Defining and Measuring Illicit Financial Flows

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Combating illicit financial flows (IFFs) is clearly important for international development and security, but the concept of IFFs remains contested and debates are often confused. Questions of definitions and measurement are contentious.

Large and confidently stated estimates of the scale of IFFs have played a critical role in attracting attention and encouraging political momentum. In 1998, the managing director of the International Monetary Fund (IMF) stated the expert consensus that laundered monies accounted for 2–5 percent of global gross domestic product (GDP), around $1.5 trillion at the time. No methodology, however, has been found for this estimate.[1] Global Financial Integrity (GFI), a nongovernmental organization (NGO) that publishes annual estimates for individual developing countries, has claimed that around $1 trillion "drains" from developing countries annually.[2] The High Level Panel on Illicit Financial Flows from Africa, set up by the African Union and the UN Economic Commission for Africa (UNECA), found that trade misinvoicing, concentrated on a few commodities, is the dominant form of IFFs and is responsible for $50 billion of illicit flows from Africa.[3]

Numbers such as these are widely repeated, giving the impression that amounts and trends in IFFs can be tracked and that reliable country-level data is available. However, many estimates are no more than speculative guesses or suffer from significant methodological issues. While estimates have been important in raising attention and highlighting the potential magnitude of the issue, they have also heightened both expectations and confusion regarding the nature of IFFs, which could undermine ongoing efforts to address them.[4] Debates on IFFs should not remain mired in arguments over definitions and measurement but should instead focus on the information that measurement provides and on how best to prioritize interventions and support. Debate, research, and action on IFFs need to go beyond the broad-brush narrative and international legal and transparency measures toward clearer understanding of the political and economic factors driving IFFs and the particular channels used.

DEFINING ILLICIT FINANCIAL FLOWS

There is no one agreed-upon definition of IFFs, but the concept generally relates to flows of money (or sometimes other assets used as stores of value) associated with crime and corruption.[5] As Miles Kahler describes, the IFF agenda has developed through several iterations.[6] Different professional and organizational groups tend to have somewhat different working conceptions.

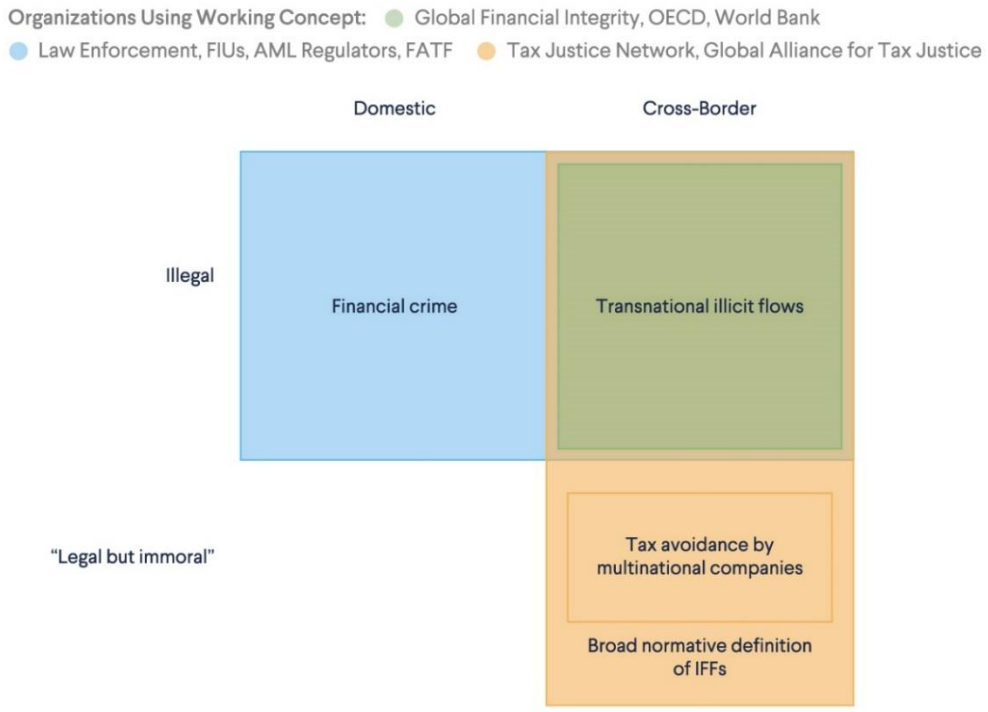
- International development organizations focus on transnational illicit flows and, in their context, tend to use the concept of IFFs to describe financial assets that cross borders, with a particular focus on money leaving developing countries. This is closely linked to concerns about capi-

tal flight.[7] Raymond Baker, founder and president of GFI, an organization that has played a critical role in promoting the term, uses the definition: "funds crossing borders [that] are illegally earned, transferred, and/or utilized."[8]

