Global Financial Integrity

Illicit Financial Flows to and from 148 Developing Countries: 2006-2015

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January 2019

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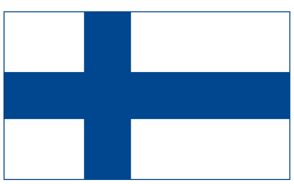
Global Financial Integrity wishes to thank the Government of Finland for supporting this project.



Executive Summary

This is the latest in a series of reports, issued on a roughly annual basis by Global Financial Integrity (GFI), which provides country-level estimates of the illicit flows of money into and out of 148 developing and emerging market nations as a result of their trade in goods with advanced economies, as classified by the International Monetary Fund.[1] Such flows—hereafter referred to as illicit financial flows (IFFs)—are estimated over the years from 2006 to 2015, the most recent ten year period for which comprehensive data are available. In addition to updating the estimated IFFs GFI has presented in the past, this report widens the scope of its research and uses a more detailed database published by the United Nations (UN) along with updated measures from the International Monetary Fund (IMF) data it has used previously. This report presents estimates of IFFs based on both data sets. GFI defines IFFs as "money that is illegally earned, used or moved and which crosses an international border." Currently, the World Bank, IMF, UN, and the OECD use a similar definition.

This study underscores the point that **trade-related IFFs appear to be both significant and persistent features of developing country trade** with advanced economies. As such, trade misinvoicing remains an obstacle to achieving sustainable and equitable growth in the developing world. **Highlights of our research for the year 2015 using the Direction of Trade Statistics dataset from the IMF show that:**

- **the top quintile (30) of countries, ranked by dollar value of illicit *outflows*, includes resource rich countries such as South Africa ($10.2 billion) and Nigeria ($8.3)** but also European countries including **Turkey ($8.4 billion), Hungary ($6.5 billion) and Poland ($3.1 billion)** as well as Latin American nations **Mexico ($42.9 billion), Brazil ($12.2 billion), Colombia ($7.4 billion) and Chile ($4.1 billion).** Asian states in the top 30 countries of this category include **Malaysia ($33.7 billion), India ($9.8 billion), Bangladesh ($5.9 billion) and the Philippines ($5.1 billion)**
- **the top quintile (30) of countries, ranked by illicit *outflows* as a percentage of total trade with advanced economies,** produces an entirely different group of countries including **Mozambique (48.1%), Malawi (44.1%), Zambia (43%), Honduras (39.7%), Namibia (38.7%) and Myanmar (30.8%)**
- **the list of top 30 countries ranked by dollar value of illicit *inflows*** (Note: illicit inflows are a type of resource curse in that a) their origin is unknown, b) inflows are invisible to governments, c) they are not taxed, and d) they often times fuel illegal activities such as drug trafficking) include a regionally diverse group including **Vietnam ($22.5 billion), Thailand ($20.9 billion), and Indonesia ($15.4 billion)** as well as Latin American nations **Panama ($18.3 billion) and Argentina ($4.8 billion).** Additional countries include **Kazakhstan ($16.5 billion), Belarus ($6.1 billion) and Morocco ($3.9 billion).**

1 International Monetary Fund (2011). Classifications of Countries Based on Their Level of Development: How it is Done and How it Could be Done, IMF Working Paper, February. Retrieved at: https://www.imf.org/external/pubs/ft/wp/2011/wp1131.pdf.

For DOTS-based estimates of illicit flows—in dollars and as a percentage of total trade with advanced economies—for countries which do not appear above see: Appendix Table III-1. DOTS-based Estimates of Potential Trade Misinvoicing by Country, 2015.

