

Financial Flows and Tax Havens

Combining to Limit the Lives of Billions of People



Centre for Applied Research, Norwegian School of Economics
Global Financial Integrity
Jawaharlal Nehru University
Instituto de Estudos Socioeconômicos
Nigerian Institute of Social and Economic Research
December 2015

Financial Flows and Tax Havens: Combining to Limit the Lives of Billions of People

Centre for Applied Research, Norwegian School of Economics

Global Financial Integrity

Jawaharlal Nehru University

Instituto de Estudos Socioeconômicos

Nigerian Institute of Social and Economic Research

December 2015

*Generous funding by the Norwegian Research Council
is gratefully acknowledged and appreciated.*



This report is published under a Creative Commons Attribution license (CC BY).
For more information on the license, visit: <http://creativecommons.org>.



December 2015

We are pleased to present here our report ***Financial Flows and Tax Havens: Combining to Limit the Lives of Billions of People.***

This is the most comprehensive analysis of global financial flows impacting developing countries compiled to date and focuses particular attention on the deleterious effects of offshore tax havens. A portion of licit financial flows is addressed as well, because with both flow data and deposit data it is often difficult to disaggregate between legally and illegally derived components.

Including balance of payments data and bilateral trade data in our analysis means that we are taking into consideration official development assistance, loans, repayments, debt cancellation, foreign direct investment, portfolio investment, remittances, contributions from religious and charitable organizations, and recorded and unrecorded trade flows, as they are revealed in available databases. Not revealed in available databases are a number of important components of financial flows:

Criminal: It is not clear whether the totality of drug trading, human trafficking, counterfeiting, smuggling, and more lead to net transfers into or out of developing countries.

Same-Invoice Faking: Bilateral trade data reveal re-invoicing of transactions, usually through offshore entities, but do not reveal misinvoicing within the same documents exchanged between exporters and importers.

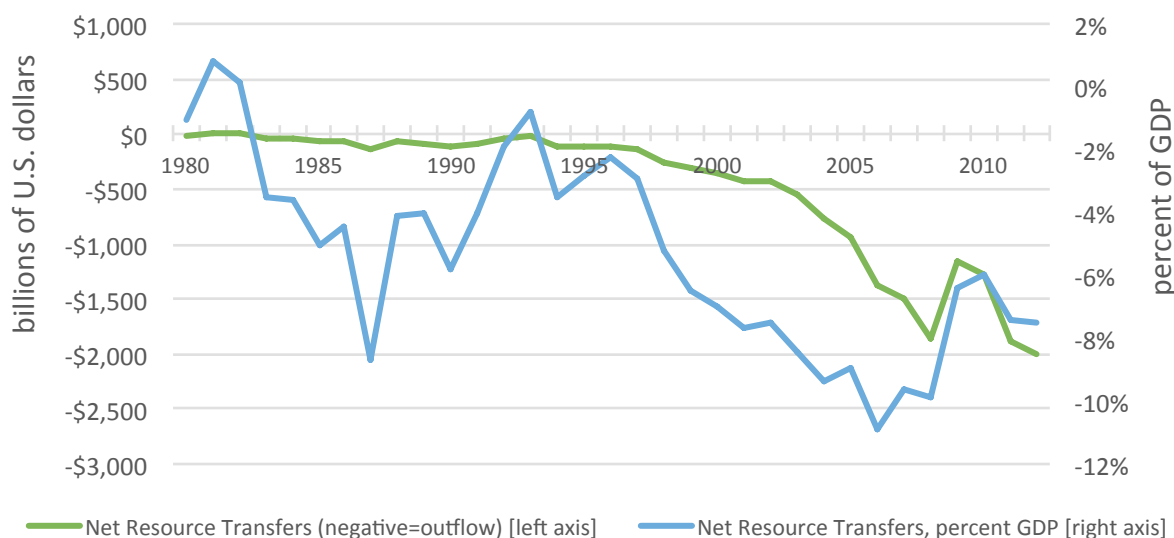
Intellectual Property and Services: Only merchandise trade is encompassed within the data analysis of trade misinvoicing, and we offer an approximating adjustment for intangibles.

Much improved statistical compilation and reporting is required in order to have a more adequate picture of global financial flows, a task that urgently needs to be undertaken in combination by the International Monetary Fund, World Bank, United Nations, Organization of Economic Cooperation and Development, and the Bank for International Settlements.

We offer a number of alternative approaches to analysis of available data. China presents an especially thorny problem because it is the biggest exporter of both licit and illicit capital and because financial flows through Hong Kong are problematic.

We define Net Resource Transfers (NRT) as net recorded flows into or out of a country less outflows of illicit capital. We do not net out illicit flows in both directions because illicit inflows are unrecorded and do not benefit developing countries as do inflows of recorded capital.

The most revealing picture emerging from this analysis is reproduced below, showing that since the early 1980s, NRT for all developing countries have been mostly large and negative, indicating sustained and significant outflows from the developing world. The NRT line is largely negative regardless of whether it is in nominal terms (green line) or expressed as a percent of developing countries' GDP (blue line). We estimate that illicit outflows account for nearly 82 percent of all NRTs from developing countries.



Offshore tax havens, beginning in the 1930s and exploding across the world since, undermine the capitalist system. Adam Smith expected that people of principle and character would operate the free markets he envisioned. Illicit flows, financial secrecy, and tax evasion have forestalled his ambitions for equitable economic participation by all. At the center of this most unfortunate development sit the offshore centers facilitating criminal, corrupt, and commercially tax evading financial flows, having their most damaging impact on the poor of the world. It cannot be argued that the small role tax havens may play in legitimate dealings justifies their far more damaging role in intermediating illicit flows which are the main drivers of NRTs from developing countries.

Our analysis indicates that residents of developing countries held US\$4.4 trillion in assets in tax havens in 2011, the latest year for which data is available. Other studies of this phenomenon find even higher numbers.

There is perhaps no greater driver of inequality within developing countries than the combination of illicit financial flows and offshore tax havens. These mechanisms and facilitating entities benefit the rich—we call them the “1 percent” for convenience—and harm the middle class and poor. Even the

inflow side of illicit financial movements benefits primarily the rich who are escaping customs duties, VAT assessments, and income taxes through such processes.

Our shared world would greatly benefit by purposefully strengthening financial transparency in capital and trade movements and in wealth repositories.

We extend our great appreciation to our collaborators in this project. Arun Kumar at the Center for Economic Studies and Planning at Jawaharlal Nehru University has for many years worked in this subject area and contributed materially to this study. Godwin Akpokodje at the Nigerian Institute of Social and Economic Research compiled quite startling data from Nigeria and interacted with the central banks of Ghana and Uganda. Francisco Sadeck working for the Institute for Socioeconomic Studies in Brazil sought valiantly for data from his country's central bank and provided many useful insights into the analysis.

Our thanks are extended again to the Norwegian Research Council for its generous funding of this effort.

We have only opened the door to a fuller analysis of the financial relationships between the rich and the poor of the world. Much, much more needs to be done.

Guttorm Schjelderup

Director

Norwegian School of Economics

Raymond W. Baker

President

Global Financial Integrity

Table of Contents

Executive Summary	xi
Introduction	1
I. Recorded and Unrecorded Financial Flows to and from Developing Countries	7
i. Recorded transfers (RecT) to and from All Developing Countries	7
ii. Broad capital flight from developing countries	11
iii. Adjustments for services trade and same-invoice faking	16
iv. Net Resource Transfers (NRT) to and from Developing Countries, Excluding China . . .	18
v. Regional NRT	22
vi. NRT and Economic Performance in Developing Economies	23
vii. Criminal Flows: Net in or Net Out?	25
II. The Normative Case Against Offshore Tax Havens	29
i. Introduction	29
ii. The Business Model of Secrecy Jurisdictions	31
iii. Evasion of National and International regulation	37
iv. Tax Havens and Developing Countries	42
v. Information Exchange Treaties	49
vi. The Future	51
III. The Role of Tax Havens in Financial Intermediation	53
i. Data sources and limitations	56
ii. Financial Intermediation by Tax Havens: Recorded Investments	59
Conclusion	67
References	71
Statistical Appendix I	77
Appendix II. Methodology of Estimating NRT	83
Appendix III. NRT Based on Net Capital Flight	93
Appendix IV. Financial Flows between selected developing countries and tax havens	101
Glossaries	109
Glossary of Databases	109
Glossary of Terms	109
Acknowledgments	113

Charts and Tables in the Report

Table 1.	Top Ten Receivers of Recorded Transfers, 1980-2012	8
Table 2.	Top Ten Providers of Recorded Transfers, 1980-2012	8
Chart 1.	Receivers of Recorded Transfers (RecT): All Developing Countries, 1980-2012	9
Chart 2.	Providers of Recorded Transfers (RecT): All Developing Countries, 1980-2012	9
Chart 3.	Recorded Transfers (RecT): All Developing Countries, 1980-2012	10
Table 3.	Recorded Transfers (RecT) to and from All Developing Countries, 1980-2012	11
Table 4.	Capital Flight from Developing Countries: 1980-2012	13
Table 5.	Capital Flight Outflows as a percent of GDP, 1980-2012	14
Chart 4.	Change in External Debt (CED): All Developing Countries, 1980-2012	14
Chart 5.	Trade Misinvoicing (GER): All Developing Countries, 1980-2012	15
Table 6.	NRT of All Developing Countries, 1980-2012	15
Chart 6.	Net Resource Transfers (NRT): All Developing Countries, 1980-2012	17
Chart 7.	Adjusted Net Resource Transfers (NRT): All Developing Countries, 1980-2012	17
Table 7.	RecT to and from Developing Countries Excluding China, 1980-2012	18
Table 8.	Capital Flight from Developing Countries Excluding China, 1980-2012	19
Table 9.	Capital Flight Outflows as a Percent of GDP, 1980-2012	20
Table 10.	NRT of Developing Countries Excluding China, 1980-2012	20
Chart 8.	Net Resource Transfers: Developing Countries Excluding China, 1980-2012	21
Chart 9.	Adjusted Net Resource Transfers, Developing Countries Excluding China, 1980-2012	21
Table 11.	NRT of All Developing Countries by Region, 1980-2012	22
Chart 10.	NRT Distribution by Regions, 1980-2011	22
Table 12.	Correlations Between Developing Country Flows and Domestic Living Standards, 2000-2012	24
Table 13.	Estimated Values of Transnational Crime	26
Figure 1	46
Chart 11.	Net Balance Sheet Position of Major Tax Havens, 2002-2012	55
Chart 12.	Gross Balance Sheet Position of Major Tax Havens, 2002-2012	55
Table 14A.	Portfolio Investment in Tax Havens, 2009-2012, year-end stock	59
Table 14B.	Tax Havens' Portfolio Investment, 2009-2012, year-end stock	59
Table 15A.	Direct Investment in Tax Havens, 2009-2012, year-end stock	60
Table 15B.	Tax Havens' Direct Investment, 2009-2012, year-end stock	61
Table 16A.	Total Assets in Offshore Financial Centers by Region, 2005-2011	63
Table 16B.	Private Assets in Offshore Financial Centers by Region, 2005-2011	64
Table 17.	Total Assets Based on CPIS and CDIS database and IIP/BIS Data	65
Table 18.	Broad Capital Flight and Components: Including and Excluding China, 1980-2012	77
Table 19.	Recorded Transfers (RecT) and Components: All Developing Countries, 1980-2012	78
Table 20.	Recorded Transfers (RecT) and Components: Developing Countries Excluding China, 1980-2012	79
Table 21.	Net Resource Transfers (NRT) and Components: Including and Excluding China, 1980-2012	80

Table 22.	Net Resource Transfers: All Developing Countries by Region, 1980-2012	81
Table 23.	Balance of Payments, Standard BPM5 Presentation, 2002-2006*	84
Table 24.	Detailed Components of Net Recorded Flows (BPM6)	85
Table 25.	Ghana: Net Current Transfers, Net Capital Transfers, and Financial Account Balance. .	86
Table 26.	NRT of All Developing Countries, 1980-2012	94
Chart 13.	NRT: All Developing Countries	94
Chart 14.	NRT, Adjusted: All Developing Countries	95
Table 27.	Broad Capital Flight and Components: Including and Excluding China, 1980-2012	96
Table 28.	Net Resource Transfers (NRT) and Components: Including and Excluding China, 1980-2012	97
Table 29.	Broad Capital Flight (Net) as Percent of GDP: Including and Excluding China, 1980-2012	98
Table 30.	Net Recorded Transfers: All Developing Countries by Region, 1980-2012	99
Table 31.	FDI net from Brazil to Tax Havens – from 2008 to June/2013	102
Table 32.	FDI net to Brazil from tax havens – from 2008 to June/2013	103
Table 33.	FDI net from Chile to Tax Havens – from 2009 to 2012	104
Table 34.	FDI net to Chile from tax havens – from 2009 to 2012	105
Table 35.	India: Cumulative FDI (Equity) Inflows from Tax Havens, Apr. 2000 – Jan. 2013	106
Table 36.	Nigeria: Transactions with Tax Havens, Cumulative 2007-2011 Outflows	107
Table 37.	Nigeria: Transactions with Tax Havens, Cumulative 2007-2011 Inflows.	108

Executive Summary

Policymakers and economists have typically focused on increasing official development assistance and stimulating foreign direct investment as ways to promote economic growth in developing countries. But adequate recognition has not yet been given to the adverse impact that unrecorded capital flight can have on development and the harmful role played by offshore tax havens in draining resources from relatively poorer countries and regions of the world. Curtailing illicit financial flows in general, and tax havens in particular, would work to improve the effectiveness of macroeconomic policies and reduce inequality in developing countries, leading to improved living standards and sustainable economic growth over the long run.

Part I of this paper presents a broader approach to development than is typical in most economic studies in that we estimate the effects of both recorded and unrecorded flows on the net resource transfers (NRT) into or out of such countries. Previous studies have typically examined NRT as consisting only of recorded financial flows. This study broadens that scope in two ways. First, we include non-financial transactions (such as debt forgiveness and write-offs) and unrequited transfers (such as workers' remittances) among the factors affecting recorded transfers. Second, and most important, we include unrecorded capital outflows to estimate the NRT of developing countries. The inclusion of unrecorded financial flows is also consistent with the fact that financial institutions (including those in tax havens) cannot distinguish between recorded (licit) and unrecorded (mostly illicit) capital. Hence, any study that seeks to analyze the role of tax havens in financial intermediation would need to consider both types of flows.

Significant and persistent unrecorded capital flight (largely, though not exclusively, illicit) can diminish a developing country's capacity for growth to a far greater degree than would large, recorded outflows. That is because the institutions that enable significant illicit activity to persist in a particular country redirect productive resources away from those economic activities designed to improve living standards and reduce inequality for the country's citizens. Moreover, those institutions are not likely to disappear on their own, and such countries would not move closer to their productive potential without deliberate and meaningful reforms. We present some preliminary results that indicate that inflows of recorded capital positively impact consumption. Illicit outward transfers, by draining inflows of recorded capital, adversely impact consumption.

The principal finding presented in Part I is that, on balance since the late 1990s, substantial amounts of capital have moved from developing to developed countries. Using the broader definition of NRT introduced here, developing countries have effectively served as net creditors to the rest of the world, an ironic twist to the development narrative. The flow from resource-poor countries to resource-rich countries also flies in the face of allocative efficiency calling for flows in the reverse direction. On a global scale, such misallocations of resources represent sizeable social costs that would, in this case, be borne by the citizens of developing countries.

It should be noted that we do not net out inflows and outflows of capital that are largely illicit. As flows are illicit in both directions, a net of the two would be akin to the concept of net crime—a conceptual absurdity. Hence, while it makes perfect economic sense to net flows of recorded capital that are licit, the same cannot be said of flows that are mainly illicit in nature. So estimates of NRT in this study are based on gross outward capital flight.

Illicit inflows to the developing world matter as well. High net worth individuals and private corporations may initiate illicit flows into a developing country in order to extract a private gain; in that case, they would benefit from flows in both directions. Our fundamental assumption is that private economic agents would not initiate any action if it did not benefit themselves. Accordingly, we estimate an alternative measure of NRT by treating inward capital flight in the same way as recorded inflows. We find that that even if we treat every dollar of illicit inflows as if they were inflows of legitimate capital, developing countries still end up losing resources on balance. In particular, Sub-Saharan Africa, the poorest region of the world, loses massive amounts of NRT even if all inflows of illicit capital were to be considered as if they were legitimate.

In general, negative NRT represents the depletion of scarce capital from developing countries (such as through import over-invoicing and export under-invoicing). That depletion is helpful in understanding the relatively slower growth or even declines in the incomes of the 99 percent when compared with the top 1 percent. We present stylized arguments as to how alternative measures of NRT might contribute to an understanding of what appears to be widening income inequality in developing countries. Again, a comprehensive analysis of those relationships is beyond the scope of this paper. The nature of illicit flows in and out of a particular developing country are dependent on the institutional framework of that country. More detailed country-level studies are needed to explain the income stagnation or even the “hollowing out of the middle class” in the developing world. For example, Piketty’s seminal contribution on the analysis of income inequality does not take account the impact of unreported income on Gini indices based on national data on income distribution using official surveys.¹

This study covers the period 1980–2012 in order to capture the position of developing countries since the time when China joined the global financial system by re-entering international organizations such as the IMF and the World Bank. Because the Chinese economy is so large, we examine capital flows to and from the developing world with and without China. As it happens, recorded transfers flowed out of developing countries whether we include or exclude China. A total of nearly US\$3 trillion in recorded transfers (about US\$90 billion per annum on average) flowed out of those developing countries for which data are available. Due to China’s large current account surpluses and associated capital and reserve asset outflows, excluding China from the developing world total reduces the magnitude of cumulative net transfers from the remaining developing countries to about US\$1 trillion or about US\$32 billion per annum on average. Large primary

¹ Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge, MA: Harvard University Press, 2014).

income outflows (associated with net outflows of investment income) were mainly responsible for the large outflow of recorded transfers from developing countries since 1980.²

Next, we summarize what happened to capital flight outflows (a mix of illicit and licit capital). The study finds that developing countries lost US\$13.4 trillion dollars (US\$10.6 trillion excluding China) through broad leakages in the balance of payments and trade misinvoicing. It should be noted that trade misinvoicing estimates are consistent with the updates of illicit flows published by GFI. However, because we estimate broad capital flight using the World Bank Residual (WBR) method, estimates of balance of payments leakages would differ significantly from estimates of purely illegal capital based on the Hot Money Narrow (HMN) method (i.e., the method used in GFI's annual updates). We use the WBR rather than the HMN measure of illicit outflows (the former also captures unrecorded *licit* outflows), given that tax havens have no way of distinguishing licit from illicit flows. They intermediate both types of financial flows. These methodological differences are explained in greater detail in an appendix to this report.

While it is beyond the scope of this study to estimate the social costs of such resource depletion for all developing countries, the paper presents some preliminary results on the impact of illicit flows on living standards in developing countries. The results are indicative and not conclusive given the limited availability of comprehensive balance of payments data for all developing countries and the fact that many countries have not completed the transition from the earlier BPM5 system of BoP compilation to the current BPM6 version. As such, a consistent time series on recorded inflows are not available on BPM6 basis going back to 1980 for all developing countries. Nevertheless, results based on some 57 to 76 developing countries show that both recorded inflows by themselves and such inflows less illicit outflows are significantly correlated with real per capita consumption in those countries as a group. In other words, to the extent that growing illicit outflows drain resources due to recorded inflows, we can expect real per capita consumption and hence living standards to decline in developing countries. These results need to be corroborated based on more comprehensive BoP data over a much longer time span. But it is interesting to note that the results of our study are consistent with a recent study at the IMF using a sample size in excess of 700 observations (based on World Bank data) that recorded inflows are positively and significantly impacting domestic investment in developing countries over the period 2001-07.

Having established the enormous and negative impact of financial outflows from developing countries, Part II of this paper, authored by Guttorm Schjelderup, analyzes how tax havens affect markets and lead to inefficient outcomes through a survey of externalities that follow from tax haven legislation. These externalities have a negative impact on non-tax haven states, firms, and citizens. It provides evidence that tax havens undermine national and international regulation and shows that tax havens have a detrimental effect on growth in poor countries.

² Once we include unrecorded flows, illicit outflows account for the overwhelming majority of NRTs from developing countries.

The section begins by examining how tax systems (also referred to as “secrecy jurisdictions”) and “ring-fencing” in tax havens are structured. It describes how these structures promote asymmetric information, which in turn impedes market efficiency. As tax havens allow individuals and firms to conceal information about their activities, wrongdoers may not bear the full consequences of their actions. Secrecy jurisdictions have no incentive to supervise or enforce supervision. Foreign companies registered in tax havens are typically prohibited from doing business domestically (i.e. in the tax haven country), but many companies still migrate there to use and abuse loopholes in the tax laws of other jurisdictions to reduce their tax bills in those countries.

Secrecy jurisdictions also help shield the identity of the owners of the assets and accounts, even from law enforcement in other countries. When combined with lax or non-existent regulation and/or supervision, this opacity can facilitate the breach of laws and regulations in other countries as a result of the reduced risk of being caught. The owners of these accounts can engage in regulatory arbitrage, whereby they seek the highest rates of return at the lowest regulatory “cost.” Evidence of linkages between tax havens and illegal, unreported, and unregulated (IUU) fishing as well as transport safety are presented.

This section also delves into the impact of these tax havens and secrecy jurisdictions on developing countries. Through abusive transfer pricing and affiliate lending, multinational corporations are able to lower taxable income in developing countries, thereby denying these governments an important stream of public revenue from which to invest in infrastructure and social programs. In this way, secrecy jurisdictions contribute to the erosion of institutional quality and democracy in poor countries. Another hit to developing countries comes from the increase in the profitability and ease of rents and rent-seeking activities from the secrecy provisions of tax havens. This is a particular problem in countries rich in natural resources. Resource rents can give the political elite incentives to reduce democracy in order to retain control over profits from these resources, particularly in presidential, as opposed to parliamentary, systems.

The section concludes with an overview of tax information exchange treaties (TIEAs) and their potential ability to curb the detrimental impact of tax havens on other countries. However, even among non-tax haven partners, TIEAs are not functioning optimally due to the lack of a market structure. In other words, the country that receives the request has no incentive (other than goodwill or generosity) to expend the resources necessary to fulfill the request. Political momentum is needed instead for a convention on transparency and non-harmful legal structures.

In Part III of the paper, we use the stock of assets held in tax havens as a proxy for the extent of financial intermediation. Tax havens are defined to be the 48 countries and jurisdictions listed by the IMF as offshore financial centers. Data on balance of payments flows are not well suited for tracking stocks of wealth in tax havens, primarily because the BoP flows record transactions between the residents of developing countries and the rest of the world, not tax havens per se. Still, we present limited flow data between selected developing countries and tax havens in Appendix V to draw

attention to the paucity of such data, the difficulty of collecting them, and whether they can shed some light on the nature of such transactions.

We note that it is not possible to “reconcile” the estimated flows of recorded transfers, illicit flows, and net resource transfers with the asset positions in tax havens. One reason is that there are large gaps in data reported by tax havens. Another reason is that international stocks and flows are notoriously difficult to reconcile due to valuation changes and exchange rate fluctuations. Most importantly, recorded and unrecorded flows are with reference to the rest of the world (including intra developing country transactions), whereas stock data estimates refer to assets held by residents of developing countries in tax havens.

The stock of assets are based on three IMF databases—the Coordinated Direct Investment Survey (CDIS), Coordinated Portfolio Investment Survey (CPIS), and the International Investment Position (IIP)—and the Bank of International Settlements (BIS) database on international bank deposits in tax havens. Developing country residents’ portfolio investments (PI) in tax havens increased from US\$129.3 billion as of end-2009 to US\$182 billion by the end of 2012, the latest year for which data are available. However, more than 80 percent of tax havens either did not report or reported with a confidential flag so that the figures are understated.

Tax havens invest much more in developing countries than the latter invests in tax havens. PI asset holdings of tax havens in developing countries nearly doubled from US\$824.3 billion at end-2009 to US\$1.3 trillion by the end of 2012.

Developing countries foreign direct investment in tax havens stood at US\$794.9 billion at the end of 2009 which increased to US\$1.1 trillion by the end of 2012. However, around 60 percent of developing countries did not report FDI data. In contrast, the FDI position of tax havens in developing countries was US\$1.1 trillion at end 2009, ending at nearly US\$2.0 trillion at end 2012. The financial linkages between tax havens and developed countries both in terms of PI and FDI are much stronger than between tax havens and developing countries.

Total PI and FDI investment of developing country residents in tax havens has therefore increased from US\$0.9 trillion at end 2009 to US\$1.3 trillion at the end of 2012. The large gaps in data inherent in the CDIS/CPIS databases is apparent once we compare the total asset position obtained through the IIP/BIS asset database. Using the IMF IIP (Assets) database and applying the share of bank assets held in tax havens using the BIS data, we find that residents of developing countries held US\$1.8 trillion in 2005 which increased to US\$4.4 trillion in 2011. Sub-Saharan Africa evidenced the fastest rate of growth at more than 20 percent per annum.

In sum, both recorded and unrecorded transfers of licit and illicit funds from developing countries have tended to increase over the period 1980-2011. Available evidence based on IIP (Asset) data as well as CDIS/CPIS databases show that the stock position of asset holdings of developing country residents in tax havens have also increased in tandem.

Introduction

Financial Flows Impacting Developing Countries³

1. Development cooperation among advanced and developing countries became imperative in the nineteen-sixties as the latter sought to emerge from years of colonization. It fell upon advanced countries, still recovering from the ravages of the Second World War, to supply the resources necessary to foster economic development. It was rightly thought that advanced countries would also benefit from stimulating faster rates of economic growth in developing countries. Accordingly, flows of productive resources between nations in varying stages of economic development increased. With the emergence of China in the early 1980s, the rising volume of trade and financial transactions have linked advanced and developing countries in an increasingly interdependent world.
2. The concept of net resource transfer (NRT) is central to an understanding of the role of capital flows in sustainable development. The rise in cross-border flows between developed and developing economies stimulated interest in metrics to track the directions and magnitudes of resource flows. Net resource transfer (NRT) is a measure of the amount of purchasing power, on balance, foreign economies are providing to or drawing from a particular country at a particular time. NRT is also indicative of the degree to which external financing is available to a country. The Balance of Payments (BoP) accounts provide a unified statistical framework for measuring recorded transfers, which are mainly financial but also include certain non-financial flows, across developing countries. The netting of outward transfers through capital flight from the recorded BoP transfers yields the NRT balance. Because capital flight is also partly estimated based on the gap between key BoP series, the BoP accounts are the basis of the NRT estimates presented here.
3. This paper takes a balance of payments approach to measuring NRT. The BoP framework provides a detailed and comprehensive accounting of transactions between the residents of a particular country and nonresidents over a specific period of time (depending upon whether the frequency of compilation of BoP statistics is monthly, quarterly, or annual). Transactions in goods, services, flows of income, transfers, and financial claims are covered within the BoP system in such a way that changes in a country's current account (i.e., net trade in merchandise and non-factor services plus net factor and transfer payments) are mirrored by countervailing changes to the country's capital accounts (subsequently called financial accounts).

³ The bulk of this study was written and prepared by Global Financial Integrity, with contributions by Jawaharlal Nehru University in India, the Instituto de Estudos Socioeconômicos in Brazil, and the Nigerian Institute of Social and Economic Research. Part II of the study is the work of the Centre for Applied Research at the Norwegian School of Economics.

4. Let us first discuss transfers that are *recorded* in the balance of payments. For example: a net recorded outflow from a country occurs when that country's service payments on its external debt exceed the supply of new foreign capital. Other things equal, the country must finance that excess with a trade surplus either by increasing domestic production of goods and services or by lowering domestic absorption of goods and services (or by some combination of both) sufficiently to cover service payments on its external debt. The required adjustment in this case is a net outward transfer of resources from the country to its creditors. When such transfers are tabulated for all developing countries, the direction of net recorded flows between the developing and developed world can be assessed and the key questions concerning sustainable development addressed. The question of sustainability of economic policies seldom include flows of *unrecorded* capital. In this study, we consider flows of both recorded as well as unrecorded transfers in order to analyze developing countries' net resource transfers or NRT. Thus defined, NRT is a crucial measure that harks to the sustainability of development policies.

5. While the concept of NRT appears clear-cut in principle, measurement issues arise in practice and various approaches have been taken to construct estimates of NRT. Early on, economists analyzed NRT simply in terms of *recorded* flows. For instance, the difference between a country's debt service payments to foreign creditors and the flow of new loans in any period could be used as an estimate of NRT. Accordingly, NRT would be positive or negative if new loans exceeded or fell short of debt service payments. Over time, as international capital markets became more sophisticated, the definition of NRT has broadened to include other categories of financial (e.g., workers' remittances) and non-financial (debt write offs and debt forgiveness) transfers. Most often, NRT is taken to be a country's current account balance net of its net interest payments to foreigners.⁴ Calculations of NRT in this vein have generally shown that in spite of significant capital inflows to developing countries, the burden on those countries of servicing and repaying their external debt has tended to be even larger, resulting in a chronic net drain of resources from the developing world over extended periods of time.

6. The defining characteristic of NRT measures in academic studies is their exclusive use of *recorded* flows. Certainly, persistent and sizeable recorded outflows from developing economies would point to a diminished capacity for growth in those emerging economies. However, these studies ignore the extent to which *unrecorded* flows out of the developing world further erode their prospects for sustainable growth.

⁴ See, for example, the papers by:

Klaus Didszun, "On the Problem of Negative Net Financial Transfers to Developing Countries" *Intereconomics* 25, no.2 (1990): 67-72.
Rigmar Osterkamp, "Is There a Transfer of Resources from Developing Countries to Industrial Countries?" *Intereconomics* 25, no.5 (1990): 242-247.

Krishnalekha Sood, *Trends in International Cooperation and Net Resource Transfers to Developing Countries* (Helsinki: United Nations University World Institute for Development Economics Research, 1995).

Steven B. Webb and Heidi S. Zia, "Borrowing, Resource Transfers, and External Shocks to Developing Countries: Historical and Counterfactual" Working Paper WPS 235, July (Washington, DC: Country Economics Department, The World Bank, 1989).

United Nations, *World Economic Situation and Prospects 2011* (New York: United Nations, 2011)

7. This study by Global Financial Integrity is the first to take account of both recorded and unrecorded flows in arriving at a comprehensive measure of NRT. In the present analysis, we recognize two types of capital flows—those that are recorded in the balance of payments or the external accounts of a country and those that are unrecorded and largely illicit.⁵ Illicit financial flows always break laws in their generation, utilization, or transference. In this sense, we analyze the whole of the development equation taking stock of the recorded resources received by developing countries (as accounted for in the BoP) as well as the impact of unrecorded flows on the recorded position. Inherently unobservable, unrecorded flows must be inferred from other sources; GFI estimates unrecorded flows by applying well-known, established economic methods to the BoP accounts. As unrecorded capital flows move in and out of the developing world, we present alternative estimates of NRT: a preferred measure equal to recorded transfers less gross illicit outflows and an alternative measure (see Appendix IV) equal to recorded transfers less the balance of illicit inflows and outflows. The alternative measure of NRT based on net capital flight is relegated to an appendix because NRT based on net capital flight is not realistic. Developing countries do not derive any benefit from illicit inflows and hence they should not be treated in the same way as inflows of recorded capital such as foreign direct investment (FDI) or portfolio investment.
8. The data used in the study begin in 1980 so as to include the period during which China formally reentered into the world economy.⁶ China's outsized role in the world economy skews various indicators covered in this study. Hence, we present the various estimates of developing world totals both including and excluding China. The time series data used for the estimates end in 2012. Moreover, throughout the period between 1980 and 2012, the number of developing countries included in the sample varies. Such factors as political change (e.g. China's re-entry in 1982 and the collapse of the U.S.S.R. in the early 1990s) and improved reporting have since 1980 tended to enlarge the number of countries for which data are available.⁷
9. Illicit financial flows are sizeable and growing, and they should be included in measures purporting to track resource flows between countries. GFI's estimates show that, over the past decade, an average of more than US\$1 trillion per year have flowed out of developing countries unrecorded. Viewed another way, *for every dollar of development assistance received by developing countries, more than ten dollars disappear from these countries.* No discussion of sustainable development should ignore the massive hemorrhaging of scarce capital from poor countries. GFI has been sounding the clarion call to curtail such illicit outflows since 2008.

⁵ We say "largely" because estimates of unrecorded capital flows to and from a country inevitably involve a relatively small portion of legitimate capital flows that are not captured due to statistical shortcomings and not because the flows themselves are illicit. See Stijn Claessens and David Naudé, "Recent Estimates of Capital Flight" Working Paper WPS 1186 (Washington, DC: World Bank, September, 1993)

⁶ China joined the IMF on December 27, 1945, as one of its 35 original members. The People's Republic of China assumed responsibility for China's relations with the IMF in April 1980.

⁷ For the year 1980, the complete data needed to estimate NRT were available for only 34 developing and emerging countries; those countries represented just under a third of the total GDP of all developing and emerging economies. By 2010, the number of countries in the sample had risen to 128, representing about 94 percent of total GDP in the developing and emerging world.

10. Largely as a result of GFI's persistence, a number of international organizations and global economic forums have finally added their voice to address this problem. For instance, the July 2015 Addis Ababa Action Agenda called upon the IMF, World Bank and the United Nations to assist both source and destination countries to combat illicit flows and to publish estimates of their volume and composition. The Addis Ababa declaration further noted that the promotion of peaceful and inclusive societies would require good governance and other measures to combat corruption and curtail illicit flows. The High Level Panel on Illicit Financial Flows from Africa had also noted the harmful effect of illicit flows on African countries and called upon governments and international institutions to combat the menace in order to promote sustainable development. In recognition of these initiatives, this study provides an in-depth analysis of how unrecorded capital flows alter the recorded balance sheet of resources into and out of developing countries. Only after such a comprehensive analysis can we answer the question—are developing countries net recipients or providers of scarce capital? The answer to this question has a bearing on another issue—is it possible to assess the role of tax havens in intermediating recorded (licit) and unrecorded (mainly illicit) financial flows to and from developing countries?
11. The study is organized in three parts. The first part presents a discussion of recorded transfers (RecT), broad capital flight, and net resource transfers (NRT). Broad capital flight is distinct from illicit financial flows in that the former includes outflows of both licit and illicit capital. Detailed data on RecT and estimates on capital flight and NRT are provided in Appendix I. Appendix II presents a brief discussion of the concepts and the methodology used to derive the estimates. We present estimates of an alternative measure of NRT based on net capital flight (i.e., outward minus inward capital flight) in Appendix III. Finally, we provide flow data on financial transactions between selected developing countries and tax havens collected by the regional research institutions in Appendix IV.
12. We consider broad capital flight rather than strictly illicit flows because tax havens and banks deal with both licit and illicit flows and they usually cannot distinguish between them. Given this assumption, we have to consider both types of flows in order to be conceptually consistent with the second part of the paper which examines the absorption of licit and illicit flows in tax havens.
13. We also expand the range of recorded transfers to estimate NRT. Previous studies on NRT have at most focused on a rather narrow recorded portion of financial transactions. This study extends the range of transactions to also include *non-financial* transactions such as debt forgiveness and write-offs, as well as charities and other transfers in kind (e.g., transfers related to disaster relief). In addition, the broader measure of recorded transfers used here includes remittances and workers' transfers which have become an important source of financing for many developing countries since the 1980s.

14. Part II of the paper discusses the normative case against tax havens. We argue that while lack of prudential regulations and oversight enable tax havens to offer higher rates of return, secrecy with regard to clients and transactions also make these jurisdictions attractive destinations for both licit capital (in search of maximum rates of return) and illicit capital (in search of anonymity and safety from legal proceedings). Regardless, the analysis points to the harm caused by such secrecy jurisdictions in a wide variety of ways including sheltering the proceeds of illegal fishing, tax evasion, and other illegal activities.
15. Part III of the paper presents an analysis of the assets of non-residents in tax havens. The financial assets data represent stock positions unlike the financial flow data underlying the first part of the paper. The purpose of this part is *not* to reconcile the asset position in Part III with the flow data presented in Part I. In fact, the estimates presented in these two parts of the paper are not reconcilable due to the fact that while the first part captures the financial (and non-financial) transactions of the residents of developing countries vis-à-vis the rest of the world (ROW), Part III deals with the estimated holdings of the residents of developing countries in tax havens.
16. The final section draws the main conclusions of the paper.