- Law enforcement agencies and regulators are concerned with financial crime. Operational agencies such as the police, financial intelligence units, and regulators with anti–money laundering (AML) responsibilities tend to think of illicit finance in terms of financial crimes that relate to their jurisdiction, whether or not there is an international dimension. For example, the Financial Crimes Enforcement Network (FinCEN), an agency in the U.S. Department of Treasury, has a mission to "safeguard the financial system from illicit use, combat money laundering, and promote national security through the collection, analysis, and dissemination of financial intelligence and strategic use of financial authorities."[9]
- The tax justice movement advocates a broader normative definition.[10] Civil society organizations in the tax justice movement tend to argue that *illicit* relates to the dictionary definition of immoral or contrary to social norms rather than being limited to unlawful behaviors. They argue in particular that tax avoidance by multinational corporations (also called base erosion and profit shifting [BEPS]) should be included under the definition of IFFs. For example, the Tax Justice Network argues: "IFF is by its nature hidden, whether it is illegal or simply unacceptable to the public—this makes clear that the source of funds may be perfectly legal, while the avoidance of tax, for example, may be technically legal but illicit according to societal norms."[11]

While in practice there can be uncertainty about the borderline between legal and illegal behaviors, these different domains of concerns are illustrated in simplified form in figure 1.

Figure 1. Approaches to Defining Illicit Financial Flows



Source: Author.

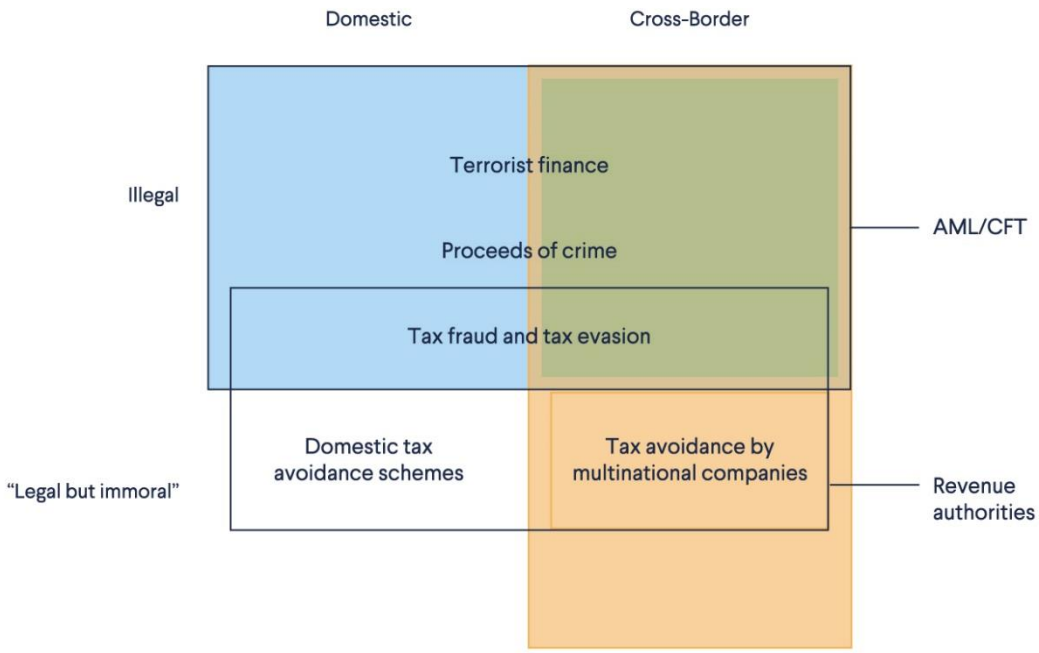
The first two definitional approaches are conceptually consistent (transnational IFFs are a subset of illicit finance). They are closely related to the concept of money laundering, which refers to activities intended to conceal or disguise the origins of the proceeds of crime related to predicate offenses, including fraud, corruption, drug trafficking, and tax evasion. Anti–money laundering and countering the financing of terrorism (AML/CFT) refers to the set of actions governments take to prevent, detect, disrupt, investigate, and prosecute money laundering and terrorist financing. Examples of financial crime and money laundering include the following:

- financial fraud, such as the Bernie Madoff investment scandal. Another example is the Kabul Bank scandal, in which over $900 million—more than 5 percent of Afghanistan's GDP and 50 percent of the government's budget—was diverted through interest-free loans to bank insiders and politically connected parties.
- corporate fraud, such as the Enron and Parmalat cases, in which corporate insiders concealed fraud through lack of transparency and use of offshore tax havens, aided by inefficient controls by auditors, administrators, and stock exchange authorities.
- corruption involving governments and businesses, such as Siemens' payment of €1.3 billion to officials around the world to win contracts, and the web of corruption surrounding companies such as Petrobras and Odebrecht.
- money laundering of criminal proceeds—such as the $881 million in criminal proceeds from Mexican and Colombian cartels transferred by HSBC—including by transporting billions of dollars of cash in armored vehicles, clearing suspicious traveler's checks worth billions, and allowing Mexican drug lords to buy planes with money laundered through Cayman Islands accounts.
- handling and laundering stolen assets for kleptocratic leaders, such as when British banks were implicated in facilitating transfers of millions of dollars of state assets by James Ibori, former governor of Delta State in Nigeria. The U.S.-based Riggs Bank (and its UK branch), which set up corporate vehicles for the Chilean dictator Augusto Pinochet to both hide his assets and shield them from asset freezing and confiscation or civil recovery orders, provides another example. In still another case, UK lawyers set up corporate vehicles for President Frederick Chiluba of Zambia to distribute and disguise money embezzled from the Zambian government, money that had purportedly been assigned for the country's security services.
- money laundering, such as by the Russian mafia buying football clubs to use as front companies for money laundering through over- or undervaluation of players on the transfer market and through television rights deals.
- tax evasion, such as in Greece, where it was considered to be one of the causes of the financial crisis. Unreported income of sole proprietors—such as doctors, accountants, and lawyers—was estimated at €28 billion in 2009. In some cases, tax evasion involves international financial institutions; for example, as was revealed in 2009, UBS bankers helped U.S. and other account-holders evade taxation, including, in one case, by squeezing diamonds into tubes of toothpaste to help a client transfer assets without detection.

- tax fraud—such as missing trader fraud (in which a seller collects value-added tax [VAT] from a purchaser but does not pass the tax to the government) or carousel fraud (in which a seller claims from the government VAT that was probably not even paid in the first place)—which is estimated to cost the European Union around €60 billion per year. Another case is of the British hedge fund manager Sanjay Shah, who is alleged to have undertaken tax frauds worth €1.65 billion in the United States, Belgium, Denmark, Germany, Norway, and the United Kingdom.[12]

The third definitional approach includes a set of practices that are conceptually different from those outlined above: tax planning and so-called aggressive tax avoidance, which take advantage of the letter of the law and arbitrage between different jurisdictions but do not break laws. Examples include the tax-motivated international structures of companies such as Apple, Facebook, Google, and many others. The domains of concern of different regulators and law enforcement agencies overlap with different definitions of IFFs (figure 2).

Figure 2. Domains of Concern of Competent Authorities



Source: Author.

A wide variety of predicate crimes underlie IFFs, but what businesspeople paying bribes, kleptocrats involved in grand corruption, organized crime syndicates managing transnational operations, and tax evaders have in common is that they exploit those vulnerabilities in financial systems that allow for anonymity and secrecy in financial transactions. Ill-gotten gains are moved by three main means: physical movement of cash, through the global financial system, and movement of goods through the international trading system. Perpetrators shop around for jurisdictions in which investigation is difficult or those that provide greater stability and safety, as well as opportunities for consumption. Ownership structures can be designed to obscure who controls assets: a bank account in one country could be owned by a corporation in another jurisdiction; that corporation could in turn be owned by a trust in a third jurisdiction.[13]

Critical interventions explicitly aimed at combating IFFs include AML laws and programs, stolen asset recovery procedures, automatic exchange of financial information between and among countries, and registration of information on the beneficial owners of companies and trusts. While AML rules have been widely adopted, evidence of their success in combating criminal enterprises and corruption is scarce, and concerns about unintended reductions of access to financial services remain.[14]

The Organization for Economic Cooperation and Development (OECD) and Group of Twenty (G20) are addressing international corporate tax avoidance through a suite of fifteen actions, which includes tightening tax treaties, exchanging information, and removing harmful tax incentives. Beyond this, debate about future reforms to the international corporate tax system continues.

