	226,667	22,667
Brunei Darussalam	1,190	3,969	5,786	5,860	8,232	5,420	6,131	6,944	2,063	.	45,595	5,066
Bulgaria	2,513	3,007	2,431	4,641	5,358	883	681	1,595	1,660	1,998	24,768	2,477
Burkina Faso	52	56	172	247	395	404	490	531	1,061	856	4,262	426
Burundi	28	102	134	53	0	28	14	146	134	227	866	87
Cabo Verde	89	0	66	43	45	23	27	47	43	48	431	43
Cambodia	374	570	565	1,046	971	930	1,273	1,731	3,620	4,007	15,086	1,509
Cameroon	1,073	569	968	1,121	1,062	278	622	778	761	291	7,523	752
Central African Republic	6	12	0	1	0	34	34	33	43	0	162	16
Chad	570	552	738	989	981	1,132	1,146	1,568	1,548	1,532	10,756	1,076
Chile	2,815	4,688	5,016	4,394	7,954	3,399	5,895	5,755	5,355	9,725	54,995	5,500
China, P.R.: Mainland	81,517	82,537	88,381	107,435	104,980	138,864	172,367	133,788	223,767	258,640	1,392,276	139,228
Colombia	1,749	1,373	582	608	3,708	1,641	625	1,188	2,088	1,185	14,745	1,475
Comoros	15	16	24	20	36	30	29	110	164	96	539	54
Congo, Democratic Republic of	539	583	458	170	0	312	175	0	0	18	2,254	225
Congo, Republic of	3,054	668	2,155	1,723	2,809	619	1,784	721	804	894	15,230	1,523
Costa Rica	5,465	5,593	5,209	5,816	6,898	9,195	15,788	17,959	20,155	21,383	113,459	11,346
Cote d'Ivoire	2,656	3,904	2,731	3,429	2,437	1,241	1,767	1,064	2,198	1,917	23,344	2,334
Croatia	2,813	3,099	3,770	4,111	5,118	3,903	2,338	3,572	3,477	2,354	34,556	3,456
Djibouti	223	276	356	385	366	337	486	478	424	413	3,745	375
Dominica	0	0	0	0	0	0	4	13	0	0	17	2
Dominican Republic	1,265	797	978	865	1,524	1,150	2,344	1,351	2,060	2,243	14,578	1,458
Ecuador	3,346	2,684	1,371	1,523	3,028	3,331	3,818	2,328	2,589	1,948	25,966	2,597

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Egypt	3,236	5,102	4,541	4,817	6,113	0	2,145	5,246	5,007	3,619	39,827	3,983
El Salvador	1,817	1,806	1,681	1,725	1,973	1,359	1,600	1,582	2,050	1,846	17,437	1,744
Equatorial Guinea	320	172	458	947	1,968	2,869	2,851	3,140	4,570	4,455	21,750	2,175
Eritrea	.	57	37	21	.	.	.	.	.	.	115	38
Ethiopia	376	785	1,152	1,491	1,823	2,999	5,618	4,249	3,973	3,371	25,835	2,583
Fiji	236	277	418	239	391	342	270	201	209	166	2,748	275
Gabon	578	439	0	0	0	108	382	143	1,489	0	3,140	314
Gambia, The	40	53	30	72	64	40	134	218	120	127	898	90
Georgia	1,583	1,374	1,769	1,566	1,921	1,415	1,227	1,479	1,422	1,190	14,945	1,495
Ghana	0	0	0	37	374	1,342	721	691	190	659	4,013	401
Grenada	26	41	28	54	58	48	59	68	74	89	544	54
Guatemala	2,769	3,177	1,821	1,526	2,105	1,393	1,990	1,833	2,506	2,672	21,793	2,179
Guinea	422	255	422	633	251	0	413	393	24	446	3,258	326
Guinea-Bissau	37	24	13	193	7	48	68	132	78	19	620	62
Guyana	139	192	173	226	95	359	579	311	454	318	2,847	285
Haiti	0	41	120	95	137	201	61	104	29	512	1,299	130
Honduras	4,465	4,328	4,639	4,787	4,806	4,034	4,761	4,776	4,760	5,579	46,935	4,694
Hungary	5,743	5,170	4,503	2,593	6,681	4,916	5,510	8,457	6,294	7,193	57,062	5,706
India	19,447	20,253	27,791	34,513	47,221	29,247	70,337	85,584	92,879	83,014	510,286	51,029
Indonesia	18,466	13,290	15,995	18,354	27,237	20,547	14,646	18,292	19,248	14,633	180,710	18,071
Iran, Islamic Republic of	819	3,076	2,784	15,173	10,987	5,752	3,247	20,481	1,904	0	64,223	6,422
Iraq	0	0	0	3,660	19,316	16,321	21,115	14,177	14,422	15,994	105,005	10,501
Jamaica	603	1,007	483	273	1,638	915	348	415	368	308	6,358	636
Jordan	875	1,325	964	918	1,187	1,291	1,632	1,769	1,901	3,359	15,223	1,522
Kazakhstan	8,951	12,205	16,113	20,794	26,562	11,693	11,236	17,176	18,143	24,529	167,401	16,740
Kenya	82	234	0	258	0	0	0	0	0	255	829	83
Kiribati	20	0	3	3	0	0	5	0	0	19	50	5
Kosovo, Republic of	0	0	0	0	0	0	0	0	0	0	0	0
Kuwait	46	782	938	5,116	10,049	752	0	4,807	1,473	4,508	28,471	2,847
Kyrgyz Republic	69	0	0	476	0	27	150	288	0	0	1,010	101
Lao People's Democratic Republic	6	0	516	930	595	702	478	819	1,009	1,584	6,638	664
Lebanon	499	1,488	2,960	6,605	2,475	3,690	149	1,906	142	0	19,915	1,991
Lesotho	236	248	186	420	438	624	294	353	355	255	3,409	341
Liberia	908	986	1,576	1,905	678	1,332	560	411	757	547	9,659	966
Libya	0	1,450	0	0	1,753	0	2,137	0	3,485	3,008	11,833	1,183
Macedonia, FYR	381	494	305	597	928	496	459	834	432	235	5,162	516
Madagascar	755	412	1,719	179	654	185	246	364	374	184	5,072	507
Malawi	160	470	405	442	1,022	851	766	1,054	503	824	6,496	650
Malaysia	26,591	35,255	36,554	36,525	40,779	34,416	62,154	50,211	47,804	48,251	418,542	41,854
Maldives	68	35	72	49	55	38	62	136	228	345	1,089	109
Mali	128	168	227	187	969	322	945	591	352	800	4,688	469
Mauritania	.	.	.	0	0	0	0	.	108	292	400	67

Appendix Table 3. Illicit Financial Flows from Developing Countries (HMN + GER) (cont)
(in millions of U.S. dollars, nominal)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Mauritius	303	404	359	462	756	450	719	651	1,100	891	6,093	609
Mexico	34,239	35,352	40,421	46,443	51,505	38,438	67,450	63,299	73,709	77,583	528,439	52,844
Moldova	855	690	697	855	1,157	633	784	1,268	1,131	1,007	9,079	908
Mongolia	0	81	14	212	774	0	0	76	195	125	1,478	148
Montenegro	980	928	263	380	0	0	0	15	0	0	2,566	257
Morocco	3,002	5,505	3,281	4,126	5,406	3,692	3,493	4,056	4,519	3,934	41,015	4,102
Mozambique	0	0	362	103	0	23	640	44	994	260	2,426	243
Myanmar	633	604	626	336	1,362	1,010	2,132	137	0	0	6,840	684
Namibia	657	678	787	1,610	1,573	2,392	1,673	1,344	1,947	1,264	13,924	1,392
Nepal	414	503	678	544	854	899	1,521	262	0	0	5,674	567
Nicaragua	1,737	1,834	2,490	2,552	2,493	2,562	2,870	4,119	4,771	4,846	30,273	3,027
Niger	86	122	0	102	98	0	561	198	261	143	1,572	157
Nigeria	1,680	17,867	19,160	19,335	24,192	26,377	19,376	18,321	4,998	26,735	178,040	17,804
Oman	2,263	1,717	3,338	4,236	5,804	3,602	2,759	5,584	6,338	8,209	43,850	4,385
Pakistan	0	202	0	0	51	0	729	0	405	529	1,917	192
Panama	1,177	1,816	1,680	1,918	2,463	2,613	2,622	1,767	2,377	2,604	21,038	2,104
Papua New Guinea	93	59	15	34	184	479	471	1,834	1,081	474	4,724	472
Paraguay	3,588	4,313	4,514	2,461	4,563	2,879	2,653	3,828	4,585	4,116	37,501	3,750
Peru	4,062	1,687	2,909	2,474	3,117	4,163	4,722	6,441	6,249	7,013	42,838	4,284
Philippines	9,192	11,620	9,970	7,910	6,878	8,594	8,874	10,541	8,733	7,938	90,250	9,025
Poland	4,926	2,051	651	3,876	12,960	10,430	13,503	15,105	9,721	16,793	90,017	9,002
Qatar	1,829	3,943	5,670	2,814	4,265	4,529	5,719	5,810	7,545	5,005	47,129	4,713
Romania	3,223	3,673	4,524	5,284	4,872	2,712	1,958	2,462	2,544	3,613	34,866	3,487
Russian Federation	46,064	53,322	66,333	81,237	107,756	125,062	136,622	183,501	129,545	120,331	1,049,772	104,977
Rwanda	208	36	136	177	145	285	430	526	607	1,039	3,589	359
Samoa	82	324	116	144	156	103	129	142	109	149	1,454	145
Sao Tome and Principe	0	0	9	10	37	14	10	25	41	31	178	18
Saudi Arabia	0	1,836	913	1,032	3,347	3,803	2,830	3,591	4,478	6,938	28,766	2,877
Senegal	318	1,109	490	693	1,440	606	588	764	997	1,029	8,034	803
Serbia, Republic of	9,776	6,433	3,861	3,156	2,921	2,984	3,005	3,213	2,571	2,910	40,830	4,083
Seychelles	82	75	4	0	0	0	107	80	110	0	458	46
Sierra Leone	152	94	309	861	45	0	1,915	1,791	0	413	5,580	558
Solomon Islands	76	88	103	136	171	90	157	179	202	167	1,369	137
Somalia	.	.	.	.	.	.	.	.	.	0	0	0
South Africa	12,137	13,599	12,864	27,292	22,539	29,589	24,613	23,028	26,138	17,421	209,219	20,922
Sri Lanka	1,487	1,389	1,554	1,890	1,655	1,435	2,634	4,602	1,567	1,753	19,967	1,997