Highlights of our research for 2015 using the Comtrade dataset from the United Nations show that:

- **the top quintile (30) of countries, ranked by dollar value of illicit *outflows*, includes European nations Hungary ($7.6 billion), Romania ($5.1 billion) and Bulgaria ($1.8 billion),** as well as Latin American countries **Mexico ($31.5 billion), Brazil ($12 billion), Argentina ($2.7 billion) and Peru ($2.1 billion).** Asian nations included in the top 30 countries of this category include **Malaysia ($22.9 billion), Thailand ($16 billion), Indonesia ($9.6 billion) and Vietnam ($9.1 billion).** African nations among the top 30 include **South Africa ($5.9 billion), Algeria ($4.1 billion), and Tunisia ($1.8 billion)**
- **the top quintile (30) of countries, ranked by illicit *outflows* as a percentage of total trade with advanced economies**, produces a different set of countries including **Uganda (14.7%), Rwanda (13.7%), and Namibia (13.6%), as well as Costa Rica (12.5%), Colombia (12.1%) and Guatemala (11.9%)**
- **the list of top 30 countries ranked by dollar value of illicit *inflows*** include a regionally diverse group including **Poland ($32.3 billion), Romania ($6.8 billion), Indonesia ($10.1 billion) Bangladesh ($2.8 billion), Chile ($3.2 billion), Colombia ($2.9 billion), Morocco ($2.7 billion), and Tunisia $2.3 billion)**

For Comtrade-based estimates of illicit flows—in dollars and as a percentage of total trade with advanced economies—for countries which do not appear above see: Appendix Table III-2. Comtrade-based Estimates of Potential Trade Misinvoicing by Country, 2015.

Further, **the study finds that over the period between 2006 and 2015, IFFs accounted for over 20 percent of developing country trade, on average, with a nearly even split between outflows and inflows** (see Table X-1 and Figure X-1).

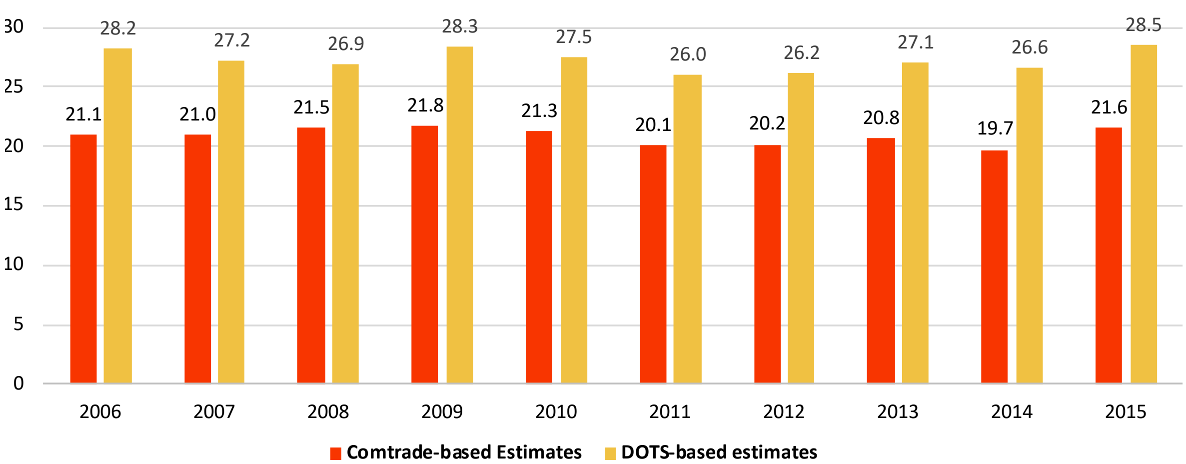
Table X-1. Estimated Potential Trade-Related Illicit Financial Flows, All Developing Economies, 2006-2015 (Percent of total developing country trade with advanced economies unless noted)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average, 2006-2015	2015 (Billions of US dollars)	
												IFFs	Total Trade
A. Total (outflows plus inflows)													
DOTS-based estimates	28.2	27.2	26.9	28.3	27.5	26.0	26.2	27.1	26.6	28.5	27.1	1,935	6,792
Comtrade-based estimates	21.1	21.0	21.5	21.8	21.3	20.1	20.2	20.8	19.7	21.6	20.8	1,128	5,213
B. Outflows													
DOTS-based estimates	14.1	13.5	13.2	14.5	13.3	11.6	11.5	11.2	10.9	11.9	12.4	807	6,792
Comtrade-based estimates	10.8	10.9	11.4	12.3	11.5	10.4	10.4	10.1	10.0	11.5	10.8	598	5,213
C. Inflows													
DOTS-based estimates	14.1	13.7	13.7	13.8	14.2	14.4	14.7	15.9	15.7	16.6	14.8	1,128	6,792
Comtrade-based estimates	10.3	10.1	10.1	9.5	9.9	9.8	9.8	10.6	9.7	10.2	10.0	530	5,213
Addendum item: Unrecorded BOP flows													
Outflows	1.2	1.2	1.5	2.8	2.5	1.4	1.8	1.7	1.7	3.1	1.9	342	11,155
Inflows	0.7	0.4	0.6	0.3	0.4	0.2	0.3	0.2	0.3	0.5	0.4	61	11,155