Whether tax avoidance should be included under the definition of IFFs, however, remains disputed. Nonetheless, there is good reason to maintain that IFFs should not encompass tax avoidance, as the latter does not involve breaking the law and is not characterized by secrecy, inappropriate anonymity, or misreporting. It is therefore not consistent with other areas of IFFs, and its inclusion under the concept risks confusion and undermining the rule of law.[15]

EFFORTS AT GLOBAL ESTIMATES

AML regulation is expensive to effect, with costs borne by both the public and private sectors, including users of financial services. In theory, assessing and quantifying IFFs (and the risk of IFFs) could support prioritization and more effective action through an enhanced understanding of

- the scale of the issue;
- the level of risk for different countries—as sources, conduits, and sinks for IFFs;
- the relative importance of different sources and channels (e.g., drug trafficking versus corruption, and wire transfers versus smuggling of high-value commodities);
- the nature of the threat (predicate offenses) and vulnerability (typologies of money laundering) in practice;
- the degree of harm caused by different types of IFFs (and associated predicate crimes);
- the effectiveness of AML/CFT actions at national and international levels; and
- change over time, both in the volume of money seeking illicit channels and the progress of AML/CFT efforts.

In practice, however, only a little headway has been made in quantitative assessment. A 2011 UN Office on Drugs and Crime study to estimate the volume of IFFs resulting from drug trafficking and other transnational organized criminal activity found that "there is currently no single method that would give clear, unambiguous, and indisputable results."[16]

Constructed Money Laundering Estimates

The Walker model was the first large-scale attempt at estimating money laundering worldwide. The methodology falls into a class of estimates termed constructed money laundering estimates. These start with observed crime statistics and then estimate how much profit is associated with the crime,

what proportion of the profits are laundered, and where they are laundered. At each step, available data is supplemented by educated guesswork, such as the assumption that money generated in the least corrupt countries (based on Transparency International's Corruption Perceptions Index) is largely sent abroad, whereas criminal money generated in the most corrupt countries is never sent abroad. The estimate of where in the world laundered money is sent is based on factors such as gross national product per capita, level of banking secrecy, government efforts against money laundering, and level of corruption.[17] Some of the assumptions seem arbitrary, including the overall assumption that countries attract criminal money for the same reasons.

Balance-of-Payments Mismatches

A common approach to estimating capital flight is the so-called sources-and-uses method. The method makes inferences about capital flight based on balance-of-payments statistics: if recorded capital inflows (net increases in foreign debt and in foreign direct investment [FDI]) exceed the recorded uses of capital inflows (the deficit on the current account and increases in the country's foreign reserves), it is assumed that this must be due to transfers of capital to foreign countries by private individuals. This residual amount is used as a measure of capital flight. However, this accounting identity would include both IFFs and legitimate capital transfers, such as acquisition of foreign securities for portfolio diversification. Therefore, it is not suitable as a measure of IFFs.[18]

Another method involving balance-of-payment mismatches, the hot-money-narrow method, focuses only on the net errors and omissions (NEO) entry in the statistics. This is based on the rationale that NEOs are more likely to reflect hidden flows. However, errors and omissions can also reflect compilation errors, incomplete measurement, or inadequate currency conversions.[19] This methodology cannot identify how much of the NEO entry is made up of this kind of noise in the data and how much reflects illicit capital flight.

Mirror Trade Analyses

Mirror trade analysis seeks to identify IFFs that take place through the channel of trade misinvoicing (under- or overreporting the value of imports or exports to generate unreported side payments). Motives can be trade-based money laundering (using misinvoicing as a means to transfer money), evading tariffs and taxes, or evading currency controls. Mirror trade analyses are the basis for the widely cited trade misinvoicing studies, such as those carried out regularly by GFI. Other examples include the findings of UNECA's High Level Panel on Illicit Financial Flows from Africa and research by James Boyce and Leonce Ndikumana.[20]

When goods are traded internationally, they generate at least two sets of records: one at the export end and another at the import end. This methodology assumes that the declared price and quantity of an export should match the declared price and quantity of the shipment when it reaches its destination (allowing for shipping and insurance costs). Most commonly, studies allow a 10 percent margin for insurance and freight, but some seek to take a more sophisticated approach, applying different margins for different types of goods and different pairs of countries at different times.