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
St. Kitts and Nevis	6	0	0	7	0	14	26	0	0	0	53	5
St. Lucia	62	14	0	0	8	14	0	0	0	23	121	12
St. Vincent and the Grenadines	14	20	14	0	0	0	0	0	5	0	53	5
Sudan	0	96	56	2,177	395	1,655	1,410	4,173	2,622	531	13,115	1,311
Suriname	543	557	734	764	940	729	947	673	831	882	7,598	760
Swaziland	499	492	638	1,364	542	659	394	439	494	295	5,817	582
Syrian Arab Republic	13,080	297	1,488	1,255	1,153	2,251	2,008	6,854	8,639	10,642	47,667	4,767
Tajikistan	186	128	265	337	18	0	0	0	0	0	934	93
Tanzania	112	839	36	58	390	308	1,355	606	793	323	4,820	482
Thailand	7,113	11,920	11,429	10,348	20,486	14,687	24,100	27,442	31,271	32,971	191,768	19,177
Timor-Leste, Dem. Rep. of	.	.	3	9	7	0	0	37	88	43	188	23
Togo	251	952	1,690	2,883	4,514	3,809	1,173	4,089	1,451	1,479	22,293	2,229
Tonga	50	21	12	9	21	6	48	1	0	0	169	17
Trinidad and Tobago	2,077	2,635	2,473	2,728	1,165	2,851	3,382	5,834	7,070	6,449	36,663	3,666
Tunisia	1,126	978	1,336	1,676	2,330	2,052	1,726	1,630	1,995	1,993	16,842	1,684
Turkey	9,677	12,393	11,050	17,237	18,435	11,431	13,365	16,900	17,524	26,487	154,500	15,450
Turkmenistan	0	0	0	0	178	.	.	.	.	.	178	36
Uganda	550	829	466	701	1,012	1,446	1,143	27	612	363	7,149	715
Ukraine	4,380	5,626	5,381	7,175	16,922	10,574	13,843	17,949	21,001	13,911	116,762	11,676
United Arab Emirates	0	0	0	0	0	0	0	0	0	0	0	0
Uruguay	466	671	281	768	396	715	2,081	1,219	1,445	1,515	9,558	956
Uzbekistan	.	.	.	.	.	.	.	.	.	.	.	.
Vanuatu	178	168	170	286	442	131	171	201	297	203	2,247	225
Venezuela, Republica Bolivariana de	19,601	25,467	10,546	18,349	7,154	9,549	7,863	10,037	6,207	9,162	123,936	12,394
Vietnam	4,034	4,665	4,964	5,473	7,633	13,054	8,358	11,976	14,940	17,837	92,935	9,293
Yemen, Republic of	0	0	0	458	1,910	0	0	344	231	125	3,068	307
Zambia	1,824	2,106	2,641	3,355	2,603	1,983	2,683	3,712	4,236	3,709	28,853	2,885
Zimbabwe	306	354	1,792	97	0	214	0	0	0	0	2,763	276
Sub-Saharan Africa	**32,550**	**51,874**	**56,351**	**77,012**	**78,599**	**85,002**	**78,038**	**74,281**	**66,678**	**74,593**	**674,977**	**67,498**
Asia	**174,612**	**191,888**	**209,112**	**236,485**	**277,530**	**277,124**	**381,729**	**361,101**	**456,709**	**481,988**	**3,048,278**	**304,828**
Developing Europe	**107,277**	**118,404**	**133,758**	**190,551**	**233,753**	**204,852**	**221,845**	**295,463**	**242,530**	**250,437**	**1,998,870**	**199,887**
MENA+AP	**29,920**	**31,007**	**33,324**	**57,426**	**80,315**	**51,926**	**52,992**	**81,093**	**68,227**	**70,266**	**556,496**	**55,650**
Western Hemisphere	**120,910**	**131,414**	**110,979**	**137,672**	**157,761**	**128,123**	**172,027**	**195,806**	**201,761**	**212,846**	**1,569,299**	**156,930**
All Developing Countries	**465,269**	**524,588**	**543,524**	**699,145**	**827,959**	**747,026**	**906,631**	**1,007,744**	**1,035,904**	**1,090,130**	**7,847,921**	**784,792**

Appendix Table 4. Trade Misinvoicing Outflows (GER)
(in millions of U.S. dollars, nominal)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Afghanistan, Islamic Republic of	667	505	159	0	0	0	0	0	0	0	1,331	133
Albania	13	92	107	220	272	0	190	255	36	18	1,201	120
Algeria	751	0	297	0	0	0	0	0	0	0	1,048	105
Angola	0	0	0	0	0	0	0	0	0	0	0	0
Antigua and Barbuda	.	.	.	.	.	.	.	.	.	.	.	.
Argentina	6,116	4,992	3,747	5,391	9,586	4,179	4,656	5,266	7,458	11,171	62,561	6,256
Armenia, Republic of	215	351	371	806	1,113	823	1,045	1,161	1,285	1,547	8,717	872
Aruba	4,617	6,546	6,876	13,517	16,201	8,035	319	18,459	5,230	642	80,441	8,044
Azerbaijan, Republic of	1,093	2,860	5,374	26,444	6,227	6,954	6,885	7,576	10,895	12,847	87,154	8,715
Bahamas, The	1,098	1,694	1,330	1,622	2,123	1,532	1,910	1,760	1,733	2,368	17,171	1,717
Bahrain, Kingdom of	1,504	2,227	2,281	1,677	0	0	0	0	0	0	7,688	769
Bangladesh	3,347	3,494	2,734	3,342	6,126	5,430	5,008	4,750	6,546	8,355	49,132	4,913
Barbados	574	241	69	66	11	0	22	16	0	67	1,066	107
Belarus	3,593	4,261	5,314	8,325	13,120	8,357	7,911	12,622	12,929	10,348	86,781	8,678
Belize	86	90	84	147	159	137	95	134	142	135	1,208	121
Benin	107	34	0	0	0	0	343	453	465	81	1,482	148
Bhutan	.	.	.	.	.	.	.	.	.	.	.	.
Bolivia	0	0	0	0	0	0	0	0	757	321	1,078	108
Bosnia and Herzegovina	.	.	.	.	.	.	.	.	.	.	.	.
Botswana	880	948	939	1,687	1,464	1,468	1,230	1,430	1,568	1,242	12,857	1,286
Brazil	14,305	17,171	10,599	14,021	21,926	22,061	28,315	31,057	31,138	28,185	218,778	21,878
Brunei Darussalam	.	.	.	.	.	.	.	.	.	.	.	.
Bulgaria	2,513	1,789	1,446	1,589	1,130	883	681	1,595	1,660	1,521	14,807	1,481
Burkina Faso	52	53	163	247	395	404	490	531	1,061	856	4,250	425
Burundi	0	28	134	15	0	14	11	146	134	225	705	70
Cabo Verde	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	374	524	565	1,046	971	930	1,273	1,634	3,460	3,860	14,636	1,464
Cameroon	1,073	569	959	1,121	954	244	539	749	755	250	7,213	721
Central African Republic	6	12	0	1	0	34	34	33	43	0	162	16
Chad	506	430	738	989	860	1,132	1,146	1,568	1,548	1,532	10,448	1,045
Chile	2,545	3,364	3,490	3,944	7,954	3,399	5,039	5,175	5,355	8,587	48,853	4,885
China, P.R.: Mainland	81,517	82,537	88,381	107,435	104,980	97,481	119,431	120,023	136,693	181,009	1,119,486	111,949
Colombia	1,749	1,373	582	608	3,237	1,226	0	1,188	1,560	1,185	12,707	1,271
Comoros	15	16	24	20	21	30	29	110	164	96	525	52
Congo, Democratic Republic of	539	539	441	0	0	312	175	0	0	0	2,005	201
Congo, Republic of	2,962	668	2,155	1,524	2,635	614	1,784	721	804	894	14,761	1,476
Costa Rica	5,441	5,593	5,209	5,816	6,850	9,195	15,537	17,498	20,155	20,898	112,191	11,219
Cote d'Ivoire	2,656	3,866	2,693	3,429	2,393	1,204	1,742	1,020	2,122	1,917	23,042	2,304
Croatia	1,640	1,787	2,052	2,478	2,977	2,410	1,511	2,065	3,035	1,180	21,133	2,113
Djibouti	213	232	302	303	366	302	363	439	424	413	3,357	336
Dominica	0	0	0	0	0	0	0	0	0	0	0	0
Dominican Republic	284	376	844	865	1,524	987	1,237	1,351	1,953	1,994	11,415	1,142
Ecuador	3,346	2,684	1,371	1,523	2,876	3,074	3,818	2,328	2,589	1,948	25,557	2,556