I. Recorded and Unrecorded Financial Flows to and from Developing Countries

17. In this section, we will first discuss trends and patterns of licit flows that are recorded in the balance of payments (RecT), outflows of capital flight, and net resource transfers (NRT).
18. We only consider outward capital flight and not a net of outward and inward flight capital as in academic literature. This is because the so-called inward capital flight that is unrecorded cannot add to productive capital and is of no or little use to governments. Therefore, they cannot be treated as beneficial to an economy unlike inward transfers of recorded capital such as foreign direct investment and portfolio investment. Note that we present NRT for developing countries including and excluding China because China has the largest share of both licit and illicit flows among developing countries.

i. Recorded transfers (RecT) to and from All Developing Countries

19. Countries register positive and negative recorded transfers in any given year so that when we calculate the cumulative position over the entire sample period, 1980-2012, most countries show a positive and a negative total for this period. In other words, the two lists of positive and negative recorded transfers are not mutually exclusive. However, here we focus exclusively on the top ten receivers (positive) and providers (negative) of recorded transfers so that the lists are mutually exclusive.
20. There has been a change in the IMF's system of compilation for balance of payments data from the Balance of Payments Fifth Edition (BPM5) to the Balance of Payments Sixth Edition (BPM6). Many developing countries have yet to migrate to the newer version of compilation framework. The main advantage of the BPM6 system is that the accounts are more consistent with the System of National Accounts (SNA). Nomenclatures have also changed. The primary income under BPM6 corresponds to what had been labeled "income" under the BPM5. Secondary income now relates mainly to the current transfers under the BPM5. Capital transfers are very close to the capital account balance so we adopt the former nomenclature in this study.
21. Tables 1 and 2 present data on the top ten receivers and providers of RecT vis-à-vis the rest of the world respectively. Table 3 presents data on the four components of RecT under BPM6, namely the financial account balance, primary income, secondary income, and capital transfers for the period 1980-2012. For ease of presentation, we show the five-year totals for these types of recorded flows in Table 3 over the period 1980-2004 and corresponding annual flows through 2012. These aggregates are shown for all developing countries including China; a separate section will consider the aggregates excluding China. We can make the following observations based on data reported by 151 developing countries over 33 years, 1980-2012.

22. Typically, countries with current account deficits receive capital on a net basis (in order to finance the deficit), and those running a surplus provide capital to the rest of the world. Hence the financial account balance *tends* to have the opposite sign of the financial account balance unless the primary and secondary income balances offset this relationship. Chart 1 shows the volume of inward recorded transfers, while Chart 2 shows the volume of outward recorded transfers from developing countries over the period 1980-2012. The inward and outward recorded transfers were obtained by aggregating, on a year-by-year basis, developing countries receiving from and providing net resources to the rest of the world. As a country's net resource positions may change from one year to the next, the composition of countries representing the lines in Chart 1 and 2 would vary. Still, we can identify the main developing countries that were either receiving from or providing resources to the world over the period 1980-2012 by looking at the cumulative flows to and from these groups (Tables 1 and 2). Large cumulative inflows and outflows of recorded resources imply a certain degree of stability regarding whether a country has largely been a receiver or provider of resources over this period.

Table 1. Top Ten Receivers of Recorded Transfers, 1980-2012
(billions of U.S. dollars)

Rank	Country	Cumulative Receipts of RecT
1	India	766.1
2	Mexico	307.8
3	Turkey	303.7
4	Philippines	205.2
5	Egypt	198.1
6	Pakistan	194.4
7	Poland	155.1
8	Romania	149.8
9	Morocco	118.3
10	Bangladesh	116.8

Table 2. Top Ten Providers of Recorded Transfers, 1980-2012
(billions of U.S. dollars)

Rank	Country	Cumulative Receipts of RecT
1	China	-1,908.1
2	Russia	-1233.4
3	Saudi Arabia	-902.0
4	Kuwait	-402.9
5	Malaysia	-385.0
6	Libya	-208.8
7	Indonesia	-196.9
8	Algeria	-162.7
9	Qatar	-160.8
10	Venezuela	-148.2

23. The countries receiving financial resources are those that have run current account deficits over the period as a whole, led by India, Mexico, Turkey and the Philippines, in that order. In contrast, China and some oil exporters like Russia, Saudi Arabia, Kuwait, and Malaysia have provided such resources to the rest of the world due to their current account surpluses. The surpluses have resulted from trade globalization (China) and surging oil prices during this period which added to the surpluses of the oil exporters.

Chart 1. Receivers of Recorded Transfers (RecT): All Developing Countries, 1980-2012
(billions of U.S. dollars)

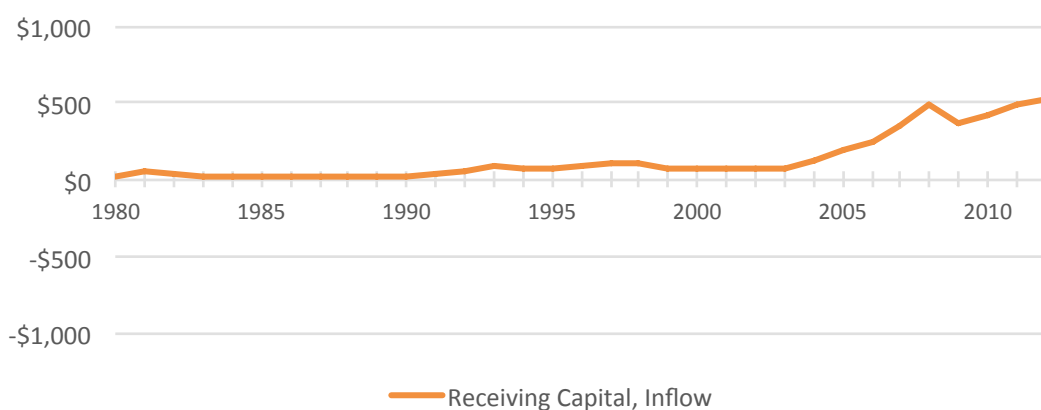
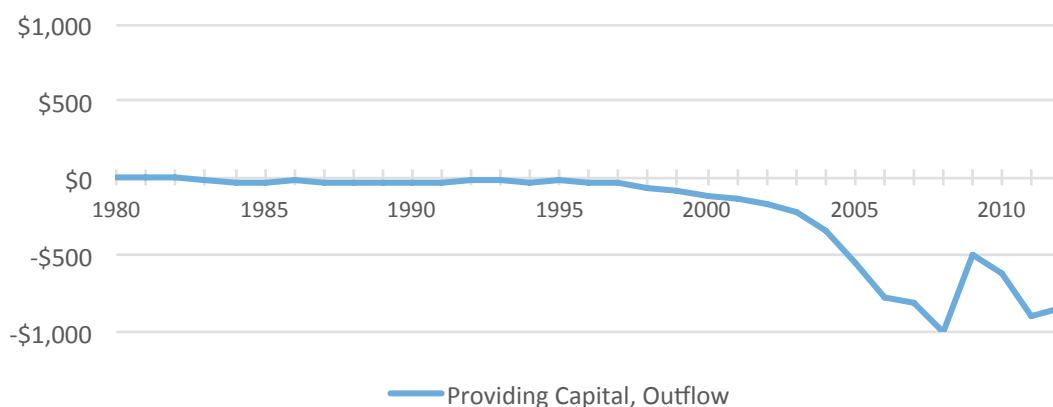
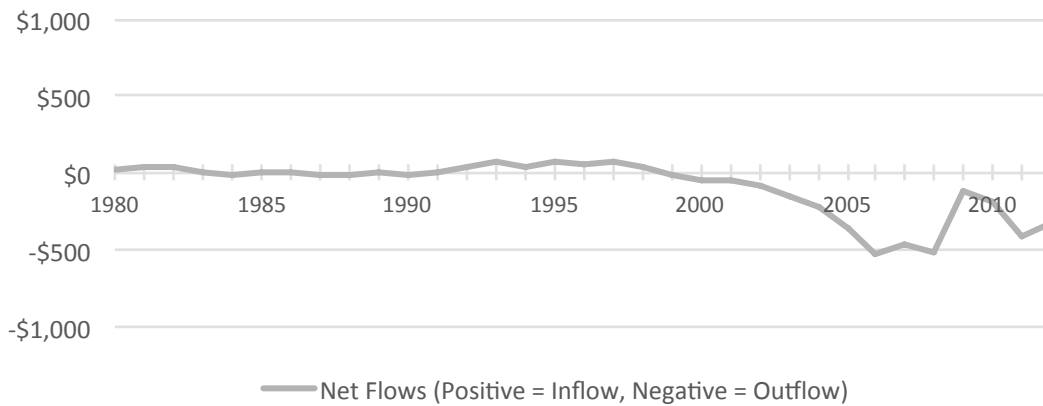


Chart 2. Providers of Recorded Transfers (RecT): All Developing Countries, 1980-2012
(billions of U.S. dollars)



24. While Charts 1 and 2 represent the volume of resources received and provided by developing countries as recorded in their balance of payments, Chart 3 tracks the net of the two.

Chart 3. Recorded Transfers (RecT): All Developing Countries, 1980-2012
(billions of U.S. dollars)



25. Estimates of recorded transfers (including primary and secondary income) as shown in Chart 3 are not comparable to estimates of “net resource transfers” for two main reasons.⁸ First, these studies focus on a narrower definition of recorded transfers (mainly the financial account balance) whereas the estimates shown in Table 3 are much broader including remittances and workers’ transfers, debt write-offs and forgiveness, as well as other types of non-financial transfers. Second, the studies cited make no attempt to estimate outward capital flight and its impact on recorded transfers.
26. Chart 3 reflects the recorded transfers (RecT) on a net basis (i.e., inflows less outflows) based on the positions of receivers and providers of resources recorded in the balance of payments. The net RecT position of all developing countries is shown in the last column of Table 3. Barring a small outflow during 1985-1989, net recorded transfers into developing countries increased from an average of US\$22.8 billion over 1980-84 to US\$47.9 billion over 1995-1999. Since 1999, as China ramped up its exports, and as oil exporters (such as Russia and oil exporters in the Middle East) registered increasingly large current account surpluses due to significant oil price increases, they became net providers of capital through 2012, the final year of this study.

⁸ See Sood, *Trends in International Cooperation*; Webb and Zia, “Borrowing, Resource Transfers, and External Shocks to Developing Countries”; and United Nations, *World Economic Situation and Prospects 2011*.

Table 3. Recorded Transfers (RecT) to and from All Developing Countries, 1980-2012
(billions of U.S. dollars)

Recorded Transfers: All Developing Countries					
Period / Year	Primary Income	Secondary Income	Financial Account Balance	Capital Transfers	Recorded Transfers (RecT)
1980-1984	-35.8	14.6	44.2	-0.1	22.8
1985-1989	-42.6	20.9	19.3	-0.1	-2.6
1990-1994	-52.1	39.9	39.3	3.7	30.8
1995-1999	-88.6	57.4	76.6	2.5	47.9
2000-2004	-114.1	86.2	-84.2	2.3	-109.7
2005	-212.6	180.8	-340.4	13.8	-358.4
2006	-232.1	215.7	-569.4	58.8	-527.0
2007	-253.1	249.7	-485.1	18.8	-469.8
2008	-282.5	276.2	-536.1	28.5	-513.8
2009	-282.0	241.3	-103.1	23.1	-120.8
2010	-379.3	272.4	-137.1	55.4	-188.6
2011	-500.5	267.3	-215.5	31.7	-417.0
2012	-455.5	246.0	-138.3	22.0	-325.9
Cumulative	-4,263.5	3,044.6	-2,049.0	293.1	-2,974.9
Average	-129.2	92.3	-62.1	8.9	-90.1

Note: As in all summary tables found in Part I, values for 1980-2004 are presented as averages. Yearly values are available in Appendix I.

27. Outflows of recorded transfers declined sharply in 2009 due to the global financial crisis as export markets shrank and the current account surplus of the group as a whole declined sharply. But outflows resumed their upward trend over 2010-11 falling somewhat in 2012 (Table 3).

28. The current account surplus has led to increasing reserve accumulation by China and other developing countries which also reflect their desire to “self-insure” against macroeconomic instability, fluctuations in commodity prices, and financial crises. China’s current reserve holdings have increased to more than US\$3 trillion. An increase in reserves under the balance of payments nomenclature is shown with a negative sign signifying capital outflows as reserves are invested in foreign assets. Data collected by the regional research institutions confirm that reserves are held not only in developed country banks but also in tax havens as well.

ii. Broad capital flight from developing countries

29. Having analyzed recorded financial transfers to and from developing countries through their balance of payments, we now turn to unrecorded and largely illicit transfers from developing countries. Certain important methodological caveats need to be pointed out.

30. First, broad capital flight consists mainly of illicit flows, because deliberate trade misinvoicing generates most flight capital. Moreover, unrecorded leakages of capital from the balance of payments also mainly consist of illicit capital.⁹ Outflows of capital through the balance of payments captured by the World Bank Residual (WBR) measure, include a smaller licit component which is not recorded in the balance of payments due to weak statistical capacity. GFI's annual updates on illicit flows show that the major portion of the WBR measure is illicit in nature so that the greater portion of total capital flight consists of illicit outflows.
31. Second, the reason we chose the WBR rather than purely illicit flows (as captured by the Hot Money Narrow or HMN method) is that we want to capture the broadest types of flows involving both licit and illicit funds. As we noted earlier, financial institutions usually have inadequate means of distinguishing between licit and illicit funds.
32. Finally, as already mentioned, we only consider outward capital flight rather than a net of inward and outward capital movements. This is because while a net of recorded flows such as foreign direct investment (FDI) or portfolio investment provides a net position on legitimate transactions that has an impact on a country's well-being, a net of capital flight consisting mainly of illicit flows in both directions would be akin to the concept of net crime, which is absurd. Inward capital flight such as under-invoicing of imports, far from providing any benefit to developing countries, actually implies import duty and VAT evasion, which results in a loss of government revenues.
33. Table 4 presents estimates of capital flight outflows. The CED (Change in External Debt) is a particular version of the WBR method that represents outflows only. Similarly, the GER (Gross Excluding Reversals) approach to trade misinvoicing also captures outflows associated with deliberate misinvoicing (i.e., export under-invoicing and import over-invoicing). We can make a number of interesting observations based on these estimates of unrecorded capital outflows.
34. Cumulative outflows amount to US\$13.4 trillion or about US\$405 billion per annum on average. They increased from an average of US\$38.6 billion during 1980-1984 to US\$394.1 billion in 2000-2004. Thereafter, they continued to increase through 2008 but fell sharply in 2009 as a result of the global financial crisis which reduced trade and other source of funds such as foreign direct investments and new loans. The reduction in trading volumes led to a decline in trade misinvoicing while a decline in the source of funds relative to use of funds led to a decline in unrecorded capital outflows from the balance of payments.

⁹ Claessens and Naudé "Recent Estimates of Capital Flight"

Table 4. Capital Flight from Developing Countries: 1980-2012
(billions of U.S. dollars)

Broad Capital Flight: All Developing Countries			
Period/Year	CED [Outflows]	GER [Outflows]	Broad Capital Flight [CED+GER]
1980-1984	17.2	21.4	38.6
1985-1989	36.4	43.8	80.1
1990-1994	47.9	67.4	115.3
1995-1999	111.0	121.2	232.2
2000-2004	169.3	224.8	394.1
2005	230.5	360.3	590.8
2006	440.5	403.4	844.0
2007	523.5	493.1	1,016.6
2008	757.8	588.0	1,345.8
2009	520.6	508.4	1,029.0
2010	513.2	585.5	1,098.8
2011	701.1	770.6	1,471.7
2012	973.0	700.3	1,673.4
Cumulative	6,569.2	6,802.7	13,371.9
Average	199.1	206.1	405.2

35. Capital flight from developing countries over the 33-year period 1980-2012 was split almost evenly between balance of payments leakages (CED) and deliberate trade misinvoicing (GER). Though balance of payments leakages initially accounted for about 44 percent of capital flight during the period 1980-1994, their share of outward capital flight increased to about 55 percent from 1995-2012.

36. Capital flight outflows as a share of GDP increased from 3.7 percent in 1980-84 to 6.4 percent in 2000-2004, peaking at 7.2 percent in 2008 just before the onset of the global financial crisis (Table 5). Since then there has been a decline in outward capital flight to 5.1 percent in 2010, followed by an upward swing to 6.2 percent in 2012. It is interesting to note that capital flight as a percent of GDP was the highest in the years leading up to the financial crisis before declining to a lower average during 2009-2012 as a result of reduced trade volumes and source of funds relative to use of funds. We now look at the two components of capital flight in more depth—the leakages of capital from the balance of payments and trade misinvoicing.

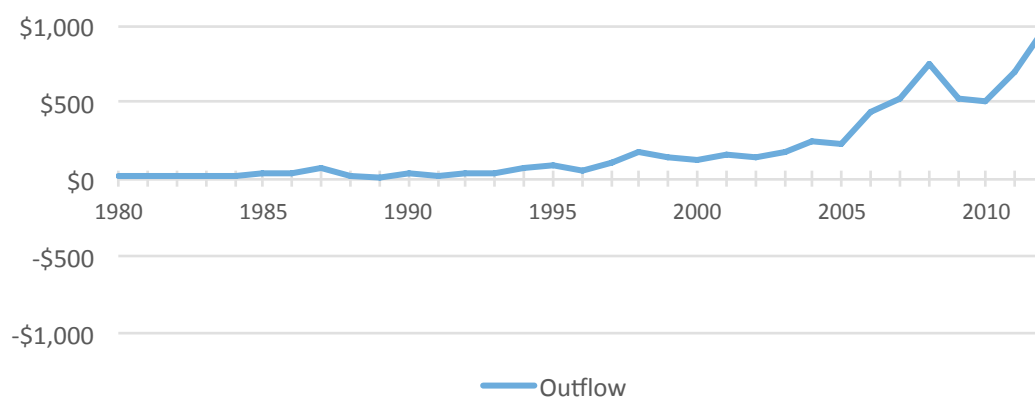
Table 5. Capital Flight Outflows as a percent of GDP, 1980-2012
(billions of U.S. dollars, or in percent)

Broad Capital Flight: All Developing Countries		
Period/Year	GDP, current prices	Broad Capital Flight as % of GDP
1980-1984	1,046.7	3.7%
1985-1989	1,603.6	5.0%
1990-1994	2,748.4	4.2%
1995-1999	4,696.7	4.9%
2000-2004	6,187.3	6.4%
2005	10,608.4	5.6%
2006	12,555.0	6.7%
2007	15,522.5	6.5%
2008	18,771.0	7.2%
2009	17,942.6	5.7%
2010	21,627.4	5.1%
2011	25,466.1	5.8%
2012	26,816.5	6.2%
Average, 1980-2012	6,991.6	5.8%
Average, 2000-2012	13,865.1	6.1%

Note 1: GDP numbers presented for 1980-2004 are averages

Note 2: GDP numbers are sums of the individual countries for which there is capital flight data in that year

Chart 4. Change in External Debt (CED): All Developing Countries, 1980-2012
(billions of U.S. dollars)



37. Chart 4 tracks the behavior of the CED portion of outward capital flight from developing countries. In essence, when source of funds of a country (FDI inflows by non-residents in excess of FDI outflows by domestic residents plus new external debt contracted in excess of repayments of old loans) exceed use of funds (such as financing current account deficits and/or addition to reserves), the Residual method implies that the excess must have leaked out of the balance of payments in an unrecorded manner. The methodology underlying the WBR method is discussed in more detail in Appendix III.

38. The pattern of illicit flows due to trade misinvoicing (Chart 5 below) looks quite similar to the pattern of flows associated with leakages from the balance of payments (Chart 4). While gross outflows due to misinvoicing (i.e., due to export under-invoicing and import over-invoicing, Chart 5) were very small in the early 1980s, they have risen significantly since then. Similarly, outflows through the balance of payments have increased sharply since 2000, as the source of funds far outstripped use of funds except in 2009 when source of funds fell in relation to use. However, BoP outflows quickly recovered, hitting a new peak of US\$973 billion in 2012.

Chart 5. Trade Misinvoicing (GER): All Developing Countries, 1980-2012
(billions of U.S. dollars)

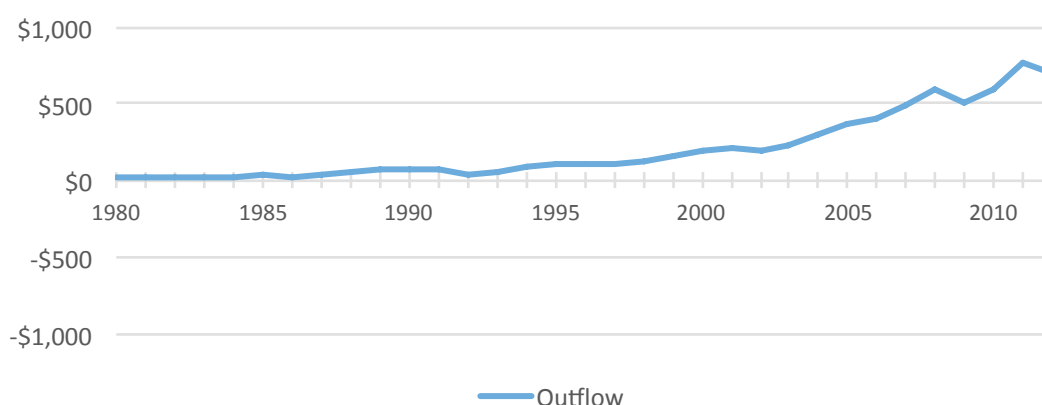


Table 6. NRT of All Developing Countries, 1980-2012
(billions of U.S. dollars)

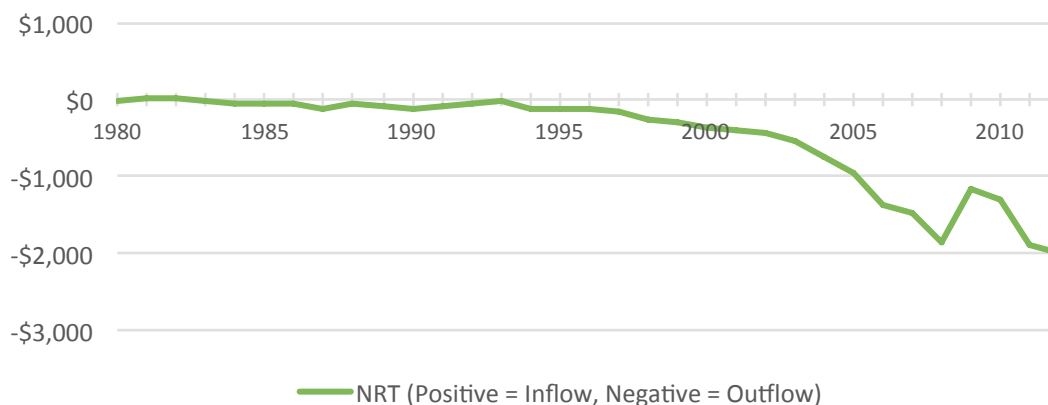
Net Resource Transfers: All Developing Countries			
Period/Year	Recorded Transfers (RecT)	Broad Capital Flight	Net Resource Transfers (NRT)
1980-1984	22.8	38.6	-15.8
1985-1989	-2.6	80.1	-82.7
1990-1994	30.8	115.3	-84.5
1995-1999	47.9	232.2	-184.3
2000-2004	-109.7	394.1	-503.8
2005	-358.4	590.8	-949.2
2006	-527.0	844.0	-1,371.0
2007	-469.8	1,016.6	-1,486.5
2008	-513.8	1,345.8	-1,859.6
2009	-120.8	1,029.0	-1,149.8
2010	-188.6	1,098.8	-1,287.3
2011	-417.0	1,471.7	-1,888.7
2012	-325.9	1,673.4	-1,999.2
Cumulative	-2,974.9	13,371.9	-16,346.8
Average	-90.1	405.2	-495.4

39. Developing countries have always been net providers of resources to the rest of the world based on the five-year intervals from 1980-2012 (Table 6). The net provision of resources increased from an average of US\$15.8 billion over the first half of the 1980s to US\$503.8 billion over the first half of the 2000s. Net outflows of resources, defined as what developing countries received in recorded resources through the balance of payments less what they lost through outward capital flight, have continued to increase since 2005. The net drain of resources fell briefly in 2009 mainly as a result of reduced inflow of recorded transfers and a reduced volume of outward capital flight in the wake of the financial crisis. But the net drain of resources from developing countries continued its upward climb in the following three years to reach US\$2.0 trillion in 2012. These developments are shown in Chart 6 which tracks the NRT for the period 1980-2012.
40. In sum, as Table 3 showed, the outward recorded transfers over the period 1980-2012 are mainly driven by outflows due to primary income (US\$4.3 trillion, consisting of compensation to employees and income on direct and portfolio investments) and outflows from the financial account (US\$2 trillion). Offsetting these outflows were net inflows of secondary income (such as remittances and other transfers) amounting to US\$3 trillion. Net capital transfers were small accounting for just US\$0.3 trillion. This, together with outward capital flight of US\$13.4 trillion over this period led to a cumulative loss of resources of US\$16.3 trillion. However, as we argue in sub-section (iii), even this massive loss of resources is understated.

iii. Adjustments for services trade and same-invoice faking

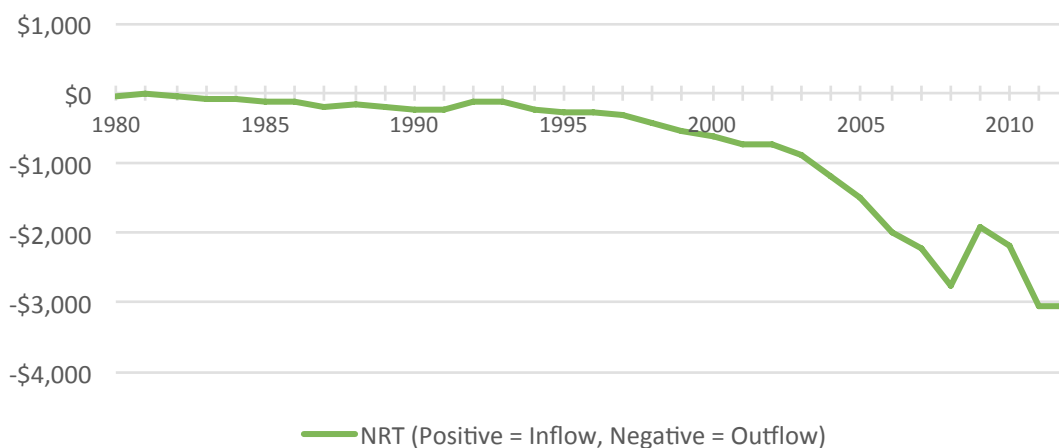
41. Outward capital flight is actually understated for two main reasons and needs to be adjusted. First, the understatement arises from the fact that the IMF's Direction of Trade Statistics (DOTS), the database for our trade misinvoicing estimates, *relates to goods trade only and excludes trade in services and intangibles*. The services factor is derived as the ratio of world trade in services to world trade in goods (world exports plus imports). Hence, the GER estimates of trade misinvoicing involving goods needs to be "bumped up" by the services factor to come up with total trade misinvoicing in goods and services. The assumption is that the propensity to misinvoice services is the same as the propensity to misinvoice goods trade. This is a conservative assumption given that it is much harder to detect misinvoicing of services, and intellectual property in particular has become a favorite route for shifting unrecorded money across borders.

Chart 6. Net Resource Transfers (NRT): All Developing Countries, 1980-2012
(billions of U.S. dollars)



42. There are no estimates of same-invoice faking, a practice whereby traders misinvoice their exports or imports of goods within the same invoice through word-of-mouth collusion. No statistical methods can estimate illicit flows that are generated through such practices, which are prevalent in China and many other developing countries.

Chart 7. Adjusted Net Resource Transfers (NRT): All Developing Countries, 1980-2012
(billions of U.S. dollars)



43. The only way we can estimate illicit flows involving same-invoice faking is to assume that because same-invoice faking would be extremely difficult if not impossible to detect, the propensity to engage in such practices must be at least as high as that for cross-invoice faking which we estimate through bilateral trade data comparisons. So conservatively we double illicit outflows through trade misinvoicing in order to include same-invoice faking.

44. Once this adjustment is carried out, the NRT line shown in Chart 7 plunges even further into negative territory, well beyond the unadjusted NRT line shown in Chart 6. The inclusion of estimates of i) misinvoicing of services and intangibles and ii) same-invoice faking are defensible. If reasonably accurate, at this rate of resource depletion, it is not possible to foster long-term economic development and to close the widening income inequality between the rich and poor countries through aid alone. While developing countries need to create a better business climate to attract more non-debt creating inflows of resources as recorded in the balance of payments, both developing and advanced countries need to collaborate in order to curtail outward capital flight which mainly consists of illicit flows.

iv. Net Resource Transfers (NRT) to and from Developing Countries, Excluding China

45. This section presents a summary of the components of NRT for developing countries excluding China from 1980-2012 looking at both recorded and unrecorded financial flows. It closely resembles sections (i)-(iii) above, but considers the developing world's net resource transfers without the outside influence of China. So, prior to discussing NRT (Table 10), we analyze RecT (Table 7) and capital flight (Table 8) for developing countries excluding China.

46. The cumulative RecT position amounted to an outflow of US\$1.1 trillion over this period (Table 7). Though outflows through the financial account are almost one-third of cumulative recorded outward transfers if China is included (Table 3), the financial account balance of developing countries excluding China is almost negligible over the period 1980-2012 (Table 7).

Table 7. RecT to and from Developing Countries Excluding China, 1980-2012
(billions of U.S. dollars)

Recorded Transfers: Developing Countries, Excluding China					
Period / Year	Primary Income	Secondary Income	Financial Account Balance	Capital Transfers	Recorded Transfers (RecT)
1980-1984	-36.2	14.5	44.4	-0.1	22.6
1985-1989	-42.8	20.5	13.4	-0.1	-9.0
1990-1994	-52.0	39.2	37.2	3.7	28.0
1995-1999	-76.0	53.8	77.9	2.5	58.1
2000-2004	-102.0	72.6	-44.9	2.4	-71.9
2005	-196.5	156.9	-181.0	9.7	-210.9
2006	-227.0	187.6	-329.9	54.8	-314.5
2007	-261.2	212.6	-115.6	15.7	-148.5
2008	-311.1	233.0	-93.6	25.5	-146.1
2009	-273.5	209.6	102.7	19.8	58.6
2010	-353.4	231.7	52.5	51.4	-17.9
2011	-430.1	242.8	-87.7	28.1	-247.0
2012	-435.6	242.5	-5.7	18.9	-179.9
Cumulative	-4,033.8	2,720.2	-18.3	265.2	-1,066.8
Average	-122.2	82.4	-0.6	8.0	-32.3

47. Over the period 1980-2012, outward capital flight from this group of developing countries excluding China totaled US\$10.6 trillion, averaging about US\$322 billion per year (Table 8). Barring a significant drop in 2009 following the financial crisis, outflows from the balance of payments of developing countries, whether including and excluding China, have increased steadily since 1980.

Table 8. Capital Flight from Developing Countries Excluding China, 1980-2012
(billions of U.S. dollars)

Broad Capital Flight: Developing Countries, Excluding China			
Period/Year	CED [Outflows]	GER [Outflows]	Broad Capital Flight [CED+GER]
1980-1984	16.1	20.8	36.8
1985-1989	33.1	29.9	63.0
1990-1994	28.9	48.6	77.5
1995-1999	64.4	98.8	163.1
2000-2004	148.1	157.1	305.2
2005	221.8	278.0	499.8
2006	353.6	315.9	669.5
2007	441.1	386.0	827.1
2008	695.3	483.2	1,178.4
2009	520.6	409.9	930.4
2010	447.6	464.8	912.4
2011	570.7	621.6	1,192.3
2012	634.2	537.8	1,172.0
Cumulative	5,337.3	5,272.9	10,610.2
Average	161.7	159.8	321.5

48. Table 9 shows that capital flight from developing countries excluding China increased from 4.9 percent of their GDP in the first-half of the 1980s to 5.1 percent of GDP in the second half of that decade. It then dropped to 3.4 percent of GDP in the first half of the 1990s after which capital flight increased steadily to 8.3 percent of GDP in 2008 just before the global financial crisis began. After that capital flight declined to 5.9 percent of GDP in 2010 due mainly to a fall in trading volumes and in source of funds before increasing to 6.4 percent of GDP in 2012.

49. Generally, the trend of NRT excluding China looks very similar to that for all developing countries. On a cumulative basis between 1980 and 2012, US\$10.6 trillion left the developing world excluding China (Table 8), as compared to the US\$13.4 trillion that flowed out of all developing countries (Table 4). The larger transfer including China reflects the outward investments of its swelling reserves associated with a large current account surplus. The NRT of developing countries excluding China is shown in Chart 8. Over the period 1980-2000, developing countries excluding China did not lose resources on a significant scale; the NRT line barely dipped into negative territory then. The plunge started in 2000 when, as recorded outflows increased (due to rising reserves), outward capital flight increased due to increasing misinvoicing and balance of payments leakages.

Table 9. Capital Flight Outflows as a Percent of GDP, 1980-2012
(billions of U.S. dollars, or in percent)

Broad Capital Flight: Developing Countries, Excluding China		
Period/Year	GDP, current prices	Broad Capital Flight as % of GDP
1980-1984	749.3	4.9%
1985-1989	1,245.4	5.1%
1990-1994	2,253.7	3.4%
1995-1999	3,763.5	4.3%
2000-2004	4,669.1	6.5%
2005	8,339.8	6.0%
2006	9,825.2	6.8%
2007	11,999.3	6.9%
2008	14,212.1	8.3%
2009	12,882.9	7.2%
2010	15,587.8	5.9%
2011	17,973.6	6.6%
2012	18,355.0	6.4%
Average, 1980-2012	5,229.7	6.1%
Average, 2000-2012	10,193.9	6.7%

Note 1: GDP numbers presented for 1980-2004 are averages

Note 2: GDP numbers are sums of the individual countries for which there is capital flight data in that year

Table 10. NRT of Developing Countries Excluding China, 1980-2012
(billions of U.S. dollars)

Net Resource Transfers: Developing Countries, Excluding China			
Period/Year	Recorded Transfers (RecT)	Broad Capital Flight	Net Resource Transfers (NRT)
1980-1984	22.6	36.8	-14.2
1985-1989	-9.0	63.0	-72.0
1990-1994	28.0	77.5	-49.4
1995-1999	58.1	163.1	-105.0
2000-2004	-71.9	305.2	-377.1
2005	-210.9	499.8	-710.7
2006	-314.5	669.5	-984.0
2007	-148.5	827.1	-975.6
2008	-146.1	1,178.4	-1,324.5
2009	58.6	930.4	-871.8
2010	-17.9	912.4	-930.3
2011	-247.0	1,192.3	-1,439.3
2012	-179.9	1,172.0	-1,351.9
Cumulative	-1,066.8	10,610.2	-11,677.0
Average	-32.3	321.5	-353.8

Chart 8. Net Resource Transfers: Developing Countries, Excluding China, 1980-2012
(billions of U.S. dollars)

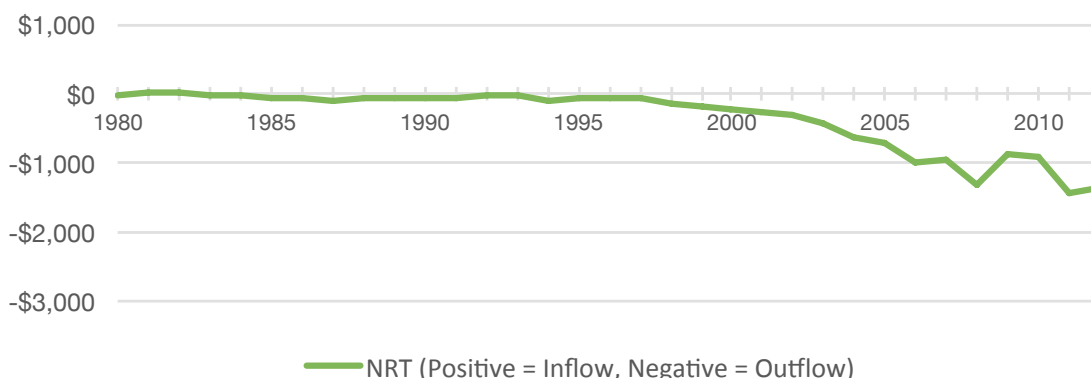
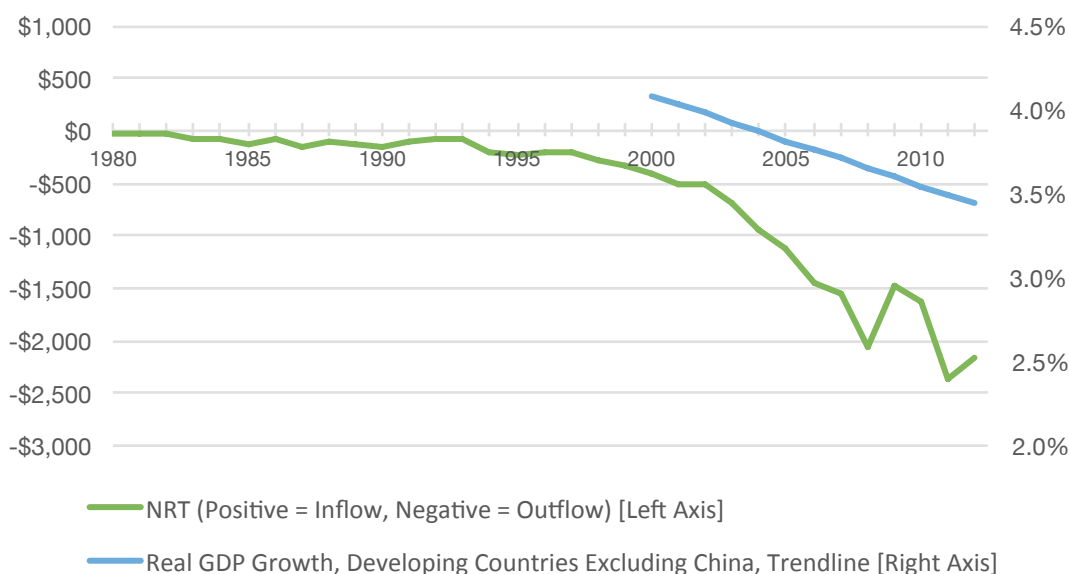


Chart 9. Adjusted Net Resource Transfers: Developing Countries, Excluding China, 1980-2012
(billions of nominal U.S. dollars, or percent change)



50. If outward capital flight was to be adjusted upwards due to misinvoicing involving (i) services trade and (ii) same-invoice faking, the NRT line for developing countries excluding China would turn sharply negative, as Chart 9 shows. The sharp dip of the NRT line after 2000 correlates well with the deceleration in economic growth of developing countries excluding China shown by the blue trend line. Economic growth is a complex process and it is simplistic to relate one variable to explain growth. However, a number of researchers such as Sachs¹⁰ and Husain¹¹ have pointed out that negative NRTs have led to a decline in investments which in turn has led

¹⁰ Jeffrey Sachs, "Managing the LDC Debt Crisis," Brookings Papers on Economic Activity, 1986.