Gaps and mismatches in trade statistics can occur for innocent reasons, such as errors in recording prices or amounts, goods transiting via bonded warehouses, price volatility, differences among countries in categorizing products, and variable shipping and insurance costs.[21] Volker Nitsch highlights how small changes to underlying assumptions can have large implications for the resulting esti-

mates.[22] The calculations also tend to deliver a different pattern of findings for landlocked countries and for countries with seaports, which are more likely to reflect different patterns of trade reporting and transport costs than inherently different patterns of underlying criminal economies. Mirror data analysis can be used as a starting point for investigating customs fraud but cannot be directly interpreted as evidence of such fraud.[23]

Mirror trade analyses have led to substantial overestimates and mischaracterizations of IFFs in several high-profile cases. Most notable, in 2016, the UN Conference on Trade and Development (UNCTAD) claimed that 67 percent of gold exports from South Africa were misinvoiced, indicative of IFFs of nearly $80 billion between 2000 and 2014.[24] It was later revealed that much of the discrepancy was driven by differences in the way that South Africa and its trading partners record gold exports and imports.[25] This is explained by South Africa's Statistics Agency in its explanations and notes to its published trade data.[26]

Trade Price Deviation

Another approach looks at deviations in the recorded price of imports and exports from some reasonable range of prices. Simon Pak and John Zdanowicz examine U.S. exports and imports and concludes that trade prices that are in the top or bottom quartile of the range indicate illicit behavior (under- or overpricing).[27] However, these deviations can also reflect ordinary deviations in price (and underlying quality differences within some commodity categories) as well as errors in the data.[28]

Deviations From Traditional Gravity Models of Financial Flows

Another method uses a model that predicts cross-border flows based on the economic characteristics of countries, then attempts to estimate the additional amount that is attracted into jurisdictions solely on the basis of the ability to hide these assets (i.e., financial secrecy). Josef Brada, Zdenek Drabek, and Marcos Perez use a gravity model that predicts FDI from transition economies to the rest of the world and find that those they term money laundering jurisdictions are associated with higher-than-predicted levels of FDI, with the suggestion that around 10 percent of the FDI from the east European countries studied is money being laundered. (Money laundering jurisdictions are identified as those that the U.S. State Department's International Narcotics Control Strategy Report identifies as being of "primary concern"; these include Austria, Hong Kong, Luxembourg, Switzerland, and the United Kingdom.) However, this methodology cannot distinguish whether jurisdictions are financial centers and conduits for legitimate investment or money laundering centers.[29]

Extrapolation From International Offshore Wealth

Other estimates seek to identify the stock of financial assets held offshore and estimate the proportion housed there to evade taxes. The Tax Justice Network, for example, estimates that between $21 trillion and $32 trillion of private wealth is registered in offshore international financial centers.[30] Gabriel Zucman uses data on aggregate worldwide reported assets and liabilities and cross-border deposits provided by the Bank of International Settlements to estimate that approximately 8 percent of household financial wealth is held overseas. However, much offshore money represents sovereign wealth funds, pension funds, and other institutional investment, as well as individual investment that is tax compliant. Zucman assumes that 75–80 percent of offshore assets and income are unreported

by owners.[31] However, this assumption seems hard to support given that many of the offshore jurisdictions Zucman assesses are largely compliant with Financial Action Task Force (FATF) standards and are part of the Common Reporting Standard of exchange of financial information.

Methodological Issues

Criminal finances are difficult to find and estimate because, by their nature, they are hidden. Little reliable data is available, and each estimation method involves a large degree of speculation. No method can provide solid indicators of the scale of different channels and sources, or of trends over time or among countries, and all depend strongly on the input assumptions used.

Adding to the data and methodological issues are the problems of contemplating stocks and flows in intentionally opaque networks. Money laundering involves many stages—placement (e.g., depositing illicit cash at a bank), layering (moving money to hide its illicit origin), and integration (investing laundered money)—so the same money can go through many different transactions, each of which is an instance of money laundering. While financial regulators and law enforcement agents are interested in each of these instances, adding them together to generate an overall dollar sum produces a meaningless figure.