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Egypt	3,110	2,671	4,541	4,817	3,217	0	0	2,389	2,848	2,302	25,896	2,590
El Salvador	1,817	1,357	1,197	1,725	1,973	1,359	1,600	1,236	1,704	1,846	15,813	1,581
Equatorial Guinea	320	172	355	918	1,968	2,869	2,851	3,140	3,232	3,259	19,084	1,908
Eritrea	.	.	.	.	.	.	.	.	.	.	.	.
Ethiopia	52	785	1,152	1,333	1,823	2,498	2,542	2,446	3,712	3,371	19,712	1,971
Fiji	236	159	254	239	391	204	255	100	86	166	2,090	209
Gabon	258	0	0	0	0	108	382	143	1,489	0	2,381	238
Gambia, The	27	20	23	30	33	40	47	119	109	104	552	55
Georgia	1,583	1,374	1,709	1,530	1,861	1,415	1,194	1,479	1,369	1,162	14,676	1,468
Ghana	0	0	0	0	0	0	0	0	0	0	0	0
Grenada	26	38	28	54	58	48	59	68	74	89	542	54
Guatemala	2,769	3,177	1,821	1,526	2,105	1,116	1,644	1,609	2,052	2,106	19,926	1,993
Guinea	422	255	422	633	251	0	413	375	24	446	3,239	324
Guinea-Bissau	33	18	12	193	2	37	65	116	63	19	559	56
Guyana	96	124	89	189	0	192	228	267	312	318	1,814	181
Haiti	0	41	120	95	124	33	61	30	29	39	572	57
Honduras	4,465	4,137	4,337	4,467	4,806	3,958	4,623	4,776	4,577	5,163	45,310	4,531
Hungary	3,658	2,241	1,899	2,593	3,149	3,699	4,178	4,987	6,294	5,562	38,261	3,826
India	19,447	19,712	27,791	34,513	47,221	28,967	68,367	83,643	92,879	83,014	505,555	50,555
Indonesia	15,360	13,111	15,995	16,986	26,999	17,572	13,319	14,828	18,972	14,447	167,590	16,759
Iran, Islamic Republic of	0	0	0	0	0	0	0	0	0	0	0	0
Iraq	.	.	.	.	10,071	10,205	13,165	10,908	10,306	8,294	62,949	10,492
Jamaica	570	1,006	483	273	1,258	915	348	415	368	308	5,943	594
Jordan	875	1,325	758	918	1,187	1,291	1,632	1,444	1,411	3,359	14,201	1,420
Kazakhstan	7,910	10,394	12,978	17,856	20,849	10,943	11,236	13,267	13,674	18,704	137,810	13,781
Kenya	13	0	0	0	0	0	0	0	0	255	268	27
Kiribati	.	.	.	.	.	.	.	.	.	.	.	.
Kosovo, Republic of	.	.	.	.	.	.	.	.	.	.	.	.
Kuwait	46	782	938	385	0	752	0	188	1,473	832	5,394	539
Kyrgyz Republic	0	0	0	0	0	0	0	0	0	0	0	0
Lao People's Democratic Republic	6	0	113	195	186	179	75	497	599	1,106	2,956	296
Lebanon	499	878	143	608	729	648	149	0	142	0	3,796	380
Lesotho	236	248	186	420	310	363	294	353	350	255	3,014	301
Liberia	851	946	1,478	1,829	635	1,044	454	384	416	251	8,288	829
Libya	0	0	0	0	0	0	0	0	950	328	1,278	128
Macedonia, FYR	381	488	305	545	897	496	459	834	432	235	5,072	507
Madagascar	720	412	1,598	73	637	166	85	265	173	0	4,129	413
Malawi	160	470	405	442	828	685	766	885	503	824	5,967	597
Malaysia	26,591	28,622	29,094	31,324	32,187	29,175	40,810	40,246	37,867	45,648	341,564	34,156
Maldives	68	35	72	49	55	38	62	69	178	345	972	97
Mali	102	144	189	187	969	248	945	537	331	763	4,416	442
Mauritania	.	.	.	.	.	.	.	.	.	.	.	.

Appendix Table 4. Trade Misinvoicing Outflows (GER) (cont)
(in millions of U.S. dollars, nominal)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Mauritius	303	404	359	462	756	450	719	651	730	891	5,723	572
Mexico	29,345	35,352	40,014	46,443	46,266	34,743	44,787	52,708	55,806	60,227	445,693	44,569
Moldova	855	690	697	855	1,157	633	784	1,268	1,131	1,007	9,079	908
Mongolia	0	0	0	0	0	0	0	0	0	0	0	0
Montenegro	980	928	238	163	0	0	0	15	0	0	2,324	232
Morocco	2,711	5,097	2,758	4,126	4,991	3,171	3,334	3,812	4,290	3,934	38,224	3,822
Mozambique	0	0	362	103	0	0	640	0	994	235	2,334	233
Myanmar	492	0	0	0	0	0	0	0	0	0	492	49
Namibia	657	678	787	1,610	1,573	2,148	1,392	1,302	1,433	1,098	12,677	1,268
Nepal	414	503	678	544	747	899	1,346	262	0	0	5,392	539
Nicaragua	1,334	1,769	2,213	2,361	2,493	2,552	2,870	3,500	3,772	4,519	27,384	2,738
Niger	86	122	0	84	41	0	561	190	231	128	1,443	144
Nigeria	1,680	523	2,008	4,936	3,410	0	4,231	13,056	0	0	29,844	2,984
Oman	1,512	857	3,329	4,236	5,804	2,461	2,759	5,028	5,605	7,686	39,278	3,928
Pakistan	0	0	0	0	0	0	0	0	0	0	0	0
Panama	1,177	1,456	1,680	1,444	2,463	2,613	2,622	1,767	2,377	2,552	20,152	2,015
Papua New Guinea	93	0	0	34	111	479	380	909	1,081	474	3,561	356
Paraguay	3,588	3,955	4,514	1,956	4,523	2,879	2,653	3,828	4,274	4,116	36,286	3,629
Peru	4,062	1,687	2,370	2,199	2,862	3,481	4,722	5,547	6,249	7,013	40,191	4,019
Philippines	8,903	11,620	8,357	7,910	6,878	5,580	5,359	10,541	4,177	3,736	73,061	7,306
Poland	4,926	1,246	651	578	804	407	3,041	4,612	5,115	5,006	26,387	2,639
Qatar	1,829	3,943	5,670	2,814	4,265	4,529	5,719	5,810	7,545	5,005	47,129	4,713
Romania	3,223	3,673	4,524	4,036	2,890	1,048	1,885	2,462	2,544	3,199	29,484	2,948
Russian Federation	40,569	48,318	66,333	71,505	104,617	118,663	127,488	174,849	119,174	110,061	981,577	98,158
Rwanda	208	36	136	176	126	285	416	526	607	1,039	3,555	355
Samoa	79	324	116	142	137	103	115	115	109	149	1,388	139
Sao Tome and Principe	0	0	0	0	5	4	0	18	36	31	95	9
Saudi Arabia	0	1,836	913	1,032	3,347	3,803	2,830	3,591	4,478	6,938	28,766	2,877
Senegal	318	1,109	490	693	1,440	606	584	764	997	1,029	8,030	803
Serbia, Republic of	9,776	6,433	3,861	3,156	2,710	2,910	3,005	3,213	2,571	2,910	40,545	4,055
Seychelles	82	75	4	0	0	0	107	80	8	0	356	36
Sierra Leone	39	32	282	846	18	0	1,915	1,791	0	413	5,335	534
Solomon Islands	69	88	93	136	169	90	152	152	132	167	1,248	125
Somalia	.	.	.	.	.	.	.	.	.	.	.	.
South Africa	12,137	13,599	12,477	27,292	22,539	23,094	22,566	23,015	24,985	17,421	199,125	19,912
Sri Lanka	1,303	1,324	1,458	1,735	1,655	1,435	1,766	4,284	1,182	1,159	17,302	1,730