¹¹ Ishrat Husain, "The Adequacy of Resource Flows to Developing Countries," Report to World Bank Development Committee, (February 1988).

¹² Webb and Zia, "Borrowing, Resource Transfers, and External Shocks to Developing Countries".

to stagnant outputs.¹² These finding also seem to be consistent with the results in this paper.

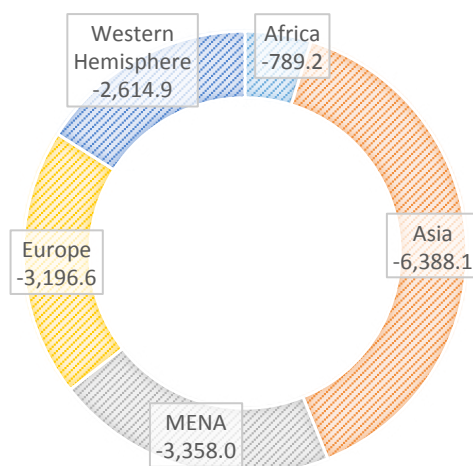
v. Regional NRT

51. Table 11 and Chart 10 show the NRT for all developing countries by region based on capital flight outflows. Every region of the developing world lost resources on a cumulative basis over the period 1980-2012. Not surprisingly (and primarily due to China's outsized role), Asia lost the most (US\$6.4 trillion), followed by developing Europe (US\$3.4 trillion), MENA due to rising current account surpluses and large unrecorded outflows (US\$3.2 trillion), Western Hemisphere (US\$2.6 trillion), and Africa (US\$789 billion). The regional cumulative distribution of NRT for the period 1980-2011 is shown in Chart 10.

Table 11. NRT of All Developing Countries by Region, 1980-2012
(billions of U.S. dollars)

Regional Balance of Net Resource Transfers (NRT)					
Period/Year	Africa	Asia	Europe	MENA	Western Hemisphere
1980-1984	-0.6	-1.1	1.8	-0.1	-15.8
1985-1989	-11.9	-24.5	-3.2	-3.8	-39.3
1990-1994	-10.0	-51.0	-7.4	-0.7	-15.4
1995-1999	-6.6	-109.7	-35.3	3.1	-35.8
2000-2004	-36.2	-201.6	-115.7	-76.7	-73.7
2005	-39.7	-332.3	-158.3	-210.9	-208.2
2006	-50.9	-516.4	-259.4	-313.2	-231.0
2007	-75.6	-654.1	-231.3	-278.1	-247.4
2008	-74.2	-674.7	-449.9	-413.9	-246.9
2009	-19.7	-427.2	-373.3	-147.6	-181.9
2010	-74.3	-495.7	-272.4	-258.9	-186.0
2011	-70.0	-608.7	-434.8	-547.5	-227.7
2012	-58.4	-739.6	-379.7	-635.9	-185.6
Cumulative	-789.2	-6,388.1	-3,358.0	-3,196.6	-2,614.9
Average	-23.9	-193.6	-101.8	-96.9	-79.2

Chart 10. NRT Distribution by Regions, 1980-2011
(billions of U.S. dollars)



vi. NRT and Economic Performance in Developing Economies

52. Some economic consequences of capital inflows and capital flight. Based on a panel regression of 103 developing countries over 2001-07, a recent study at the IMF Research Department found that “Neither institutional quality nor domestic credit affect the extent to which capital inflows translate into domestic investment”.¹³ The authors chose the period based on the fact that it corresponds to a period of “unprecedented loosening of global monetary conditions” that led to significant declines in interest rates and surging capital inflows.
53. These findings have obvious implications for this study. If capital inflows are a major determinant of domestic investment, outward capital flight would decimate the beneficial impact of recorded capital inflows on domestic investment. Now since investment is a major driver of economic growth, the implication is that capital flight would adversely impact economic performance.
54. Our results are consistent with the IMF study even though we used an entirely different approach and database to arrive at this conclusion. Our indicator of economic performance is based on consumption which determines living standards. Data on consumption are based on national accounts data. We find that total recorded inflows and recorded inflows less illicit outflows (both aggregated over all developing countries and measured as shares of total developing country GDP) are positively correlated with living standards in the developing world as a whole (measured by real household consumption per capita). The correlations (listed in the table below) are significantly different from zero (two-tailed test) and positive in all cases.
55. We would expect measures of resource flows into and out of countries in the developing world to be correlated with the economic well-being of residents of those countries. GFI put this notion to the test using the data developed in this study. Total recorded inflows and net resource transfers were aggregated across available data for developing and emerging countries for each of the 13 years between 2000 and 2012. We found these aggregate flows (measured as shares of developing world GDP) to be positively correlated with living standards in the developing world as a whole (measured by real household consumption per capita). The correlation measures, selected because they can be especially useful in small samples, are positive and appear significantly different from zero in all cases.

¹³ Oana Luca and Nikola Spatafora, “Capital Inflows, Financial Development, and Domestic Investment: Determinants and Inter-Relationships,” Working Paper WP/12/120 (Washington, DC: International Monetary Fund, May 2012), p. 9. <https://www.imf.org/external/pubs/ft/wp/2012/wp12120.pdf>.

Table 12. Correlations Between Developing Country Flows and Domestic Living Standards, 2000-2012

Correlations Between Developing Country Flows and Domestic Living Standards, 2000-2012				
	Spearman ($H_0: \rho = 0$)		Kendall ($H_0: \tau = 0$)	
	ρ	p -value (95%)	τ	p -value (95%)
Recorded Inflows (76 countries, % of GDP)	0.533	0.064	0.308	0.164
Excluding China	0.604	0.032	0.385	0.076
China	0.511	0.078	0.308	0.164
Recorded Inflows less Illicit Outflows (57 countries, % of GDP)	0.643	0.021	0.487	0.022
Excluding China	0.659	0.017	0.462	0.03
China	0.593	0.036	0.436	0.042

Sources: Primary data from the IMF, Balance of Payments Statistics ([online](#)); IMF, World Economic Outlook ([online](#)); and the UN, System of National Accounts ([online](#)).

56. Hence, the adverse impact of illicit flows on economic performance and living standards seems to be corroborated regardless of whether one approaches this issue from the investment side (as in the IMF study) or the consumption side (as in this study). There is a caveat to the above results. Whereas the IMF sample size is large involving a panel of 103 developing countries over 7 years (721 observations), our sample size is small given IMF BoP data limitations. Specifically, the BoP series on financial account (liability), primary income (credit), secondary income (credit), and capital transfers (credit) that together comprise total capital inflows into developing countries are only available for the period 2005-2014 (we had to truncate the sample period at 2012 in order to be consistent with the rest of the paper). According to the IMF Statistics Department, it would be extremely difficult to extend these series backwards to 1980 for two reasons. First, many developing countries have not yet completed the migration of their BoP compilation system from the Balance of Payments Fifth Edition (BPM5) to the current Balance of Payments Sixth Edition (BPM6) on which the aggregate BoP series are based. Second, the IMF does not have the statistical breakdown to reclassify the BPM5 series to the BPM6 version in order to extend the country series backwards from 2005. The aggregate series can only be extended as more and more countries successfully migrate to the new classification, allowing the IMF to estimate any remaining gaps using secondary sources (such as the World Economic Outlook database and information provided by its country desks).

57. While the results are indicative of the beneficial impact of capital inflows on real consumption in the absence of capital flight and an adverse impact of the latter on living standards in poor developing countries, more robust results would require running the tests with a much larger sample size. It is likely that the IMF study carried out at its Research Department, skirted the data issues underlying the IMF BoP series by using detailed data on capital flows extracted from the World Bank's *Global Development Finance* (GDF) database. In fact, the authors note that the GDF has a more comprehensive coverage of different types of capital flows than comparable sources. However, such a detailed empirical study of this issue was outside the scope of our study.
58. NRT in general and IFF in particular can also affect the viability of domestic policy institutions and the efficacy of policy outcomes in developing countries. An important asset of any government is its *fiscal capacity*. Fiscal capacity is often defined as the degree to which a government is able to raise revenues if and when it needs to. This is a central to the operation of government and it is this capacity that distinguishes governments from individuals and businesses in an economic sense. Fiscal capacity is crucially connected to national sovereignty and, in this way, financial flows that undermine fiscal capacity (e.g., through significant underground economic activity, tax evasion and illegal trade mispricing) undermine not only fiscal policy, but also the government's ability to carry out stable and credible monetary and currency policies that are important to sustaining growth.

vii. Criminal Flows: Net in or Net Out?

59. An estimate of total financial flows affecting developing countries would not be complete without recognizing that crime generates an enormous amount of money, some of it bringing money into and some of it taking money out of poorer countries. GFI has estimated the global value of transnational criminal flows to be roughly US\$1.1 to US\$1.4 trillion in 2014—about twice the size of our 2011 estimate. Though the economic impact of these flows is significant in itself, there is little doubt that crime also negatively impacts the general security and stability for states around the globe.
60. GFI has attempted for several years to analyze this phenomenon, without successfully concluding on financial terms alone whether crime is a net gainer or net loser for the developing world in particular. In 2011 and 2014 GFI completed analyses of the retail value of 14 categories of criminal activities. Table 13, below, conveys the results of these two studies.

Table 13. Estimated Values of Transnational Crime^{14, 15}
(billions of U.S. dollars)

Illicit Market	2011 [1]	2016 [2]
Drugs	320.0	435 - 610
Human Trafficking	31.6	150.2
Human Organs	0.6 - 1.2	0.9 - 1.9
Wildlife	7.8 - 10	5 - 23
Fishing (Illegal/unreported)	5.0 - 11.8	15.5 - 36.5
Timber/Logging	7.0	50 - 150
Small Arms & Light Weapons	0.3 - 1	1.3 - 2.5
Diamonds & Colored Gemstones	0.9	.
Illegal Mining	.	12 - 48
Gold	2.3	.
Art & Cultural Property	3.4 - 6.3	1.2 - 1.6
Oil Theft	10.8	.
Counterfeiting Total	250.0	500 - 800
- Counterfeit Pharmaceuticals	35 - 40	.
- Counterfeit Electronics	50.0	.
- Counterfeit Cigarettes	2.6	.
Total	\$639 - \$651	\$1,171 - \$1,824

[1] Jeremy Haken, *Transnational Crime in the Developing World* (Washington, DC: Global Financial Integrity, 2011), <http://www.gfintegrity.org/report/briefing-paper-transnational-crime/>.

[2] Channing S. May, *Transnational Crime and the Developing World* (Washington, DC: Global Financial Integrity, Forthcoming).

61. The figures in the table above have been compiled using a wide range of sources based on different methods as the basis for their estimates. Estimating the value of a given crime is therefore in itself a challenge. There is often no single method to give a clear, indisputable result due to the very nature of these flows. This is particularly evident looking at the wide span between some of the estimates concerning the same illicit market, e.g. from US\$30 billion to US\$100 billion for illicit timber logging.

62. Furthermore, attributing the value of a specific criminal flow—or part of it—to any particular country is another challenge. For instance how does one estimate the loss to a country when a citizen is trafficked abroad? Or in the case of counterfeit currency, if it is produced in, say, North Korea and then smuggled out to Europe or the United States, do we estimate the value to North Korea dollar for dollar? Lastly, even if we were able to determine criminal flows on a country by country basis, how do we know whether these flows reach the economy, whether they have an economic impact? These are just some of the questions that make this subject

¹⁴ Jeremy Haken, *Transnational Crime In the Developing World* (Washington, DC: Global Financial Integrity, 2011). http://www.gfintegrity.org/storage/gfip/documents/reports/transcrime/gfi_transnational_crime_web.pdf

¹⁵ Channing S. May, *Transnational Crime and the Developing World* (Washington, DC: Global Financial Integrity, Forthcoming). *Adjusted for updated methodology

area so problematic.

63. Our conclusion for now is that it is not possible to determine, based on publicly available data, for a given country or for the developing world together whether there is a net inflow or net outflow of the proceeds of transnational crime. A net outflow would mean a further supply of capital by developing economies to developed economies, but a net inflow should not necessarily be classified as a benefit. Advocates, experts, and policymakers should continue to focus on the broader cross border flows of money estimated and analyzed in this report, which are much more closely tied to the investment and growth and economic health of developing country economies.

II. The Normative Case Against Offshore Tax Havens

i. Introduction

64. In the wake of the financial crisis, tax havens and their role in the crisis have been hotly debated. One view on tax havens is that they are “Treasure Islands” with a positive effect on the global economy.¹⁶ This view starts from the presumption that humans are well-behaved, and that tax havens are jurisdictions that offer firms and individuals opportunities for tax avoidance that allows them to sidestep poorly designed tax systems. Under such circumstances tax havens may even increase welfare in high tax countries. Not only are tax havens helpful for investors, but key economic indicators show that their growth rates outpace most other countries.¹⁷ Tax havens also enjoy high income levels and play an important role in the global economy as conduits for international capital flows.¹⁸ But is there another side to this story? Does tax haven affluence come at the expense of the rest of the world? A look at the real world is worrisome.
65. The United States allegedly loses in excess of US\$100 billion annually in tax revenue due to undeclared bank deposits offshore, tax evasion and avoidance by multinational corporations.¹⁹ Norway, a country with 5 million inhabitants, estimates that its taxpayers have undeclared bank deposits in excess of US\$35 billion in tax havens.²⁰ Financial secrecy and offshore tax evasion are widespread and engrained in the financial system. Two examples are UBS, the largest Swiss bank, and Wegelin, the oldest bank in Switzerland.
66. In 2009, UBS accepted a fine of US\$780 million on charges of conspiring to defraud the United States by impeding the Internal Revenue Service.²¹ UBS had secretly sent its employees into the United States where they engaged in illegal banking activities that included soliciting U.S. taxpayers to open secret bank accounts with full knowledge that it was helping them commit tax evasion. Wegelin, the oldest bank in Switzerland, pleaded guilty in New York City in 2013 to criminal charges for helping wealthy American customers evade taxes by hiding more than \$1.2 billion in secret accounts. Wegelin bank officials admitted that the bank had campaigned UBS’ departing customers to move their secret accounts to Wegelin where they would continue to be hidden and free of tax. Wegelin pleaded guilty to the criminal charges by the US state attorney and paid \$74 million in fines, restitution and forfeited funds, which ultimately lead the bank to close its doors. Other well known cases are the LTG-scandal, as well as the money laundering scandal by one of the biggest banks in the world, HSBC.

¹⁶ James R. Hines Jr., “Treasure Islands” *Journal of Economic Perspectives* 24, no. 4 (2010): 103-126.

¹⁷ Qing Hong and Michael Smart, “In Praise of tax havens: International tax planning and foreign direct investment” *European Economic Review* 54 (2010): 82-95.

¹⁸ Hines, “Treasure Islands”

¹⁹ U.S. Senate Permanent Subcommittee on Investigations: Tax haven banks and U.S. tax compliance, July 17, 2008 and http://www.justice.gov/tax/UBS_Signed_Deferred_Prosecution_Agreement.pdf, http://www.irs.gov/pub/irs-drop/bank_agreement.pdf

²⁰ “100 ansatte jakter på norske formuer,” *Dagens Næringsliv*, May 20, 2010, <http://www.dn.no/nyheter/politikk/Samfunn/2010/05/20/100-ansatte-jakter-pa-norske-formuer>.

²¹ NOU Official Norwegian Reports, Government Commission on Capital Flight from Poor Countries, Tax havens and development, 2009:19 (Oslo: Government Administration Services Information Management, 2009), 25.

67. The legislation in tax havens forbids companies owned by foreigners to have production activities in the tax haven itself so investors use what is known as shell companies as a vehicle for business transactions. These companies do not have any significant assets or operations and are little more than a legal identity hence the term shell company. Shell companies are expendable and if set up without proper identification of its owners, are perfectly suited for criminal activities. There is substantial evidence for the use of anonymous shell companies in various criminal activities. Russian officials, for example, used shell companies registered in Cyprus and the British Virgin Islands to steal hundreds of millions of dollars in a case that led to the imprisonment and death of Russian whistle-blower Sergei Magnitsky. Shell companies in the British Virgin Islands played a role in the British arms firm BAE Systems' weapon scandal, and Malta and Cyprus-registered shell companies were used by the Iranian government to conceal ownership of its tankers.²² A report by the World Bank provides 21 examples of corruption cases by government officials involving tax haven jurisdictions.²³ One point he makes is the use of shell companies in connection with money laundering.
68. Many worry that the banking and corporate secrecy offered by tax havens could facilitate criminal activities by dictators and government officials. Such worries are well founded and cannot be dismissed as just anecdotal. The Democratic Republic of Congo, Zaire (DRC), is a well-known example. Mobutu Sese Seko was in power in the DRC from 1965 to 1997. His political position enabled him to steal from society and tax havens were helping him to conceal his theft. The consequences were devastating: Income in the DRC per capita in 1992 was half of what it was at independence in 1960.²⁴
69. There are other examples where the use of tax havens helped to conceal theft. Sani Abacha was the de facto head of state in Nigeria during 1993-98. He misappropriated between US\$3-5 billion from Nigeria's currency reserves, hiding the money in Jersey, Liechtenstein, Switzerland and the UK. With the help of the UK lawyer Tim Daniels, Nigeria has had close to US\$3bn repatriated. The president of Pakistan, Asif Ali Zardari, previously married to Benazir Bhutto, has been tried and found guilty of corruption in Pakistan, Switzerland and the Isle of Man.²⁵ Tim Daniels lists 14 cases of presidents and government officials who have stolen money from their countries. Their crimes have all been facilitated by the use of tax havens.²⁶

²² Michael Findlay, Daniel Nielson, and Jason Sharman, "Global Shell Games: Testing Money Launderer's and Terrorist Financiers' Access to Shell Companies" Centre for Governance and Public Policy Working Paper. (Queensland, Australia: Griffith University, 2012). <http://www.gfintegrity.org/wp-content/uploads/2014/05/Global-Shell-Games-2012.pdf>

See also Jason C. Sharman, "Shopping for Anonymous Shell Companies: An Audit Study of Anonymity and Crime in the International Financial System" *Journal of Economic Perspectives* 24, no.4 (2010): 127-140.

²³ Richard K. Gordon, "Laundering the Proceeds of Public Sector Corruption" Case Legal Studies Research 09-10 (Washington, DC: World Bank, Spring 2009), p.18. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1371711

²⁴ Daron Acemoglu, James A. Robinson, and Thierry Verdier, "Kleptocracy and divide-and-rule: a theory of personal rule" *Journal of the European Economic Association* 2, no. 2-3 (April-May 2004): 162-192.

²⁵ NOU, "Tax Havens and Development".

²⁶ Tim Daniels, "Abacha: The Kleptocrat's legacy and James Ibori, Nigeria's president Manque." (Presentation at the conference on Financial Secrecy, Society and Vested Interests, Bergen, Norway, November 20-22, 2012). <http://www.pwyp.no/sites/all/files/TimDaniel.pdf>

70. In this paper, I provide a survey of the externalities that follow from tax haven legislation. It is interesting that the term asymmetric information is hardly mentioned in relation to tax havens despite the worries over corporate and banking secrecy. The Nobel Prize in economics in 2001 was awarded jointly to G.A. Akerlof, M. Spence and J. Stiglitz for their work on how information asymmetries impose transaction costs that impede market efficiency. Insofar as tax havens allow individuals and firms to conceal their activities and even in some cases obtain anonymity, wrongdoers do not bear the full consequences of their actions. This has undesirable outcomes in a wide variety of markets.
71. The paper starts by looking at how the tax systems and ring-fencing in tax havens work and how they facilitate asymmetric information. In a next step I show how this leads to inefficient outcomes and breach of regulation. The last part of the paper brings together research from various scientific disciplines on how tax havens affect poor countries. A major insight that follows from this research is that tax havens contribute to the weakening of institutional capacity and quality in poor countries.
72. The concluding section of the paper examines the initiatives by the OECD to force tax havens to agree on information exchange treaties (TIEAs) for tax enforcement purposes. The question of whether tax havens benefit the global economy or harms it cannot be answered without taking into account that this is not merely an economic question; it is also an ethical one. Most countries' legislation puts aside economic arguments when issues such as the drug trade, human trafficking or murder are on the table. The international agenda against tax havens has primarily been occupied with the issues of tax planning and taxes in order to recuperate tax revenue in the wake of the financial crisis. Nonetheless, some of the evidence produced in this paper shows that the lack of supervision in tax havens promotes activities linked to the darkest sides of society.

ii. The Business Model of Secrecy Jurisdictions

73. There are no generally accepted criteria for determining what a tax haven is; yet the term “tax haven” is a well-known and frequently used expression. It is also often used synonymously with, or as an alternative to, “offshore financial center” (OFC) and “secrecy jurisdiction,” although neither of these terms has a generally accepted definition.²⁷ In the continuation, I shall use the term secrecy jurisdiction and tax haven interchangeably, though I prefer the term *secrecy tax haven* to the term *tax haven*. Many countries may be labeled as low tax countries in the sense that they offer low or zero taxes on certain activities, but the set of rules that govern ring-fenced legislation in normal states differ considerably from those in secrecy jurisdictions.

²⁷ Several non-governmental organizations, however, define tax havens and even provide lists of countries classified as tax havens. One example of this is the Tax Justice Network.

74. Tax and other privileges given in a tax haven are directed at foreign investors only, and are not available to local firms and residents.²⁸ The favorable part of the ring-fenced legislation in secrecy jurisdictions prevents tax-favored enterprises (often called exempted companies or international business companies) owned by foreign investors from undertaking local operations or activities over and above the formal activities associated with their registration and board membership. Although legislative details may vary, investments in tax havens often involve setting up a holding-company structure in which the tax haven affiliate's activities are conducted in other states. Examples are ship registration (flags of convenience), financial and insurance intermediaries, and the leasing of brand names.²⁹
75. In normal states, favored industries are monitored and supervised in order to ensure that privileges are not used elsewhere. In tax havens, it is the opposite. Supervision and the enforcement of rules and regulation are costly and have no income side, since foreign investor firms do not pay tax, nor can operate locally. In addition, supervision implies transparency, which goes against the desire of many tax haven users. The case of Cyprus is revealing. Despite international regulation (such as FATF) and being a member of the EU, the main Norwegian business newspaper, *Dagens Næringsliv*, was denied access to the Cyprus registry. After a court order that granted the newspaper access, its investigation revealed that the registry was at least 10 years behind in firm registration, and that firms could leave out important financial records in their filings without risk of detection.³⁰
76. Lack of monitoring and supervision is part of the business model of tax havens, and so is tax domicile. In most countries, a company is generally treated as a resident for tax purposes if it is incorporated in the country or, if the company is not incorporated there, whether its central management and control are exercised in the country. The term "central management and control" refers to the highest level of oversight, usually as exercised by the board, rather than day-to-day management. Since the ring-fenced legislation of most tax havens forbids local activity, tax domicile is ensured by the requirement that a firm appoints a sufficient number of locals as board members and that meetings are held in the tax haven. A major question in law is still whether a firm really is tax domiciled in the tax haven, or if local board members are straw men instructed from elsewhere.
77. The uncertainty of who exercises control is made even worse by the practice used in many tax havens of allowing pre-signed undated letters of resignation from local board members.³¹ These letters are often kept by service providers who represent the shareholders. The argument for this practice is often administrative ease, but such letters also provide a

²⁸ NOU, "Tax Havens and Development".

²⁹ For example, the IKEA trademark and concept are owned by Inter IKEA Systems, a private Dutch company. Its parent company is Inter IKEA Holding, which is registered in Luxembourg, and which in turn belongs to an identically named company in the Netherlands Antilles. The latter is run by a trust company in Curacao. Beneficial owners are unknown, but have been linked to IKEA founder Kamprad.

³⁰ See "Her Fant Dagens Næringsliv 47 Milliarder," *Dagens Næringsliv*, August 11, 2012, <http://www.dn.no/nyheter/naringsliv/2012/11/08/her-fant-dagens-naeringsliv-47-milliard>.

³¹ Edward Report, "Review of Financial Regulation in the Crown Dependencies" Part 1, section 13.2. *Jersey Financial Service Commission*, 2009.

powerful tool for instilling obedience into local board members who derive a significant part of their income from board service.

78. There are many examples that highlight this problem. In the 1980s, for example, the Channel Islands became famous for the “Sark Lark.” Under the laws of Guernsey and Jersey in existence at the time, all companies were liable for corporate taxes unless the annual director’s meetings were held outside of Guernsey and Jersey, i.e. offshore from the main Channel Isles. As a result, thousands of Jersey and Guernsey companies appointed Sark directors and held board meetings in Sark or in nearby French towns where companies bought Sark addresses without any physical presence on the island. The case against Phil Crowshaw is illustrative of this. He was a Sark resident who rented out his name to 3,378 companies that needed a director or a board member, with each firm paying between 50 to 400 pounds for the use of his name. When some of the companies for which Crowshaw was legally responsible committed criminal offenses, the UK took action against him and the high court of Manchester disqualified him from acting as a director of any UK company.³²
79. Today, the issue of tax domicile for shell companies is one that frequently enters the courts in many countries. Corporate board members often register their phone calls and correspondence with the owners in order to charge them for their services, though it is often very difficult to establish whether a corporate board member has been instructed or simply sought information before making a decision. However, the amount of responsibility that falls on single individuals (as in the case of Mr. Crowshaw) is telling. Indicative of this is the fact that individuals act as board members for hundreds and sometimes thousands of firms. Some of these firms may be passive, but the sheer number is too large to be dismissed. No less than 830,000 companies were registered in the British Virgin Islands (BVI) in 2012, which only has approximately 31,000 inhabitants. In addition, there are an unknown number of trusts, banks and funds. A country like Norway with 5 million inhabitants had approx. 270,000 companies in 2012. If the financial regulatory capacity of the BVI should be on par with Norway in the sense of having the same number of employees per capita, 4% of the population in the BVI would be employed in the financial services commission.
80. Recently, there has been a move, particularly among large multinational enterprises, to set up shell companies with a minimum degree of physical presence in low-tax jurisdictions that allow this. One example is the drilling company, Seadrill, which set up a company on the island of Svalbard, a low tax jurisdiction. The Svalbard company has a single employee whose job is to send a single invoice every month for the hiring of two oilrigs. The parent company saves approximately US\$14.3 million annually by using this arrangement, and pays the employee US\$86,800 per year.³³

³² For a description of this case see Charles Piggott, “Stamping out the Sark Lark,” *Independent*, June 26, 1999, <http://www.independent.co.uk/news/business/stamping-out-the-sark-lark-1102707.html>.

³³ R. Endersen, “Svalbard kan bli et skatteparadis” [Svalbard may become a tax haven], *Dagens Næringsliv*, 27 November, 2010. <http://www.dn.no/nyheter/politikk/Samfunn/2010/11/27/-svalbard-kan-bli-et-skatteparadis>

81. The legal defense line against tax haven shell companies in most countries is through the use of domestic law or controlled foreign corporation (CFC) rules. The use of domestic law would imply that the tax authorities establish that the board level functions are performed somewhere else other than in the tax haven. CFC rules vary across states, but the basic enforcement mechanism is that taxpayers resident in a non-haven who have a controlling interest in foreign companies located in low-tax jurisdictions are taxed on their share of the foreign company's "attributable income." For CFC rules to apply, the tax authorities must be informed by the taxpayers that they hold a controlling share of such companies. Taxpayers who want to avoid taxation can do so by either not reporting that they hold such shares, or by making arrangements so that they no longer hold a controlling stake through the use of nominee shareholders in tax havens. Hence, for CFC rules to be effective, truthful self-reporting is required. One of the lessons learned from the last decade of research into tax compliance is that tax payers are more prone to misreport income when they self-report.³⁴ The EU Savings directive came about due to the lessons learned about self-reporting.
82. The issue of secrecy, and in particular what it involves, has received scant attention in the economic literature. Hines and Rice define this as a legislation that supports banking and business secrecy.³⁵ In its report on the use of secrecy jurisdictions by American corporations, the U.S. Government Accountability Office³⁶ similarly describes it as a lack of effective exchange of tax information with foreign tax authorities and a lack of transparency in the operation of legislative, legal or administrative provisions. As part of its harmful tax competition initiative, the OECD characterizes secrecy as the existence of laws or administrative practices that prevent the distribution of effective information for tax purposes with other governments.³⁷
83. Secrecy takes many forms in tax havens, one is to conceal what is really going on (confer above). The most common one, and the one that most people associate with tax havens, is an unwillingness to comply with information requests from third parties. If a tax haven has signed an information request, it will provide information if the requesting party can link a tax evader, say, to the tax haven. If the tax haven does not provide the information, then there is non-compliance. There are also other hindrances that contribute to secrecy. In most non-haven countries, there is a public registry that requires companies to file financial accounts. In tax havens, firms may be required to file annual records. These are often limited to mentioning the shareholders, the number of shares and the amount of capital invested. Nor do secrecy jurisdictions conduct public audits, which is left to the firms themselves. Public supervision and audits are, of course, not necessary when there is no taxation and no local creditors, since the firm cannot operate locally.

³⁴ Henrik J. Kleven, Martin B. Knusden, Claus T. Kreiner, Søren Pedersen, and Emmanuel Saez, "Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark" *Econometrica* 79 (2011): 651-692.

³⁵ James R. Hines Jr. and Eric M. Rice, "Fiscal Paradise: Foreign Tax Havens and American Business." *Quarterly Journal of Economics* 109, no.1 (1994): 149-82

³⁶ U.S. Government Accountability Office, *Large U.S. Corporations and Federal Contractors with Subsidiaries in Jurisdictions Listed as Tax Havens or Financial Privacy Jurisdictions*, GAO-09-157 (Washington, DC: U.S. Government Accountability Office, 2009).

³⁷ OECD, *Harmful Tax Competition: An Emerging Global Issue* (Paris: Organisation for Economic Co-operation and Development, 1998).

84. Another aspect of secrecy is that of trust legislation. In most non-haven countries, trusts are registered by a trust registry, while many countries also have a public administration of trusts to ensure that people do not give away money to themselves. In secrecy jurisdictions, a trust is normally a private agreement. The implication of this is that the trust is not known to the general public or the authorities. Although there may be rules that guard against the misuse of trusts in secrecy jurisdictions, there is no effective enforcement of these rules, since those who benefit from them do not reside in the tax haven. In essence then, such structures are an open invitation to abuse. It is for such reasons that many states have public institutions to administrate trusts.
85. In conclusion, it is the combined effects of ring-fenced legislation and secrecy rules that make these jurisdictions so attractive. The way ring-fencing works means that secrecy jurisdictions do not have any incentive to enforce regulations and supervision. When this is paired with confidentiality, a string of externalities follows. Since firms registered in tax havens must operate in other states, the implication is that the externalities that follow from tax haven legislation occur in non-haven states. By applying a revealed preference to this legislation, it is clear that tax havens also see the legislation aimed at foreigners as being harmful; otherwise they would have allowed these firms to operate domestically. To see how ring-fencing works in practice, the example of Mauritius is provided below.

a. An Example of Ring-fencing

86. Tax havens have recently come into the public eye due to the financial crisis, and window dressing has therefore become an important part of their business model. In order not to be labeled a zero- or low tax jurisdiction, some of them have corporate tax rates in the 10-20% interval that seemingly apply to both the local-and foreign investor regime, although the reality is very different. One example of this is Mauritius, which in 2009 was scrutinized by a Norwegian government commission.³⁸
87. In Mauritius, neither residents nor non-residents pay capital gains tax, inheritance or wealth tax. In order to attract foreign investors, Mauritius offers two types of companies that are only accessible to non-residents, and where secrecy applies. These companies, which are named Global Business Company 1 and 2 (hereafter named GBC1 and GBC2), cannot use local currency. The restrictions that apply mean that although they are incorporated in Mauritius, they must conduct their business in other states. In order to add substance to the GBC1 companies, they must use locals for company registration purposes, and they are often managed by management companies.

³⁸ NOU, "Tax Havens and Development", ch.7. The description of the tax system in Mauritius is based on this investigation.

88. The corporate tax rate in Mauritius is 15 percent and applies to both domestic (local) companies and GBC1 companies, though GBC2 companies are exempt from taxation. For GBC1 companies, foreign investors can claim an automatic foreign tax credit which yields an 80 percent reduction in the 15 percent rate irrespective of whether foreign taxes have been incurred or not. This means that the nominal tax rate is 3% for GBC1 companies, which should be contrasted to non-haven countries, where tax credits are only given based on documented source taxes falling on repatriated income. Even so, however, GBC1 companies can also claim an actual tax credit for taxes paid abroad, and will use whatever rule is most favorable.
89. There are a number of exemptions given to both GBC1 and GBC2 companies that make them even more favorable than what the difference in tax rates between them and local companies signifies. Here, I shall limit myself to mentioning that GBC1 companies are exempted from using the designation “Limited” for companies with limited liability, and are allowed to use company abbreviations used in other states such as AS, OY, GmbH and so forth. This is quite helpful if one wants to disguise a company’s true identity. Another advantage with GBC1 companies is that they can use the tax treaties Mauritius has signed with other countries. Thus, GBC1 companies are excellent vehicles for tax avoidance schemes.
90. GBC2 companies face a zero tax rate, and can be set up in the space of 24 hours. They are under no obligation to pay in share capital in cash and use local nominees, in addition to being exempted from accounting obligations and the duty to preserve important corporate documents. The sum total of all the liberal provisions applied to GBC2 companies makes it very hard to obtain any form of information even after an information request; therefore, it is not unreasonable to argue that GBC2 companies are suitable hiding places for illicit money from various sources.
91. Mauritius also allows so-called protected cell companies (PCC), which can only be used by non-residents. Such companies can divide their assets and liabilities into a different cell, each of which has its own name and represents a single asset (or asset class). The total number of cells thereby comprises the entire company, which provides very good protection against third parties who want to seize assets. Furthermore, Mauritius derives income from the registration of each cell in such companies. PCC companies face the same tax regime as GBC1 companies, and it should also be noted that a PCC company that invests in a tax-favored object abroad can credit taxes paid abroad as if the investment were made in a non-favored object by calculating what the tax would have been for such an object. Not only does this way of applying a tax credit differ from the practice in non-havens, but favorable arrangements of this type mean that in practice the tax burden is probably zero for PCCs and GBC1 companies.