While aggregate estimates have been powerful as advocacy tools, for policy and research purposes it is more appropriate to disaggregate the concepts and estimates to understand which of the flows policy tools can target. As Peter Reuter argues,

> the relationship between the underlying concept of IFFs and the estimates is obscure. Nothing is known about the relative importance of component sources or of the channels that are used to move the funds overseas, which will surely vary over time and across countries. Discussions of the likely effect of different control measures is just an exchange of impressions rather than the result of any systematic analysis.[32]

LOCAL ANALYSIS

Getting beyond the broad-brush global estimates to understand the channels and drivers of IFFs depends on local and thematic analysis.

National Risk Assessments

Countries are increasingly undertaking national risk assessments (NRAs) as part of FATF's risk-based approach to AML/CFT measures. FATF calls for countries to identify and assess national money laundering/terrorist financing risks, keep risk assessments up to date, and provide information on the results to all relevant competent authorities and self-regulatory bodies, financial institutions, and other businesses with AML responsibilities. This risk assessment, according to FATF, should be used as the basis for allocating resources and implementing measures to prevent or mitigate risk of IFFs.[33]

NRAs are often elaborate exercises conducted over many months. They draw on detailed analysis of crime and tax enforcement statistics, extrapolation from suspicious activity reports and audit findings, and expert opinion surveys and dialogues. They can involve classified and restricted information, but many countries produce a public version of the report. Depending on the particular threats and vulnerabilities faced, some NRAs are concerned mainly with domestic IFFs, and others

are more international-facing. For example, Italy's NRA is focused on domestic organized crime, whereas Switzerland's addresses the role of the country's banking system in holding foreign assets, including the fruits of corruption and fraud from other countries.[34] FATF advises a three-step process:

1. identification of potential risks or risk factors drawn from known or suspected threats or vulnerabilities
2. analysis of the nature, sources, likelihood, and consequences of the identified risks or risk factors
3. evaluation to determine priorities for addressing them and to contribute to the development of a strategy for mitigation

Notably, NRAs do not tend to make the confident assertions about volumes of IFFs, as top-down international studies commonly do. For example, Bhutan's NRA estimated that annual proceeds of crime amount to between $10 million and $100 million.[35] FATF warns against an overreliance on seemingly robust statistics:

> While quantitative assessments (i.e., based mostly on statistics) may seem much more reliable and able to be replicated over time, the lack of available quantitative data in the ML/TF field makes it difficult to rely exclusively on such information. Moreover, information on all relevant factors may not be expressed or explained in numerical or quantitative form, and there is a danger that risk assessments relying heavily on available quantitative information may be biased towards risks that are easier to measure and discount those for which quantitative information is not readily available.[36]

FATF advises countries to draw on intelligence information, expert judgments, private sector input, case studies, thematic assessments, and typology studies.

The IMF includes AML/CFT assessments as part of Article IV consultations with countries. Outputs include estimates of the domestic proceeds of crime by category based on an expert survey. However, there is often a wide range. In some cases, the estimates are broken down into cash, financial and physical assets, and assets attributable to domestic and transnational organized criminal groups and other criminals.

The 2013 FATF methodology for risk assessments refers to the critical concepts of threat and vulnerability. Threats are the external forces, such as drug trafficking, that could lead to demand for money laundering. Vulnerability refers to those characteristics of a sector or country that make it attractive: weaknesses in prevention, detection, or enforcement. The idea of threat and vulnerability highlights the need for both a numerator and a denominator in considering risks of illicit flows. For example, the threat that a sector regulator is concerned with is the degree of contamination of a particular sector, such as banking, real estate, or fine art—in other words, the chance that a dollar entering the sector is associated with a predicate crime. However, the threat with which an investigative agency is concerned is how much money generated by a particular area of predicate crime can be found in a sector. At the same time, the regulator and the agency are also concerned with vulnerability, the chance that a dollar of dirty money goes undetected.