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
St. Kitts and Nevis	0	0	0	0	0	0	0	0	0	0	0	0
St. Lucia	62	0	0	0	0	0	0	0	0	0	62	6
St. Vincent and the Grenadines	0	0	0	0	0	0	0	0	0	0	0	0
Sudan	0	96	56	1,030	395	1,493	416	4,077	2,622	531	10,717	1,072
Suriname	543	557	734	764	840	709	779	596	418	544	6,483	648
Swaziland	499	451	403	668	506	604	394	439	464	295	4,723	472
Syrian Arab Republic	13,080	160	0	627	0	1,702	2,008	6,854	8,639	10,642	43,711	4,371
Tajikistan	154	51	0	0	0	0	0	0	0	0	205	20
Tanzania	0	0	36	58	0	60	60	289	236	0	739	74
Thailand	6,403	11,920	11,429	10,348	20,486	14,687	20,263	27,442	25,004	32,971	180,955	18,095
Timor-Leste, Dem. Rep. of	.	.	.	.	.	.	.	.	.	.	.	.
Togo	251	952	1,690	2,883	4,514	3,809	1,173	4,085	1,451	1,479	22,289	2,229
Tonga	12	9	12	9	21	6	5	1	0	0	76	8
Trinidad and Tobago	1,834	1,738	2,129	2,382	1,165	2,851	3,382	4,765	7,070	6,449	33,764	3,376
Tunisia	992	950	1,299	1,639	2,330	2,052	1,726	1,630	1,995	1,993	16,607	1,661
Turkey	9,677	12,393	10,823	17,237	18,435	11,431	13,365	16,900	17,524	26,487	154,273	15,427
Turkmenistan	.	.	.	.	.	.	.	.	.	.	.	.
Uganda	255	374	455	679	1,012	1,159	1,143	27	612	363	6,079	608
Ukraine	4,380	5,626	5,381	6,695	16,922	10,574	13,843	17,949	21,001	13,271	115,642	11,564
United Arab Emirates	0	0	0	0	0	0	0	0	0	0	0	0
Uruguay	466	497	129	489	396	715	1,395	908	1,039	1,515	7,549	755
Uzbekistan	.	.	.	.	.	.	.	.	.	.	0	.
Vanuatu	153	152	166	281	442	93	164	187	297	203	2,139	214
Venezuela, Republica Bolivariana de	17,098	11,878	8,335	17,540	6,222	6,326	4,908	6,393	3,024	5,801	87,526	8,753
Vietnam	3,121	4,269	4,964	4,896	6,588	4,032	4,668	6,499	9,470	9,074	57,581	5,758
Yemen, Republic of	0	0	0	458	1,910	0	0	0	231	125	2,725	272
Zambia	1,824	1,996	2,430	3,290	2,590	1,974	2,656	3,681	4,203	3,680	28,324	2,832
Zimbabwe	306	354	1,792	97	0	111	0	0	0	0	2,660	266
Sub-Saharan Africa	**30,634**	**31,334**	**37,777**	**58,966**	**54,706**	**47,818**	**54,924**	**65,437**	**56,053**	**44,741**	**482,390**	**48,239**
Asia	**167,987**	**178,402**	**192,272**	**221,163**	**256,351**	**207,384**	**282,819**	**316,181**	**338,733**	**385,884**	**2,547,175**	**254,718**
Developing Europe	**97,139**	**104,993**	**124,064**	**166,611**	**199,131**	**181,646**	**198,701**	**267,108**	**220,670**	**215,065**	**1,775,129**	**177,513**
MENA+AP	**27,789**	**21,558**	**23,444**	**24,671**	**38,613**	**32,409**	**34,101**	**46,172**	**52,959**	**52,382**	**354,097**	**35,410**
Western Hemisphere	**109,415**	**112,892**	**104,395**	**131,427**	**150,000**	**118,315**	**137,628**	**172,646**	**171,214**	**180,106**	**1,388,037**	**138,804**
All Developing Countries	**432,962**	**449,178**	**481,951**	**602,838**	**698,802**	**587,573**	**708,172**	**867,544**	**839,630**	**878,178**	**6,546,829**	**654,683**

Appendix Table 5. Illicit Hot Money Outflows (HMN)
(in millions of U.S. dollars, nominal)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Afghanistan, Islamic Republic of	.	.	0	0	0	0	0	0	0	0	0	0
Albania	0	0	0	0	33	0	0	0	0	0	33	3
Algeria	.	203	1,962	1,301	3,378	2,131	1,406	187	2,586	1,043	14,198	1,578
Angola	0	574	0	1,641	1,236	0	0	17	326	55	3,850	385
Antigua and Barbuda	16	7	7	4	0	1	0	13	0	0	49	5
Argentina	0	0	0	0	0	0	608	4,194	3,176	6,000	13,979	1,398
Armenia, Republic of	188	163	128	0	41	102	156	37	0	301	1,116	112
Aruba	0	0	0	0	9	119	0	1	2	6	136	14
Azerbaijan, Republic of	54	85	260	372	834	1,456	975	0	1,919	1,889	7,845	784
Bahamas, The	0	210	0	0	0	60	286	0	0	0	556	56
Bahrain, Kingdom of	0	0	0	0	30	66	0	0	0	123	219	22
Bangladesh	0	768	643	756	317	697	402	1,171	679	1,311	6,745	675
Barbados	0	0	0	0	7	0	65	0	0	0	71	7
Belarus	0	0	286	0	194	0	0	0	0	935	1,416	142
Belize	3	8	7	38	11	4	0	7	4	0	83	8
Benin	10	0	0	0	0	0	0	0	0	0	10	1
Bhutan	.	.	0	101	0	0	0	44	173	0	318	40
Bolivia	628	363	96	103	0	443	809	0	795	1,952	5,189	519
Bosnia and Herzegovina	0	0	0	67	131	0	0	0	0	0	198	20
Botswana	264	0	0	0	0	559	0	0	0	0	823	82
Brazil	1,436	0	0	2,409	0	0	2,455	0	1,589	0	7,888	789
Brunei Darussalam	1,190	3,969	5,786	5,860	8,232	5,420	6,131	6,944	2,063	.	45,595	5,066
Bulgaria	0	1,218	986	3,052	4,229	0	0	0	0	477	9,961	996
Burkina Faso	0	2	9	0	0	0	0	.	.	.	11	2
Burundi	28	75	0	38	0	15	3	0	0	3	161	16
Cabo Verde	89	0	66	43	45	23	27	47	43	48	431	43
Cambodia	0	46	0	0	0	0	0	97	160	148	451	45
Cameroon	0	0	9	0	108	35	83	29	6	41	311	31
Central African Republic	0	0	.	.	.	.	.	.	.	.	0	0
Chad	64	122	.	.	121	0	0	.	.	.	307	61
Chile	270	1,324	1,526	450	0	0	855	580	0	1,138	6,143	614
China, P.R.: Mainland	0	0	0	0	0	41,383	52,936	13,766	87,074	77,631	272,790	27,279
Colombia	0	0	0	0	471	415	625	0	527	0	2,038	204
Comoros	0	0	0	0	14	0	0	0	0	.	14	2
Congo, Democratic Republic of	0	44	17	170	0	0	0	0	0	18	249	25
Congo, Republic of	92	0	0	199	174	4	0	.	.	.	469	67
Costa Rica	24	0	0	0	48	0	251	461	0	484	1,268	127
Cote d'Ivoire	0	38	38	0	44	37	25	45	77	0	303	30
Croatia	1,174	1,312	1,719	1,633	2,141	1,492	828	1,507	442	1,174	13,423	1,342
Djibouti	10	45	54	82	0	35	123	39	0	0	388	39
Dominica	0	0	0	0	0	0	4	13	0	0	17	2

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Dominican Republic	981	422	133	0	0	163	1,107	0	106	249	3,163	316
Ecuador	0	0	0	0	152	257	0	0	0	0	409	41
Egypt	126	2,431	0	0	2,896	0	2,145	2,857	2,160	1,317	13,931	1,393
El Salvador	0	449	485	0	0	0	0	345	345	0	1,624	162
Equatorial Guinea	0	0	102	29	0	0	0	0	1,338	1,196	2,666	267
Eritrea	.	57	37	21	.	.	.	.	.	.	115	38
Ethiopia	324	0	0	158	0	501	3,075	1,803	261	0	6,123	612
Fiji	0	118	164	0	0	138	15	101	123	0	658	66
Gabon	320	439	.	.	.	.	.	.	.	.	759	380
Gambia, The	13	34	7	42	31	0	87	98	11	23	345	35
Georgia	0	0	59	36	60	0	33	0	53	28	269	27
Ghana	0	0	0	37	374	1,342	721	691	190	659	4,013	401
Grenada	0	2	0	0	0	0	0	0	0	0	2	0
Guatemala	0	0	0	0	0	277	346	224	454	566	1,867	187
Guinea	0	0	0	0	0	0	0	18	0	0	18	2
Guinea-Bissau	4	5	1	0	5	11	3	16	15	0	61	6
Guyana	43	68	84	37	95	168	352	43	143	0	1,033	103
Haiti	0	0	0	0	13	168	0	73	0	473	727	73
Honduras	0	191	301	319	0	76	138	0	183	416	1,626	163
Hungary	2,085	2,929	2,604	0	3,531	1,218	1,332	3,470	0	1,631	18,801	1,880
India	0	541	0	0	0	279	1,970	1,941	0	0	4,731	473
Indonesia	3,106	179	0	1,368	238	2,975	1,327	3,465	275	186	13,120	1,312
Iran, Islamic Republic of	819	3,076	2,784	15,173	10,987	5,752	3,247	20,481	1,904	.	64,223	7,136
Iraq	0	0	0	3,660	9,245	6,116	7,951	3,269	4,116	7,700	42,056	4,206
Jamaica	33	2	0	0	381	0	0	0	0	0	415	42
Jordan	0	0	206	0	0	0	0	325	491	0	1,022	102
Kazakhstan	1,042	1,811	3,134	2,938	5,713	750	0	3,909	4,469	5,826	29,592	2,959
Kenya	69	234	0	258	0	0	0	0	0	0	560	56
Kiribati	20	0	3	3	0	0	5	0	0	19	50	5
Kosovo, Republic of	0	0	0	0	0	0	0	0	0	0	0	0
Kuwait	0	0	0	4,732	10,049	0	0	4,619	0	3,676	23,077	2,308
Kyrgyz Republic	69	0	0	476	0	27	150	288	0	0	1,010	101
Lao People's Democratic Republic	0	0	403	735	409	523	402	322	410	478	3,681	368
Lebanon	0	610	2,818	5,997	1,746	3,042	0	1,906	0	0	16,119	1,612
Lesotho	0	0	0	0	128	261	0	0	5	0	394	39
Liberia	58	39	98	76	43	288	106	27	341	296	1,372	137
Libya	0	1,450	0	0	1,753	0	2,137	0	2,535	2,680	10,554	1,055
Macedonia, FYR	0	6	0	52	31	0	1	0	0	0	90	9
Madagascar	35	0	120	106	17	19	161	99	201	184	943	94
Malawi	0	0	0	0	194	165	0	169	0	.	528	59
Malaysia	0	6,633	7,460	5,201	8,592	5,242	21,345	9,965	9,937	2,603	76,978	7,698
Maldives	0	0	0	0	0	0	0	67	49	0	116	12