92. It should be clear from the description above that the tax system of Mauritius is ring-fenced and with a substantial favorable bias directed at non-residents. It is also clear from the difference in legislation pertaining to the different types of companies that they serve different purposes. Otherwise there would have been just one single company form. Even after the OECD made its peer-review of Mauritius in 2011, the basic structures described above remain intact.
93. There is no reason to believe that Mauritius is worse or better than the long list of other jurisdictions that were previously on the secrecy tax haven list of the OECD, but the fact that this type of legislation existed in 2009 tells a tale that tax havens are very much alive, even after the financial crisis and despite all the talk about ending secrecy and harmful legislative practices among G20 countries.

iii. Evasion of National and International regulation

94. Secrecy jurisdictions make it harder to identify who the ultimate owner of assets are and therefore provide the means to avoid detection and penalties for wrongdoing. In combination with the lack of regulation and/or effective supervision, the legislation lowers the cost of breaching rules and regulations. Below I present examples that range from resource management, food and transport safety, environmental standards and human rights.

a. Illegal, Unreported and Unregulated (IUU) Fishing

95. A large number of scientific studies have shown a very significant decline in important fish stocks around the world and have pointed out that a major reason for this is excessive fishing, of which a substantial part is illegal fishing.³⁹ It is widely acknowledged that ship registration in states that offer flags of convenience, among them typical tax havens, is integral to the problem of illegal, unreported and unregulated fishing.⁴⁰ IUU fishing⁴¹ is undertaken on a large scale, and is therefore a major problem. Recent reports assess the worldwide value of IUU catches at US\$10-23.5 billion a year.⁴² In perspective, this comprises between 13-31% of global catches.

³⁹ Swedish Food and Agriculture Organization (FAO) Committee, Ministry of Agriculture, *Roving Bandits in Modern Fisheries*, by Rolf Eriksson, Publication Series 5 Jo 09.002, ISSN: 1652-9316 (Västerås: Edita Västra Aros, 2009).

See also Gunnar Stølsvik, "Flags of convenience as a complicating factor at combating crime at sea" In *Maritime Security in Southeast Asia*, ed. Kwa Chong Guan and John K. Skogan (New York: Routledge, 2007).

⁴⁰ OECD, *The social dimension of IUU fishing*, Memorandum JT00162108 (Paris: Organization for Economic Co-operation and Development, 2004).

⁴¹ Illegal fishing takes place where ships operate in violation of the fishery laws. Unreported fishing is fishing that is unreported or misreported to the relevant authority in contravention of applicable laws and regulations. Unregulated fishing is fishing carried out by vessels without nationality, or vessels flying the flag of a state that is not party to the regional organization governing the particular fishing areas or fishing for fish stocks where there are no conservation and management measures in place.

⁴² *Food and Agriculture Organization of the United Nations (FAO)*, "Shining a spotlight on illegal fishing". November 22, 2010. <http://www.fao.org/news/story/en/item/47812/icode/>

EJF, *All at Sea: The Abuse of Human Rights Aboard Illegal Fishing Vessels* (London: Environmental Justice Foundation, 2010).

High Seas Task Force, *Closing the net: Stopping illegal fishing on the high seas*, Governments of Australia, Canada, Chile, Namibia, New Zealand, and the Earth Institute at Colombia University (London: IUU Fishing Coordination Unit, 2006).

96. The Swedish FAO Committee identifies poor control of vessel flag states as a significant factor to the problem of illegal fishing. Flags of convenience states (FOCs) run so-called open registries, which mean that they let foreign vessels pay to sail under their flag. Registration is easily done on the Internet for a few hundred dollars, thereby enabling vessels to “re-flag” at will.⁴³ FOC states generally have less stringent control of vessels than normal states either because they do not have the capacity or the will, and also because they do not have ratified agreements for fisheries governance. For such reasons, vessels that sail under a flag of convenience do not have to pay for fishing licenses and vessel monitoring systems, or abide by national or international regulations and rules meant to preserve fish stocks, safety, worker conditions or the environment. These low-cost advantages may be combined with owner anonymity, particularly if the vessel is owned by an anonymous shell company—making it possible to violate national and international rules without facing the consequences.⁴⁴
97. The implication of secrecy in flags of convenience states in the fishing industry is that it is almost impossible to obtain even basic information on a fishing vessel’s identification, ownership, control and activity. Together with a growing demand for fish, the lack of control is serious because the decline of fish stocks has led governments and governmental organizations to impose tougher regulations to preserve stocks and ensure food security. However, tougher controls have made it even more profitable to use flags of convenience, since these flag states do not supervise or monitor the vessels. It has also caused fishing fleets to seek new fishing grounds primarily along the coasts of poor countries, Africa being one such place. Poor countries have weak fisheries governance, with the end result often being that illegal fishing undermines the conditions for local fisheries and food security, thereby threatening the livelihoods of poor coastal populations.⁴⁵
98. The International Labor Organization (ILO) has estimated that there is an annual average of 24,000 deaths and 24 million non-fatal accidents in the fishing industry.⁴⁶ It is reasonable to assume that both fatalities and non-fatalities in the IUU fishing fleet largely go unreported, and that the number of deaths and injuries in IUU fishing is likely to be much higher than simply taking the estimated share of IUU catches as a proxy given that poor safety conditions are common on board IUU vessels.⁴⁷ The term “floating coffin” has been used to reflect

⁴³ A point in case is given by the Norwegian coast guard, which on June 29, 2006 boarded a ship marked with the name “Joana” that flew the flag of the state of Sao Tome. However, the Norwegian coast guard possessed information that the vessel had changed flags from the state of Togo to the state of Guinea before sailing into Alveiro, Portugal on Saturday January 14, 2006. After sailing from Alveiro, the vessel had changed back to the flag of the state of Togo on May 15, 2006 and later, when in international waters, changed from Togo back to the flag of the state of Sao Tome on May 22, 2006. At the last of these changes, the vessel also changed its name from “Kabou” to “Joana”. See NOU, “Tax Havens and Development”, p.38.

⁴⁴ The Environmental Justice Foundation lists some flags of convenience states that facilitate owner anonymity, which are Antigua and Barbuda, Barbados, Bahamas, Belize, Bermuda, Bolivia, the Cayman Islands, Cyprus, Dominica, Gibraltar, Hong Kong, Honduras, the Isle of Man, Jamaica, Liberia, Malta, Marshall Islands (USA), Mauritius, Panama, the Seychelles, Singapore, Sri Lanka, St. Vincent and the Grenadines, Tonga and Vanuatu. See EJF, *All at Sea*.

⁴⁵ Swedish FAO, *Roving Bandits in Modern Fisheries*.

⁴⁶ According to the International Labor Organization (ILO), the number of deaths and non-fatal accidents in the fishing industry is underreported, see International Labour Organization, *Safety and health in the fishing industry: Report for the discussion at the Tripartite Meeting on Safety and Health in the Fishing Industry* (Geneva: ILO, 1999).

⁴⁷ Matthew Gianni and Walt Simpson, *The Changing Nature of High Seas Fishing: how flags of convenience provide cover for illegal, unreported and unregulated fishing* (Australian Department of Agriculture, Fisheries and Forestry, International Transport Workers’ Federation; and WWF International, 2005).

the poor condition of many IUU vessels, some of which have been allowed to deteriorate to the point of not being seaworthy, with no life rafts, flares, radio or radar.⁴⁸ It is the lack of standards and supervision, combined with anonymity in secrecy jurisdictions that is instrumental in fostering such hazardous conditions.

99. One of the darker sides of flags of convenience states and IUU fishing is the abuse of human rights. IUU fishing vessels draft workers on contracts (if a contract exists at all) signed by fictitious companies, which are described as being grossly unfair.⁴⁹ In a report from the World Wildlife Foundation and the Australian government, physical and psychological mistreatment of crew on board IUU vessels is mentioned as a frequent occurrence, and Asian crew members have been known to work as forced labor sometimes chained while at sea or in port.⁵⁰ There are also reports of murder. In 2009, the United Nations' Inter-Agency Project on Human Trafficking interviewed 49 Cambodian workers who had served aboard a so-called IUU "slave ship." Eighteen percent of these were children when recruited, and they reported a number of horrendous abuses by the captain and senior crew members. For example, 59% of them had witnessed the captain murder a crew member, and one 19-year-old crewmember witnessed two separate incidents of decapitation by the captain.⁵¹ Perhaps the most horrifying account of them all is the death of 39 Burmese fishermen, who died of starvation due to lack of provisions because the captain did not want to approach shore for fear of being arrested for IUU fishing.⁵²
100. The use of secrecy jurisdictions by IUU fishing vessels is illustrative of the full range of harm these jurisdictions create. IUU fishing vessels harm the environment, negatively affect food security, violate national and international governance structures, endanger species, break safety regulations, evade taxation and are in violation of basic human rights. These vessels and their owners also commit other crimes, including murder, in some cases.

b. Safety in Transport

101. The ability to hide who the beneficial owner is provides weak incentives to adhere to regulation in transport. One example of this is the Scandinavian Star accident. On the night of April 7, 1990, a fire broke out on the ferry known as the Scandinavian Star, which was on its way from Oslo (Norway) to Fredrikshavn (Denmark). The fire killed 158 people and two persons died later as a result of injuries related to the fire. The investigation of the fire showed that the ship had some serious defects and that security regulations had not been followed. Since the ship was registered in the Bahamas, it has thus far not been possible to establish who the real owners of the ship are, so they can therefore not be brought to court.

⁴⁸ EJF, *All at Sea*, p. 9.

⁴⁹ See OECD, *The social dimension of IUU fishing*; and High Seas Task Force, *Closing the net*, pp. 33-34.

⁵⁰ Gianni and Simpson, *The Changing Nature of High Seas Fishing*, p.34.

⁵¹ EJF, *All at Sea*, p. 11 See also United Nations Inter-Agency Project on Human Trafficking, *Exploitation of Cambodian Men at Sea: Facts About the Trafficking of Cambodian Men onto Thai Fishing Boats* (Bangkok: UNIAP, 2009). http://www.no-trafficking.org/reports_docs/siren/siren_cb3.pdf

⁵² Masaru Mio, "Burmese Fisherman Deaths Cause Outrage," *Japan's Seaman's Union Marine Journal* 4, no.3 (May-June 2007): p.2.; see also EJF, *All at Sea*, p. 11

102. It is not only sea transport that is affected by tax havens. In 2009, the main business newspaper in Norway revealed that the airline company Scandinavian Airline Systems (SAS) leased passenger planes from anonymous companies in the Cayman Islands (i.e. the beneficial owner could not be established). According to a Danish news article,⁵³ SAS did not lease the airplanes directly from Cayman companies, but instead used a go-between company called Babcock and Brown, which was located outside the Cayman Islands.⁵⁴ The article found that the Norwegian aviation authorities had registered 383 incidents on SAS flights in the last five years leading up to 2009, and 274 of these had not been investigated. Many of these incidents pertained to the Cayman Island planes, while investigations carried out showed that it was not possible to establish the identity of the beneficial owners of these planes.
103. The main point in relation to these two stories is twofold. First, the use of secrecy jurisdictions makes it possible for owners to hide information about assets of importance to public safety. Second, if an accident occurs and it turns out that the owner is wholly or partially to blame, the owner will remain hidden and cannot be charged. Consequently, the owner does not bear the full cost of negligence. In industries such as the airline industry, in which safety is a major concern, national authorities respond to asymmetric information by setting up their own safety regulating bodies to ensure that service and maintenance are undertaken according to high standards. However, the main point remains: Asymmetric information gives owners weaker incentives for care and maintenance than if their identities were visible.

c. Financial Stability, Regulation and Asset Management

104. Jurisdictions that specialize in opacity have legal systems that secure anonymity in financial transactions and allow the creation of shell companies whose owners remain largely unknown. These legal structures create information asymmetries, and it is well-known from economic theory that information asymmetry weakens the market mechanism and introduces costs in various forms.
105. One such cost is related to regulatory arbitrage. It is widely acknowledged that the current financial crisis was caused to a large degree by too much risk taking made possible by excessive debt. Despite legislation such as the Basel Accords, in which the primary aim was to ensure that banks maintain adequate capital ratios, financial institutions were able to circumvent such rules. Debt or potential debt obligations were kept off the balance sheets through the use of structured investment vehicles (SIVs) or Special Purpose Entities (SPEs),

⁵³ G. Gjernes and O. Kibar, "Punger ut til skatteparadis" [Pays out to tax havens], *Dagens Næringsliv*, June 15, 2009. <http://www.dn.no/nyheter/naringsliv/2009/06/15/punger-ut-til-skatteparadis>

⁵⁴ Ibid.

so-called conduit entities. Such conduits could be kept off the balance sheets due to lax auditing and accounting rules, and many were registered in secrecy jurisdictions.⁵⁵ Arguably, problems related to SIVs or SPEs when the financial crisis hit were due to their off-balance sheet status causing information failure, and not to the fact that they were located in secrecy jurisdictions. Nonetheless, one reason why they were registered in secrecy jurisdictions was that it made it more difficult to determine the extent of the risk taken and who was involved. The response to such uncertainty in financial markets is often to increase risk premiums and hence market transaction costs.⁵⁶

106. One worrisome aspect of the financial crisis is that we do not really know how many SPEs and other entities are kept in secrecy jurisdictions. Furthermore, the mere fact that secrecy jurisdictions exist means that there will always be the nagging doubt in the market as to whether all the cards are on the table. It is also clear that the financial institutions that used these techniques and hid their obligations gained an unfair competitive advantage. By dodging regulation, they obtained access to more credit and avoided regulatory capital charges. In turn, this advantage contributed to excessive risk taking.
107. Another area where secrecy jurisdictions impede market efficiency is the stock market. There are quite a number of court cases in various countries, where insiders have used corporate structures in secrecy jurisdictions to disguise their true identity in order to illegally buy shares.⁵⁷ Using a string of corporate structures in combination with nominee arrangements has made it almost impossible to detect that the real purchaser is red flagged.
108. It is also interesting to note that it is not uncommon for asset management firms to use secrecy jurisdictions. Asset management funds very often conduct their investments from a secrecy jurisdiction, although the tactical allocation decisions are made in another country. In other words, the work and related costs are allocated to a high tax country, whereas the income of the investment decisions accrues in a zero-taxed secrecy jurisdiction. As long as these structures can justify their actions by claiming that the investment vehicle or fund is registered in and managed from a tax haven, they are granted tax residency in the tax haven. However, anyone who has worked with international finance knows that this type of work

⁵⁵ Basel Committee on Banking Supervision. *Report on Special Purpose Entities*

See also National Audit Office (NOA), *Managing Risk in the Overseas Territories*, report by the Controller and Auditor General, HC 4 session 2007- 2008, 16 November (Foreign and Commonwealth Office, London: The Stationary Office, 2007); and NOU, "Tax Havens and Development".

⁵⁶ The Northern Rock (NR) bankruptcy is an interesting and illustrative case. NR was a building society, which in 2007 became a bank and the fifth largest lender in the U.K. It established a charitable trust called Granite which – as it turned out - did not do charity work at all, but instead stood for NR's financial engineering. Investigation of the trust also revealed that it did not have any employees despite naming some of its trustees in Jersey. Granite did, however, have a debt of 50 million pounds. See Ronen Palan, "The havens, the Crisis of 2007 and Financial Regulation" *The World Financial Review*, December 20, 2010. <http://www.worldfinancialreview.com/?p=2751>

⁵⁷ An example is the Norwegian state versus Nagell-Erichsen (case number 03-01353 M/02; Borgarting Lagmannsrett). For more information, see "Oppgave, PBL kurs 13 og 14," *University of Oslo*, n.d., http://www.uio.no/studier/emner/jus/jus/JUR4000/v07/JUR4000-1-2/undervisningsmateriale/pbl-kurs_rettsslare_arnesen.doc.

involves a continuous screening and rebalancing of portfolios from teams that work below the board level. These teams are delegated authority by a board to act within certain parameters, but this means that those who do the actual work very often reside and create value in non-haven countries. In such cases, a management firm located in the city of say London, may continuously adjust the portfolio of an investment fund, which poses the interesting question of whether these funds' tax status is justified.

iv. Tax Havens and Developing Countries

109. Since they do not have well-developed registration systems for wages, developing countries mainly derive their tax revenue from capital taxation. For example, less than 1 percent of the population in Bangladesh is registered as tax payers, and only 4 percent of these contribute to 40 percent of labor taxes.⁵⁸ The reliance on capital income is very visible in some countries. In Tanzania, a country with over 35 million inhabitants, 286 companies contribute to 70 percent of total tax revenue.⁵⁹ Developing countries have a narrower tax base than rich countries, and for this reason more are vulnerable to the incentives of tax evasion and tax avoidance that tax havens provide. Therefore, tax havens contribute to a narrowing of the tax base, which then increases the excess burden of taxation.

a. Multinationals

110. Multinationals pose a real challenge to poor countries since they are engaged in various strategies of tax planning and tax evasion. Since the competence level in public bureaucracy is much lower in poor countries than in rich countries, multinationals have considerable discretion in shifting income to secrecy tax haven affiliates. One way that a multinational can do this is by structuring its debt so that a secrecy tax haven affiliate lends capital to an affiliate in a poor country with high taxes. In this way, the tax savings that arise from the interest deductions in the high-tax country exceed the corresponding tax payments (if any at all) in the tax haven. By excessively stacking debt in poor countries where thin capitalization rules are not in place and the competence level in the bureaucracy is low, taxable income is therefore reduced.⁶⁰

111. A second strategy used by multinationals is to misprice intra-firm transactions. Most countries' tax legislations state that the correct price between related affiliates is the market price, i.e. the price that would have occurred in the market place between independent parties (often termed the arm's length price). However, multinationals often transfer assets that are

⁵⁸ Tapan Sarker and Yokinobu Kitamura, "Technical assistance in fiscal policy and tax administration in developing countries: The state of nature in Bangladesh", *Asia Pacific Tax Bulletin* 8, no.9 (2002): 278-288.

⁵⁹ Odd-Helge Fjeldstad and Mick Moore, "Revenue authorities and public authority in Sub-Saharan Africa" *Journal of Modern African Studies* 47, no.1 (2009): 224-239.

⁶⁰ For a survey of the literature on debt shifting, see Jack M. Mintz and Alfons J. Weichenrieder, *The Indirect Side of Direct Investment: Multinational Company Finance and Taxation* (Cambridge, MA: MIT Press, 2010).

specialized to such an extent that comparable products do not exist in the market place, or else the products transferred are intangible in nature (e.g. patents, technical knowledge or the use of specialized consultants). This means that multinationals have considerable discretion in setting their transfer price. There is also evidence in support of such mispricing strategies in developing countries, where income is shifted to tax havens.⁶¹ Even so, the lack of good data often makes studies on developing countries more difficult to undertake than is the case for rich countries.⁶²

112. There is also ample evidence to suggest that multinationals are able to negotiate contracts related to the extraction of natural resources that effectively shelter them from taxation. Such contracts may be due in part to incompetence in the bureaucracy in poor countries, but they may also reflect deals struck by politicians that benefit from these contracts, rather than making sure they benefit the nation they should be serving.⁶³ Even here, secrecy jurisdictions play a role because they provide a hiding place for illicit money from such deals.

b. Institutions and Tax Havens

113. Over the past decade, it has become clear that institutional quality is one of the most important drivers for economic growth, with estimates indicating that a country located in the 25th percentile for institutional quality could increase its national income sevenfold if it were able to improve its institutional quality sufficiently to move into the 75th percentile.⁶⁴
114. Among the most damaging aspects of secrecy jurisdictions is the fact that they contribute to the weakening of institutional quality and democracy in poor countries. This is because they enable the ruling elite in poor countries to conceal income derived from corruption, development aid, natural resources or the budget. Since secrecy jurisdictions offer anonymity and escape clauses, as well as the ability to move funds between secrecy jurisdictions, they make it more profitable to engage in such crimes.⁶⁵ Moreover, these incentives also make it more attractive to dismantle institutions and weaken the workings and control of the political system.

⁶¹ For a survey on the role of profit shifting in developing countries see Clemens Fuest and Nadine Riedel, "Tax Evasion and Tax Avoidance in Developing Countries: The Role of International Profit Shifting" WP 10/12 (Oxford: Oxford University Centre for Business Taxation, June 2010).

⁶² The mispricing of intra-firm transactions is documented in a number of studies, see James R Hines Jr., "Lessons from behavioral responses to international taxation" *National Tax Journal* 52 (1999): 305-322; and Thomas A. Gresik, "The Taxing Task of Taxing Transnationals" *Journal Of Economic Literature* 39 (2001): 800-838.

⁶³ The Swedish NGO organization Action Aid uncovered in 2012 that an oil company through an intricate deal had been granted tax exemption unless its investments yielded a 25% return on its capital, and that only profits above this threshold level were taxable.

⁶⁴ Daron Acemoglu, Simon Johnson, and James A. Robinson, "The colonial origins of comparative development: An empirical investigation" *American Economic Review* 91, no.5 (2001): 1369-1401.

⁶⁵ An example of re-domiciliation between secrecy jurisdictions is given in NOU "Tax Havens and Development", p.36.

115. In the economic literature on tax havens, the possibility that secrecy jurisdictions can facilitate criminal activities, including crimes by dictators, is often doubted. James Hines for example, states that; “These concerns are all plausible, albeit often founded on anecdotal evidence rather than systematic evidence.”⁶⁶ However, the long list of cases I refer to in the introduction of this article shows that this is not true. The cases are real and there are convictions. The misuse of power and theft of state money combined with the use of tax havens among the political elite is widespread and well documented. It is also well documented that targeting the political elite from within for corruption and theft is very dangerous. A few examples are worth mentioning.
116. Nigeria, one of the most corrupt states in the world according to Transparency International, had up until 2004 not convicted anyone for corruption. When the leader of the corruption unit, Nuhu Ribadu, had the Nigeria’s police inspector general imprisoned for corruption and then went after Nigeria’s powerful governors, he was sacked. Ribadu also narrowly escaped an assassination attempt.⁶⁷ Maxwell Nkole who lead the anti-corruption unit in Zambia under the reform friendly president Levy Mwanawasa, investigated former president Frederick Chiluba. The investigation revealed that Chiluba had used tax havens to conceal bribes and stolen assets. He was convicted in London in 2007 and sentenced to pay back US\$55 million to Zambia. When president Mwanawasa died in 2008, the new president in Zambia, Rupiah Banda, acquitted Chiluba. When Nkole took the case to the high court he was sacked.⁶⁸
117. Since secrecy jurisdictions make it less costly to engage in criminal activities, they provide incentives to steal from society and to weaken ‘balances and checks’ that are in place to prevent such theft. Wealth represented by rainforests in the Philippines, Indonesia and Malaysia for instance, contributed to the conscious destruction of state institutions intended to prevent misuse and excessive exploitation.⁶⁹ Former president Suharto of Indonesia topped Transparency International’s 2004 list of the world’s most corrupt leaders and is, together with his family, estimated to have misappropriated between US\$15-35 billion, some of which is linked to rainforest exploitation.⁷⁰
118. Even more worrisome is the possibility that secrecy jurisdictions may affect the political system in poor countries. Michael Ross finds that, *ceteris paribus*, countries with large oil deposits tend to become less democratic because democracy carries a cost to politicians who prevent them from using government revenue as they please.⁷¹ Thus, resource rents can give the political elite incentives to weaken democracy. In the same vein, secrecy jurisdictions offer income opportunities to the ruling elite in poor countries which can lead to

⁶⁶ Hines, “Treasure Islands”, p.104.

⁶⁷ Bob Davis, “Corruption Fighters Form Close Knit Club” *The Wall Street Journal*, July 7, 2010. <http://www.wsj.com/articles/SB10001424052748704067504575305200456314876>

⁶⁸ Michaela Wrong, “First Person: Maxwell Nkole” *Financial Times*, January 16, 2010. <http://www.ft.com/cms/s/0/47e03a88-00ac-11df-ae8d>

⁶⁹ Michael L. Ross, *Timber booms and institutional breakdown in Southeast Asia* (Cambridge University Press, New York, 2001a).

⁷⁰ See NOU, “Tax Havens and Development”, p.60, for a short brief of the Suharto case.

⁷¹ Michael L. Ross, “Does oil hinder democracy?” *World Politics* 53, no.3 (2001): 325-361

less democratic control of those in power. These perspectives are worrisome especially since institutional rules that limit the potential for the political abuse of power enhance growth.⁷² Particularly in developing countries rich in resources, where “balances and checks” to limit the power of politicians are undermined by politicians.⁷³

119. A commonly held belief among academics and policymakers has been that the choice of political system (presidential or parliamentary) is formed by historical choices. However, Robinson and Torvik show that this explanation is inadequate.⁷⁴ For example, at independence there were 27 countries south of the Sahara and five out of 27 were presidential, while the rest were parliamentary. In 2009, only three out of the 27 countries were parliamentary (Botswana, Mauritius, and South Africa), two of which (Botswana and Mauritius) have done much better in economic terms than the rest. An interesting question is why all these countries have chosen a form of government that in the end has led to worse economic outcomes.
120. Ragnar Torvik makes the point that the transition to presidential rule in southern Africa has given a narrower political elite greater political power, which has led to a less democratic system in these countries.⁷⁵ Given the substantial amount of evidence showing that presidents in newly constituted presidential regimes in Africa have abused their power and used secrecy jurisdictions to hide stolen funds, it is clear that secrecy jurisdictions provide incentives for personal enrichment through a political career. The very opportunity that secrecy jurisdictions present may even have consequences for the types of people who seek a political career. It is quite clear that even if secrecy jurisdictions did not exist, there would still be dishonest politicians, though the presence of secrecy jurisdictions makes matters much worse.

c. Tax Havens and Income in Developing Countries

121. In contrast to rich countries, poor developed countries have a higher crime rate, corruption is much more widespread and the competence level and quality of the public bureaucracy are low. In addition, the political system is often weak and with a concentration of power. In such a setting, it is more attractive to engage in activities that are destructive such as banditry, corruption, rent seeking and tax evasion. In such a setting, entrepreneurs may also find it profitable not to engage in productive activities. Drawing on Mehlum et al., occupational choice between productive activities and unproductive activities, here called rent-seeking, is illustrated by Figure 1.⁷⁶

⁷² Paul Collier and Anke Hoeffler, “Testing the neocon agenda: Democracy in resource-rich societies” *European Economic Review* 53, no.3 (2009): 293-308.

⁷³ Ibid.

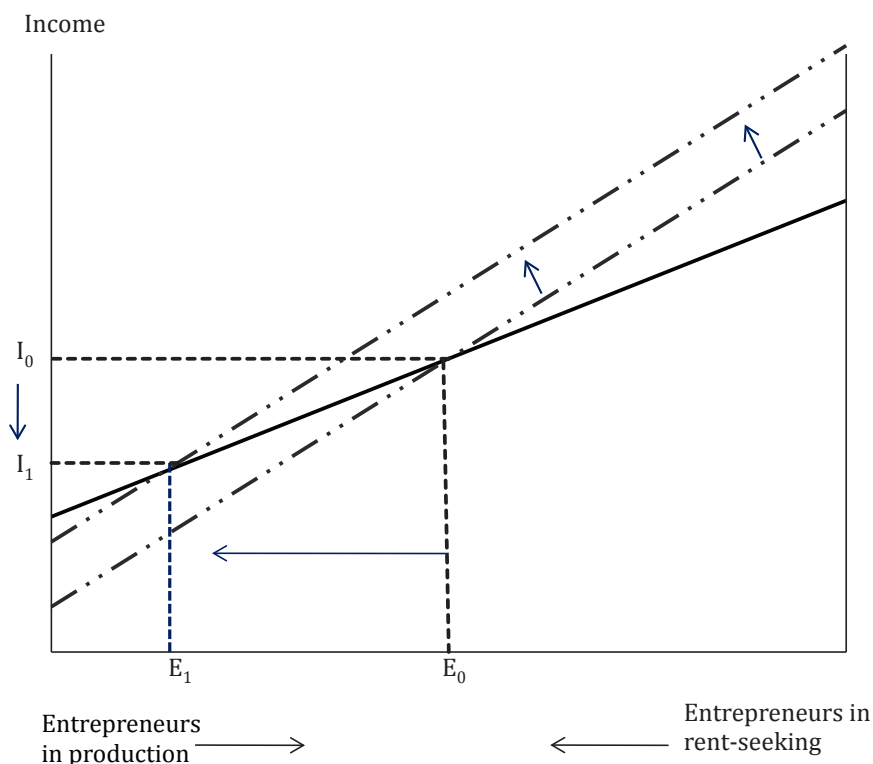
⁷⁴ James A. Robinson and Ragnar Torvik, “Endogenous presidentialism” NBER WP paper 14603 (Cambridge, MA: National Bureau of Economic Research, 2008).

⁷⁵ Ragnar Torvik, “Why do some resource abundant countries succeed while others do not?” *Oxford Review of Economic Policy* 25, no.2 (2009): 241:256.

⁷⁶ Halvor Mehlum, Kalle Moene, and Ragnar Torvik, “Institutions and the Resource Curse,” *Economic Journal* 116, no. 508 (2006): 1–20.

122. The solid line in Figure 1 shows (starting from the left) that the larger the number of people who become productive entrepreneurs the higher the income for each entrepreneur. This is so because the more the people that create value, the higher the income. High income in turn gives rise to high demand and increases the tax base, which enables governments to provide better public infrastructure that may enhance private productivity and thus income.
123. In Figure 1, the equilibrium occurs when the income in rent-seeking and entrepreneurship is given by the income point I_0 and the division of the workforce at point E_0 . In equilibrium, nobody has an incentive to switch between unproductive and productive activities. The equilibrium is stable in the sense that to the left of the intersection between the two curves income is higher in production, and people will switch to productive activities until the income opportunities are equalized. To the right of the intersection income is higher in rent-seeking, and entrepreneurs will switch to rent-seeking until the income in rent seeking is equal to the income in the productive sector.

Figure 1



124. The dashed-dot-dot line in Figure 1 shows income for those who choose rent-seeking as an occupation. Starting from the right, an increase in the number of people who engage in wasteful activities leads to a lower production and income. The reason for this is partly that as more people engage in unproductive activities, competition among them increases and presses down income. Furthermore, as more people move from productive- to unproductive activities, production falls and there is consequently less income to prey on.
125. How do secrecy jurisdictions influence this equilibrium? Ragnar Torvik argues that they increase the profitability of undertaking rent-seeking activities since secrecy jurisdictions provide a safe hiding place, and because they sell technology that can be used to reduce the cost of illegal activities.⁷⁷ This means that the rent-seeking curve shifts upwards, which is illustrated in Figure 1 by an upward shift of the dashed-dot-dot line. The shift upwards implies that even fewer people will be engaged in productive activities and leads to a new equilibrium (I1, E1), which has fallen for everyone in the economy. This follows from a multiplicative process in which the income rent seekers prey on falls when people move from productive to unproductive activities.⁷⁸
126. It is not easy to assess the effect of the income opportunities that secrecy jurisdictions give rise to, primarily because they are shrouded in secrecy, although it is possible to find these by studying how other types of income opportunities affect countries. For example, natural resources represent an income opportunity that arises irrespective of whether a country is rich or poor. Different from the income opportunity that arises through the use of a secrecy jurisdiction, one could argue that the extraction of natural resources such as oil and gas yields greater benefits to society, since such activities create business related to the extraction itself by employing people on oil rigs and in service industries related to the extraction itself. In contrast, income opportunities from secrecy jurisdictions often reduce public revenue and have few positive spillover effects. Therefore, if one uses the income opportunities that arise from natural resources as a proxy for the income effects presented by secrecy jurisdictions, one would underestimate the possible negative effects of secrecy jurisdictions.

⁷⁷ Torvik, "Why do some resource abundant countries succeed while others do not?", 241-256.

⁷⁸ Notice that the income curves in Figure 1 are drawn such that the income curve of the rent seeker is steeper than that of income from entrepreneurship. If one reversed the steepness of the curves, the economy would have two stable equilibrium points: one in which no entrepreneur would find it profitable to engage in productive activities - a poverty trap equilibrium - and one in which nobody would find it profitable to become rent seekers. Introducing the income opportunities that tax havens give rise to in this setting would not affect the number of equilibriums.

See Ragnar Torvik, "Natural resources, rent seeking and welfare" *Journal of Development Economics* 67 (2002): 455-470.

d. The Resource Curse

127. It is well-known in the economic literature that countries that derive large revenues from the extraction of natural resources have on average a lower level of income than countries without income from such resources.⁷⁹ This paradoxical phenomenon is often referred to as the “resource curse” or the “paradox of the plenty,” and is relevant to the issue of secrecy jurisdictions for two reasons. First, the income opportunities represented by natural resources are an indirect way of estimating how the income opportunities arising from secrecy jurisdictions affect countries. Natural resources and secrecy jurisdictions affect both poor and rich countries, and they both represent a possibility for higher private income. But the latter is hidden by secrecy and therefore difficult to measure. Second, as will become clear later, secrecy jurisdictions are a natural part of the explanations behind the resource curse.
128. Mehlum et al.⁸⁰ controlled for an entire range of factors that may explain why resource abundance may lead to lower growth, and they find that resource-abundant countries become growth winners or losers depending on the quality of their public institutions.⁸¹ In countries where the government does not effectively support property rights and is unable to provide basic security, and where corruption is widespread in the public bureaucracy, growth is low despite resource richness. Similarly, Boschini et al. studied how different types of natural resources influence growth—and how this depends on institutional quality.⁸² They find that the decisive factor for the effect on growth is the combination of institutional quality and the ease with which various natural resources can be seized.⁸³ Therefore, diamonds are more harmful than oil since they are more easily extracted. From these studies, then, comes the message that in countries where institutional quality is low, it is much more profitable to pursue rent-seeking activities that harm income and growth. Since secrecy jurisdictions provide incentives to weaken institutional quality, they are part of the explanation for the resource curse. Not only do secrecy jurisdictions provide incentives for the theft of state money, they also make it more difficult for poor countries to make the best out of whatever natural resources they have.
129. Andersen and Aslaksen study whether the democratic system matters for the resource curse, and they show that the resource curse is relevant in democracies with presidential rule, though not in countries with parliamentary rule.⁸⁴ There is no link between resource abundance and growth in countries with parliamentary rule. Hence, it is not easy to assess

⁷⁹ For a survey of these findings, see Richard M. Auty, ed. *Resource Abundance and Economic Development* (New York: Oxford University Press, 2001).

⁸⁰ Halvor Mehlum, Karl Moene and Ragnar Torvik, “Institutions and the resource curse” *Economic Journal* 116, no.508 (2006): 1-20. See also, “Cursed by resources or institutions?” *World Economy* 29, no.8 (2006): 1117-1131.

⁸¹ Resource abundance does not cause a poor quality of institutions. See Jeffrey D. Sachs and Andrew M. Warner, “Natural resource abundance and economic growth” NBER Working Paper No. 5398 (Cambridge, MA: National Bureau of Economic Research, 1995).

⁸² Anne D. Boschini, Jan Pettersson, and Jesper Roine “Resource curse or not: A question of appropriability” *Scandinavian Journal of Economics* 109, no.3 (2007): 593-617

⁸³ See Boschini et.al”Resource curse or not”; Mehlum et al. “Institutions and the resource curse” and “Cursed by resources or institutions?”. These studies contrast the popular perception that Dutch disease explains the resource curse. In doing so, they point out that it is not clear why the crowding out of the traded goods sector should affect institutional quality.