Source: GFI staff estimates using data from the International Monetary Fund's Direction of Trade Statistics (DOTS) and Balance of Payments (BOP) databases as well as the United Nations Comtrade database.

Note: Estimated potential trade-related illicit financial flows are defined as the sum of estimated potential trade misinvoicing and unrecorded BOP flows. Estimates of total trade with advanced economies were calculated as an average of the magnitude reported by each developing country and the magnitude reported by the country's advanced economy trade partners. Total trade is defined for any country as the sum of its merchandise imports (on an FOB basis) and exports. The trade totals recorded in the DOTS and Comtrade data need not match precisely as they are reported independently and can reflect differences in country and commodity trade coverage. For this reason, comparisons of dollar-denominated estimates from different databases as well as within each of the databases is not meaningful and are recorded here for illustrative purposes. Estimates of unrecorded BOP leakages are drawn from the IMF's BOP database and reflect an estimate of each country's total trade with advanced economies that differs yet again from the DOTS and Comtrade estimates. Those were incorporated directly using the reported propensities which, for the purpose of evaluating the dollar magnitudes of IFFs, are applied to the DOTS and Comtrade trade totals, respectively. Therefore, the dollar values reported for unrecorded BOP outflows and inflows do not directly enter the dollar values of IFFs reported for the DOTS and Comtrade estimates.

Figure X-1. Alternative Estimates of Potential Trade-Related Illicit Financial Flows, 2006-2015 (Percent of total developing country trade with advanced economies)



Source: GFI staff estimates using data from the International Monetary Fund.

Note: Total trade equals developing country imports from and exports to advanced countries, amounting to different magnitudes in the UN and DOTS databases.

As was the case in its past reports, GFI's updated estimates of trade-related illicit financial flows stem from two sources: (1) misinvoicing in merchandise trade, and (2) leakages in the balance of payments, labelled by the International Monetary Fund (IMF) as "net errors and omissions" in its Balance of Payments accounts. Of those two sources, our estimates indicate that **potential trade misinvoicing is the primary means for illicitly shifting funds between developing and advanced countries.** Over the ten-year time period of this study, **potential trade misinvoicing has amounted to between 19 and 24 percent of developing country trade, on average.** (see Table X-2 and Figure X-2).

Table X-2. Estimated Potential Trade Misinvoicing, All Developing Economies, 2006-2015

(Percent of total developing country trade with advanced economies unless noted)