Appendix Table 5. Illicit Hot Money Outflows (HMN)
(in millions of U.S. dollars, nominal)

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
Mali	26	24	37	0	0	74	0	53	20	36	272	27
Mauritania	.	.	.	0	0	0	0	.	108	292	400	67
Mauritius	0	0	0	0	0	0	0	0	370	0	370	37
Mexico	4,894	0	407	0	5,239	3,695	22,662	10,591	17,903	17,356	82,746	8,275
Moldova	0	0	0	0	0	0	0	0	0	0	0	0
Mongolia	0	81	14	212	774	0	0	76	195	125	1,478	148
Montenegro	.	.	25	217	0	0	0	0	0	0	242	30
Morocco	291	408	523	0	414	521	160	244	229	0	2,792	279
Mozambique	0	0	0	0	0	23	0	44	0	25	92	9
Myanmar	141	604	626	336	1,362	1,010	2,132	137	0	0	6,348	635
Namibia	0	0	0	0	0	244	281	42	514	166	1,248	125
Nepal	0	0	0	0	107	0	175	0	0	0	282	28
Nicaragua	403	65	277	191	0	10	0	618	999	327	2,890	289
Niger	0	0	0	18	57	0	0	9	30	15	129	13
Nigeria	0	17,345	17,151	14,399	20,783	26,377	15,144	5,265	4,998	26,735	148,197	14,820
Oman	751	859	9	0	0	1,141	0	555	733	523	4,572	457
Pakistan	0	202	0	0	51	0	729	0	405	529	1,917	192
Panama	0	359	0	474	0	0	0	0	0	52	885	89
Papua New Guinea	0	59	15	0	73	0	91	925	0	0	1,163	116
Paraguay	0	358	0	505	40	0	0	0	311	0	1,214	121
Peru	0	0	540	275	255	682	0	894	0	0	2,646	265
Philippines	289	0	1,613	0	0	3,013	3,515	0	4,556	4,202	17,189	1,719
Poland	0	805	0	3,298	12,156	10,023	10,462	10,493	4,606	11,787	63,630	6,363
Qatar	.	.	.	.	.	.	.	.	.	.	.	.
Romania	0	0	0	1,248	1,982	1,664	73	0	0	414	5,381	538
Russian Federation	5,494	5,004	0	9,733	3,139	6,399	9,133	8,652	10,371	10,270	68,196	6,820
Rwanda	0	0	0	1	20	0	14	0	0	0	34	3
Samoa	3	0	0	2	19	0	15	27	0	0	66	7
Sao Tome and Principe	0	0	9	10	32	10	10	7	6	0	83	8
Saudi Arabia	.	.	.	.	.	.	.	.	.	.	.	.
Senegal	0	0	0	0	0	0	4	0	.	0	4	0
Serbia, Republic of	0	.	.	0	211	74	0	0	0	0	285	36
Seychelles	0	0	0	0	0	0	0	0	102	0	102	10
Sierra Leone	113	62	28	15	27	0	0	0	0	0	245	24
Solomon Islands	7	0	10	0	3	0	5	27	69	0	121	12
Somalia	.	.	.	.	.	.	.	.	.	0	0	0
South Africa	0	0	387	0	0	6,495	2,047	13	1,152	0	10,094	1,009
Sri Lanka	184	65	96	155	0	0	867	317	385	594	2,665	266

Country	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Cumulative	Average
St. Kitts and Nevis	6	0	0	7	0	14	26	0	0	0	53	5
St. Lucia	0	14	0	0	8	14	0	0	0	23	59	6
St. Vincent and the Grenadines	14	20	14	0	0	0	0	0	5	0	53	5
Sudan	0	0	0	1,146	0	162	994	95	0	0	2,398	240
Suriname	0	0	0	0	100	19	168	77	413	338	1,115	112
Swaziland	0	41	235	696	36	55	0	0	30	0	1,094	109
Syrian Arab Republic	0	137	1,488	628	1,153	550	0	.	.	.	3,956	565
Tajikistan	32	77	265	337	18	0	0	0	0	0	730	73
Tanzania	112	839	0	0	390	248	1,296	317	557	323	4,081	408
Thailand	710	0	0	0	0	0	3,837	0	6,267	0	10,813	1,081
Timor-Leste, Dem. Rep. of	.	.	3	9	7	0	0	37	88	43	188	23
Togo	0	0	0	0	0	0	0	3	0	.	3	0
Tonga	38	12	0	0	0	0	43	0	0	.	93	10
Trinidad and Tobago	243	897	344	345	0	0	0	1,069	.	.	2,898	362
Tunisia	134	27	37	37	0	0	0	0	0	0	235	24
Turkey	0	0	227	0	0	0	0	0	0	0	227	23
Turkmenistan	0	0	0	0	178	.	.	.	.	.	178	36
Uganda	295	455	11	22	0	287	0	0	0	0	1,070	107
Ukraine	0	0	0	480	0	0	0	0	0	640	1,120	112
United Arab Emirates	.	.	.	.	.	.	.	.	.	.	.	.
Uruguay	0	174	152	279	0	0	687	311	406	0	2,009	201
Uzbekistan	.	.	.	.	.	.	.	.	.	.	.	.
Vanuatu	24	17	4	5	0	37	7	14	0	0	109	11
Venezuela, Republica Bolivariana de	2,503	13,589	2,211	809	932	3,223	2,955	3,644	3,183	3,361	36,410	3,641
Vietnam	913	396	0	578	1,045	9,022	3,690	5,477	5,470	8,763	35,354	3,535
Yemen, Republic of	0	0	0	0	0	0	0	344	0	0	344	34
Zambia	0	111	211	66	14	8	27	31	32	29	529	53
Zimbabwe	0	0	.	.	.	103	0	0	0	.	103	17
Sub-Saharan Africa	**1,916**	**20,540**	**18,574**	**18,046**	**23,892**	**37,184**	**23,114**	**8,843**	**10,625**	**29,852**	**192,587**	**19,259**
Asia	**6,625**	**13,486**	**16,840**	**15,322**	**21,179**	**69,740**	**98,910**	**44,920**	**117,975**	**96,104**	**501,102**	**50,110**
Developing Europe	**10,138**	**13,411**	**9,694**	**23,940**	**34,622**	**23,205**	**23,143**	**28,355**	**21,861**	**35,372**	**223,742**	**22,374**
MENA+AP	**2,132**	**9,449**	**9,881**	**32,755**	**41,702**	**19,517**	**18,892**	**34,921**	**15,268**	**17,884**	**202,399**	**20,240**
Western Hemisphere	**11,496**	**18,523**	**6,584**	**6,245**	**7,761**	**9,808**	**34,399**	**23,160**	**30,546**	**32,740**	**181,262**	**18,126**
All Developing Countries	**32,307**	**75,409**	**61,573**	**96,308**	**129,158**	**159,454**	**198,458**	**140,199**	**196,275**	**211,952**	**1,301,092**	**130,109**

Appendix Table 6. The Components of Trade Misinvoicing, 2004-2013

(in millions of U.S. dollars, nominal, or in percent)

Country	Import Misinvoicing		Export Misinvoicing		Total Trade Misinvoicing Inflows (b+c)	Total Trade Misinvoicing Outflows (a+d)	Gross Trade Misinvoicing (a+b+c+d)
	Over-Invoicing (a)	Under-Invoicing (b)	Over-Invoicing (c)	Under-Invoicing (d)			
Afghanistan, Islamic Republic of	1,331	8,114	1,213	0	9,327	1,331	10,658
Albania	1,201	5	684	0	690	1,201	1,891
Algeria	0	21,780	59,696	1,048	81,476	1,048	82,524
Angola	.	.	41,146	0	41,146	0	41,146
Antigua and Barbuda	.	.	.	.	.	.	.
Argentina	24,904	75,003	40,170	37,657	115,173	62,561	177,734
Armenia, Republic of	8,341	2,976	2,649	376	5,625	8,717	14,342
Aruba	906	2,377	50	79,535	2,427	80,441	82,868
Azerbaijan, Republic of	6,355	27,463	53,242	80,799	80,704	87,154	167,859
Bahamas, The	0	76,828	0	17,171	76,828	17,171	93,999
Bahrain, Kingdom of	7,688	12,379	70,702	0	83,081	7,688	90,769
Bangladesh	18,209	38,931	3,962	30,922	42,893	49,132	92,025
Barbados	656	1,788	220	411	2,008	1,066	3,074
Belarus	63,341	61,971	190,091	23,440	252,063	86,781	338,843
Belize	0	2,198	0	1,208	2,198	1,208	3,406
Benin	0	36,739	1,735	1,482	38,474	1,482	39,957
Bhutan	.	.	.	.	.	.	.
Bolivia	1,078	3,041	13,496	0	16,537	1,078	17,615
Bosnia and Herzegovina	.	.	.	.	.	.	.
Botswana	3,587	3,992	3,467	9,270	7,459	12,857	20,316
Brazil	73,782	211,179	124,071	144,996	335,250	218,778	554,028
Brunei Darussalam	.	.	.	.	.	.	.
Bulgaria	7,936	20,819	27,334	6,871	48,153	14,807	62,960
Burkina Faso	4,240	0	6,101	10	6,101	4,250	10,352
Burundi	681	36	176	24	212	705	917
Cabo Verde	0	608	.	.	608	0	608
Cambodia	3,700	25,678	13,915	10,936	39,593	14,636	54,228
Cameroon	1,828	1,068	0	5,385	1,068	7,213	8,281
Central African Republic	27	1,033	132	135	1,165	162	1,327
Chad	10,448	0	10,434	0	10,434	10,448	20,883
Chile	20,052	64,162	44,241	28,801	108,403	48,853	157,256
China, P.R.: Mainland	332,458	3,513,294	1,169,294	787,028	4,682,588	1,119,486	5,802,074
Colombia	7,045	1,746	17,861	5,663	19,606	12,707	32,314
Comoros	283	71	0	242	71	525	595
Congo, Democratic Republic of	2,005	1,885	7,374	0	9,259	2,005	11,264
Congo, Republic of	2,487	2,955	1,016	12,273	3,971	14,761	18,732
Costa Rica	9,829	7,439	3,987	102,362	11,427	112,191	123,618
Cote d'Ivoire	13,242	9,012	19,277	9,800	28,290	23,042	51,331
Croatia	17,498	25,746	25,676	3,635	51,422	21,133	72,556
Djibouti	0	17,326	0	3,357	17,326	3,357	20,683
Dominica	0	2,276	.	.	2,276	0	2,276