⁸⁴ Jørgen J. Andersen and Silje Aslaksen, “Constitutions and the resource curse” *Journal of Development Economics* 87, no. 2 (2008): 227-246.

why the resource curse should be more closely linked to presidential rule, except for the fact that in many developing countries, the type of presidential rule that has come into play yields much more concentrated power to the president than in rich countries. This means that a wider circle of the ruling elite depends to a much greater extent on the president, whereas the reverse is often true in developed countries. As a result, the president in such regimes can pursue policies that are in his interest, rather than in that of the nation. Secrecy jurisdictions will therefore make such selfish strategies a much more attractive proposition.

v. Information Exchange Treaties

130. The harm caused by secrecy jurisdictions in a wide variety of fields, in addition to the tax revenue losses incurred by countries due to tax evasion and theft, particularly from poor countries, have led to a massive amount of international pressure on secrecy jurisdictions to reform their systems. In response, some of these jurisdictions now have legislation in place regarding financial auditing, surveying and regulation on a par with the majority of the OECD countries. However, as reported in the NOU Official Norwegian Reports, such rules are not enforced in practice. This gives rise to the suspicion that they have enacted such rules because it is in their own interest to appear to be cooperating internationally, but not because—as with other countries—such legislation has grown out of the need for rules and systems that balance the interests of minority shareholders, investors and society at large. The lack of such drivers means that the incentives to comply are weak. Adding to this is the fact that secrecy jurisdictions are most often very small jurisdictions, with the amount of capital sloshed through them very formidable. The Cayman banking system, for example, holds assets of over 500 times its GDP. Therefore, many of the secrecy jurisdictions lack the resources in terms of people and competence to abide by the rules and regulations that the international society wants them to establish.⁸⁵ And if they gave up their opacity, their national income would be harmed, thus indicating that secrecy jurisdictions are not involved in this process because of their hearts, but instead because of international pressure.
131. On April 2, 2009, the G20 countries held a meeting on the financial crisis in which tax havens were one of the main topics on the agenda. U.K. Prime Minister Gordon Brown saw the meeting as a success, and warned individuals and corporations investing in tax havens that their money would be unsafe: “There will be no guarantee about the safety of funds there. If tax information is exchanged on request, as these countries have agreed to, then the benefits from being in these countries will diminish every day.”⁸⁶

⁸⁵ The inability of many of these jurisdictions to perform such tasks has been pointed out in NAO, “Managing Risks in the Overseas Territories”, and in NOU, “Tax Havens and Development”

⁸⁶ Nicholas Watt, Larry Elliott, Julian Borger, and Ian Black, “G20 declares door shut on tax havens”, *The Guardian*, April 2, 2009. <http://www.guardian.co.uk/world/2009/apr/02/g20-summit-tax-havens>

132. The statement by Mr. Brown was made in reference to the information exchange initiative by the OECD, in which secrecy jurisdictions have agreed in principle to sign tax information exchange treaties (TIEAs). A positive quality of the TIEAs is that, on request, a jurisdiction must provide information both in civil and criminal matters. Previously, information was not provided in civil matters, and very often not even in criminal matters. The implication was that tax evasion by filing a false return was not considered a crime and no information would be supplied on such accounts. Under the TIEAs, however, tax evasion information will be provided.
133. Some economists and policymakers argue that it remains to be seen just how effective the TIEAs are in practice. The reason for such doubts is that under TIEAs, the requesting jurisdiction must provide significant accurate information in the letter of request in order to avoid allegations of a “fishing expedition,” e.g. to identify a specific person, transaction, account, trust or company linked to the suspicion in question, and the tax purpose for seeking this information. It must also provide evidence for why it believes the requested jurisdiction holds the information in question, and demonstrate that it has exhausted all other means of information (within reason). Furthermore, the requested jurisdiction does not need to adhere to a request if the requested information pertains to information that the requested jurisdiction does not collect.⁸⁷
134. As a matter of fact, most so-called tax havens collect very little information. For example, the British Virgin Islands require neither the identification of shareholders or directors nor the maintenance of accounts or financial records. Additionally, trusts and companies can be redomiciled to other tax havens quickly and with very few formalities. The same is the case for many other secrecy jurisdictions, and since taxes are not levied on capital income, such records have no value to a tax haven. Therefore, requests pertaining to who are the beneficial owners of a company would in many cases not be responded to. More worrisome is the dynamic aspect of this. If only collected information falls under TIEAS, secrecy jurisdictions —given the “exemptions” they offer to foreign companies—have a clear incentive to collect as little information as possible in order to circumvent TIEAS. Paradoxically, then, TIEAs may actually lead to less information being collected and exchanged.
135. From an ethical point of view, one may ask why it would not suffice for a requesting country to provide evidence that a certain tax payer has evaded taxes at home, and based on this, request information about deposits in another jurisdiction. However, such requests are labeled as “fishing expeditions” since the requesting jurisdiction does not have evidence that links the taxpayer to the requested jurisdiction. Such requests will therefore be left unanswered in a secrecy tax haven jurisdiction.

⁸⁷ See Article 2 in the OECD blueprint for TIEAs. It states that a requested party is not obligated to provide information that is neither held by its authorities nor in the possession or control of persons who are within its territorial jurisdiction. “Model Protocol for the Purpose of Allowing the Automatic and Spontaneous Exchange of Information under a TIEA” (OECD, n.d.), <https://www.oecd.org/tax/exchange-of-tax-information/Model-Protocol-TIEA.pdf>.

136. It should also be added that even among non-tax havens, TIEAs are not working too well due to what we might call a lack of market structure. When a country requests information from another country, it is always costly to comply with such requests for the requested jurisdiction. And there is no corresponding income side to the cost side other than the potential goodwill that may or may not materialize in the future. Because of this, responses are slow and sometimes insufficient, and thus for obvious reasons, it is very difficult to go public with such discontent.
137. Finally, TIEAs will not lead to the abolishment of the ring-fenced tax system in tax havens, nor will they eliminate harmful trust structures, protected cell companies or legal structures that are forbidden in most non-haven countries. Therefore, secrecy will still thrive, although the TIEAs have made it a little more costly to use tax havens. But for those who engage in all sorts of criminal activities, or who want to hide their ownership and identity, secrecy jurisdictions remain a very attractive proposition.
138. In the business sector, a common phrase among CEOs is that since everybody else is using secrecy jurisdiction they must do as well too. This is like an echo from the past when company leaders said that they had to use children as laborers because everybody else did. As I said at the outset, this is a topic where greed trumps ethics. As with child labor, the world will not move forward unless we see some leadership that goes beyond what the OECD is aiming for with the TIEAs.

vi. The Future

139. A hint of the way forward may be found by studying how the World Trade Organization (WTO) came into existence. In the 1930s, the world economy was ripe with trade wars which hampered economic growth, prosperity and financial stability. The Bretton Woods Conference of 1944 recognized the need for an international institution for trade that could work side by side with the World Bank and the International Monetary Fund. The new organization was negotiated and named the International Trade Organization (ITO), and was to be a United Nations specialized agency. Its charter was completed in Havana in 1948, and implied that the ITO would address not only issues related to trade and tariffs, but also issues such as employment, investment, restrictive business practices and commodity agreements. The ITO charter, however, was never ratified since a number of signatories, among them the U.S., never approved it.⁸⁸ The main reason for this was that the ITO was seen as interfering with internal economic matters.

⁸⁸ Paradoxically, the U.S. was one of the driving forces behind the ITO, though it turned out to be impossible to persuade Congress to approve the Charter. On December 6, 1950, President Truman announced that he would no longer seek Congressional approval of the ITO Charter.

140. In December 1945, a small group of 15 countries began talks to reduce customs tariffs. They wanted to give an early boost to trade liberalization, and to start correcting the legacy of protectionist measures that remained in place from the early 1930s. Their first round of negotiations, which ended with a deal in October 1947 called the General Agreement on Tariffs and Trade (GATT), had seen the group expand to 23 countries. The tariff package they agreed on involved one-fifth of the world's trade, and came into effect in 1948.
141. The 23 founding partner countries were also part of the larger group negotiating the ITO Charter. Nevertheless, when the ITO failed to become ratified, the GATT became the only multilateral instrument governing international trade from 1948 until the GATT transformed itself into the WTO in 1995.⁸⁹ It is interesting to note that it was a private initiative among a small group of countries that eventually lead to the WTO, and not the result of consensus. Over time, countries gave their support because they realized that trade wars were detrimental to their welfare, and it took the world over 50 years to recognize that trade wars are harmful and that international rules are needed in order to create prosperity and growth.
142. By contrast, capital mobility is a relatively recent phenomenon since most countries enforced restrictions on capital movements in the 1930s. It was only in the late 1980s that most of the OECD countries liberalized their foreign exchange regulations, and by doing so, created free capital mobility. Alas, the problem of tax havens became much more pronounced. The history of the WTO tells us that a consensus agreement is difficult to achieve, and that chances are better if a group of countries negotiate and commit to non-harmful legislation and transparency, as well as to the right to defend themselves against harmful legal structures, i.e. structures that much like tariffs are aimed directly at the well-being of other nations. The political question this begs is whether there is the political momentum for a convention on transparency and non-harmful legal structures.

⁸⁹ The GATT still exists as the WTO's umbrella treaty for trade in goods, and was updated as a result of the Uruguay Round negotiations.

III. The Role of Tax Havens in Financial Intermediation

143. The focus of this section of the study is to assess, in light of available data, the role of tax havens in intermediating the flow of resources to and from developing countries. The stock of financial assets in tax havens which are held by residents of developing countries can serve as a proxy for the role of tax havens in intermediating financial flows to and from this group of countries. However, available data on financial assets in tax havens are not broken down by holdings of advanced and developing country residents. We will therefore break down total assets into developed and developing country assets based on certain assumptions. Given the paucity of data reported by tax havens and their inherent limitations, a few caveats are in order.
144. First, as we noted in the introduction to this study, it is not possible to reconcile the flow data on net resource transfers in Part I with the stock of financial assets held in tax havens estimated in this section. Such a task is impossible for the simple reason that both recorded (RecT) and unrecorded financial flows involve residents of developing countries as a whole and the rest of the world (ROW). These transactions between developing countries and the ROW cannot be broken down into those only involving tax havens.
145. Second, as the data on financial assets in tax havens are not broken down into those held by residents of advanced and developing countries, we estimate the split based mainly on GDP shares. In the absence of hard data reported by the tax havens themselves, the margin of errors in making estimates based on GDP shares is large. Finally, the reconciliation of stocks and flows is extremely difficult due to large variances arising from a number of reasons including exchange rate fluctuations and changes in the market values of the financial assets themselves.
146. The estimates of financial assets in tax havens, as a measure of the extent of financial intermediation by tax havens, is necessarily based on the stock approach because data on financial flows between individual developing countries and tax havens do not exist. Moreover, given that the balance of payments is a double-entry account of all transactions between residents and non-residents in the rest of the world (ROW), we cannot expect to obtain a consolidated balance of payments of developing countries vis-à-vis tax havens. The balance of payments of countries are simply not compiled in that way.
147. We use the IMF definition of “offshore financial centers” (OFCs) to identify tax havens. The IMF defines an OFC as a center (which may be a country, dependency, or jurisdiction) where the bulk of financial sector activity is offshore. The predominance of offshore activity implies that the counterparties of the majority of financial institutions’ assets and liabilities involve non-residents. Thus, tax havens are characterized by financial institutions whose transactions with non-residents generate assets and liabilities that far exceed those that result from their intermediation with domestic residents. Moreover, tax havens are as diverse as the range of

financial instruments and services they provide. As the IMF list shows, tax havens range from advanced high-income countries such as Luxembourg, Singapore, and Switzerland to poor developing countries such as Belize and Dominica, including many countries and jurisdictions that have been classified as middle income by the World Bank. It is clear, however, that going by the overall size of balance sheets (international investment Position, IIP Assets plus IIP Liabilities), the bulk of offshore activities is driven by developed-country tax havens (see Box 1).

148. Box 1 presents a brief discussion of the gross and net balance sheet position of certain tax havens in recent years. Gross position is defined as IIP assets plus IIP liabilities while the net position reflects the net asset position. The two need not move together and in fact, the performance of tax havens differs sharply when assessed by these two measures. An important conclusion we can derive from the information in Box 1 is that all the major tax havens report data to the IMF and are included in this study. Hence, the GDP-based extrapolations of assets in non-reporting tax havens is not going to introduce large errors in estimating total assets, given that the major tax havens account for the bulk of tax haven activity.

Box 1. Recent Trends in the Balance Sheet Positions of Major Tax Havens, 2002-2011

By Simon Ramírez

The gross balance sheet position, defined as international investment position (IIP) assets plus IIP liabilities of a tax haven is a measure of its importance in the global financial system—the larger the size, the bigger its role in attracting and making various types of investments. IIP assets as well as IIP liabilities include investments from the non-resident private sector as well as investment from foreign governments and monetary authorities (such as holdings of reserve assets). Certain types of non-resident investments in tax havens are typically more important than others. For instance, portfolio investments such as mutual funds and hedge funds and inward FDI positions are likely to be much larger than the holdings of foreign monetary authorities. This is because monetary authorities tend to be more risk-averse when investing their reserve assets. In general, balance sheet positions that are derived using reported IIP data reflect legitimate transactions and offer no clue on the size of illicit assets in tax havens.

Chart 11 and Chart 12 show recent developments in the balance sheet positions of 8 major tax havens in Europe and Asia for which IIP data is available. Out of these 7 tax havens Switzerland, Singapore and Hong Kong stand out as important “creditors” with expanding net balance sheet positions of more than US\$700 billion as of 2011. Ireland stands out as the only “debtor” with a stable negative balance sheet position of approximately US\$200 billion since 2006.

Analysis of the gross balance sheet positions of major tax havens also seems to highlights the important role played by these tax havens. It must be noted that Luxembourg's outlying gross balance sheet position to GDP ratio, which fluctuated around 210 for the whole period, has been left out in order to make charts' scale more comprehensive.

Chart 11. Net Balance Sheet Position of Major Tax Havens, 2002-2012

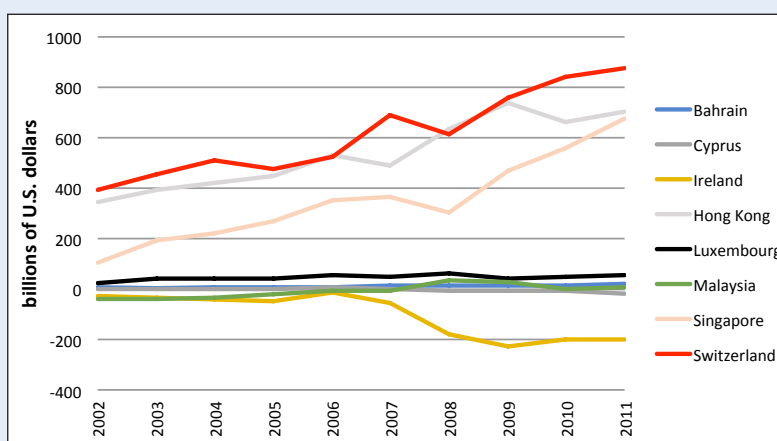
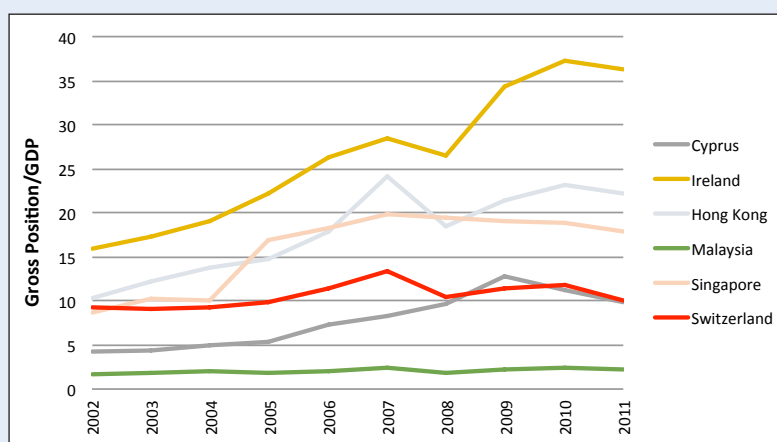


Chart 12. Gross Balance Sheet Position of Major Tax Havens, 2002-2012



We observe that while Switzerland's gross balance sheet position to GDP ratio stagnated around 10 over the period 2002-2011, the ratio doubled from 10 in 2002 to about 20 in 2011 in the case of Hong Kong and Singapore. The latter two outpaced Switzerland by a larger margin in recent years, confirming that the Asian tax havens may outgrow Switzerland in the not-too-distant future following the sharper focus on Switzerland's role as a tax haven. The balance sheet positions of these major tax havens differ significantly. While Switzerland, Singapore and Hong Kong have continued to accumulate external assets at a more or less constant rate, Ireland's gross balance sheet position has surged since the onset of the global financial-euro crisis. Major tax havens are not only tax havens but complex economies fully inserted in the dynamics of the international financial system and the global economy.

i. Data Sources and Limitations

149. There are two broad types of financial data—stocks and flows. We will use the stock approach to assess the extent of financial intermediation by tax havens vis-à-vis developing countries. The flow approach will only be used to a limited extent, throwing light on the overall scale of operations of tax havens. There is no way to decompose balance of payments flows to only reflect those between residents of developing countries and tax havens. Even the stock approach to estimating financial assets in tax havens is subject to significant data limitations including lack of reporting, lack of quality and consistency across jurisdictions, and gaps in coverage.

a. The Stock Approach

150. The stock approach is not only the preferred approach it is, for two important reasons, the only approach to estimate financial transactions between tax havens and developing countries. Balance of payments flow data offer no such possibility because by definition these accounts capture transactions between residents and the rest of the world (ROW). Like the balance of payments flow approach, the stock data on assets and liabilities whether through the CDIS/CPIS database or the IIP (see next paragraph), also does not provide a breakdown of flows by private and public sectors. That said, we will use reported BoP transactions in FDI and portfolio investments by some tax havens which were obtained by the regional research centers in order to shed light on their pattern and how that pattern has changed over time.

151. There are essentially three databases on the stock of assets held globally—the Coordinated Direct Invest Survey (CDIS), the Coordinated Portfolio Investment Survey (CPIS), and the International Investment Position (IIP), none of which break down asset holdings by public and private sectors. The CDIS database contains detailed data on “inward” and “outward” direct investments that is, direct investments into a reporting economy and direct investments by that country to the rest of the world. The bilateral reporting of FDI data affords the estimation of an important component of private sector holdings in reporting tax havens. Moreover, we can estimate the FDI positions in non-reporting tax havens by deriving them based on source countries that do report FDI into those tax havens (called “brother” tax havens) or that receive FDI from those jurisdictions. In other words, the bilateral reporting of CDIS allows us to derive estimates for non-reporting countries using data reported by others that supply or receive the FDI as applicable. While all countries under the CDIS system provide data on FDI received, more than two-thirds of them also report data on outward FDI positions.

152. In 2011, some 73 member countries of the IMF reported annual data on portfolio holdings under the CPIS. This is the only global survey of cross-border holdings of equities and long- and short-term debt securities broken down by the economy of residence of the issuer. Countries reporting portfolio data under the CPIS are encouraged to report additional detail on the sector of the holder, the currency composition of holdings, and other details on portfolio investment liabilities.
153. The main limitation of the CDIS databases is that reporting only began in 2009 while reporting under the CPIS began in 1997. The overlap is 2009-2012 which means that we cannot use the data to study the long-run behavior of these stock positions. Another limitation is that not all countries report inward and outward positions so that the data cannot be checked using mirror statistics. Finally, the coverage of reporting countries under the CDIS and CPIS differs with more reporting under the latter (73-76 countries) than the former (about 52-55 countries).
154. Another limitation of the CDIS/CPIS approach is that even the countries that do report for these databases are not required to list the assets in certain jurisdictions if the reporting country deems that reporting such assets would breach confidentiality agreements in place. Hence, the reported data are also subject to many data gaps, so that total assets held in certain jurisdictions are not comprehensive. Moreover, the CDIS/CPIS data only cover data on foreign direct investments and portfolio investments which do not include “other” investments (see below).
155. Whereas the CDIS and the CPIS provide stock positions on foreign direct investments (FDI) and portfolio investments on a bilateral basis, the IIP presents a statistical statement that shows the value of financial assets of a country’s residents (i.e., claims on non-residents) and the value of financial liabilities owed by residents to non-residents (i.e., non-residents’ claims on residents). As assets and liabilities are stocks, the IIP balance sheet reflects positions at a point in time, typically at the end of a calendar year (December 31). As the IMF notes:

*Flows refer to economic actions and effects of events within an accounting period, and positions refer to a level of assets or liabilities at a point in time. International flows are recorded in the accounts as transactions (balance of payments) and other changes in financial assets and liabilities account. Flows and stocks are integrated so that all changes in positions between two points in time are fully explained by the recorded flows.*⁹⁰

⁹⁰ *Balance of Payment Statistics, Yearbook 2012*, paragraph 3.2, Annex V, Conceptual Framework of the Balance of Payments and International Investment Position, International Monetary Fund, Washington DC.

156. The IIP framework allows us to estimate the assets of residents held abroad and the liabilities owed to non-residents. Total IIP assets reflect the value of public and private assets held by residents abroad while total liabilities reflect the value of total deposits by non-residents in the country. So we can either use the asset approach or the liability approach to estimate the role of tax havens. While it is clear that both approaches should yield identical estimates of non-resident deposits in tax havens, they seldom do because there are serious data limitations with regard to coverage and sectorization on both the asset and liability sides.

b. IIP (Assets)

157. Let us first consider the IIP asset approach which allows us to estimate the assets in tax havens for all sectors as well as for the private sector only. Total assets are based on IIP data reported by certain major tax havens (e.g., Luxembourg, Switzerland) to the IMF. However, as there are a number of non-reporting tax havens, this estimate based on reported IIP data understates assets held. Nevertheless, given that a majority of the large tax havens report the data, the understatement is not large. We can also estimate the assets held by the private sector by netting out assets held by monetary authorities on the premise that the latter are government-owned and are not in the business of tax evasion—the government does not evade taxes from itself. Because the IIP asset side clearly identifies reserve assets held by advanced and developing countries, the netting out does not present a problem. Although this is an advantage of the asset approach, the difficulty lies in assuming that reserve assets are the only public sector assets. They are unlikely to be. For instance, the counterpart of public debt that accrues to the government is a form of assets but these cannot be readily identified in the IIP asset series. Moreover, sovereign wealth funds (SWFs) are government-owned. Hence, for countries with large SWFs, failure to net such holdings from the assets side of the IIP will lead to an overstatement of the IIP (Assets) held by the private sector.

c. IIP (Liabilities)

158. Total IIP (Liabilities) represent the total value of assets held by non-residents in a country. The advantage of the liabilities approach is that we can directly consider the value of non-resident assets held in tax havens that report IIP data to the IMF. However, the same limitations with regard to the public and private sectors apply to the liability side as well—the data are not broken down by sector. Not only are reserve asset holdings impossible to identify on the liability side, it is also impossible to disaggregate the holders of these assets according to whether they reside in developed or developing countries. The total liability position simply reports a stock position of holdings of all non-residents in the rest of the world. Given these serious limitations on the stock of IIP (liabilities) of tax havens, we will not be using these data to estimate the stock of non-resident asset holdings in tax havens.

ii. Financial Intermediation by Tax Havens: Recorded Investments

159. Table 14A on the reported and derived CPIS data show that, as of end-2009, developed and developing countries together held US\$5.3 trillion in portfolio investments in some 48 tax havens.

Table 14A. Portfolio Investment in Tax Havens, 2009-2012, year-end stock
(millions of U.S. dollars)

Year	From	Into	PI	Missing + Confidential (%)	Reported + Derived (%)
2009	Developing	Tax Havens	129,312	89.86	10.14
	Developed	Tax Havens	5,202,901	29.52	70.48
2010	Developing	Tax Havens	161,945	83.72	16.28
	Developed	Tax Havens	5,558,164	7.14	92.86
2011	Developing	Tax Havens	159,834	46.89	53.11
	Developed	Tax Havens	5,641,156	10.40	89.60
2012	Developing	Tax Havens	182,006	89.61	10.39
	Developed	Tax Havens	6,455,616	31.52	68.48

Source: Coordinated Portfolio Investment Survey database, IMF

Table 14B. Tax Havens' Portfolio Investment, 2009-2012, year-end stock
(millions of U.S. dollars)

Year	From	Into	PI	Missing + Confidential (%)	Reported + Derived (%)
2009	Tax Havens	Developing	834,329	74.46	74.46
	Tax Havens	Developed	6,029,930	56.29	43.71
2010	Tax Havens	Developing	1,024,582	47.55	52.45
	Tax Havens	Developed	6,147,642	45.65	54.35
2011	Tax Havens	Developing	936,511	48.23	51.77
	Tax Havens	Developed	5,720,686	46.89	53.11
2012	Tax Havens	Developing	1,248,783	74.03	25.97
	Tax Havens	Developed	6,106,057	58.46	41.54

Source: Coordinated Portfolio Investment Survey database, IMF

160. Residents of developed and developing countries increased their portfolio investment positions in tax havens over the next three years. The latest available data show that by the end of 2012 the stock of portfolio assets in such jurisdictions increased to US\$6.6 trillion. Developed country residents held the bulk (slightly over 97 percent) of total portfolio assets in tax havens.

161. However, between end-2009 and end-2012, the stock of portfolio assets held by developing country residents increased by 40.7 percent while those held by developed country residents increased by 24.1 percent. The missing and confidential column show that the portfolio asset data are likely to be significantly understated, more so for developing compared to developed country holdings. For reasons that are not entirely clear, developing countries reported the most data in 2011 (53.1 percent) while the proportion of reported data has hovered around 10-16 percent in other years.
162. Table 15A presents summary data on the foreign direct investment (FDI) positions of developed and developing countries vis-à-vis tax havens. At end 2009, residents of developing countries held US\$794.9 billion in FDI positions in tax havens which increased steadily to US\$1.1 trillion at the end of 2012, the last year for which CDIS data are available. In contrast, the outward FDI position of developed countries in tax havens increased from US\$3.7 trillion at end 2009 to US\$4.6 trillion at end 2012. The FDI position of developing countries in tax havens increased much faster compared to that of developed countries over this period, which is in lockstep with the relatively higher rate of increase of portfolio investments by developing country residents in tax havens.
163. Tax havens also invested much less in developing countries than they did in industrial countries (Table 15B). Their FDI positions in developing countries increased from US\$1.1 trillion at end-2009 to nearly US\$2 trillion at end 2012. In contrast, tax havens' FDI positions in advanced economies increased from US\$2.6 trillion at end-2009 to US\$3.6 trillion by the end of 2012. So tax havens had a positive FDI balance with regard to developed countries (that is tax havens received more from developed countries than they invested in them), whereas they had an FDI deficit vis-à-vis developing countries. Part of this deficit can perhaps be attributed by round-tripping of FDI from tax havens like British Virgin Islands into China and those from Mauritius to India.

Table 15A. Direct Investment in Tax Havens, 2009-2012, year-end stock
(millions of U.S. dollars)

Year	From	Into	FDI	Missing + Confidential (%)	Reported + Derived (%)
2009	Developing	Tax Havens	794,905	60.43	39.57
	Developed	Tax Havens	3,713,253	25.93	74.07
2010	Developing	Tax Havens	932,364	58.52	41.48
	Developed	Tax Havens	3,985,098	23.84	76.16
2011	Developing	Tax Havens	1,001,381	57.52	42.48
	Developed	Tax Havens	4,509,801	20.89	79.11
2012	Developing	Tax Havens	1,105,516	56.07	43.93
	Developed	Tax Havens	4,637,318	21.82	78.18

Source: Coordinated Direct Investment Survey database, IMF

Table 15B. Tax Havens' Direct Investment, 2009-2012, year-end stock
(millions of U.S. dollars)

Year	From	Into	FDI	Missing + Confidential (%)	Reported + Derived (%)
2009	Tax Havens	Developing	1,088,468	60.59	39.41
	Tax Havens	Developed	2,609,430	25.31	74.69
2010	Tax Havens	Developing	1,352,726	56.13	43.87
	Tax Havens	Developed	2,825,935	23.76	76.24
2011	Tax Havens	Developing	1,838,658	54.98	45.02
	Tax Havens	Developed	3,215,999	28.11	71.89
2012	Tax Havens	Developing	1,963,627	60.97	39.03
	Tax Havens	Developed	3,638,654	9.24	90.76

Source: Coordinated Direct Investment Survey database, IMF

164. Total portfolio and FDI positions from residents of developing and developed countries into tax havens increased from US\$9.8 trillion at end-2009 to US\$12.38 trillion at the end of 2012. In turn, tax havens held US\$10.6 trillion in total portfolio and FDI positions at end-2009 in advanced and developing economies which increased to nearly US\$13 trillion by the end of 2012. Hence, tax havens maintained a positive net asset position (based on PI and FDI) vis-à-vis the world (that is they invested more PI and FDI in the rest of the world that vice-versa). However, this observation is subject to the caveat that most developing countries have not reported their positions in tax havens.
165. The increase in total assets held in tax havens amounts to an inflow of US\$185.7 billion in 2010 and a further inflow of US\$85.8 billion in 2011. Of course, tax havens are also investing in developing countries. We do not look at the net position due to two reasons. First, as a Working Paper by the IMF notes, differences in the coverage of reporting countries on the asset and liabilities side means that net positions are not reliable.⁹¹ Second, FDI flows from tax havens into developing countries are often financed through illicit funds from the latter so that recorded FDI from tax havens like Cyprus, British Virgin Island, Hong Kong, or Mauritius often reflect an elaborate money laundering scheme whereby illicit funds from developing countries are round-tripped back as FDI.
166. We find that the estimates of portfolio and FDI asset holdings in tax havens by residents of developing countries based on the CDIS and CPIS databases are significantly understated compared to the estimates of asset holdings based on IIP Assets and the share of assets held in tax havens as shown by BIS data. We use the BIS table on "International bank positions, by residence" which shows deposits held by residents in all countries in onshore as well as offshore banks. Not all 48 tax havens listed by the IMF report to the BIS. So the split based on BIS data may understate the proportion of assets held in tax havens.

⁹¹ Philip R. Lane and Gian Maria Milesi-Ferretti, "The Cross Country Incidence of the Global Crisis" IMF Working Paper 10/171 (Washington, DC: International Monetary Fund, 2010).

167. The assumption is that total assets (including portfolio and direct investments) are held in the same proportion in tax havens as are bank deposits. This assumption probably overstates the proportion in tax havens which generally hold more bank deposits than PI and FDI. However, as mentioned, a number of tax havens including Liechtenstein, Dubai, and the British Virgin Islands do not report to the BIS, so the split actually understates the ratio of money held in tax havens versus onshore locations. As a new tax haven would also add to total assets, the split will be understated if their contribution to total tax haven assets is larger than their share in total assets. This BIS split was then applied to IIP Assets by region, which was extracted from the IMF IIP database. For the private sector assets table, the splits were applied to the IIP (Assets) less Official Reserve Assets series.
168. Based on these adjustments we estimate that total assets of advanced and developing country residents in tax havens increased from US\$18.1 trillion at end-2005 to US\$30.8 trillion in 2011 (Table 16A) entailing a trend rate of growth of 5.9 percent per annum over this period. Barring a slight dip in 2009 as a result of the unfolding global economic crisis that began in 2008, the increase in total asset positions in tax havens otherwise increased steadily throughout the period.
169. Based on the log-linear trend rate of inflation-adjusted values, the assets of advanced country residents grew at 5.9 percent per annum while those of developing country residents grew at 12.2 percent per annum. Asset holdings of residents of Sub-Saharan Africa, comprising of some of the poorest countries of the world, grew the fastest at 20.3 percent per annum, followed by emerging and developing Asia (16.7 percent per annum), developing Europe (11.0 percent per annum) and Western Hemisphere (10 percent per annum).
170. On average, holdings of developing country residents account for about 12 percent of total assets in tax havens. The overwhelming majority of assets are held by residents of advanced countries (88 percent). This means that even if most developing countries were to reduce their exposure to tax havens, the latter can continue to thrive based on their business with advanced country residents.
171. Hence, policies to curtail the harmful aspects of tax haven transactions and operations must also be initiated by the advanced economies which not only have a larger benefit to derive (such as gains from reduction in tax evasion) but which can also exercise the strongest leverage to improve compliance of existing regulations related to anti-money laundering and the financing of terrorism (AML-CFT provisions).
172. Table 16B provides estimates of private sector assets in tax havens which are derived by applying the same splits based on the BIS data to total IIP (Assets) less reserve assets. The latter term (IIP (Assets) less reserve assets) overstates private sector assets because such assets may be held in other forms besides reserve assets. However, the IIP data are not broken down into private and public sector assets except for reserve assets which are held by the central banks of countries.

Table 16A. Total Assets in Offshore Financial Centers by Region, 2005-2011⁹²
(millions of U.S. dollars)

Country	2005	2006	2007	2008	2009	2010	2011	Trend Rate of Growth
Africa	103,499	134,628	167,931	186,943	278,945	311,955	324,594	18.3%
Sub-Saharan Africa	77,000	97,966	119,936	128,164	221,552	252,490	263,040	20.3%
Emerging and Developing Asia	517,852	699,225	969,896	1,171,658	1,284,127	1,481,645	1,608,950	16.7%
Europe	274,192	417,502	594,523	633,321	629,441	652,043	662,418	11.0%
Central and eastern Europe	101,409	167,006	225,207	249,678	246,872	242,842	234,980	10.2%
CIS	172,782	250,496	369,316	383,643	382,569	409,201	427,438	11.5%
Middle East and North Africa	433,921	573,859	681,879	733,799	718,556	746,395	826,787	7.2%
Middle East	407,422	537,196	633,884	675,019	661,163	686,930	765,233	6.9%
Western Hemisphere	507,498	602,094	746,201	770,655	864,942	995,646	1,035,867	10.0%
Advanced Economies	16,235,947	20,630,658	25,598,372	26,084,859	25,039,270	26,312,361	26,381,522	5.1%
Emerging and Developing Countries	1,810,462	2,390,647	3,112,437	3,437,596	3,718,618	4,128,219	4,397,062	12.2%
All Countries	18,046,409	23,021,305	28,710,809	29,522,455	28,757,888	30,440,580	30,778,584	5.9%
<i>Developing Countries as % of All Countries</i>	<i>10.0%</i>	<i>10.4%</i>	<i>10.8%</i>	<i>11.6%</i>	<i>12.9%</i>	<i>13.6%</i>	<i>14.3%</i>	<i>...</i>

Note: Trend Rate of Growth is calculated as a log linear function using constant dollars
Source: IMF IIP, BIS, BEA

173. Total private sector assets of developing and advanced countries grew by 5.5 percent per annum on average from US\$16.8 trillion in 2005 to US\$28.1 trillion in 2011. The steady growth was broken in 2009 when total private assets fell to US\$26.4 trillion from US\$27.3 trillion in 2008 in the wake of the global financial crisis. The decline in total assets in 2009 was brought about by the withdrawal of residents of advanced countries which offset the rise in holdings of the residents of developing countries. The private assets of developing country residents registered a steady increase from US\$1.2 trillion in 2005 to US\$2.6 trillion in 2011—a trend rate of increase of 10.6 percent per annum on average.

⁹² Based on data reported by offshore financial centers to the IMF. The reporting offshore centers account for the majority of assets held but exclude non-member jurisdictions such as the Cayman Islands, British Virgin Islands, Guernsey, and Liechtenstein.

Table 16B. Private Assets in Offshore Financial Centers by Region, 2005-2011
(in millions of U.S. dollars)

Country	2005	2006	2007	2008	2009	2010	2011	Trend Rate of Growth
Africa	58,905	72,906	88,322	90,536	185,367	218,168	226,525	23.1%
Sub-Saharan Africa	54,303	66,028	79,893	82,689	177,979	210,266	217,781	24.2%
Emerging and Developing Asia	199,440	286,427	386,274	436,808	449,055	526,676	591,579	14.7%
Europe	172,386	265,407	378,095	421,067	419,098	432,144	445,295	12.2%
Central and eastern Europe	89,474	158,592	214,931	248,434	237,609	233,143	231,157	11.5%
CIS	152,477	215,133	323,343	391,409	380,627	395,544	421,225	14.0%
Middle East and North Africa	324,483	423,120	473,070	465,054	467,811	481,822	547,800	4.7%
Middle East	319,882	416,241	464,641	457,208	460,423	473,920	539,405	4.7%
Western Hemisphere	436,722	515,687	623,772	626,405	716,159	828,994	849,186	9.2%
Advanced Economies	15,637,358	19,982,653	24,909,115	25,338,251	24,208,646	25,423,276	25,437,040	5.0%
Emerging and Developing Countries	1,184,534	1,553,435	1,937,224	2,029,199	2,226,051	2,475,006	2,646,618	10.6%
All Countries	16,820,381	21,534,497	26,844,704	27,365,777	26,433,190	27,896,776	28,082,223	5.5%
<i>Developing Countries as % of All Countries</i>	<i>7.0%</i>	<i>7.2%</i>	<i>7.2%</i>	<i>7.4%</i>	<i>8.4%</i>	<i>8.9%</i>	<i>9.4%</i>	<i>...</i>

Note: Trend Rate of Growth is calculated as a log linear function using constant dollars

Source: IMF IIP, BIS, BEA

174. Again, the assets of the private sector of Sub-Saharan Africa grew the fastest (24.2 percent per annum). This was followed by residents of Africa as a whole (23.1 percent), Asia (14.7 percent), CIS countries (14.7 percent), developing Europe as a whole (12.2 percent), Central and Eastern Europe (11.5 percent), Western Hemisphere (9.2 percent), and MENA (4.7 percent).