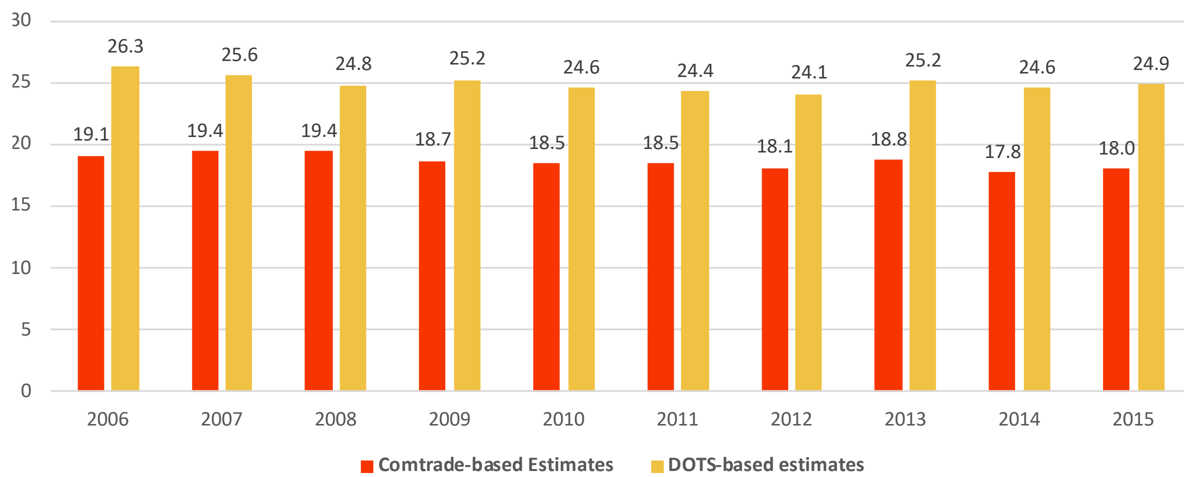
												2015 (Billions of US dollars)		
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average, 2006-2015	Potential Trade Misinvoicing	Total Trade	Average annual percent change since 2006
A. Total (outflows plus inflows)														
DOTS-based estimates	26.3	25.6	24.8	25.2	24.6	24.4	24.1	25.2	24.6	24.9	24.9	1,690	6,792	3.8
Comtrade-based estimates	19.1	19.4	19.4	18.7	18.5	18.5	18.1	18.8	17.8	18.0	18.6	940	5,213	3.4
B. Outflows														
DOTS-based estimates	12.9	12.3	11.6	11.7	10.8	10.2	9.7	9.5	9.2	8.8	10.5	599	6,792	0.1
Import over-invoicing	3.2	3.3	3.3	3.4	3.2	3.4	3.3	3.7	3.7	3.6	3.4	241	6,792	5.7
Export under-invoicing	9.7	9.0	8.4	8.3	7.6	6.8	6.4	5.8	5.5	5.3	7.1	358	6,792	-2.4
Comtrade-based estimates	9.5	9.7	9.8	9.5	9.0	9.0	8.6	8.4	8.3	8.4	9.0	438	5,213	2.6
Import over-invoicing	3.2	3.4	3.8	3.6	3.2	3.3	3.3	3.3	3.3	3.3	3.4	175	5,213	4.5
Export under-invoicing	6.3	6.3	6.0	5.9	5.9	5.7	5.3	5.1	5.0	5.1	5.6	264	5,213	1.6
C. Inflows														
DOTS-based estimates	13.4	13.3	13.2	13.5	13.8	14.2	14.4	15.7	15.4	16.1	14.4	1,091	6,792	6.5
Import over-invoicing	9.3	9.0	8.1	9.1	9.4	9.2	8.7	9.1	9.2	10.8	9.2	732	6,792	6.1
Export under-invoicing	4.1	4.3	5.1	4.4	4.5	5.0	5.8	6.6	6.2	5.3	5.3	359	6,792	7.5
Comtrade-based estimates	9.6	9.7	9.6	9.2	9.5	9.5	9.5	10.4	9.5	9.6	9.6	502	5,213	4.1
Import over-invoicing	4.6	4.8	4.6	4.5	4.5	4.3	4.3	4.4	3.9	4.1	4.4	214	5,213	2.9
Export under-invoicing	5.0	4.9	5.0	4.7	5.0	5.3	5.2	6.0	5.5	5.5	5.3	287	5,213	5.2

Source: GFI staff estimates using data from the International Monetary Fund's Direction of Trade Statistics (DOTS) and the United Nations Comtrade database.

Note: Estimates of total trade with advanced economies were calculated as an average of the magnitude reported by each developing country and the magnitude reported by the country's advanced economy trade partners. Total trade is defined for any country as the sum of its merchandise imports (on an FOB basis) and exports. The trade totals recorded in the DOTS and Comtrade data need not match precisely as they are reported independently and can reflect differences in country and commodity trade coverage. For this reason, comparisons of dollar-denominated estimates from different databases as well as within each of the databases is not meaningful and are recorded here for illustrative purposes.