Country	Import Misinvoicing		Export Misinvoicing		Total Trade Misinvoicing Inflows (b+c)	Total Trade Misinvoicing Outflows (a+d)	Gross Trade Misinvoicing (a+b+c+d)
	Over-Invoicing (a)	Under-Invoicing (b)	Over-Invoicing (c)	Under-Invoicing (d)			
Dominican Republic	5,887	9,125	6,869	5,529	15,994	11,415	27,409
Ecuador	5,799	17,984	9,629	19,758	27,613	25,557	53,170
Egypt	0	109,287	1,149	25,896	110,436	25,896	136,332
El Salvador	13,045	4,476	2,872	2,768	7,348	15,813	23,161
Equatorial Guinea	19,084	0	3,230	0	3,230	19,084	22,314
Eritrea	.	.	.	.	.	.	.
Ethiopia	19,709	0	6,482	3	6,482	19,712	26,194
Fiji	1,837	0	583	253	583	2,090	2,674
Gabon	633	2,227	11,115	1,747	13,342	2,381	15,722
Gambia, The	0	4,794	0	552	4,794	552	5,347
Georgia	3,643	15,471	1,502	11,033	16,972	14,676	31,649
Ghana	0	24,064	28,107	0	52,171	0	52,171
Grenada	18	533	0	524	533	542	1,075
Guatemala	11,209	2,751	1,684	8,716	4,435	19,926	24,360
Guinea	74	7,532	50	3,166	7,582	3,239	10,821
Guinea-Bissau	0	566	0	559	566	559	1,125
Guyana	428	473	0	1,386	473	1,814	2,287
Haiti	0	8,450	1	572	8,451	572	9,024
Honduras	1,327	38,449	559	43,983	39,007	45,310	84,317
Hungary	16,311	81,287	141,005	21,950	222,292	38,261	260,553
India	382,960	407,805	183,092	122,594	590,897	505,555	1,096,452
Indonesia	42,596	393,879	29,472	124,993	423,351	167,590	590,941
Iran, Islamic Republic of	0	163,660	143,710	0	307,370	0	307,370
Iraq	62,949	0	47,496	0	47,496	62,949	110,445
Jamaica	4,238	2,638	3,383	1,704	6,020	5,943	11,963
Jordan	5,043	49,778	4,275	9,158	54,053	14,201	68,254
Kazakhstan	45,744	30,497	306,608	92,066	337,105	137,810	474,915
Kenya	0	14,121	2,193	268	16,314	268	16,582
Kiribati	.	.	.	.	.	.	.
Kosovo, Republic of	.	.	.	.	.	.	.
Kuwait	5,394	421	119,580	0	120,001	5,394	125,396
Kyrgyz Republic	0	37,038	4,935	0	41,972	0	41,972
Lao People's Democratic Republic	0	14,673	14	2,956	14,687	2,956	17,643
Lebanon	3,235	330	4,435	561	4,766	3,796	8,562
Lesotho	1,395	1,537	571	1,619	2,108	3,014	5,122
Liberia	0	101,636	0	8,288	101,636	8,288	109,924
Libya	1,278	45,039	29,211	0	74,250	1,278	75,528
Macedonia, FYR	4,768	39	4,171	305	4,210	5,072	9,283
Madagascar	3,205	751	520	925	1,271	4,129	5,400
Malawi	5,844	0	1,180	123	1,180	5,967	7,148
Malaysia	111,684	395,635	36,230	229,881	431,865	341,564	773,429
Maldives	473	201	0	499	201	972	1,173

Appendix Table 6. The Components of Trade Misinvoicing, 2004-2013 (cont)
(in millions of U.S. dollars, nominal, or in percent)

Country	Import Misinvoicing		Export Misinvoicing		Total Trade Misinvoicing Inflows (b+c)	Total Trade Misinvoicing Outflows (a+d)	Gross Trade Misinvoicing (a+b+c+d)
	Over-Invoicing (a)	Under-Invoicing (b)	Over-Invoicing (c)	Under-Invoicing (d)			
Mali	4,416	0	15,268	0	15,268	4,416	19,684
Mauritania	.	.	.	.	.	.	.
Mauritius	4,521	6,858	2,343	1,202	9,202	5,723	14,925
Mexico	269,649	221,197	352,673	176,044	573,870	445,693	1,019,563
Moldova	4,247	7,193	2,019	4,831	9,212	9,079	18,291
Mongolia	0	3,501	3,824	0	7,324	0	7,324
Montenegro	2,324	741	.	.	741	2,324	3,065
Morocco	16,016	51,014	17,170	22,207	68,183	38,224	106,407
Mozambique	1,172	4,383	1,878	1,162	6,260	2,334	8,594
Myanmar	0	34,615	11,643	492	46,258	492	46,749
Namibia	3,666	4,094	3,157	9,011	7,250	12,677	19,927
Nepal	5,392	1,945	1,234	0	3,179	5,392	8,571
Nicaragua	3,122	11,839	321	24,261	12,161	27,384	39,545
Niger	1,356	208	4,317	86	4,524	1,443	5,967
Nigeria	24,038	24,387	45,155	5,806	69,542	29,844	99,386
Oman	5,420	27,271	18,928	33,858	46,199	39,278	85,477
Pakistan	0	47,513	20,795	0	68,308	0	68,308
Panama	14	626,744	1,272	20,138	628,016	20,152	648,168
Papua New Guinea	238	8,963	371	3,323	9,335	3,561	12,896
Paraguay	20,279	63,226	10,837	16,007	74,062	36,286	110,349
Peru	25,488	24,319	62,481	14,704	86,799	40,191	126,991
Philippines	5,757	176,831	37,841	67,304	214,671	73,061	287,732
Poland	9,520	265,678	218,927	16,867	484,606	26,387	510,993
Qatar	14,694	33,373	66,576	32,435	99,949	47,129	147,078
Romania	15,425	45,891	77,502	14,059	123,393	29,484	152,877
Russian Federation	101,997	647,399	1,034,465	879,580	1,681,864	981,577	2,663,441
Rwanda	3,347	40	1,052	208	1,092	3,555	4,647
Samoa	324	1,165	109	1,064	1,274	1,388	2,662
Sao Tome and Principe	95	55	.	.	55	95	149
Saudi Arabia	28,766	2,963	238,866	0	241,829	28,766	270,596
Senegal	2,556	25,149	5,616	5,474	30,765	8,030	38,795
Serbia, Republic of	40,545	0	.	.	0	40,545	40,545
Seychelles	204	369	563	152	933	356	1,288
Sierra Leone	5,227	1,844	618	108	2,462	5,335	7,797
Solomon Islands	37	249	0	1,212	249	1,248	1,497
Somalia	.	.	.	.	.	.	.
South Africa	63,046	68,180	50,386	136,079	118,566	199,125	317,691
Sri Lanka	13,453	12,882	7,733	3,849	20,615	17,302	37,917