175. Table 17 shows the gap between the stocks of total portfolio and FDI assets of developing countries in tax havens estimated based on the IMF's CPIS and CDIS databases and those derived based on IIP (Assets) using BIS data on bank deposits. We do not expect the data to converge because (i) whereas the CDIS and CPIS databases only capture PI and FDI data, total assets consist of other financial assets and (ii) there are large gaps in data because most tax havens do not report data for the CPIS and CDIS database. Another reason for the difference in asset estimates is that the coverage of countries reporting under the IIP and the CDIS/CPIS statistical reporting systems is not uniform, with more countries reporting IIP than report FDI or portfolio investments. So as expected, the IIP based assets data average about US\$4.1 trillion whereas the CPIS plus CDIS database show average holdings at about US\$1.2 trillion.

Table 17. Total Assets Based on CPIS and CDIS database and IIP/BIS Data
(billions of U.S. dollars)

Measure	2009	2010	2011	2012
Total PI of Developing Countries in Tax Havens*	129.3	161.9	159.8	182.0
Total FDI of Developing Countries in Tax Havens*	794.9	932.4	1,001.4	1,105.5
Total Assets of Developing Countries in Tax Havens*	924.2	1,094.3	1,161.2	1,287.5
<i>Level Change</i>	.	170.1	66.9	126.3
Total Assets of Developing Countries in Tax Havens**	3,718.6	4,128.2	4,397.1	.
<i>Level Change</i>	.	409.6	268.8	.

*Source: IMF CDIS & CPIS (Tables 14A & 15A)

**Source: IMF IIP & BIS Split (Table 16A)

176. As Lane and Milesi-Ferretti point out in *The External Wealth of Nations*, to the extent that derivatives, hedge funds, and other assets held by the private sector are not included in the IIP, private sector assets held in tax havens are most likely to be understated.⁹³ They note, for example, that a recent survey by the Cayman Island Monetary Authority (CIMA) found that at end-2007, hedge funds recorded in the country amounted to over US\$2.2 trillion. Such assets are not reported through the CPIS. Moreover, as Cayman Islands does not report IIP data to the IMF (as it is not a member of the IMF), the total IIP (Assets) line is understated. In brief, there are factors that over- and under-state the IIP (Assets) estimates and there are those that mainly understate the CDIS and CPIS estimates. As of end-2011, we estimate that assets held in tax havens range from at least US\$18 trillion to as high as US\$30.8 trillion, most of which belong to residents of the advanced countries. Only roughly 10 percent of these assets are held by residents of developing countries. In fact, given the different data sources and methods and the differing definitions of what constitutes a tax haven or an offshore financial center, estimates of private sector assets in tax havens vary significantly. The collection and compilation of high-quality source data on deposits and other financial assets in tax havens continue to be hampered by a lack of transparency and regulatory oversight of the transactions and operations of tax havens.

⁹³ Philip R. Lane and Gian Maria Milesi-Ferretti, "The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Countries," *Journal of International Economics* 55, (2001): 263–94.

Conclusion

This paper in three parts assesses the net flow of resources into or out of developing countries over the period 1980-2012, the normative role of tax havens, and the extent of their financial intermediation vis-à-vis developed and developing countries. Because the estimates of recorded and unrecorded financial flows are primarily based on the balance of payments, they necessarily reflect the *flow* of all transactions between residents of developing countries vis-à-vis the rest of the world. In contrast, the approach taken in the third part of the paper on the extent of financial intermediation by tax havens is necessarily based on the *stock* approach. We point out why the stock approach to estimating assets in tax havens is not only preferable to the BoP flow approach, it is the only approach that can highlight the specific role of tax havens vis-à-vis developed and developing countries. The following are some of the key findings of this study.

- Net resource transfers (NRT) are defined as recorded transfers (RecT) less gross illicit outflows. An alternative definition of NRT wherein recorded transfers are adjusted by outward minus inward capital flight, is relegated to an appendix. This is because unrecorded inward capital flight cannot be treated as if it were a benefit like recorded inflows of FDI or portfolio investments.
- As China is an outlier in terms of trade and illicit flows, the inclusion of China tends to skew the RecT, IFF, and NRT estimates. Hence, we present NRT indicators for developing countries that include and exclude China to see if we reach entirely different conclusions. The overall results indicate that while developing countries as a whole lost massive amounts of resources, when China is excluded, the loss is reduced.
- According to the NRT measure based on outward capital flight, developing countries lost a total of nearly US\$3 trillion in recorded transfers and nearly four and half times as much (US\$13.4 trillion) through capital flight. Excluding China, the corresponding loss in resources was US\$1.1 trillion in recorded transfers and US\$10.6 trillion through outward flight capital.
- Test results seem to corroborate the adverse impact of illicit flows on economic performance regardless of whether one approaches it from the investment or consumption side of the equation. For instance, a recent study at the IMF found that capital inflows positively impact domestic investment by a far larger extent than factors like institutional quality or domestic credit. And since capital flight would drain resources, it stands to reason that such outflows would reduce the beneficial effect of inflows on domestic investment. Our findings, based on limited IMF BoP data are consistent with the IMF findings in that we show that capital inflows have a positive impact on consumption and that illicit outflows would reduce that beneficial impact on consumption and living standards in poor developing countries.

- Part II of this paper, regarding the normative case against tax havens (also known as secrecy jurisdictions) surveys their negative externalities. Tax havens have been a preferred destination of holders of illicit assets because lax regulations and oversight afford holders a high rate of return while secrecy regarding clients and transactions allow holders to ring-fence their illicit assets. There is no evidence that tax havens provide any legitimate competition to on-shore financial institutions that play by the rules and are subject to prudential regulations by central banks and other regulatory agencies.
- Secrecy jurisdictions help shield the identity of the owners of the assets and accounts, even from law enforcement in other countries. When combined with lax or non-existent regulation and/or supervision, this opacity can facilitate the breach of laws and regulations in other countries due to the reduced risk of being caught. The owners of these accounts can engage in regulatory arbitrage, whereby they seek the highest rates of return at the lowest regulatory “cost.” Evidence is presented of linkages between tax havens and illegal, unreported, unregulated (IUU) fishing as well as transport safety.
- This section delves into the impact these tax havens and secrecy jurisdictions have on developing countries. Through abusive transfer pricing and affiliate lending, multinational corporations are able to lower taxable income in developing countries, thereby denying these governments an important stream of public revenue from which to invest in infrastructure and social programs. In this way, secrecy jurisdictions contribute to the erosion of institutional quality and democracy in poor countries. Furthermore, the secrecy provisions of tax havens allow for increased ease of rent-seeking activities. This is a particular problem in countries rich in natural resources. Resource rents can give the political elite incentives to reduce democracy in order to retain control over profits from these resources, particularly in presidential, as opposed to parliamentary, systems.
- We begin the third part of the paper with an important caveat—for a variety of reasons, it is not possible to “reconcile” the flows estimates of NRT with the stock asset positions of developed and developing countries in tax havens. There are a number of reasons why it is impossible to undertake such an exercise. For one, data reported by tax havens to the IMF are incomplete and even when reported, have a number of large gaps because much of the data are confidential. Second, stocks and flows are notoriously difficult to reconcile due to valuation changes and exchange rate fluctuations. Most importantly, recorded and unrecorded flows based on balance of payments statistics are compiled *with reference to the rest of the world* (including intra developing country transactions), while the stock data refer to assets held by residents of developed and developing countries in tax havens.

- The stock of assets are based on three IMF databases—the Coordinated Direct Investment Survey (CDIS), Coordinated Portfolio Investment Survey (CPIS), and the International Investment Position (IIP) and the BIS database on international bank deposits in tax havens.
- Developing country residents' portfolio investments (PI) in tax havens increased from US\$129.3 billion as of end-2009 to US\$182 billion by the end of 2012, the latest year for which data are available. Around 90 percent of developing countries did not report or reported with a confidential flag their portfolio asset positions in tax havens. Hence, the estimates greatly understate portfolio asset holdings of developing countries vis-à-vis tax havens.
- Tax havens hold more portfolio assets in developing countries than the latter invests in tax havens—they increased from US\$834 billion at end 2009 to US\$1.2 trillion by the end of 2012.
- Regarding foreign direct investment (FDI), the investment position of developing countries was just US\$794.9 billion as of the end of 2009 which increased to US\$1.1 trillion by the end of 2012. However, around 60 percent of developing countries did not report FDI data so that again, the estimates understate the actual position. In contrast, the FDI position of tax havens in developing countries was US\$1.1 trillion at end 2009, ending at nearly US\$2 trillion at end 2012.
- The financial linkages between tax havens and developed countries both in terms of PI and FDI are much stronger than between tax havens and developing countries. Total PI and FDI investment of developing country residents in tax havens has therefore increased from US\$1.2 trillion at end 2009 to US\$1.5 trillion at the end of 2012. The large gaps in data inherent in the CDIS/CPIS databases is apparent once we compare the total asset position obtained through the IIP/BIS asset database. Using the IMF IIP (Assets) database and applying the share of bank assets held in tax havens using the BIS data, we find that residents of developing countries held US\$1.8 trillion in 2005 which increased to US\$4.4 trillion in 2011, the latest year for which IIP data are available.

References

- “100 ansatte jakter på norske formuer.” *Dagens Næringsliv*, May 20, 2010. Available at: <http://www.dn.no/nyheter/politikkSamfunn/2010/05/20/100-ansatte-jakter-pa-norske-formuer>.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. “The colonial origins of comparative development: An empirical investigation” *American Economic Review* 91, no.5 (2001): 1369-1401.
- Acemoglu, Daron, James A. Robinson, and Thierry Verdier. “Kleptocracy and divide-and-rule: a theory of personal rule” *Journal of the European Economic Association* 2, no. 2-3 (April-May 2004): 162-192.
- Action Aid (2012). “Svenskt bistand til skatteparads”. Report, 2012.
- Ajayi, S. Ibi. “An Analysis of External Debt and Capital Flight in the Severely Indebted Low Income Countries in Sub-Saharan Africa.” IMF Working Paper WP/97/68. Washington, DC: International Monetary Fund, 1997.
- Andersen, Jørgen J. and Silje Aslaksen. “Constitutions and the resource curse” *Journal of Development Economics* 87, no. 2 (2008): 227-246.
- Auty, Richard M., ed. *Resource Abundance and Economic Development*. New York: Oxford University Press, 2001.
- Bank for International Settlements “Locational Banking Statistics” available at <http://www.bis.org/statistics/bankstats.htm>.
- Basel Committee on Banking Supervision. *Report on Special Purpose Entities*. Basel: Bank for International Settlements, September 2009.
- Baunsgard, Thomas, and Michael Keen, M. “Tax revenue and (or?) trade liberalization”. Working paper WP/05/112. Washington, DC: International Monetary Fund, June 2005.
- Boschini, Anne D., Jan Pettersson, and Jesper Roine.”Resource curse or not: A question of appropriability” *Scandinavian Journal of Economics* 109, no.3 (2007): 593-617.
- Boyce, James K. and Léonce Ndikumana. “Capital Flight from Sub-Saharan African Countries: Updated Estimates, 1970-2010,” PERI Research Report. Amherst, MA: Political Economy Research Institute, University of Massachusetts, Amherst, October 2012.
- Claessens, S. (1997) “Estimates of Capital Flight and Its Behavior,” *Rev. de Analisis Economico* 12, June, 3-33.
- Claessens, Stijn and David Naude. “Recent Estimates of Capital Flight” World Bank Working Paper Series 1186. Washington, DC: World Bank, 1993.
- Collier, Paul, and Anke Hoeffler. “Testing the neocon agenda: Democracy in resource-rich societies” *European Economic Review* 53, no.3 (2009): 293-308.
- Collier, Paul, Anke Hoeffler, and Catherine Patillo. “Flight Capital as a Portfolio Choice, *World Bank Economic Review* 15, no. 1 (January 2001): 55-80.
- Cuddington, J. (1986). “Capital Flight: Estimates, Issues and Explanations,” Princeton Essay in *International Finance* 58, December.
- Cumby, R. E. and Levich, R. (1989). On the Definition and Magnitude of Recent Capital Flight. National Bureau of Economic Research Working Paper Series No. 2275, 1989.

- Daniels, Tim, "Abacha: The Kleptocrat's legacy and James Ibori, Nigeria's president Manque." Presentation at the conference on Financial Secrecy, Society and Vested Interests, Bergen, Norway, November 20-22, 2012. Available at: <http://www.pwyp.no/sites/all/files/TimDaniel.pdf>
- Davis, Bob. "Corruption Fighters Form Close Knit Club". *The Wall Street Journal*, July 7, 2010. Available at: <http://www.wsj.com/articles/SB10001424052748704067504575305200456314876>
- Desai, A. M., Foley, C.F. and Hines, J.R. Jr., 2006a. 'Do tax havens divert economic activity?' *Economics Letters* 90, 219-224.
- Desai, A. M., Foley, C.F. and Hines, J.R. Jr., 2006b. 'The demand for tax haven operations'. *Journal of Public Economics* 90, 513-531.
- Dharmapala, D., 2008. 'What problems and opportunities are created by tax havens?' *Oxford Review of Economic Policy* 24(4): 661-679.
- Dharmapala, D. and Hines, J.R. jr., 2009. 'Which Countries Become Tax Havens?' *Journal of Public Economics* 93, 1058-1068.
- Diamond, W.H. and Diamond, D.B., 2002. Tax havens and the world. Mathew Bender Books, Newark, NJ.
- Didszun, Klaus. "On the Problem of Negative Net Financial Transfers to Developing Countries" *Intereconomics* 25, no.2 (1990): 67-72.
- Dornbusch, R. (1990). "Capital Flight: Theory, Measurement and Policy Issues." IADB Working Paper, no. 2.
- Edward Report, "Review of Financial Regulation in the Crown Dependencies" Part 1, section 13.2. *Jersey Financial Service Commission*, 2009.
- EJF. *All at Sea: The Abuse of Human Rights aboard Illegal Fishing Vessels*. London: Environmental Justice Foundation, 2010.
- Endersen, R. "Svalbard kan bli et skatteparadis" [Svalbard may become a tax haven] *Dagens Næringsliv*, November 27, 2010. Available at: <http://www.dn.no/nyheter/politikkSamfunn/2010/11/27/-svalbard-kan-bli-et-skatteparadis>
- Findlay, Michael, Daniel Nielson, and Jason Sharman. "Global Shell Games: Testing Money Launderer's and Terrorist Financiers' Access to Shell Companies" Centre for Governance and Public Policy Working Paper. Queensland, Australia: Griffith University. Available at: <http://www.gfintegrity.org/wp-content/uploads/2014/05/Global-Shell-Games-2012.pdf>
- Food and Agriculture Organization of the United Nations. "Shining a spotlight on illegal fishing". November 22, 2010. Available at: <http://www.fao.org/news/story/en/item/47812/icode/>
- Fjeldstad, Odd-Helge., and Mick Moore. "Revenue authorities and public authority in Sub-Saharan Africa" *Journal of Modern African Studies* 47, no.1 (2009): 224-239.
- Fuest, Clemens, and Nadine Riedel. "Tax Evasion and Tax Avoidance in Developing Countries: The Role of International Profit Shifting". WP 10/12. Oxford: Oxford University Centre for Business Taxation, June 2010.
- Gianni, Matthew, and Walt Simpson. *The Changing Nature of High Seas Fishing: how flags of convenience provide cover for illegal, unreported and unregulated fishing*. Australian Department of Agriculture, Fisheries and Forestry, International Transport Workers' Federation, and WWF International, 2005.

- Gjernes, G. and O. Kibar. "Punger ut til skatteparadis" [Pays out to tax havens]. *Dagens Næringsliv*, June 15, 2009. Available at: <http://www.dn.no/nyheter/naringsliv/2009/06/15/punger-ut-til-skatteparadis>.
- Gordon, Richard K. "Laundering the proceeds of public sector corruption" Case Legal Studies Research 09-10. Washington, DC: World Bank, April 2009. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1371711
- Gresik, Thomas A. "The Taxing Task of Taxing Transnationals" *Journal Of Economic Literature* 39 (2001): 800-838.
- Haken, Jeremy, *Transnational Crime In the Developing World*. Washington, DC: Global Financial Integrity, 2011. Available at: http://www.gfintegrity.org/storage/gfip/documents/reports/transcrime/gfi_transnational_crime_web.pdf
- "Her Fant Dagens Næringsliv 47 Milliarder." *Dagens Næringsliv*, August 11, 2012. <http://www.dn.no/nyheter/naringsliv/2012/11/08/her-fant-dagens-naeringsliv-47-milliarder>.
- High Seas Task Force. *Closing the net: Stopping illegal fishing on the high seas*. Governments of Australia, Canada, Chile, Namibia, New Zealand, and the Earth Institute at Colombia University. London: IUU Fishing Coordination Unit, 2006.
- Hines, James R. Jr. "Lessons from behavioral responses to international taxation" *National Tax Journal* 52 (1999): 305-322
2005. 'Do tax havens flourish?' In Poterba, J. (Ed) Tax policy and the economy, vol 19, National Bureau of Economic Research and MIT Press, Cambridge.
2006. 'Will social welfare expenditures survive tax competition'. In A.J. Auerbach, J. Hines, Jr., and J. Slemrod, eds. Taxing Corporate Income in the 21st Century, Cambridge, UK: Cambridge University Press.
2008. 'Tax havens'. The New Palgrave Dictionary of Economics, second edition (edited by Durlauf, S. N. and Blume, L.).
- "Treasure Islands" *Journal of Economic Perspectives* 24, no. 4 (2010): 103-126.
- Hines, James R. Jr., and Eric M. Rice. "Fiscal Paradise: Foreign Tax Havens and American Business" *Quarterly Journal of Economics* 109, no.1 (1994): 149-82
- Hong, Qing, and Michael Smart. "In praise of tax havens: International tax planning and foreign direct investment" *European Economic Review* 54 (2010): 82-95.
- Husain, Israt. "The Adequacy of Resource Flows to Developing Countries," Report to World Bank Development Committee, February 1988.
- International Labour Organization. *Safety and health in the fishing Industry: Report for the discussion at the Tripartite Meeting on Safety and Health in the Fishing Industry*. Geneva: ILO, 1999.
- International Monetary Fund (2012) Balance of Payments Manual, Sixth Edition, Washington DC: IMF. (1992). Balance of Payments Manual, Part I, Washington DC: IMF,
2005. Monetary and fiscal policy design issues in low-income countries. Report. International Monetary Fund, Washington DC.
- (2008). Sovereign Wealth Funds—A Work Agenda, prepared by the Monetary and Capital Markets and Policy Development and Review Departments, Washington DC: IMF, February 29.
- (2012). Balance of Payment Statistics Yearbook, 2012, Washington DC: IMF.

- Johannesen, N., 2010. 'Imperfect tax competition for profits, asymmetric equilibrium and beneficial tax havens'. *Journal of International Economics* 81,253-264.
- Kar, D. (2012). *Mexico: Illicit Financial Flows, Macroeconomic Imbalances, and the Underground Economy*. Washington DC: Global Financial Integrity, December 2012
- (2011), *Illicit Financial Flows from the Least Developed Countries: 1990-2008*, Dev Kar, United Nations Development Programme (UNDP), Discussion Paper for The United Nations IV Conference of LDC Ministers at Istanbul, Turkey, May 2011.
- (2010). *The Drivers and Dynamics of Illicit Financial Flows from India: 1948-2008*, Global Financial Integrity, Washington DC, November.
- Kar, D. and Cartwright-Smith, D. (2008). *Illicit Financial Flows from Developing Countries: 2002-2006*, Global Financial Integrity, Washington DC, December 2008.
- Kar, D., Cartwright-Smith, D. and Hollingshead, A. (2010). *The Absorption of Illicit Financial Flows from Developing Countries: 2002-2006*. Washington DC: Global Financial Integrity, April 2010.
- Kar, D. and Freitas, S. (2012). *Illicit Financial Flows from Developing Countries: 2002-2006*. Washington DC: Global Financial Integrity, December 2012
- Kar, D. and Spanjers, J. (2014). *Illicit Financial Flows from Developing Countries: 2003-2012*. Washington, DC: Global Financial Integrity, December 2014.
- Kleven, Henrik, J., Martin B. Knusden, Claus T. Kreiner, Søren Pedersen, and Emmanuel Saez. "Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark". *Econometrica* 79 (2011): 651-692.
- Lane, Philip R., and Gian Maria Milesi-Ferretti "The Cross Country Incidence of the Global Crisis" IMF Working Paper 10/171. Washington, DC: International Monetary Fund, 2010.
- "The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Countries," *Journal of International Economics* 55, (2001): 263-94.
- Luca, Oana, and Spatafora, Nikola. "Capital Inflows, Financial Development, and Domestic Investment: Determinants and Inter-Relationships," Working Paper WP/12/120. Washington, DC: International Monetary Fund, 2012.
- May, Channing S., *Transnational Crime and Illicit Markets*. Washington, DC: Global Financial Integrity, Forthcoming.
- Mehlum, Halvor, Karl Moene, and Ragnar Torvik. "Institutions and the resource curse" *Economic Journal* 116, no.508 (2006): 1-20.
- "Cursed by resources or institutions?" *World Economy* 29, no.8 (2006): 1117-1131.
- Mintz, Jack M., and Alfons J. Weichenrieder. *The Indirect Side of Direct Investment: Multinational Company Finance and Taxation*. Cambridge, MA: MIT Press, 2010.
- Mio, Masaru. "Burmese Fisherman Deaths Cause Outrage," *Japan's Seaman's Union Marine Journal* 4, no.3. May-June (2007): p.2
- National Audit Office (NOA). *Managing Risk in the Overseas Territories*. Report by the Controller and Auditor General. HC 4 session 2007- 2008, 16 November. Foreign and Commonwealth Office, London: The Stationary Office, 2007.

- Ndikumana, Léonce and James K. Boyce. "New Estimates of Capital Flight from Sub-Saharan African Countries: Linkages with External Borrowing and Policy Options," PERI Working Paper Series No. 166. Amherst, MA: Political Economy Research Institute, University of Massachusetts, Amherst, 2008.
- NOU Official Norwegian Reports. Government Commission on Capital Flight from Poor Countries. Tax havens and development 2009:19. Oslo: Government Administration Services Information Management, 2009. http://www.regjeringen.no/pages/2223780/PDFS/NOU200920090019000EN_PDFS.pdf
- OECD. *The social dimension of IUU fishing*. Memorandum JT00162108. Paris: Organization for Economic Co-operation and Development, 2004.
2007. Revenue Statistics 1965-2006. 2007 Edition. Table A, p. 19. OECD, Paris.
- Harmful Tax Competition: An Emerging Global Issue*. Paris: Organisation for Economic Co-operation and Development, 1998.
- Model Protocol for the Purpose of Allowing the Automatic and Spontaneous Exchange of Information under a TIEA*, 2015. Available at: <https://www.oecd.org/tax/exchange-of-tax-information/Model-Protocol-TIEA.pdf>.
- "Oppgave, PBL kurs 13 og 14." *University of Oslo*, n.d. http://www.uio.no/studier/emner/jus/jus/JUR4000/v07/JUR4000-1-2/undervisningsmateriale/pbl-kurs_rettsslare_arnesen.doc.
- Osterkamp, Rigmar. "Is There a Transfer of Resources from Developing Countries to Industrial Countries?" *Intereconomics* 25, no.5 (1990): 242-247.
- Palan, Ronen. "The havens, the Crisis of 2007 and Financial Regulation". *The World Financial Review*, December 20, 2010. Available at: <http://www.worldfinancialreview.com/?p=2751>
- Peralta, S., Wauthy, X., van Ypersele, T., 2006. 'Should countries control international profit shifting?' *Journal of International Economics* 68, 24-37.
- Piggott, Charles. "Stamping out the Sark Lark." *Independent*, June 26, 1999. Available at: <http://www.independent.co.uk/news/business/stamping-out-the-sark-lark-1102707.html>.
- Piketty, Thomas. *Capital in the Twenty-First Century*. Translated by Arthur Goldhammer. Cambridge, MA: Harvard University Press, 2014.
- Robinson, James A., and Ragnar Torvik. "Endogenous presidentialism" NBER WP paper 14603. Cambridge, MA: National Bureau of Economic Research, 2008.
- Rose, A.K., and Spiegel, M.M., 2007. 'Offshore Financial Centers: Parasites or Symbionts?' *Economic Journal* 117, 1310-1335.
- Ross, Michael L. *Timber booms and institutional breakdown in Southeast Asia*. Cambridge University Press, New York, 2001.
- "Does oil hinder democracy?" *World Politics* 53, no.3 (2001): 325-361.
- Sachs, Jeffrey D. "Managing the LDC Debt Crisis," Brookings Papers on Economic Activity, 1986.
- Sachs, Jeffrey D., and Andrew M. Warner. "Natural resource abundance and economic growth". NBER Working Paper No. 5398. Cambridge, MA: National Bureau of Economic Research, 1995.
- Sarker, Tapan, and Yokinobu Kitamura. "Technical assistance in fiscal policy and tax administration in developing countries: The state of nature in Bangladesh" *Asia Pacific Tax Bulletin* 8, no.9 (2002): 278-288.

- Sharman, Jason C., "Shopping for Anonymous Shell Companies: An Audit Study of Anonymity and Crime in the International Financial System" *Journal of Economic Perspectives* 24, no.4 (2010): 127-140.
- Slemrod, J., 2008. 'Why is Elvis on Burkina Faso postage Stamps?' *Journal of Empirical Legal Studies* Volume 5, Issue 4, 683-712, December 2008.
- Slemrod, J. and Wilson J.D., 2009. 'Tax competition with parasitic tax havens'. *Journal of Public Economics* 93 (11-12), 1261-70.
- Sood, Krishnalekha. *Trends in International Cooperation and Net Resource Transfers to Developing Countries*. Helsinki: United Nations University World Institute for Development Economics Research, 1995.
- Stølsvik, Gunnar. "Flags of convenience as a complicating factor at combating crime at sea" In *Maritime Security in Southeast Asia*, edited by Kwa Chong Guan and John K. Skogan. New York: Routledge, 2007.
- Swedish Food and Agriculture Organization (FAO) Committee. Ministry of Agriculture. Roving Bandits in Modern Fisheries. By Rolf Eriksson. Publication Series 5 Jo 09.002, ISSN; 1652-9316. Västerås: Edita Västra Aros, 2009.
- Torvik, Ragnar. "Natural resources, rent seeking and welfare" *Journal of Development Economics* 67 (2002): 455-470.
- "Why do some resource abundant countries succeed while others do not?" *Oxford Review of Economic Policy* 25, no.2 (2009): 241:256
- United Nations. *World Economic Situation and Prospects 2011*. New York: United Nations, 2011.
- United Nations Inter-Agency Project on Human Trafficking. *Exploitation of Cambodian Men at Sea: Facts About the Trafficking of Cambodian Men onto Thai Fishing Boats*. Bangkok: UNIAP, 2009. Available at: http://www.no-trafficking.org/reports_docs/siren/siren_cb3.pdf
- U.S. Department of Commerce. Bureau of Economic Analysis. U.S. Direct Investment Abroad: 2004 Final Benchmark Data. Washington, DC: U.S. Government Printing office, 2008.
- U.S. Government Accountability Office. 2008. Large U.S. Corporations and Federal Contractors with Subsidiaries in Jurisdictions Listed as Tax Havens or Financial Privacy Jurisdictions. GAO-09-157. Washington, DC: U.S. Government Accountability Office, 2008.
- U.S. Senate Permanent Subcommittee on Investigations: Tax haven banks and U.S. tax compliance, July 17, 2008 and http://www.justice.gov/tax/UBS_Signed_Deferred_Prosecution_Agreement.pdf, http://www.irs.gov/pub/irs-drop/bank_agreement.pdf.
- Watt, Nicholas, Larry Elliott, Julian Borger, and Ian Black. "G20 declares door shut on tax havens". *The Guardian*, April 2, 2009. Available at: <http://www.guardian.co.uk/world/2009/apr/02/g20-summit-tax-havens>
- Webb, Steven B., and Heidi S. Zia "Borrowing, Resource Transfers, and External Shocks to Developing Countries: Historical and Counterfactual", Working Paper WPS 235, July. Washington, DC: Country Economics Department, The World Bank, 1989.
- Wrong, Michaela. "First Person: Maxwell Nkole". *Financial Times*, January 16, 2010. Available at: <http://www.ft.com/cms/s/0/47e03a88-00ac-11df-ae8d>

Statistical Appendix I

**Table 18. Broad Capital Flight and Components:
Including and Excluding China, 1980-2012**
(billions of U.S. dollars)

Year	All Developing Countries			Developing Countries, Excluding China		
	CED [WBR Outflows]	GER [Trade Misinvoicing Outflows]	Broad Capital Flight [CED+GER]	CED [WBR Outflows]	GER [Trade Misinvoicing Outflows]	Broad Capital Flight [CED+GER]
1980	17.1	17.2	34.3	17.1	17.2	34.3
1981	16.0	21.8	37.8	16.0	21.8	37.8
1982	18.9	21.2	40.1	18.9	21.2	40.1
1983	20.5	22.6	43.1	20.5	22.6	43.1
1984	13.4	24.3	37.7	7.9	21.0	28.9
1985	36.4	33.8	70.2	36.4	27.4	63.8
1986	43.9	29.7	73.6	41.1	20.0	61.1
1987	76.8	38.9	115.7	67.9	27.7	95.5
1988	13.3	50.3	63.6	10.0	34.4	44.3
1989	11.5	66.1	77.6	10.1	40.1	50.2
1990	46.0	74.6	120.7	32.6	46.5	79.1
1991	25.6	81.1	106.7	18.0	42.4	60.4
1992	44.5	37.7	82.2	16.7	35.5	52.3
1993	42.3	57.6	99.9	19.0	45.3	64.3
1994	81.0	86.1	167.1	58.2	73.0	131.2
1995	85.7	101.3	187.0	55.1	90.4	145.5
1996	50.7	115.3	166.0	26.3	96.8	123.1
1997	108.4	115.4	223.8	47.8	103.1	150.9
1998	175.3	121.8	297.1	111.7	99.2	210.9
1999	134.9	152.2	287.1	80.9	104.2	185.2
2000	118.0	190.6	308.5	73.6	128.0	201.6
2001	155.0	210.2	365.2	109.3	146.9	256.2
2002	144.4	202.5	346.8	136.2	135.0	271.2
2003	183.8	226.5	410.3	175.6	162.1	337.7
2004	245.6	294.1	539.7	245.6	213.8	459.4
2005	230.5	360.3	590.8	221.8	278.0	499.8
2006	440.5	403.4	844.0	353.6	315.9	669.5
2007	523.5	493.1	1,016.6	441.1	386.0	827.1
2008	757.8	588.0	1,345.8	695.3	483.2	1,178.4
2009	520.6	508.4	1,029.0	520.6	409.9	930.4
2010	513.2	585.5	1,098.8	447.6	464.8	912.4
2011	701.1	770.6	1,471.7	570.7	621.6	1,192.3
2012	973.0	700.3	1,673.4	634.2	537.8	1,172.0
Cumulative	6,569.2	6,802.7	13,371.9	5,337.3	5,272.9	10,610.2

**Table 19. Recorded Transfers (RecT) and Components:
All Developing Countries, 1980-2012**
(billions of U.S. dollars)

Year	Primary Income	Secondary Income	Financial Account Balance	Capital Transfers	Recorded Transfers (RecT)
1980	-22.8	12.5	35.7	-0.1	25.3
1981	-34.8	12.7	68.9	-0.2	46.6
1982	-42.7	13.0	71.3	-0.2	41.4
1983	-38.3	16.6	31.8	-0.1	9.9
1984	-40.5	18.1	13.4	-0.1	-9.1
1985	-40.0	16.9	24.0	-0.1	0.9
1986	-38.7	18.4	32.2	0.0	12.0
1987	-41.5	21.4	4.9	0.0	-15.3
1988	-45.1	22.5	16.9	-0.8	-6.5
1989	-47.8	25.1	18.5	0.1	-4.1
1990	-48.1	31.6	0.1	10.8	-5.6
1991	-52.0	39.0	20.2	0.8	7.9
1992	-50.4	42.9	38.7	0.9	32.0
1993	-54.3	42.7	86.3	1.5	76.1
1994	-55.6	43.5	51.2	4.6	43.7
1995	-76.4	46.9	95.2	3.4	69.1
1996	-82.6	54.1	83.6	4.0	59.1
1997	-87.3	60.3	101.5	1.4	76.0
1998	-96.2	57.8	82.9	1.6	46.1
1999	-100.3	68.0	19.8	1.9	-10.7
2000	-106.9	72.4	-21.2	14.6	-41.2
2001	-108.4	62.6	-1.7	-5.1	-52.6
2002	-104.1	77.5	-54.3	-8.2	-89.2
2003	-117.0	99.4	-131.3	4.4	-144.4
2004	-134.1	119.4	-212.6	6.0	-221.2
2005	-212.6	180.8	-340.4	13.8	-358.4
2006	-232.1	215.7	-569.4	58.8	-527.0
2007	-253.1	249.7	-485.1	18.8	-469.8
2008	-282.5	276.2	-536.1	28.5	-513.8
2009	-282.0	241.3	-103.1	23.1	-120.8
2010	-379.3	272.4	-137.1	55.4	-188.6
2011	-500.5	267.3	-215.5	31.7	-417.0
2012	-455.5	246.0	-138.3	22.0	-325.9
Cumulative	-4,263.5	3,044.6	-2,049.0	293.1	-2,974.9

**Table 20. Recorded Transfers (RecT) and Components:
Developing Countries Excluding China, 1980-2012**
(billions of U.S. dollars)

Year	Primary Income	Secondary Income	Financial Account Balance	Capital Transfers	Recorded Transfers (RecT)
1980	-22.8	12.5	35.7	-0.1	25.3
1981	-34.8	12.7	68.9	-0.2	46.6
1982	-42.7	13.0	71.3	-0.2	41.4
1983	-38.3	16.6	31.8	-0.1	9.9
1984	-42.1	17.7	14.5	-0.1	-10.0
1985	-40.9	16.7	12.6	-0.1	-11.7
1986	-38.9	18.1	24.3	0.0	3.5
1987	-41.4	21.2	3.6	0.0	-16.5
1988	-45.0	22.1	12.1	-0.8	-11.6
1989	-48.1	24.7	14.3	0.1	-8.9
1990	-49.2	31.3	8.8	10.8	1.8
1991	-52.9	38.1	26.7	0.8	12.7
1992	-50.7	41.7	36.8	0.9	28.8
1993	-53.0	41.6	64.6	1.5	54.6
1994	-54.5	43.2	49.0	4.6	42.3
1995	-64.8	45.4	79.0	3.4	63.1
1996	-70.3	52.0	75.3	4.0	61.0
1997	-76.6	55.2	116.3	1.5	96.4
1998	-82.7	53.5	95.4	1.7	67.9
1999	-85.8	63.0	23.2	1.9	2.4
2000	-92.2	66.1	-12.5	14.6	-24.0
2001	-89.1	54.1	10.9	-5.1	-29.1
2002	-89.1	64.5	-11.4	-8.2	-44.2
2003	-109.1	82.0	-80.5	4.5	-103.2
2004	-130.6	96.5	-131.0	6.1	-158.9
2005	-196.5	156.9	-181.0	9.7	-210.9
2006	-227.0	187.6	-329.9	54.8	-314.5
2007	-261.2	212.6	-115.6	15.7	-148.5
2008	-311.1	233.0	-93.6	25.5	-146.1
2009	-273.5	209.6	102.7	19.8	58.6
2010	-353.4	231.7	52.5	51.4	-17.9
2011	-430.1	242.8	-87.7	28.1	-247.0
2012	-435.6	242.5	-5.7	18.9	-179.9
Cumulative	-4,033.8	2,720.2	-18.3	265.2	-1,066.8