Figure X-2. Alternative Estimates of Potential Trade Misinvoicing, 2006-2015

(Percent of total developing country trade with advanced economies)



Source: GFI staff estimates using data from the United Nations and the International Monetary Fund.

Note: Total trade equals developing country imports from and exports to advanced countries, amounting to different magnitudes in the UN and DOTS databases.

Trade misinvoicing 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.

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 GFI believes estimates of illicit flows from developing countries by economists are likely to be under- rather than over-stated.

By their nature, IFFs are typically intended to be hidden. Given this, even those types of illicit flows that can be measured must be measured indirectly and are, therefore, an imprecise estimate of this activity. However, there are many 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. Therefore, we characterize the estimates presented here as likely to be very conservative. Nonetheless, they fill a critical gap in the literature and to the extent the conservative estimates are large, amply demonstrate the scale of the trade-related IFFs problem.

Bilateral trade data allow analysts to examine mirror reports to draw inferences, albeit uncertain ones, as to the potential global scale of trade misinvoicing. While highly detailed country data sources can provide important insights, such data are not available on a comprehensive basis for all countries.

The most significant methodological change introduced in the updated estimates reflects GFI's use of two macroeconomic databases on bilateral trade to yield two estimates of potential trade misinvoicing. As it has in the past, GFI has constructed one set of potential trade misinvoicing estimates using the IMF's Direction of Trade Statistics (DOTS) which report bilateral trade on a country-to-country basis. The DOTS data used here reflect substantial methodological improvements introduced by the IMF over previous vintages of DOTS, and GFI has simplified the procedures it has used in the past to process its DOTS-based estimates. The revisions to the DOTS data and GFI's procedures for using those data account for the differences between its current and past estimates of potential trade misinvoicing; nevertheless, the estimation results are not fundamentally different from GFI's DOTS-based estimates in the past.

The second database used in its current estimates (for the first time) is the Comtrade database maintained by the United Nations (UN). Beyond the country-to-county reports of bilateral trade in DOTS, Comtrade additionally records both the value and volume of bilateral trade at the commodity level—the harmonized 6-digit commodity detail (amounting to about five thousand distinct commodities) represents the most detailed level of comparable commodity trade reporting available on a comprehensive basis. The richer detail available in the Comtrade data enabled GFI to employ (standard) statistical treatments and more precise accounting for its estimates than is possible with the DOTS database.

Even taking into account all those changes in both the databases and the methods appropriate for each, along with the uncertainty that attends all such estimates, the clear message in the numbers is that potential misinvoicing on trade with advanced economies has been both a significant and persistent issue for developing country trade.

In 2015, 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 which 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, including:

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 in their financial institution.

Anti-Money Laundering

- Government authorities should adopt and fully implement all of the Financial Action Task Force's (FATF) 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 automatic exchange of tax information as endorsed by the OECD and the G20.

Trade Misinvoicing

- Deliberate trade misinvoicing for the purpose of evading or avoiding VAT taxes, customs duties, income taxes, excise taxes, or any other form of government revenues should be made illegal.
- 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.
- GFI has developed a product to assist governments in the detection of potential misinvoicing in real time: GFTrade is a proprietary risk assessment application enabling customs officials to determine if goods are priced outside typical ranges for comparable products.[2]

Sustainable Development

- 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 flows of illicit capital shown in this study represent diversions of resources from their most efficient social uses in developing economies and are likely to adversely impact domestic resource mobilization and hamper sustainable economic growth. For example, some portion of the illicit flows highlighted here may correspond to tax revenues lost by developing country governments which would then be unavailable for use by those governments toward reducing

2 Additional information on GFTrade is available on GFI's website; see https://www.gfintegrity.org/solutionsforinspiredeconomies/.

inequality, eliminating poverty and, more generally, raising the quality of life for people living in those countries. Whatever the source of the illicit flows, it is necessary to consider their role in any discussion of the development equation. It is important to examine not only the volume of resources legally flowing into and out of developing countries but also the illicit flows associated with leakages of capital from the balance of payments and from trade misinvoicing. Governments and international organizations must strengthen policy and increase cooperation to combat this scourge.

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