Country	Import Misinvoicing		Export Misinvoicing		Total Trade Misinvoicing Inflows (b+c)	Total Trade Misinvoicing Outflows (a+d)	Gross Trade Misinvoicing (a+b+c+d)
	Over-Invoicing (a)	Under-Invoicing (b)	Over-Invoicing (c)	Under-Invoicing (d)			
St. Kitts and Nevis	0	1,819	.	.	1,819	0	1,819
St. Lucia	62	16,353	.	.	16,353	62	16,415
St. Vincent and the Grenadines	0	3,079	.	.	3,079	0	3,079
Sudan	3,729	9,562	3,296	6,988	12,858	10,717	23,576
Suriname	0	7,622	0	6,483	7,622	6,483	14,106
Swaziland	1,326	1,402	1,178	3,397	2,581	4,723	7,304
Syrian Arab Republic	13,080	70,536	16,589	30,631	87,125	43,711	130,836
Tajikistan	205	2,424	3,340	0	5,765	205	5,969
Tanzania	739	1,927	9,413	0	11,339	739	12,079
Thailand	116,727	186,990	147,292	64,228	334,282	180,955	515,236
Timor-Leste, Dem. Rep. of	.	.	.	.	.	.	.
Togo	1,680	21,777	2,195	20,609	23,971	22,289	46,261
Tonga	8	160	4	68	164	76	240
Trinidad and Tobago	6,022	119	0	27,742	119	33,764	33,883
Tunisia	7,186	33,780	17,819	9,421	51,599	16,607	68,206
Turkey	93,035	268,052	77,449	61,238	345,501	154,273	499,774
Turkmenistan	.	.	.	.	.	.	.
Uganda	6,079	0	7,724	0	7,724	6,079	13,804
Ukraine	42,095	130,328	61,300	73,548	191,628	115,642	307,270
United Arab Emirates	0	113,025	694,031	0	807,055	0	807,055
Uruguay	0	20,334	0	7,549	20,334	7,549	27,882
Uzbekistan	.	.	.	.	.	.	.
Vanuatu	0	2,390	0	2,139	2,390	2,139	4,529
Venezuela, Republica Bolivariana de	16,187	91,474	60,428	71,339	151,901	87,526	239,427
Vietnam	22,497	141,047	26,521	35,084	167,568	57,581	225,149
Yemen, Republic of	0	10,498	3,681	2,725	14,179	2,725	16,904
Zambia	16,311	2,693	50,264	12,013	52,957	28,324	81,281
Zimbabwe	1,197	1,553	7,081	1,463	8,634	2,660	11,293
Sub-Saharan Africa	**229,748**	**379,545**	**352,515**	**252,643**	**732,060**	**482,390**	**1,214,450**
Asia	**1,058,350**	**5,360,834**	**1,673,133**	**1,488,825**	**7,033,967**	**2,547,175**	**9,581,142**
Developing Europe	**484,531**	**1,671,018**	**2,232,900**	**1,290,598**	**3,903,917**	**1,775,129**	**5,679,046**
MENA+AP	**175,810**	**827,648**	**1,579,218**	**178,287**	**2,406,866**	**354,097**	**2,760,963**
Western Hemisphere	**521,026**	**1,621,039**	**757,104**	**867,011**	**2,378,143**	**1,388,037**	**3,766,181**
All Developing Countries	**2,469,465**	**9,860,084**	**6,594,869**	**4,077,364**	**16,454,953**	**6,546,829**	**23,001,782**

Appendix Table 7. Comparison of Trade Misinvoicing Outflows for Newly Included Bilateral Reporters

(in millions of nominal U.S. dollars, in number of years, or in percent)

Country	Previous Report		This Report			Change
	2004-2012 Average, GER (millions USD)	Years with Zero Detected Outflows	2004-2012 Average, GER (millions USD)	Years with Zero Detected Outflows	Average Trade Misinvoicing to GDP Ratio	Percent Change in Average GER Outflows
Argentina	$568.4	4	$5,710.1	0	1.7%	904.7%
Azerbaijan, Republic of	$1,857.1	4	$8,256.3	0	22.7%	344.6%
Bangladesh	$803.2	1	$4,530.8	0	4.6%	464.1%
Botswana	$795.0	0	$1,290.6	0	10.9%	62.3%
Cambodia	$0.0	9	$1,197.3	0	12.7%	.
Costa Rica	$10,020.9	0	$10,143.7	0	32.9%	1.2%
Croatia	$73.6	6	$2,217.0	0	3.7%	2914.1%
Dominican Republic	$789.0	2	$1,046.8	0	2.3%	32.7%
Ecuador	$1,794.2	0	$2,623.3	0	4.5%	46.2%
El Salvador	$641.9	1	$1,551.9	0	7.8%	141.8%
Georgia	$401.1	1	$1,501.5	0	15.3%	274.3%
Guatemala	$1,009.6	0	$1,979.9	0	5.7%	96.1%
Honduras	$3,202.3	0	$4,460.7	0	34.1%	39.3%
Hungary	$0.0	9	$3,633.2	0	3.0%	.
Jamaica	$316.9	1	$626.1	0	4.8%	97.6%
Jordan	$114.0	4	$1,204.6	0	6.5%	957.1%
Kazakhstan	$0.0	9	$13,234.0	0	12.4%	.
Lesotho	$226.3	0	$306.7	0	16.7%	35.5%
Mauritius	$118.0	3	$536.9	0	6.3%	354.9%
Mexico	$45,511.2	0	$42,829.5	0	4.3%	-5.9%
Moldova	$232.8	2	$896.9	0	18.6%	285.2%
Morocco	$738.7	2	$3,810.0	0	4.8%	415.8%
Namibia	$625.1	0	$1,286.5	0	13.2%	105.8%
Nicaragua	$1,351.0	0	$2,540.5	0	32.2%	88.1%
Oman	$263.9	7	$3,510.2	0	7.4%	1230.4%
Panama	$5,026.1	0	$1,955.5	0	8.5%	-61.1%
Peru	$666.1	3	$3,686.5	0	3.2%	453.4%
Poland	$46.8	8	$2,375.7	0	0.6%	4979.2%
Qatar	$692.6	3	$4,680.4	0	5.0%	575.8%
Romania	$532.9	7	$2,920.6	0	2.1%	448.0%
Senegal	$0.9	8	$777.9	0	6.7%	89628.0%
South Africa	$13,152.9	0	$20,189.3	0	6.2%	53.5%
Sri Lanka	$0.0	9	$1,793.7	0	4.4%	.
Swaziland	$279.6	0	$492.0	0	14.9%	75.9%
Tunisia	$0.0	9	$1,623.8	0	4.0%	.
Turkey	$3,708.3	1	$14,198.4	0	2.4%	282.9%
Ukraine	$455.9	5	$11,374.6	0	8.0%	2395.1%
Venezuela, Republica Bolivariana de	$324.7	6	$9,080.6	0	4.9%	2696.4%
Vietnam	$161.6	8	$5,389.6	0	5.9%	3234.7%

Note: Previous Report refers to "Illicit Financial Flows from Developing Countries: 2003-2012"

Methodological Appendix

GFI treats measurable illicit flows as stemming from two sources: trade misinvoicing and other unrecorded flows. The methods used to estimate IFFs from those sources are described in turn.

A. Estimating Trade Misinvoicing: The Gross Excluding Reversals (GER) Method

The "gross excluding reversals" (GER) method explicit acknowledges the fact that it is fallacious to net out illicit flows in both directions as economists have been doing to arrive at estimates of capital flight. This is because flows are illicit in both directions so that a net of the two would be akin to the concept of net crime. Hence, the GER approach only considers outflows due to trade misinvoicing, that is, export under-invoicing and import over-invoicing. Underlying this approach, as first enumerated by Bhagwati,[33] is the simple fact that country A's imports from country B are also country B's exports to country A. In a world without trade misinvoicing or statistical errors in compilation, which the IMF has found to be small, the trade data reported by country A and country B should match once they are adjusted to reflect the cost of insurance and freight. In fact, persistent and significant discrepancies abound for trade reported by developing countries in comparison with the corresponding "mirror" trade data reported by advanced countries. GFI uses one of two procedures to calculate trade misinvoicing, depending on the availability of bilateral trade data.

1. Trade Misinvoicing: Bilateral Advanced Economies Calculation

When bilateral trade data are available for countries, GFI calculates trade misinvoicing for a particular developing country by comparing that country's reported exports to and imports from advanced countries with the corresponding reports by the advanced countries of imports from and exports to the developing country.[34] Once the bilateral trade data are adjusted to reflect a common valuation basis,[35] discrepancies between the developing country's reported trade volumes and the advanced countries' reported volumes can be evaluated for each time period under study.

At this point, GFI calculates two discrepancies, one for imports, the other for exports and each discrepancy for a particular country in a particular year could be positive or negative.

1) In any given year, the ***import discrepancy*** equals the difference between the developing country's reported import volumes from advanced countries and the advanced countries' reported export volumes to that developing country. If the import discrepancy for that country is positive, the country is said to be ***over-invoicing imports*** in that year (an ***illicit outflow***); if the import discrepancy for that country is negative, the country is said to be ***under-invoicing imports*** that year (an ***illicit inflow***).

[33] Bhagwati, "Underinvoicing of Imports."
[34] "Advanced countries" are defined and listed by the IMF in its International Financial Statistics (IFS).
[35] First, a developing country's import c.i.f. data are converted to an f.o.b. basis using a freight and insurance factor of 10 percent (r in the equations below), a standard factor used by the IMF's Direction of Trade Statistics (DOTS).International Monetary Fund, "Direction of Trade Statistics (DOTS)," [Online Database].

2) In any given year, the ***export discrepancy*** equals the difference between the advanced countries' reported import volumes from a particular developing country and that country's reported export volumes to the advanced countries. If the export discrepancy for that country is positive, the country is said to be ***under-invoicing exports*** in that year (an ***illicit outflow***); if the export discrepancy for that country is negative, the country is said to be ***over-invoicing exports*** that year (an ***illicit inflow***).

At this point, the discrepancies reflect trade misinvoicing for developing countries vis-à-vis the advanced countries only. Next, for each developing country in the sample, the trade discrepancies are marked up to reflect trade vis-à-vis the rest of the world by applying a ratio equal to that country's trade volume with the world relative to its trade volume with advanced countries only.

Finally, the bilateral trade misinvoicing estimates are adjusted for entrepôt trade through Hong Kong, using re-export statistics from the Hong Kong Census and Statistics Department.[36] The reasoning for this adjustment is laid out in a previous GFI report.[37] Because disaggregated re-exports data are not available for other major trade entrepôts (e.g. Singapore, Dubai), we are not able to carry out a similar adjustment for trade passing through them. The adjustment is necessary to avoid over-estimating trade misinvoicing due to the fact that exports and imports passing through such entrepôts would be double-counted when both source country and its entrepôt (e.g., China and Hong Kong) report the data to the IMF and total world trade includes exports and imports from both.