**Table 21. Net Resource Transfers (NRT) and Components:
Including and Excluding China, 1980-2012**
(billions of U.S. dollars)

Year	All Developing Countries			Developing Countries, Excluding China		
	RecT	Capital Flight	NRT	RecT	Capital Flight	NRT
1980	25.3	34.3	-9.1	25.3	34.3	-9.1
1981	46.6	37.8	8.8	46.6	37.8	8.8
1982	41.4	40.1	1.4	41.4	40.1	1.4
1983	9.9	43.1	-33.3	9.9	43.1	-33.3
1984	-9.1	37.7	-46.9	-10.0	28.9	-38.9
1985	0.9	70.2	-69.3	-11.7	63.8	-75.4
1986	12.0	73.6	-61.6	3.5	61.1	-57.6
1987	-15.3	115.7	-130.9	-16.5	95.5	-112.1
1988	-6.5	63.6	-70.1	-11.6	44.3	-55.9
1989	-4.1	77.6	-81.6	-8.9	50.2	-59.1
1990	-5.6	120.7	-126.3	1.8	79.1	-77.3
1991	7.9	106.7	-98.7	12.7	60.4	-47.7
1992	32.0	82.2	-50.3	28.8	52.3	-23.5
1993	76.1	99.9	-23.7	54.6	64.3	-9.7
1994	43.7	167.1	-123.4	42.3	131.2	-88.9
1995	69.1	187.0	-117.9	63.1	145.5	-82.4
1996	59.1	166.0	-106.9	61.0	123.1	-62.2
1997	76.0	223.8	-147.8	96.4	150.9	-54.5
1998	46.1	297.1	-251.0	67.9	210.9	-143.0
1999	-10.7	287.1	-297.8	2.4	185.2	-182.8
2000	-41.2	308.5	-349.7	-24.0	201.6	-225.6
2001	-52.6	365.2	-417.7	-29.1	256.2	-285.3
2002	-89.2	346.8	-436.0	-44.2	271.2	-315.4
2003	-144.4	410.3	-554.7	-103.2	337.7	-440.9
2004	-221.2	539.7	-761.0	-158.9	459.4	-618.3
2005	-358.4	590.8	-949.2	-210.9	499.8	-710.7
2006	-527.0	844.0	-1,371.0	-314.5	669.5	-984.0
2007	-469.8	1,016.6	-1,486.5	-148.5	827.1	-975.6
2008	-513.8	1,345.8	-1,859.6	-146.1	1,178.4	-1,324.5
2009	-120.8	1,029.0	-1,149.8	58.6	930.4	-871.8
2010	-188.6	1,098.8	-1,287.3	-17.9	912.4	-930.3
2011	-417.0	1,471.7	-1,888.7	-247.0	1,192.3	-1,439.3
2012	-325.9	1,673.4	-1,999.2	-179.9	1,172.0	-1,351.9
Cumulative	-2,974.9	13,371.9	-16,346.8	-1,066.8	10,610.2	-11,677.0

**Table 22. Net Resource Transfers:
All Developing Countries by Region, 1980-2012**
(billions of U.S. dollars)

Year	Asia	Europe	MENA	Africa	Western Hemisphere
1980	-0.6	-1.5	1.7	-3.0	-5.7
1981	3.6	-4.1	2.4	0.1	6.8
1982	4.0	6.1	1.8	-1.3	-9.2
1983	-3.7	4.3	1.8	-0.4	-35.3
1984	-6.4	-10.2	1.5	4.1	-35.8
1985	-13.5	-9.1	-1.6	-7.6	-37.5
1986	-12.3	-13.6	-3.9	-4.4	-27.4
1987	-17.7	-41.4	-5.6	-9.7	-56.5
1988	-6.1	-24.6	-3.8	0.4	-35.9
1989	-9.9	-33.7	-1.1	2.3	-39.3
1990	-22.1	-65.6	1.2	-5.4	-34.4
1991	-11.8	-63.8	-4.6	-3.9	-14.7
1992	-7.3	-35.4	0.0	1.0	-8.5
1993	-3.9	-20.7	7.8	5.0	-11.8
1994	-4.8	-69.6	-41.5	0.0	-7.5
1995	-5.0	-47.2	-28.3	0.0	-37.3
1996	-11.9	-39.1	-41.4	0.9	-15.5
1997	-10.4	-112.7	-8.5	4.8	-21.1
1998	3.6	-177.8	-33.1	5.4	-49.2
1999	-9.3	-171.7	-65.3	4.5	-56.1
2000	-27.4	-186.6	-94.0	5.6	-47.3
2001	-24.1	-195.8	-98.9	-48.0	-50.8
2002	-29.4	-197.1	-107.0	-50.3	-52.2
2003	-40.0	-203.7	-98.9	-118.5	-93.7
2004	-59.9	-224.6	-179.7	-172.3	-124.5
2005	-39.7	-332.3	-158.3	-210.9	-208.2
2006	-50.9	-516.4	-259.4	-313.2	-231.0
2007	-75.6	-654.1	-231.3	-278.1	-247.4
2008	-74.2	-674.7	-449.9	-413.9	-246.9
2009	-19.7	-427.2	-373.3	-147.6	-181.9
2010	-74.3	-495.7	-272.4	-258.9	-186.0
2011	-70.0	-608.7	-434.8	-547.5	-227.7
2012	-58.4	-739.6	-379.7	-635.9	-185.6
Cumulative	-789.2	-6,388.1	-3,358.0	-3,196.6	-2,614.9

Appendix II. Methodology of Estimating NRT

i. Overall Approach

177. Inflows and outflows of financial and non-financial transfers as recorded in the balance of payments (recorded transfers, RecT) involve flows of legitimate or licit capital. In contrast, illicit financial flows (IFFs), estimated through the World Bank Residual (WBR) method, adjusted for trade misinvoicing, are mainly illicit in nature. We present two alternate measures of illicit flows—one based on gross outflows only and the other based on a net of inflows and outflows. We discuss the rationale for presenting IFFs on a gross and net basis in section (iii). It will suffice to note here that we derive two estimates of NRT, one based on a net of RecT and gross illicit outflows and the other based on a net of RecT and net IFFs.
178. If a developing country receives more recorded transfers through its balance of payments than it loses through unrecorded illicit outflows, then its net resource transfers (NRT) will be positive. If IFFs are larger than RecT, the NRT balance will be negative. In other words, such a country will be a net creditor to the rest of the world. The total NRT of developing countries will also differ depending on whether we are including or excluding China from the list of developing countries. This is because China plays a dominant role among developing countries (that is, China is an outlier) when it comes to both recorded (RecT) and unrecorded illicit flows, so that the inclusion of China can distort the picture for other developing countries as a group.

a. Recorded Transfers

179. The broad measure of recorded transfers expands the narrow one (equal to the financial accounts balance) by including, for example, debt forgiveness, worker's remittances, migrant transfers, and certain types of charities and donations in cash or kind that are not included in the financial account balance. Note that it is possible for the narrow RecT and broad RecT to have opposite signs; for instance, narrow RecT can show net outward transfers while broad RecT can show net inward transfers or vice-versa. Of course, for countries that have received substantial transfers through debt forgiveness and write-offs or those that have received significant worker remittances, an estimation of NRT based on broad RecT is more relevant than one based on narrow RecT.
180. We will focus only on the broad measure of recorded transfers because financial institutions collectively intermediate financial flows of the broadest kind. In order to discuss how broad recorded transfers are estimated using the balance of payments accounting framework, it would be useful to provide an overview of certain key balance of payments concepts. We will use the data reported by Ghana to the IMF in order to illustrate key relationships used to estimate broad RecT based on the balance of payments data reported by member countries to the IMF in accordance with an agreed framework for reporting such data. Table 23 presents the main accounts of Ghana's balance of payments for the period 2002-2006. The table illustrates the basic relationship between these accounts in accordance with the Balance of Payments Manual, Fifth Edition or BPM5.

Table 23. Ghana: Balance of Payments, Standard BPM5 Presentation, 2002-2006*
(millions of U.S. dollars)

BoP Account	2002	2003	2004	2005	2006
A. Current Account	-105.1	123.7	-566.9	-1,104.6	-1,040.2
of which: Net Primary Income	-174.2	-181.0	-197.8	-187.1	-127.4
of which: Net Current Transfers	826.9	1,244.9	1,579.9	1,794.2	2,248.3
B. Capital Account	73.3	154.3	251.0	331.2	229.9
of which: Net Capital Transfers	73.3	154.3	251.0	331.2	229.9
C. Financial Account	-25.1	-230.7	200.6	747.8	636.0
D. Net Errors & Omissions	56.9	-47.4	115.2	25.6	174.2
A+B+C+D (BoP Check)**	0.0	-0.1	-0.1	0.0	-0.1

*Source: Balance of Payments Statistics Yearbook 2007; Part 1: Country Tables, IMF

**May not add to zero due to rounding

181. The main point to note is that in principle, the current account balance (which includes net current transfers) must offset net capital transfers and the financial account balance. In reality, they do not, and the discrepancies (due to errors in recording) are allocated to “Net Errors and Omissions,” a catch-all item that effectively balances the accounts of each country. Each transaction entered in the balance of payments involves a debit entry and a credit entry for each party to the transaction. This double-entry bookkeeping method ensures that the balance of payments must always balance. Those items do not generally balance owing to errors in measurement and recording; in that case, the Net Errors and Omissions line captures this balance with a reverse sign so that the four main components add to zero (except for rounding errors). For the balance of payments to balance, entries must have the appropriate signs, positive or negative in the current, capital, and financial accounts.
182. Broad RecT starts with the financial account balance and expands it to include net current transfers (secondary income), net primary income, and net capital transfers (see Table 24). For instance, this broader measure captures workers’ remittances which are included in net current transfers (under personal transfers). Workers’ remittances, particularly inflows, can be significant for some countries such as China, Ethiopia, Ghana, India, Kenya, Mexico, the Philippines and Russia. Moreover, debt forgiveness and write-offs which are included under capital transfers may be important for some heavily indebted countries which have received such non-financial transfers. The salient types of balance of payments flows under current transactions, capital transactions, and financial account balances are shown in Table 24. Note that the entries are not exhaustive in terms of the types of resource flows covered but are indicative of the types of transactions included in the relevant balance of payments accounts.

Table 24. Detailed Components of Net Recorded Transfers (BPM6)

Major BoP Accounts & Components	BPM6 Paragraph(s)	Comments
<i>Primary Income</i>	<i>Chapter 11</i>	<i>Primary income flows between resident & non-residents</i>
Compensation of employees	11.10-11.23	Cross-border remuneration of employees for labor input by an employer
Dividends and withdrawals from income of quasicorporations	11.24-11.32	Distributed earnings allocated to the owners of equity for placing funds at the disposal of corporations
Reinvested earnings	11.33-11.47	Reinvested earnings from equity participation
Interest	11.48-11.76	Receivable by owners of deposits, debt securities, loans, and other accounts receivable (including SDR holdings and allocations)
Investment income from insurance, pension funds, etc.	11.77-11.84	Returns to policyholders on their claims in insurance and standardized guarantee schemes and income payable on pension entitlements
Rent	11.85-11.90	Income receivable for putting natural resources at the disposal of another institutional unit (i.e., rent payable for a resource lease)
Taxes and subsidies on products	11.91-11.94	Cross-border taxes and subsidies on products and production
<i>Current Transfers</i>	<i>Chapter 12(B)</i>	<i>Directly affect the level of disposable income</i>
Current taxes on income, wealth, etc.	12.21-12.24	Taxes on income/assets of nonresidents, etc.
Social contributions	12.25-12.32	Cross-border contributions to social security by residents & nonresidents
Social benefits	12.33	Cross-border benefits payable under social security & pension funds
Nonlife insurance premium (net)	12.34-12.36	Cross-border gross insurance payable on nonlife insurance
Nonlife insurance claims	12.37-12.39	Cross-border settlement of nonlife insurance claim
Current international cooperation	12.39-12.44	Concessional portion of interest; external aid through nonresident entities
Personal transfers	12.47	Transfers in cash or kind to and from nonresident households
Other current transfers	12.45	Gifts and donations n.i.e., compensation for nonfulfillment of contracts, etc.
<i>Capital Transfers</i>	<i>Chapter 13(C)</i>	<i>Applies to governments, households, and nonprofit organizations</i>
Debt forgiveness	13.22-13.23	Voluntary cancellation of all or part of external debt
Nonlife insurance claims	13.24	Exceptional insurance claims related to major catastrophes and natural disasters
Investment grants	13.25-13.26	Capital transfers in cash or kind by governments and international organizations to acquire fixed assets
One-off guarantee/debt assumption	13.27	Guarantor acquires no claim on the debtor or the claim is worth less than the value of the guarantee
Taxes	13.28	Taxes on estate, gifts, property, etc.
Other capital transfers	13.29-13.35	Compensation payments for damages or injuries not covered by insurance
<i>Financial Account Balance</i>	<i>Chapter 8</i>	<i>All transactions involving financial assets/liabilities between residents & non-residents</i>
Direct Investment	8.14-8.26	Imputed FDI flows, reinvestment of earnings, mergers & acquisitions, restructuring, etc.
Portfolio Investment	8.27-8.33	Debt securities; repayment of loans, reinvestments of earnings in investment funds, convertible bonds, share buybacks, etc.
Financial Derivatives	8.34-8.41	Stock options, margin payments, settlement payments, etc.
Other Investment	8.42-8.54	Loans to and from central banks; general government; other sectors such as corporations, etc.
Reserve Assets	8.55-8.57	Gold transactions between monetary authorities, etc.

Source: *Balance of Payments and International Investment Position Manual*, Sixth Edition (BPM6), Pre-Publication Draft, December 2008

183. In order to keep Table 24 manageable, we present the components of primary income, current and capital transfers, and financial account balances on a net basis—that is, credit and debit items are not shown separately as published in the 2007 Balance of Payments Yearbook. To clarify, with reference to Table 25, net direct investment represents FDI into Ghana minus FDI by Ghanaian companies abroad; net migrant transfers represent the cost associated in the transfer of residence by foreign migrant workers coming to work in Ghana minus those types of expenditures incurred by Ghanaian workers working abroad; debt forgiveness by foreign governments provided to the Government of Ghana on say bilateral loans minus debt forgiveness by the Government of Ghana provided to foreign governments; workers' remittances into Ghana from abroad minus workers' remittances by foreign workers working in Ghana sent abroad, etc. According to the broad RecT measure shown in Table 25, Ghana received just under a total of US\$3 billion in 2006 from the rest of the world, net of all outward transfers (Table 25, lower right corner).

184. There are three other types of transfers apart from financial transfers. These are primary income, current transfers (secondary income), and capital transfers. There are a wide variety of current transfers ranging from current taxes on income and wealth to social contributions and benefits, current international cooperation, personal transfers, etc. details on which are provided in the draft BPM6.

Table 25. Ghana: Net Current Transfers, Net Capital Transfers, and Financial Account Balance
(Standard Presentation, 2002-2006; millions of U.S. dollars)

Net Recorded Transfer Components	2002	2003	2004	2005	2006
<i>A. Net Primary Income</i>	-174.2	-181.0	-197.8	-187.1	-127.4
Compensation of employees	0.0	0.0	0.0	0.0	0.0
Investment Income	-174.2	-181.0	-197.8	-187.1	-127.4
<i>B. Net Current Transfers</i>	826.9	1,244.9	1,580.0	1,794.3	2,248.3
General government	146.9	227.7	292.9	244.5	603.7
Workers' remittances	43.5	65.1	82.4	99.2	105.3
Other current transfers	636.5	952.1	1,204.7	1,450.6	1,539.3
<i>C. Net Capital Transfers</i>	73.3	154.3	251.0	331.2	229.9
General government	73.3	154.3	251.0	331.2	229.9
Debt forgiveness	0.0	0.0	0.0	0.0	0.0
Other capital transfers	73.3	154.3	251.0	331.2	229.9
Other sectors	0.0	0.0	0.0	0.0	0.0
Migrant transfers	0.0	0.0	0.0	0.0	0.0
Debt forgiveness	0.0	0.0	0.0	0.0	0.0
Other capital transfers	0.0	0.0	0.0	0.0	0.0
<i>D. Financial Account Balance</i>	-25.1	-230.6	200.6	747.8	636.0
Net Direct Investment	58.9	136.8	139.3	145.0	464.5
Net Portfolio Investment	0.0	0.0	0.0	0.0	0.0
Net Financial Derivatives	0.0	0.0	0.0	0.0	0.0
Net Other Investments	71.8	357.6	253.0	899.4	473.3
Reserve Assets, change	-155.8	-725.0	-191.7	-296.6	-271.8
Recorded Transfers (RecT)	700.9	987.6	1,833.8	2,686.2	2,986.8

Source: Balance of Payments Statistics Yearbook 2007; Part 1: Country Tables, IMF

Note: May not add to zero due to rounding

185. Primary income covers cross-border employee compensation, several types of investment and interest-related income, rent payments for access to natural resources, and some taxes and subsidies.
186. Typically, current transfers consist of all transfers that directly affect the level of disposable income and/or influence the consumption of goods and services. For our purposes, it will suffice to point out that perhaps the most notable type of current transfers are personal transfers. Personal transfers include inflows of workers' remittances from abroad as well as outflows of such remittances by migrant workers to other countries, as applicable. Other current transfers, in cash or kind, include gifts and donations between residents and non-residents (not included in other accounts), compensation for non-fulfillment of contracts, and other items.
187. Capital transfers are generally large and infrequent and result in the unilateral transfer of ownership of a nonfinancial asset or through the forgiveness of a liability (such as external debt) by a creditor that does not receive a counterpart value in return. Both current and capital transfers are generally recorded when the change in economic ownership of the goods, services, or financial assets takes place. While there may not be a value counterpart to a current or capital transfer, the transaction must give rise to two entries for each party to the transaction.

b. Broad Capital Flight

188. While several researchers have analyzed the problem of capital flight, there have been comparatively few studies on how capital flight impacts recorded transfers to and from developing countries.⁹⁴ We stated at the outset that we intend to extend the discussion in this study to analyze what we call the whole of the development equation in order to throw light on the role of recorded as well as unrecorded financial flows on economic development. While Ajayi found that capital flight from Sub-Saharan African countries increased along with an increase in their external debt burden and management issues, few researchers have studied the pattern of NRT over the long run taking into account the impact of unrecorded illicit financial flows.
189. Briefly, the method of estimating broad capital flight involves estimating unrecorded leakages of capital through the balance of payments (World Bank Residual or WBR method) and deliberate trade misinvoicing (TM). The WBR method captures the gap between recorded source of funds and use of funds, which as explained below consists of both licit and illicit funds.

⁹⁴ S. Ibi Ajayi, "An Analysis of External Debt and Capital Flight in the Severely Indebted Low Income Countries in Sub-Saharan Africa," IMF Working Paper WP/97/68 (Washington, DC: International Monetary Fund, 1997), <http://www.imf.org/external/pubs/ft/wp/wp9768.pdf>; Paul Collier, Anke Hoeffler, and Catherine Pattillo, "Flight Capital as a Portfolio Choice," *World Bank Economic Review* 15, no. 1 (January 2001): 55–80; Léonce Ndikumana and James K. Boyce, "New Estimates of Capital Flight from Sub-Saharan African Countries: Linkages with External Borrowing and Policy Options," PERI Working Paper Series No. 166 (Amherst, MA: Political Economy Research Institute, University of Massachusetts, Amherst, 2008).

190. In this study, we estimate outward capital flight and estimate NRT by netting out outward capital flight from recorded transfers (RecT). Under the method we used in this paper, both the WBR and adjustment for trade misinvoicing only capture outward flows. The rationale for the exclusive focus on gross outflows is that capital outflows that are mostly illicit (or even a mix of licit and illicit capital as obtained through the WBR method) cannot be netted out. A net of illicit flows does not have the same meaning as a net of recorded or legitimate transactions. A net of illicit flows is akin to the concept of net crime, which is absurd. However, in Appendix III we briefly summarize the impact on NRT if we were to net out inward from outward capital flight and use that net measure to estimate NRT.
191. The estimates of trade misinvoicing for 2003-2012 are fully consistent with those published in the 2014 IFF Update.⁹⁵ Those estimates were obtained by analyzing developing countries' trade with individual advanced countries on a bilateral basis and then "bumping up" these estimates for their trade with other developing countries. This bump-up method has been used in academic literature.⁹⁶
192. Misinvoicing is estimated by comparing each developing countries trade with individual advanced countries rather than their aggregate trade, because when traders misinvoice they do so with regard to specific countries and commodities. Ideally, one should estimate misinvoicing transaction-by-transaction based on the extent of deviation from the "normal" or "arms-length" price that prevails in world markets for the good in question. Since such details are not available, at least we should seek to estimate misinvoicing based on a developing country's trade with 24 advanced countries individually. As far as traders are concerned, there is no such partner as "advanced countries". Misinvoicing is always country-specific. Hence, the academic approach is a short-cut which significantly understates misinvoicing. This is because misinvoicing estimates based on comparison of a developing country's trade with the aggregate exports and imports of advanced countries would tend to offset deliberate over- and under-invoicings which appear in comparisons of bilateral trade data. For example, if a trader over-invoiced US\$2,500 of refrigerator imports from the United States and under-invoiced US\$2,600 of television imports from Germany, a total of just US\$100 of illicit inflows would appear if the advanced countries were considered as a group, as the over- and under-invoicing would offset each other. If, however, the advanced countries are considered individually, US\$2,500 of illicit outflows and US\$2,600 of illicit inflows could be statistically detected.

⁹⁵ Dev Kar and Joseph Spanjers, "Illicit Financial Flows from Developing Countries: 2003-2012" (Washington, DC: Global Financial Integrity, 2014). Note that though aggregates for trade misinvoicing presented here are sourced from the same country-level data as the 2014 IFF Update, the global aggregates presented here differ from that report. This report only presents (and thus sums) trade misinvoicing data for those countries where full data is also available for World Bank Residual-calculated capital flight (i.e. unrecorded and primarily illicit leakages from the balance of payments) and recorded transfers. As such, the trade misinvoicing estimates presented here appear to be slightly lower than those presented in the 2014 IFF Update (e.g. US\$700.3 billion v. US\$729.9 billion in 2012).

⁹⁶ See, for example, James K. Boyce and Léonce Ndikumana, "Capital Flight from Sub-Saharan African Countries: Updated Estimates, 1970-2010," PERI Research Report (Amherst, MA: Political Economy Research Institute, University of Massachusetts, Amherst, October 2012), http://www.peri.umass.edu/fileadmin/pdf/ADP/SSAfrica_capitalflight_Oct23_2012.pdf.

193. The bump-up method is necessary to deal with the fact that most developing countries do not report data on trade with individual advanced countries in a consistent manner going back to 1980. For non-reporting developing countries, we estimate trade misinvoicing by comparing their trade with advanced countries as a group (which is then bumped up for intra-developing country trade) or by directly comparing their trade vis-à-vis the world (as reported in IFS).
194. We use the World Bank Residual (WBR) method (based on Change in External Debt) to estimate outward capital flight. Claessens and Naudé showed that the WBR equation can be derived directly from the balance of payments identity.⁹⁷ The identity stipulates that the current account balance (A), net equity flows (B), short-term capital flows of other sectors (C), portfolio investment flows involving other bonds (D), the change in the deposit money banks' foreign assets (E), change in reserves of the central bank (F), the net errors and omissions (G), and the change in external debt (H) must add to zero, that is:

$$A + B + C + D + E + F + G + H = 0 \quad (1)$$

Rearranging they obtain:

$$C + D + E + G = -(A + B + F + H) \quad (2)$$

Equation (2) implies that the recorded and therefore legal private sector capital flows (C + D + E) plus the NEO (G) must equal the negative of the sum of the current account balance (A), net equity flows including foreign direct investment and portfolio investment (B), change in reserves (F), and the change in the external debt (H). The right hand side of (2) is the WBR which represents the gap between source of funds (B and H) and the use of funds (A and F) when all four variables are summed up with their signs intact. In fact, while the gap representing unrecorded flows can be estimated from both sides of equation (2), it is easier to estimate it using the right side (WBR) given that most developing countries balance of payments data are weak when it comes to recording private sector flows (C and D). That does not mean that C and D represent unrecorded illicit flows. On the contrary much of the licit capital flows C and D are simply not recorded properly due to a weak statistical capacity. That is the why the WBR method captures both recorded (licit) and unrecorded (illicit) capital flows.

195. The WBR estimates of outward capital flight are then adjusted by illicit outflows due to trade misinvoicing (based on Gross Excluding Reversals or GER method) to come up with estimates of total outward capital flight, that is

$$\mathbf{NRT = RecT - [WBR Outflows + EU + IO]}$$

where EU and IO represent are export under- and import over-invoicing respectively.

⁹⁷ Stijn Claessens and David Naudé, "Recent Estimates of Capital Flight," Policy Research Working Paper Series No. 1186 (Washington, DC: Debt and International Finance Division, International Economics Department, World Bank, 1993).

c. Estimating Trade Misinvoicing

196. Estimates of trade misinvoicing rely on the fact that there are always two parties to a particular international trade and, therefore, two sets of accounts of trade that may be compared. In the case of developing and emerging countries, economists have compared their records of the values traded with those of other countries, typically advanced countries, whose records are assumed to be the more accurate benchmarks for trade.
197. We can illustrate the calculations using the following symbols, beginning with export misinvoicing. Let X_i denote the value of total exports from developing country i in a given year as reported by country i , and M_{ji} denote the value of total imports from country i as reported by country j . In the absence of export misinvoicing, what country i reports as the value of its exports should match the sum of what all other countries report having imported from country i (after accounting for an assumed 10 percent cost of insurance and freight). If country i 's reported export total significantly exceeds the sum of what all other countries report to be importing from country i , then country i is over-invoicing its exports; conversely, if country i 's reported export total is significantly below the sum of all other countries' reported imports from country i , then country i is said to be under-invoicing its exports.
198. The degree of export misinvoicing by country i in a given year (ϵ_i) is thus given by

$$\epsilon_i = X_i - \sum_j M_{ji} .$$

The calculation for import misinvoicing is similar. Let M_i denote the value of total imports into developing country i in a given year as reported by country i , and X_{ji} denote the value of total exports from country i to country j as reported by country j . The degree of import misinvoicing by country i in a given year (μ_i) is given by

$$\mu_i = M_i - \sum_j X_{ji} .$$

Finally, the total amount of trade misinvoicing by country i in a given year is defined to be the sum of export and import misinvoicing

$$\epsilon_i + \mu_i .$$

199. The gross method only accepts illicit outflows through export under-invoicing and import over-invoicing but under the net method, illicit inflows through export over-invoicing and import under-invoicing offsets outflows through export under-invoicing and import over-invoicing.

200. Export over-invoicing ($\epsilon_i > 0$, perhaps motivated by intent to fraudulently claim refunds on VAT exports with some import content or to collect export subsidies) and import under-invoicing ($\mu_i < 0$, perhaps motivated by intent to evade import duties and/or VAT taxes) have tended to rise as trade volumes have increased sharply with globalization. In previous case studies, GFI found some evidence that trade misinvoicing seemed to increase in countries relatively more open to trade (i.e., countries with higher trade volume relative to GDP).⁹⁸

iv. Net Resource Transfers (NRT)

201. A number of studies at the OECD, United Nations, and the World Bank, as well as by other researchers have examined the issue of net resource transfers position of developing countries from different perspectives. Didszun,⁹⁹ Osterkamp,¹⁰⁰ and others have noted that researchers have used different definitions of what constitutes NRT. For instance, the World Bank has defined NRT to be the degree to which the burden of long-term debt in developing countries equals their ability to raise new long-term debt.¹⁰¹ Those calculations showed that principal and interest payments of developing countries on their long-term debt have, in some years, exceeded new long-term loans that they have been able to contract. According to that definition of NRT, financial transfers into developing countries net of the interest payments have been negative in some years. Didszun criticizes the Bank's approach saying that a negative net financial transfer predicated only on long-term flows ignores other types of capital inflows such as foreign direct investment and portfolio investment. In contrast, as Osterkamp points out, the OECD does not base its calculations of NRT exclusively on long-term debt but includes long- and short- term credits, direct investments, and transfer payments such as remittances. Standing apart from both versions, the United Nations, in its annual review of the *World Economic Situation and Prospects*, defines NRT as total receipts of financial and other resource inflows from abroad plus foreign investment income minus total resource outflows including increases in foreign reserves and foreign investment payments. Our approach expands the United Nations definition of net resource transfers by including the net flows of unrecorded (mostly illicit) capital.

202. Here, we consider only the broadest measure of recorded flows and illicit flows in order to derive the broadest estimate of net resource transfers that are applicable to all countries including those with large remittances and those that have received significant amounts of debt forgiveness. Starting with the broadest concept of RecT and IFFs ensures that we reflect NRTs positions that are applicable to all countries. Obviously, the narrower the scope of recorded inflows and the broader the measure of illicit outflows, the more negative is NRT.

⁹⁸ See, for example, *The Drivers and Dynamics of Illicit Financial Flows from India: 1948-2008*, Dev Kar, Global Financial Integrity, Washington, DC: November 2010.

⁹⁹ Didszun, "On the Problem of Negative Net Financial Transfers to Developing Countries," 64–72.

¹⁰⁰ Osterkamp, "Is There a Transfer of Resources from Developing Countries to Industrial Countries?," 242–47.

¹⁰¹ *World Debt Tables, 1984-1985*, The World Bank: March 1985, xii. <http://documents.worldbank.org/curated/en/555991468762025183/>.

Appendix III. NRT Based on Net Capital Flight

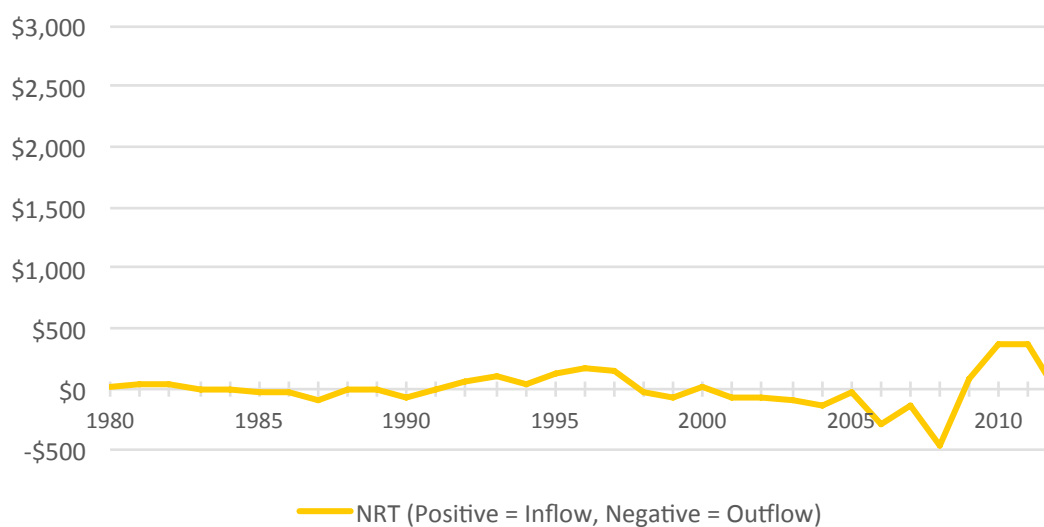
203. Some analysts have estimated NRT by removing outward capital flight and adding inward flows to recorded transfers, but the rationale for that approach is dubious. For instance, why should import under-invoicing (an inflow which may represent an attempt to evade import duties and thereby cheat the government out of revenues) be used to offset illicit outflows? Such inflows are certainly not beneficial to society—the government cannot tax proceeds that are unrecorded.¹⁰²
204. Illicit inflows have increased significantly since 2000. On average for the period 1980-2012, 55.1 percent of illicit inflows to developing countries are due to export over-invoicing while the balance is due to import under-invoicing. Import under-invoicing and export over-invoicing (possibly to fraudulently claim an export subsidy or inflate a VAT refund) amount to losses of government revenues. Nevertheless, we “net out” illicit inflows from illicit outflows in this appendix, and treat such “inflows” as if they are recorded inflows (e.g., net foreign direct investments) into the country. If we do that, then on a net basis, there are substantial illicit inflows into developing countries, particularly since 2000.
205. Table 26 shows RecT, Capital Flight, and NRT in five-year averages from 1980-2004 and annual estimates from 2005-2012. We will discuss these developments for all developing countries. When illicit inflows are netted out from outflows, the cumulative NRT balance shifts and the pattern of NRT that emerges would superficially give development economists less cause for concern. In that case, developing countries would appear to have lost only US\$74.2 billion over this 33-year period or about US\$2.2 billion per annum on average, far less than the preferred NRT measure would indicate.

¹⁰² Similarly, illicit inflows through the balance of payments are netted out from illicit outflows under the WBR (net) method which occurs when, for example, source of funds falls short of use of funds. The netting out method therefore understates the problem of capital flight as well as illicit flows by treating illicit inflows as a benefit and outflows as a cost.

Table 26. NRT of All Developing Countries, 1980-2012
(billions of U.S. dollars)

Net Resource Transfers: All Developing Countries			
Period/Year	Recorded Transfers (RecT)	Broad Capital Flight	Net Resource Transfers (NRT)
1980-1984	22.6	1.1	21.5
1985-1989	-2.6	33.4	-35.9
1990-1994	30.7	2.7	28.0
1995-1999	47.9	-20.2	68.1
2000-2004	-109.3	-38.7	-70.6
2005	-357.4	-339.4	-18.0
2006	-525.7	-233.2	-292.5
2007	-470.5	-332.8	-137.6
2008	-514.6	-41.4	-473.2
2009	-126.3	-202.0	75.8
2010	-193.1	-553.0	359.9
2011	-420.5	-793.2	372.7
2012	-330.0	-313.4	-16.6
Cumulative	-2,991.2	-2,917.0	-74.2
Average	-90.6	-88.4	-2.2

Chart 13. NRT: All Developing Countries
(billions of U.S. dollars)

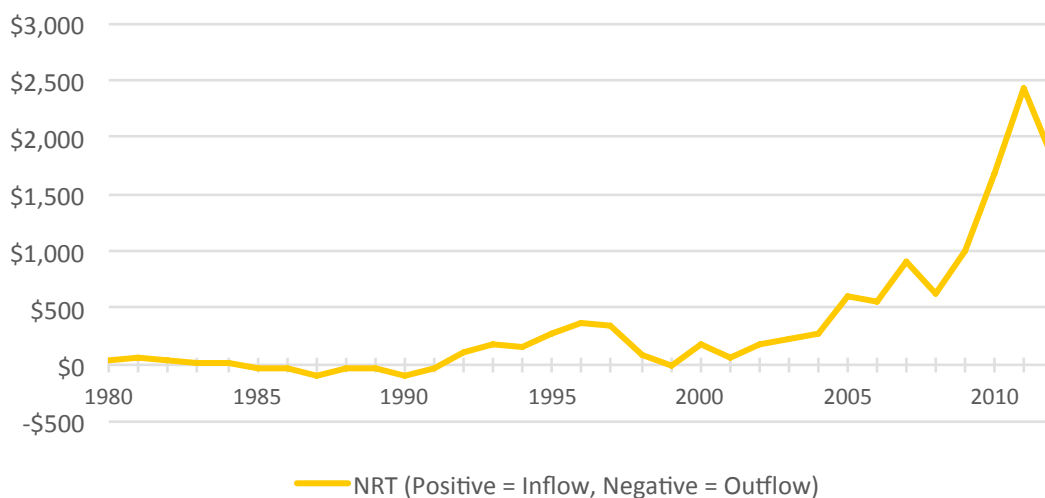


206. The NRT position of developing countries as a whole was typically only slightly negative or positive throughout the period with the exception of a steeper drop into negative territory after 2005 and an increase during 2009-2011 as a result of the financial crisis which reduced illicit flows in both directions. Since then, the NRT again turned negative as recorded transfers were not able to offset unrecorded flows on a net basis in 2012.

207. Chart 14 shows the adjusted flows of net resources transfers due to (i) same-invoice faking and (ii) services trade. Because misinvoicing can also occur on the same invoice just as easily as through word-of-mouth collusion among traders, we double both illicit inflows and outflows due to this practice. The assumption is that same-invoice faking occurs on the same scale as deliberate misinvoicing across invoices. Since same-invoice faking is significantly more difficult to detect than deliberate misinvoicing across invoices, the assumption is that economic agents would choose to engage in at least often as misinvoicing across invoices. Thus, this doubling of illicit inflows and outflows detected by misinvoicing across invoices is a conservative estimate of what the total figure for misinvoicing would be if it was possible to detect same-invoice faking. Next we bump up these flows up by a factor of 1.25 to account for misinvoicing involving services (given that world trade in services is around 25 percent of global goods trade). The bump up is necessary because the DOTS only captures misinvoicing involving goods.

208. Adjustment for same-invoice faking and misinvoicing in services lifts NRT into positive territory for nearly the entire period. This is because the adjustment bumps up already large illicit inflows, which are treated just like recorded inflows through the balance of payments.

Chart 14. NRT, Adjusted: All Developing Countries
(billions of U.S. dollars)



209. In other words, if we look upon adjusted illicit inflows as equally beneficial compared to inflows of foreign direct investment or portfolio capital, then developing countries have received financial resources from the rest of the world almost for the entire period 1980-2012.

210. Again, it should be clear that we regard this as a highly flawed calculation. Illicit inflows simply cannot be compared to recorded licit inflows, nor can they be treated as such. These inflows indicate tax evasion, they fuel illicit outflows, and they tend to foster the underground economy. They do not simply negate illicit outflows (in the way that inward FDI can be netted from outward FDI), rather, they tend to encourage them.

**Table 27. Broad Capital Flight and Components:
Including and Excluding China, 1980-2012**
(billions of U.S. dollars)

Year	All Developing Countries			Developing Countries, Excluding China		
	WBR [Net]	Trade Misinvoicing [Net]	Broad Capital Flight [WBR+TM]	WBR [Net]	Trade Misinvoicing [Net]	Broad Capital Flight [WBR+TM]
1980	14.8	-11.2	3.6	14.8	-11.2	3.6
1981	7.0	-7.2	-0.2	7.0	-7.2	-0.2
1982	10.2	-8.0	2.3	10.2	-8.0	2.3
1983	11.6	-6.8	4.8	11.6	-6.8	4.8
1984	8.7	-13.8	-5.0	3.3	-13.4	-10.1
1985	33.0	-4.7	28.3	36.3	-5.6	30.7
1986	43.5	3.3	46.8	40.7	-1.1	39.6
1987	76.4	1.6	78.0	67.5	-4.3	63.2
1988	1.2	4.7	5.9	-2.1	-1.8	-3.9
1989	-8.8	16.6	7.8	-10.1	1.1	-9.0
1990	29.8	23.5	53.3	16.3	5.1	21.4
1991	2.7	18.8	21.5	-4.9	-6.8	-11.7
1992	0.8	-33.7	-32.8	-27.0	-9.8	-36.8
1993	16.9	-46.2	-29.2	-6.3	-15.1	-21.4
1994	72.6	-71.7	0.8	49.8	-30.4	19.4
1995	47.1	-102.3	-55.2	16.4	-47.4	-31.0
1996	10.1	-124.5	-114.4	-14.2	-71.3	-85.5
1997	57.5	-129.5	-71.9	-3.1	-63.2	-66.3
1998	154.0	-76.5	77.5	90.4	-29.0	61.4
1999	110.1	-46.8	63.3	56.1	-29.1	26.9
2000	54.8	-114.5	-59.7	10.4	-57.5	-47.1
2001	107.3	-86.8	20.6	61.6	-33.7	27.9
2002	128.6	-154.3	-25.7	120.4	-86.2	34.2
2003	171.3	-215.0	-43.8	163.2	-112.3	50.9
2004	185.5	-270.3	-84.7	208.3	-153.2	55.0
2005	79.6	-419.0	-339.4	70.9	-261.3	-190.4
2006	336.6	-569.8	-233.2	249.7	-338.9	-89.2
2007	359.1	-692.0	-332.8	276.6	-410.9	-134.3
2008	688.5	-729.9	-41.4	626.0	-408.4	217.5
2009	408.6	-610.7	-202.0	411.1	-327.0	84.1
2010	329.3	-882.3	-553.0	263.6	-488.1	-224.5
2011	577.9	-1,371.1	-793.2	447.5	-912.6	-465.1
2012	873.9	-1,187.3	-313.4	535.0	-619.7	-84.7
Cumulative	5,000.2	-7,917.2	-2,917.0	3,796.8	-4,564.8	-768.0

**Table 28. Net Resource Transfers (NRT) and Components:
Including and Excluding China, 1980-2012**
(billions of U.S. dollars)

Year	All Developing Countries			Developing Countries, Excluding China		
	RecT	Capital Flight (Net)	NRT (net)	RecT	Capital Flight (Net)	NRT (Net)
1980	25.0	3.6	21.5	25.0	3.6	21.5
1981	46.4	-0.2	46.6	46.4	-0.2	46.6
1982	41.1	2.3	38.8	41.1	2.3	38.8
1983	9.7	4.8	4.8	9.7	4.8	4.8
1984	-9.3	-5.0	-4.3	-10.2	-10.1	-0.1
1985	0.9	28.3	-27.4	-11.7	30.7	-42.4
1986	12.0	46.8	-34.8	3.5	39.6	-36.1
1987	-15.3	78.0	-93.3	-16.5	63.2	-79.8
1988	-6.5	5.9	-12.4	-11.6	-3.9	-7.6
1989	-4.1	7.8	-11.9	-8.9	-9.0	0.0
1990	-5.6	53.3	-58.9	1.8	21.4	-19.6
1991	7.9	21.5	-13.6	12.6	-11.7	24.3
1992	31.8	-32.8	64.6	28.6	-36.8	65.4
1993	76.0	-29.2	105.2	54.5	-21.4	75.9
1994	43.6	0.8	42.7	42.2	19.4	22.8
1995	69.1	-55.2	124.3	63.0	-31.0	94.0
1996	59.1	-114.4	173.5	61.0	-85.5	146.5
1997	76.0	-71.9	147.9	96.4	-66.3	162.7
1998	46.1	77.5	-31.4	67.8	61.4	6.4
1999	-10.7	63.3	-74.0	2.4	26.9	-24.5
2000	-41.2	-59.7	18.5	-24.0	-47.1	23.1
2001	-52.6	20.6	-73.1	-29.1	27.9	-57.1
2002	-86.1	-25.7	-60.3	-41.1	34.2	-75.4
2003	-145.1	-43.8	-101.3	-103.8	50.9	-154.7
2004	-221.5	-84.7	-136.8	-159.2	55.0	-214.3
2005	-357.4	-339.4	-18.0	-209.8	-190.4	-19.4
2006	-525.7	-233.2	-292.5	-313.1	-89.2	-224.0
2007	-470.5	-332.8	-137.6	-149.1	-134.3	-14.9
2008	-514.6	-41.4	-473.2	-146.9	217.5	-364.5
2009	-126.3	-202.0	75.8	53.1	84.1	-30.9
2010	-193.1	-553.0	359.9	-22.4	-224.5	202.0
2011	-420.5	-793.2	372.7	-250.5	-465.1	214.6
2012	-330.0	-313.4	-16.6	-184.0	-84.7	-99.3
Cumulative	-2,991.2	-2,917.0	-74.2	-1,083.1	-768.0	-315.0

**Table 29. Broad Capital Flight (Net) as Percent of GDP:
Including and Excluding China, 1980-2012**
(billions of U.S. dollars)

Year	All Developing Countries		Developing Countries, Excluding China	
	GDP (billions of USD)	% of GDP	GDP (billions of USD)	% of GDP
1980	834.1	0.43%	530.3	0.68%
1981	1,111.5	-0.02%	824.1	-0.02%
1982	1,053.7	0.22%	771.9	0.29%
1983	941.9	0.51%	639.5	0.75%
1984	1,292.1	-0.39%	980.6	-1.03%
1985	1,383.8	2.04%	1,075.9	2.85%
1986	1,373.0	3.41%	1,074.5	3.69%
1987	1,514.0	5.15%	1,188.9	5.32%
1988	1,712.0	0.35%	1,306.3	-0.30%
1989	2,035.2	0.38%	1,581.3	-0.57%
1990	2,164.2	2.46%	1,771.7	1.21%
1991	2,472.1	0.87%	2,060.8	-0.57%
1992	2,638.0	-1.24%	2,147.1	-1.71%
1993	2,988.5	-0.98%	2,372.0	-0.90%
1994	3,479.1	0.02%	2,916.9	0.66%
1995	4,185.1	-1.32%	3,453.2	-0.90%
1996	4,777.1	-2.39%	3,916.3	-2.18%
1997	5,091.4	-1.41%	4,133.3	-1.60%
1998	4,847.4	1.60%	3,822.1	1.61%
1999	4,582.3	1.38%	3,492.9	0.77%
2000	4,989.3	-1.20%	3,784.1	-1.24%
2001	5,457.1	0.38%	4,124.8	0.68%
2002	5,791.3	-0.44%	4,329.4	0.79%
2003	6,603.1	-0.66%	4,953.2	1.03%
2004	8,095.8	-1.05%	6,154.0	0.89%
2005	10,608.4	-3.20%	8,339.8	-2.28%
2006	12,555.0	-1.86%	9,825.2	-0.91%
2007	15,522.5	-2.14%	11,999.3	-1.12%
2008	18,771.0	-0.22%	14,212.1	1.53%
2009	17,942.6	-1.13%	12,882.9	0.65%
2010	21,627.4	-2.56%	15,587.8	-1.44%
2011	25,466.1	-3.11%	17,973.6	-2.59%
2012	26,816.5	-1.17%	18,355.0	-0.46%
Cumulative	230,722.8	-1.26%	172,580.6	-0.45%

**Table 30. Net Recorded Transfers:
All Developing Countries by Region, 1980-2012**
(billions of U.S. dollars)

Year	Asia	Europe	MENA	Africa	Western Hemisphere
1980	1.1	4.6	2.7	5.9	7.1
1981	8.4	5.0	5.2	6.8	21.1
1982	12.4	15.9	3.5	3.9	3.2
1983	-0.6	17.8	4.1	5.7	-22.1
1984	-2.5	5.4	3.2	10.2	-20.5
1985	-9.2	7.4	0.6	0.2	-26.4
1986	-7.3	-1.4	-2.8	-1.4	-21.9
1987	-13.7	-27.5	-3.6	-5.2	-43.3
1988	-0.6	-1.9	-2.0	5.2	-13.1
1989	-5.7	-8.3	-0.6	6.9	-4.2
1990	-18.9	-43.5	7.2	11.6	-15.3
1991	-6.1	-27.3	-0.9	6.8	13.8
1992	-2.1	12.6	7.4	11.6	35.1
1993	1.8	57.2	18.1	13.5	14.6
1994	-2.1	22.9	1.6	5.5	14.8
1995	7.4	75.5	25.1	6.3	10.0
1996	3.4	100.0	33.9	9.6	26.6
1997	10.7	29.4	61.1	17.0	29.7
1998	20.5	-64.2	15.7	13.0	-16.4
1999	6.4	-50.0	-24.3	13.5	-19.6
2000	-7.6	35.5	-37.4	9.7	18.4
2001	-9.5	1.2	-51.2	-27.4	13.7
2002	-12.2	9.3	-34.4	-22.7	-0.4
2003	-28.7	60.5	3.0	-83.8	-52.4
2004	-28.0	124.1	-37.0	-125.4	-70.5
2005	18.6	82.3	63.4	-115.6	-66.7
2006	47.0	-24.5	11.1	-243.2	-82.9
2007	-14.9	1.1	156.1	-187.2	-92.7
2008	11.1	-18.4	-85.2	-313.0	-67.6
2009	46.1	150.9	-119.1	-23.4	21.3
2010	11.9	316.0	132.7	-144.1	43.3
2011	16.5	322.0	69.4	-80.1	45.0
2012	15.0	330.3	29.5	-502.8	111.4
Cumulative	68.7	1,520.1	256.2	-1,712.5	-206.7

Appendix IV. Financial Flows between Selected Developing Countries and Tax Havens

i. Background

211. We enlisted the help of three regional research centers. The lead researchers, affiliated institutions, and the countries they selected to work on were Godwin Akpokodje, Nigerian Institute of Social and Economic Research (NISER), on Ghana, Nigeria, and Uganda, Francisco Sadek, Instituto de Estudos Socioeconômicos (INESC) on Argentina, Brazil and Chile, and Arun Kumar, Center for Economic Studies and Planning (CESP) on India, Nepal, and Sri Lanka. Their main terms of reference was to collect data on financial flows between the selected developing countries and tax havens.
212. After repeated visits to Central Banks involving many meetings with officials there, the researchers were able to collect data on four (Brazil, Chile, India, and Nigeria) of the nine countries they selected. The researchers encountered a number of serious issues underlying the gathering of data. First, annual data on financial transactions with tax havens are not routinely compiled by any central bank. Hence, each request for data had to be processed as a special project and it took months to receive responses, if provided at all. Second, most central banks do not collect flow data in a format that is consistent across countries. Hence, the data cannot be used to analyze transactions of countries in our sample with the world's tax havens in a consistent or comprehensive manner. Third, the time period covered by the different central banks is not uniform. The Central Bank of Nigeria (CBN) was the only respondent that was able to provide data on financial inflows from, and outflows to, a comprehensive list of tax havens. The data on India was the most aggregated and did not provide any additional information beyond what is available to the general public.
213. The Central Bank of Ghana did not provide data on transactions with tax havens; they said such data are not routinely collected by the Bank and are unavailable. While the Central Bank of Brazil provided some data on foreign direct investments, no data were reported on portfolio investments. Moreover, the Brazilian central bank also did not provide a further breakdown of financial flows by sector and type as provided by the CBN. Finally, most central banks said that financial transactions with tax havens are confidential in nature when the number of transactions is small. The confidential nature of such transactions is consistent with the data notations in the CDIS and CPIS databases compiled by the IMF. In sum, for reasons of confidentiality, the researchers could not obtain data from the central banks of Argentina, Nepal, Sri Lanka, Ghana, and Uganda on these countries' financial transactions with tax havens.

214. We observe that even the data collected on the four countries was not uniform in terms of classification or availability. For instance, while all of them do not report flow of FDI by sector, India only reported FDI equity flows and not the total of FDI flows including transactions in FDI debt (such as those reported by Brazil, Chile, and Nigeria). Second, only Nigeria reported FDI data that was far more detailed by transaction than any of the other developing countries. Finally, no country reported other types of financial flows such as portfolio investments or investments classified under “Other” by the IMF.

215. Even the reported FDI flows do not identify gross flows in both directions. The most comprehensive data pertain to Brazil and Nigeria, followed by Chile. Data on India were more aggregated than data obtained for the other three countries. The following are the main observations based on the data submitted on the four countries.

ii. Brazil

216. We will first discuss FDI flows from Brazil into tax havens over the period 2008 to 2013. Cumulative net FDI from Brazil into tax havens amounted to US\$25.8 billion (Table 31). The Cayman Islands was the destination of choice attracting 57 percent of total FDI into tax havens, followed by the British Virgin Islands which secured 12.6 percent. There seems to have been some shift in the preferred destination of Brazilian FDI from Panama (which was a major destination in 2008) to the Cayman Islands and the British Virgin Islands. The shift towards the latter two destinations started in 2009 and has continued since then.

Table 31. FDI net from Brazil to Tax Havens—from 2008 to June/2013
(millions of U.S. dollars or in percent)

Country	2008	2009	2010	2011	2012	2013	Cumulative	% of Total (to tax havens)
Antigua and Barbuda	-6.0	0.0	0.0	0.0	0.0	0.0	-6.0	0.0
Bahamas	522.3	207.0	-95.9	35.7	156.0	876.9	1,702.1	6.6
Belize	0.0	3.0	3.9	3.5	2.0	9.7	22.1	0.1
Bermuda	13.0	-9.0	715.2	260.1	21.9	30.3	1,031.4	4.0
British Virgin Islands	327.5	270.0	574.4	1,219.8	215.2	654.3	3,261.1	12.6
Cayman Islands	310.9	2,059.0	10,663.2	1,389.7	-2,224.8	2,565.9	14,764.0	57.1
Dutch Antilles	492.0	42.0	0.9	0.3	0.4	0.2	535.8	2.1
El Salvador	2.0	2.0	6.0	2.2	0.0	0.0	12.2	0.0
Gibraltar	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Jersey Islands	230.0	0.0	0.0	0.0	1.5	0.0	231.5	0.9
Lebanon	0.0	-3.0	0.0	-0.2	-0.1	-1.8	-5.0	0.0
Luxembourg	246.0	183.0	1,246.3	90.4	-61.2	114.6	1,819.1	7.0
Madeira Island	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Monaco	-2.0	0.0	0.0	-0.3	-1.0	-0.2	-3.5	0.0
Panama	3,077.2	-2,144.0	726.4	440.0	123.6	209.0	2,432.3	9.4
Seychelles	0.0	0.0	0.0	7.6	0.4	0.0	8.0	0.0
Virgin Islands (U.S.)	2.0	5.0	3.5	11.0	12.6	0.2	34.3	0.1
Total FDI to Tax Havens	13,987.9	4,710.3	26,782.2	19,533.5	7,555.4	9,733.3	25,839.6	100.0

Source: Central Bank of Brazil.

217. Table 32 shows FDI inflows from tax havens into Brazil over the same period.

Table 32. FDI net to Brazil from tax havens—from 2008 to June/2013
(millions of U.S. dollars or in percent)

Country	2008	2009	2010	2011	2012	2013	Cumulative	% of Total (from tax havens)
Bahamas	1,081.5	47.2	46.2	-249.1	37.7	19.3	982.8	2.5
Barbados	-304.2	0.0	-28.2	0.0	0.0	-0.2	-332.6	-0.9
Bermuda	1,014.4	339.0	783.6	609.0	140.1	84.0	2,970.0	7.6
British Virgin Islands	714.9	186.5	1,008.4	1,096.4	793.4	106.7	3,906.3	10.0
Cayman Islands	747.6	358.0	304.3	-322.8	530.1	80.5	1,697.7	4.4
Costa Rica	-25.6	-0.8	2.9	-0.4	0.3	0.2	-23.3	-0.1
Cyprus	45.4	70.3	41.1	133.7	119.8	20.2	430.5	1.1
Dutch Antilles	477.0	6.2	10.5	3.5	577.2	0.2	1,074.6	2.8
Hong Kong	23.2	34.1	82.9	2,074.0	504.3	24.3	2,742.7	7.1
Luxembourg	5,336.9	-647.8	8,702.8	1,764.6	5,201.0	1,976.7	22,334.2	57.5
Mauritius	4.9	9.1	336.2	119.8	22.3	0.6	492.8	1.3
Panama	86.4	124.5	116.6	220.3	209.6	169.2	926.6	2.4
Singapore	91.2	91.2	38.5	251.9	999.3	200.3	1,672.4	4.3
Total FDI from Tax Havens	30,063.9	19,906.4	40,116.7	54,782.4	52,837.8	19,096.4	38,874.6	100.0

Source: Central Bank of Brazil.

218. The pattern of tax havens investing in Brazil is different from the pattern of Brazil's FDI into tax havens. Luxembourg was the leading tax haven with the largest FDI inflows into Brazil (57.5 percent of total FDI), followed by British Virgin Islands (US\$3.9 billion or 10 percent of the cumulative FDI inflows). FDI inflows from Hong Kong amounted to US\$2.7 billion) over this period. But this may not be a trend because the unusual large inflow in 2011 did not recur. On the other hand, Luxembourg has always remained the largest foreign direct investor in Brazil over the period 2008-2013. Regional tax havens pale in comparison which goes against the general finding that countries tend to have the strongest links with nearby regional tax havens.

iii. Chile

219. The Central Bank of Chile provided the data on FDI flows from and into Chile. The data refers to 2009 to 2012 and presents the flows by source and destination countries. Furthermore, no data on FDI flows by industry are available.

Table 33. FDI net from Chile to Tax Havens—from 2009 to 2012
(millions of U.S. dollars or in percent)

Country	2009	2010	2011	2012	Cumulative	% of Total (to all countries)
Bahamas	172.0	86.4	15.0	11.8	285.1	4.1
Bermuda	-297.9	-0.1	-12.9	-22.7	-333.6	-4.8
British Virgin Islands	791.0	132.2	433.0	483.1	1,839.4	26.6
Cayman Islands	404.1	539.5	482.3	249.1	1,675.1	24.2
China	-0.1	1.6	0.4	-0.9	1.1	0.0
Costa Rica	0.0	-0.4	38.7	61.5	99.8	1.4
Dutch Antilles	-0.3	0.0	0.0	0.0	-0.3	0.0
Hong Kong	0.0	0.4	0.3	0.4	1.1	0.0
Liechtenstein	0.0	-38.9	0.0	0.0	-38.9	-0.6
Luxembourg	146.5	-16.2	3.6	2.9	136.7	2.0
Panama	126.8	313.5	99.5	148.9	688.7	9.9
United Arab Emirates	193.5	1,176.4	574.0	625.5	2,569.3	37.1
Total FDI to Tax Havens	1,535.6	2,194.4	1,633.9	1,559.6	6,923.5	17.1
Total FDI to All Countries	7,976.0	7,676.9	11,464.1	13,266.5	40,383.6	100.0

Source: Central Bank of Chile.

220. The data show that the United Arab Emirates was the single-most important destination of FDI investments from Chile over the period 2009-2012 (US\$2.6 billion or about 37 percent of the total), followed by the British Virgin Islands (US\$1.8 billion or 26.6 percent of the total), and Cayman Islands at US\$1.7 billion or 24.2 percent of total FDI into tax havens (Table 33). There has been a shift in tax haven preference from the British Virgin Islands in 2009 to the United Arab Emirates in recent years. The Dutch Antilles, Liechtenstein and Bermuda invested in Chile much more than Chile invested in these jurisdictions.

221. Table 34 shows the net FDI into Chile from tax havens for the period 2009 to 2012.

Table 34. FDI net to Chile from tax havens—from 2009 to 2012
(millions of U.S. dollars or in percent)

Country	2009	2010	2011	2012	Cumulative	% of Total (from all countries)
Bahamas	-384.8	936.2	236.5	248.5	1,036.4	4.6
Bermuda	1,809.6	1,192.2	1,530.6	1,638.9	6,171.3	27.1
British Virgin Islands	1,067.6	527.1	2,907.7	3,024.2	7,526.6	33.1
Cayman Islands	-288.5	673.9	2,906.2	3,022.2	6,313.8	27.8
China	-6.7	5.1	0.0	76.2	74.7	0.3
Costa Rica	0.0	0.0	-4.5	-3.9	-8.4	0.0
Dutch Antilles	93.5	0.0	0.0	0.0	93.5	0.4
Hong Kong	0.0	0.0	21.1	21.7	42.8	0.2
Liechtenstein	12.8	0.0	57.0	54.4	124.2	0.5
Luxembourg	2.2	-60.1	325.9	345.0	613.0	2.7
Panama	228.8	-65.7	322.0	268.6	753.7	3.3
United Arab Emirates	0.0	0.0	0.0	0.0	0.0	0.0
Total FDI from Tax Havens	2,534.5	3,208.9	8,302.4	8,695.9	22,741.7	35.7
Total FDI from All Countries	13,630.4	13,589.4	14,021.5	22,499.5	63,740.8	100.0

Source: Central Bank of Chile.

222. About 35.7 percent of FDI into Chile came from tax havens. The British Virgin Islands accounted for a third of these investments reaching a cumulative position of US\$ 7.5 billion by the end of 2012, followed by Cayman Islands (US\$6.3 billion or 27.8 percent of the total FDI investments over the period, Bermuda at US\$6.2 billion or 27.1 percent of the total while the other tax havens accounted for less than 5 percent of the total. Tax havens invested US\$22.7 billion into Chile compared to the US\$6.9 billion invested by Chile in such jurisdictions.

iv. India

223. The CESP obtained data on cumulative flows of FDI by source country (Table 35). Mauritius is the largest foreign direct investor in India accounting for US\$72.3 billion over the period April 2000 to January 2013 (38.1 percent of the total). The second largest investor is Singapore at nearly US\$19 billion or 10 percent of cumulative FDI over this period. Tax havens together account for 56.4 percent of total FDI investments in the country.

224. India did not report FDI investments into tax havens.

Table 35. India: Cumulative FDI (Equity) Inflows from Tax Havens, Apr. 2000 to Jan. 2013
(billions of U.S. dollars or in percent)

Country	Apr. 2000 - Jan 2013	% of Total (to all countries)
Mauritius	72.3	38.1
Singapore	19.0	10.0
Cyprus	6.8	3.6
UAE	2.4	1.3
Switzerland	2.4	1.2
Hong Kong	1.0	0.5
Caymen Islands	0.9	0.5
British Virgin	0.8	0.4
Malaysia	0.5	0.3
The Bermudas	0.5	0.3
Luxembourg	0.5	0.2
Total FDI from Tax Havens	107.1	56.4
Total FDI from Other Countries	83.0	43.6
Total FDI from All Countries	190.1	100.0

v. Nigeria

225. Table 36 presents cumulative capital flows over the five-year period 2007-2011 between Nigeria and nine major tax havens, the Bahamas, Bermuda, Cayman Islands, Hong Kong, Ireland, Isle of Man, Luxembourg, Singapore, and Switzerland. According to Central Bank of Nigeria (CBN) officials, the bulk of the transactions are initiated by the private sector. For example autonomous funds mostly refer to funds from oil companies and individuals remitting money into and out of Nigeria. These funds are transacted through commercial banks domestically. The CBN then invests these funds in tax havens and other destinations as it deems necessary or advisable.

226. The oil sector's production and trade are not necessarily public sector transactions. The CBN insisted that the bulk of the transactions reflected in Table 6 are either initiated by the private sector through banks or can be assigned to the private sector.

Table 36. Nigeria: Transactions with Tax Havens, Cumulative 2007-2011 Outflows
(millions of U.S. dollars)

Outflows to Tax Havens:	Source of Capital					Total
	Central Bank of Nigeria	Inter-bank purchases	Autonomous Funds	Purchases from Domestic Accounts (Forex, etc.)	Other	
Bahamas	64.1	6.1	33.1	1.6	0.0	104.8
Bermuda	499.3	332.5	353.6	146.1	2.0	1,333.4
Cayman islands	3.9	0.4	59.1	0.0	0.0	63.5
Hong Kong	704.3	792.1	689.3	276.2	0.2	2,462.1
Ireland	156.3	105.8	136.3	118.3	0.1	516.8
Isle of Man	13.8	24.3	25.1	280.0	0.0	343.3
Luxembourg	19.1	42.2	54.4	28.8	0.0	144.5
Singapore	469.1	1,168.5	287.1	633.2	0.0	2,557.9
Switzerland	1,925.9	1,973.1	1,653.8	539.1	0.1	6,091.9
Totals to Tax Havens	3,855.7	4,444.9	3,291.8	2,023.3	2.3	13,618.1

227. According to data compiled by the CBN, Switzerland is by far the most important destination of funds from Nigeria, followed by Singapore and Hong Kong. Cumulative private sector funds classified under inter-bank purchases, autonomous funds of oil companies and private individuals, and purchases of foreign exchange from domestic accounts totaling US\$9.7 billion are two and a half times the volume of funds placed directly by the CBN (\$3.8 billion). Outflows to Switzerland are more than double the outflows to Cayman Islands or Singapore. CBN officials could not provide any explanation for why Switzerland tops the list of tax havens where Nigerians invest their funds apart from the stronger historical ties to that financial center. Perhaps perceptions of Switzerland's greater commitment to secrecy are part of that explanation. The outsized flows to Bermuda (totaling US\$1.3 billion) are also noteworthy given that they clearly outpace other Caribbean countries. Further research is required to explore why certain tax havens are preferred over others in the same region.

228. Regarding the flow of capital from tax havens (Table 37), we find that Hong Kong invested US\$2.5 billion in the period 2007-2011 which is almost twice the volume of funds received from Singapore (US\$1.3 billion).

Table 37. Nigeria: Transactions with Tax Havens, Cumulative 2007-2011 Inflows
(millions of U.S. dollars)

Inflows from Tax Havens:	Type or Source of Capital						Total
	All Portfolio Investments	Foreign Direct Investments (FDI)	of which FDI into oil and gas	of which FDI into manufacturing	of which FDI into other sectors	Other investments	
Bahamas	30.4	2.2	0.0	0.8	1.4	4.5	37.1
Bermuda	0.6	32.4	0.2	0.0	32.2	9.1	42.0
Cayman islands	80.4	15.3	0.1	0.1	15.1	5.5	101.3
Hong Kong	28.7	2,216.3	5.6	7.3	2,203.4	250.6	2,495.6
Ireland	0.0	0.5	0.1	0.1	0.4	0.0	0.5
Isle of Man	18.9	1.1	0.0	0.3	0.8	0.5	20.5
Luxembourg	141.4	106.3	0.3	0.0	106.0	14.4	262.1
Singapore	39.1	1,031.7	0.7	32.4	998.6	276.6	1,347.4
Switzerland	220.7	134.2	10.4	33.3	90.4	61.5	416.3
Totals from Tax Havens	560.2	3,540.0	17.4	74.2	3,448.3	622.7	4,722.9

229. However, while there is a rough balance between outflows to and inflows from Hong Kong, outflows to Singapore (totaling US\$2.6 billion) is twice the size of inflows from that tax haven. In fact, total outflows to tax havens (US\$13.6 billion) over this period are nearly three times the volume of funds Nigeria receives from them. This finding is consistent with the stock data on FDI and portfolio investments of developing countries in tax havens which outstrip the asset positions of tax havens vis-à-vis developing countries.

Glossaries

Glossary of Databases

IMF Balance of Payments (BoP): IMF database that provides international economic transactions data and International Investment Position (IIP) data. BoP data begin as early as 1960 for some countries but IIP data are only available starting 2002. For the purposes of calculating unrecorded capital flight (CED), the following time series can be found in this database: current account, foreign direct investment, and change in reserves.

IMF Direction of Trade Statistics (DOTS): IMF database containing data on exports and imports of goods on a bilateral basis, beginning in 1980. No bilateral trade data are available for services or for specific commodities.

IMF International Financial Statistics (IFS): IMF database containing all aspects of international and domestic finance, beginning in 1948. For the purposes of calculating illicit financial flows, the IFS database contains supplementary trade data.

World Bank International Debt Statistics (IDS): Formerly known as Global Development Finance (GDP), this World Bank database that provides external debt and financial flows statistics for countries that report public and publicly-guaranteed debt under the World Bank's Debtor Reporting System (DRS). Data collection begins in 1960.

Glossary of Terms

Balance of Payments: is a statistical statement that systematically summarizes, for a specific time period, the economic transactions of an economy with the rest of the world. Transactions, for the most part between residents and nonresidents, consist of those involving goods, services, and income; those involving financial claims on, and liabilities to, the rest of the world; and those (such as gifts) classified as transfers. While the current account mainly consists of exports and imports of goods and services and worker remittances, the financial account includes transactions involving foreign direct investment, portfolio capital flows, changes in reserve holdings of the central bank—line items that are necessary to estimate illicit flows based on the World Bank Residual model.

Change in External Debt (CED): is a version of the World Bank Residual model that includes change in external debt as an indicator of new loans (i.e., a source of funds for a country). The World Bank Residual model estimates unrecorded outflows from the balance of payments by estimating the gap between source and use of funds. Note that the CED model only includes gross illicit outflows from a country, occurring when source of funds is greater than use of funds (in other words, calculations have a positive sign). Thus, when the use of funds exceeds the source of funds, that is, when there are inward transfers of illicit capital (calculations have a negative sign), the CED method sets illicit flows to zero for that year.

Current Account Balance: Covered in the current account are all transactions (other than those in financial items) that involve economic values and occur between resident and nonresident entities. Also covered are offsets to current economic values provided or acquired without a quid pro quo. Specifically, the major classifications are *goods and services*, *income*, and *current transfers*.

Export Under-invoicing: A country's exports to the world are compared to world imports from that country, adjusted for cost of insurance and freight. Illicit outflows from a country are indicated whenever exports of goods from that country are understated relative to the reporting of world imports from that country adjusted for the cost of insurance and freight.

External Debt: (World Bank definition) measure of debt owed to nonresidents repayable in foreign currency, goods, or services. Total external public and publicly guaranteed debt includes long-term debt, use of IMF credit, and short-term debt. While private non-guaranteed debt is also included in total debt, the data are not comprehensive for some developing countries.

Foreign Direct Investment: measure of all net transactions between a direct investor in one economy and a direct investment enterprise (recipient) in another economy.

Gross Excluding Reversals (GER): method of calculating gross illicit outflows defined as export under-invoicing and import over-invoicing. In other words, GER calculations are based on the sum of discrepancies between (i) a country's exports and world imports from that country and (ii) a country's imports and world exports to that country.

Hot Money Narrow (HMN): more conservative measure of illicit financial flows from the balance of payments than the CED (not used in this study).

Illicit Financial Flows: illegal movements of money or capital from one country to another. Global Financial Integrity classifies this movement as an illicit flow when the funds that are illegally earned, transferred, or utilized.

Import Over-invoicing: A country's imports from the world (adjusted for cost of insurance and freight) are compared to world exports to that country. Illicit outflows from a country will be indicated if the country's imports are overstated with respect to world exports to that country.

Net Resource Transfers (NRT): A country's net external position with the world, this measure provides the broadest picture of a country's gain or loss of resources. It is calculated as recorded transfers (RecT) less illicit outflows (trade misinvoicing + change in external debt).

Recorded Transfers (RecT): A country's licit documented transfers between itself and the world. Compiled from the capital, current, and financial accounts of the balance of payments. Under the fifth revision of Balance of Payments terminology, RecT is defined as the sum of the financial account (net), capital transfers (net), and current transfers (net).

Trade Misinvoicing: Trade misinvoicing is a method for moving money illicitly across borders which involves deliberately misreporting the value of a commercial transaction on an invoice submitted to customs. It is a form of trade-based money laundering. To calculate illicit flows due to trade misinvoicing, a country's exports (respectively, imports) to the world are compared to world imports (respectively, exports) from that country to determine export or import under- and over-statement. Export under-invoicing and Import over-invoicing reflect illicit outflows, while export-over-invoicing and import under-invoicing reflect illicit inflows. As illicit inflows are also unrecorded, they cannot be taxed by the government and are generally unusable for legitimate productive purposes. Hence, only gross outflows through trade mispricing are considered in the GER method (see definition of GER).

World Bank Residual Method: measures a country's source of funds (inflows of capital) vis-à-vis its recorded use of funds (outflows and/or expenditures of capital). Source of funds includes increases in net external indebtedness and the net inflow of foreign direct investment. Use of funds includes the current account deficit that is financed by the capital account flows and additions to central bank reserves. Illicit outflows (inflows) exist when the source of funds exceeds (falls short of) the uses of funds. Traditionally, economists have netted out illicit inflows from outflows thereby understating the adverse impact of illicit flows on developing countries. As illicit inflows are also unrecorded, they cannot be taxed by the government and are generally unusable for legitimate productive purposes. Hence, only gross outflows are considered in the Change in External Debt (CED) method (see definition of CED).

Acknowledgements

This study was made possible by the efforts and contributions of a large number of people working together across five countries and continents.

The main authors of this publication are Dr. Dev Kar, Chief Economist at Global Financial Integrity (GFI) and Dr. Guttorm Schjelderup, Professor of both Economics and Business Economics at the Norwegian School of Economics. GFI Senior Economist Matthew Salomon and GFI President Raymond Baker also provided valuable contributions to the writing of this report.

Dr. Arun Kumar at the Jawaharlal Nehru University, Francisco José Sadeck Filho with the Instituto de Estudos Socioeconômicos, and Professor Godwin Akpokodje at the Nigerian Institute of Social and Economic Research contributed to the wealth of data found in this report. Additional research and data support was provided by economists Sarah Freitas, Brian LeBlanc, and Joseph Spanjers at Global Financial Integrity, along with Shunqin (Sophia) Chen, Maximilian Kremer, Yuchen Ma, Simón Ramírez, Matthieu Rouyer, and many other research interns at GFI and the other contributing organizations.

The final report was also made possible thanks to expert reviews by Dr. Tina Soreide, Professor of Law and Economics at the Norwegian School of Economics, as well as Dr. Armando José Garcia Pires, with the Centre for Applied Research at the Norwegian School of Economics, and Nathalie Beghin at the Instituto de Estudos Socioeconômicos. Additional editorial support was provided by Christine Clough at Global Financial Integrity, along with Emily Armstrong, Loosi Azarian, Tom Cardamone, Clark Gascoigne, Sam Lucas, Channing May, and Daniel Neale, also at GFI.

Gil and Lynne Leigh of Modern Media and Brija Johnson of Global Financial Integrity contributed to the design and layout of this report.