The advantage of using the bilateral advanced economies calculation described above stems from the fact that the trade reports from the advanced economies (typically compiled by large state-funded data agencies and published on a timely basis) can be regarded as an accurate and consistent benchmark for trade estimates. Sufficient bilateral trade data are available to allow GFI to calculate trade misinvoicing estimates in this way for 56 developing countries (marked with one or two asterisks in Appendix Table 1). In 2013, those 56 countries represented over 80 percent of total developing world trade.[38]

2. Estimating Trade Misinvoicing: The World Aggregate Method

For a variety of reasons, many developing countries do not report their trade volumes with advanced economies separately from their total trade. In those cases, the trade discrepancies are calculated in the same way as described above except that world trade reports must be used in place of the (presumably more accurate) advanced country trade reports used in the previous calculation. Other than that, the data are adjusted in the same way as described above for the

[36] The Government of Hong Kong Special Administrative Region, Census and Statistics Department, "Re-Export Trade Data, 2000-2014," 2015.
[37] Kar and LeBlanc, *IFFs: 2002-2011,* 47–49.
[38] However, there is considerable regional variation in the sample represented here. For example, while developing countries reporting bilateral trade with advanced countries in 2013 accounted for the overwhelming majority of total trade in Asia, Developing Europe and the Western Hemisphere, reporting countries in Sub-Saharan Africa accounted for only about 45 percent of that region's total trade in 2013.

bilateral advanced countries calculation. And the resulting estimates of trade misinvoicing carry the same conceptual interpretation.

This approach is used only when the lack of more accurate data make it necessary. While this method dramatically expands the number of countries for which trade misinvoicing calculations can be made (especially in regions like Sub-Saharan Africa), the world aggregation approach has drawbacks. For one thing, it treats developing country partner trade data at par in terms of accuracy and reliability as advanced country partner trade data. To the extent that premise is inappropriate, the calculation is vulnerable to additional measurement error.

Second, and more importantly, the estimates yielded by this method display erratic swings in magnitude, seemingly random drops to zero, and, in general, appear to understate the degree of trade misinvoicing actually taking place. That tendency toward underestimation of misinvoicing reflects an unavoidable aggregation problem. For example, a particular country may substantially under-invoice its imports from Germany while, at the same time, it over-invoices its imports from the United Kingdom to a similarly significant degree. In that case, the substantial illicit outflows from this country to Germany would be largely offset by the illicit inflows from the United Kingdom. Without the availability bilateral trade data between that country and Germany and the United Kingdom respectively, a considerable chunk of illicit flows (i.e., outflows to Germany plus inflows from the United Kingdom) will simply avoid detection. While unavoidable, this aggregation problem is an issue whenever the more accurate bilateral trade data are not available; that is the case for nearly two-thirds of the developing countries in the sample (see Appendix Table 8). This consideration represents yet another reason that GFI's estimates of illicit financial flows should be regarded as conservative.

Appendix Table 8. Regional Breakdown of Comprehensive Bilateral Reporters
(in number of countries or in percent)

	Sub-Saharan Africa	Asia	Developing Europe	MENA+AP	Western Hemisphere	All Developing Countries
Bilateral Reporters	10	10	14	5	17	56
Total Countries	45	25	24	22	33	149
Percent Reporting Bilaterally	22%	40%	58%	23%	52%	38%
Percent of IFFs from Bilateral Reporters	49%	94%	94%	30%	91%	85%
Percent of GDP from Bilateral Reporters	37%	96%	93%	12%	89%	80%

Appendix Table 8 indicates that Developing Europe has the greatest number of bilateral reporters in terms of percentage, followed by the Western Hemisphere, Asia, MENA+AP, and Sub-Saharan Africa. Other than MENA+AP and Sub-Saharan Africa, the percentage of trade misinvoicing from bilateral reporters[39] in each region tends to generally mirror the percentage of GDP from

[39] Calculated as (IFFs from Bilateral Reporters in Region)/(Total IFFs from Region)

those bilateral reporters.[40] This indicates that if data availability allowed GFI to make the bilateral advanced economy calculation on more African and Middle Eastern states, the misinvoicing estimates of those regions would most likely be higher.

B. Estimating Unrecorded Illicit Flows: The Hot Money Narrow (HMN) Method

A second source of illicit flows is reflected in leakages from the balance of payments system. GFI uses the HMN method to identify only illicit—not merely unrecorded—outflows from developing countries.

These estimates are based on the Net Errors and Omissions (NEO) term for developing countries in the IMF's Balance of Payments Statistics[41] (BOPS) database. When there are missing values in the BOPS, GFI attempts to fill the gaps by using NEO data from various IMF country reports and the hard copy 2011 and 2012 Balance of Payments Yearbooks, converted at the appropriate exchange rate[42] as necessary. HMN values for Saudi Arabia, the United Arab Emirates, and Qatar are omitted due to potential overstatement owing to substantial sovereign wealth fund activity.[43]

HMN is essentially money that has disappeared from the economy. Examples of unrecorded and illicit financial flows out of the balance of payments would include wire transfers by certain banks and foreign exchange brokers that are not registered with the Central Bank or another regulatory agency.

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40 Calculated as (GDP from Bilateral Reporters in Region)/(GDP in Region)

41 International Monetary Fund, "Balance of Payments Statistics (BOPS)," [Online Database].

42 Period average exchange rate to U.S. dollars, using: International Monetary Fund, "International Financial Statistics."

43 Dev Kar and Sarah Freitas, *Illicit Financial Flows from Developing Countries: 2001-2010* (Washington, DC: Global Financial Integrity, 2012), 23–26, 76.

Glossary

2012 IFF Update:	GFI's 2012 annual report on illicit financial flows from the developing world, titled *Illicit Financial Flows from Developing Countries: 2001-2010*.
2013 IFF Update:	GFI's 2013 annual report on illicit financial flows from the developing world, titled *Illicit Financial Flows from Developing Countries: 2002-2011*.
2014 IFF Update:	GFI's 2014 annual report on illicit financial flows from the developing world, titled *Illicit Financial Flows from Developing Countries: 2003-2012*.
2015 IFF Update:	This report; GFI's 2015 annual report on illicit financial flows from the developing world; titled *Illicit Financial Flows from Developing Countries: 2004-2013*.
ATI:	Addis Tax Initiative.
BOPS:	Balance of Payment Statistics, an IMF database that measures the balance of payments between countries. The Net Errors and Omissions line is used to adjust for when the other components of the balance of payments to not sum to zero.
DOTS:	Direction of Trade Statistics, an IMF database with that measures annual bilateral trade in goods between any two reporting IMF-member countries.
EU:	European Union.
FATF:	Financial Action Task Force.
FDI:	Foreign Direct Investment.
FfD:	Financing for Development Conference.
G8:	Forum for the governments of eight leading advanced economies.
G20:	Group of 20 largest economies in the world.
GDP:	Gross Domestic Product.
GER:	Gross Excluding Reversals, a methodology used to measure IFFs enabled by trade misinvoicing, measured the IMF's Direction of Trade Statistics (DOTS) database in conjunction with the Fund's International Financial Statistics (IFS) database.
GFI:	Global Financial Integrity.
Goal 16:	Goal 16 of the Sustainable Development Goals.
Goal 16.4:	The fourth target of Goal 16, calling on countries to "by 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime."

HMN:	Hot Money Narrow, a methodology used to measure illicit financial flows recorded in the balance of payments. This is a "narrow" (i.e. conservative) measure, which is derived from the Net Errors and Omissions (NEOs) line in the International Monetary Fund's Balance of Payments Statistics (BOPS) database.
IFFs:	Illicit Financial Flows, illegal movements of money or capital from one country to another.
Net IFFs:	Illicit outflows less illicit inflows. GFI differs from academic literature, as this measure is not used in our analysis. GFI focuses solely on illicit outflows, and does not "net out" illicit inflows, as they tend to drive illicit outflows and the underground economy and do not contribute to tax revenue or formal production capacity.
IFS:	International Financial Statistics, an IMF database with a variety of financial statistics, including reporting IMF-member countries exports to and imports from the world as a whole.
Illicit Inflow:	The gross amount of money or capital entering a country illicitly.
Illicit Outflow:	The gross amount of money or capital exiting a country illicitly.
IMF:	International Monetary Fund.
MDGs:	Millennium Development Goals.
MENA+AP:	Middle East, North Africa, Afghanistan, and Pakistan.
NEO:	Net Errors and Omissions.
Nominal:	U.S. dollars not adjusted for inflation.
ODA:	Official Development Assistance. Often referred to as "foreign aid," this is development aid that flows into developing countries.
OECD:	Organization for Economic Cooperation and Development.
Real/Constant:	U.S. dollars adjusted for inflation, using 2010 as a base year.
Re-Exports:	Goods imported by, say, a trade entrepôt, and then quickly exported to their final destination.
SDGs:	Sustainable Development Goals.
TBML:	Trade-Based Money Laundering.
Trade Entrepôt:	A major trading zone and intermediary (e.g. Hong Kong, Singapore, Dubai).
UN:	United Nations.

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About

Founded in 2006, Global Financial Integrity (GFI) is a non-profit, Washington, DC-based research and advisory organization, which produces high-caliber analyses of illicit financial flows, advises developing country governments on effective policy solutions, and promotes pragmatic transparency measures in the international financial system as a means to global development and security.

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