Joras Ferwerda and Peter Reuter argue that while these labels have intuitive appeal as means of structuring the NRA exercise, they could use greater conceptual clarity. NRAs tend to use qualitative scoring schemes to assess these risks and depend on a consensus among the experts consulted to reach their conclusions. However, these scoring procedures are specific and arbitrary, and the consensus approach does not pay attention to uncertainty of expert views, or the reasons experts from

different areas might disagree. Ferwerda and Reuter note that the FATF methodology treats threat and vulnerability as independent variables, whereas in practice criminals, kleptocrats, and tax evaders (the threats) will shop around for jurisdictions where they are less likely to be caught (the vulnerability).[37] While clearer concepts of threat and vulnerability are helpful, in practice no credible estimates exist of the proceeds of crime by predicate offense or of the amount of money laundered by sector.

Beyond the methodological challenges, issues of politics exist. Countries seek to demonstrate that their AML/CFT systems are working while also meeting the expectations of the financial sector and other actors with vested interests. At the extreme end, in countries where kleptocrats and organized crime syndicates have sufficient control over the state to embezzle, disguise, and move money with impunity, no administrative risk assessment methodology will be able to target those that effectively control the judiciary, law enforcement, bureaucracy, and media.

Donor Studies

Detailed domestic studies have been undertaken by international institutions and commissioned by donors. A World Bank study in Malawi and Namibia, for example, used an approach that involved identification of the main sources of ill-gotten money, based on interviews and a review of available literature and government reports; guesstimates of the magnitudes of flows in each area; narrative description of how the money is spent or recycled within the economy, and the economic effects; and analysis of AML policies.[38]

Collaboration with experts in Malawi and Namibia who deal with the issues on a daily basis was crucial to the study. Their findings highlighted that illicit transactions mainly did not involve high-end money laundering that used international financial structures. Instead, they involved cash-based payments. Illicit earnings were primarily used for family support and purchase of real estate, cars, and luxury goods, with only the smallest portion of the crime proceeds going to capital flight.

Other donor-led studies include a qualitative study of IFFs in West Africa conducted recently by the OECD that examines the nature of specific criminal and illicit economies, and a Royal United Services Institute study of specific IFFs in Asia that looked at the financial flows associated with cross-border trade in jade, heroin, and counterfeit goods. Both studies emphasize that, beyond the big numbers, IFFs are complex political and economic phenomena, and it is unclear how to intervene effectively without exacerbating economic problems or simply diverting the illicit activity elsewhere.[39] Several local studies, such as in Zambia and Tanzania, have attempted to confirm the global estimates, but their findings remain unpublished.[40]

Tracking Anti–Money Laundering Systems

Countries are increasingly releasing figures on their AML systems, such as the number of suspicious activity reports (SARs) submitted to the financial intelligence agency; the number of SARs that are screened and transmitted to competent authorities; the number of investigations, indictments, legal proceedings, and resulting convictions; and the scale of funds frozen, confiscated, or returned. AML systems produce large quantities of such data, although collating and comparing the data across countries is challenging.

Often, the number of SARs is offered as a proxy for the rigor of a sector's AML efforts, but it could also be an indicator of the severity of the sector's money laundering problem. In practice, no method exists for distinguishing the two. Similarly, increases in the number of police investigations

and enforcement actions can support a mistaken conclusion that a policy change has caused an increase in money laundering—even when money laundering has decreased—if the policy change in question leads to a higher proportion of financial crimes being discovered.

As Michael Findley highlights, randomized audit studies (known as mystery shopper tests) offer a powerful and underused means to test aspects of the effectiveness of AML and beneficial ownership registration regimes.

MULTINATIONAL TAX AVOIDANCE: ILLICIT FLOW OR ODD ONE OUT?

Debate about whether the definition of IFFs should be widened beyond financial flows associated with criminal activities to include financial flows associated with multinational tax avoidance or profit shifting continues.

One critical historical pathway for the argument for including multinational tax avoidance has been confusion of the large estimates of trade misinvoicing with the practice of corporate transfer pricing. Trade misinvoicing is a form of customs and/or tax fraud in which exporters or importers deliberately misreport the value, quantity, or nature of goods or services. Estimates of trade misinvoicing are closely linked to the term *illicit financial flows*, as both were popularized by GFI. GFI describes trade misinvoicing as fraudulently manipulating the price, quantity, or quality of a good or service on an invoice submitted to customs and lists four primary reasons "why criminals misinvoice trade": money laundering, tax evasion, fraudulently claiming tax incentives, and dodging capital controls.[41] All of this would be captured under a definition of illicit flows related to illegality. These behaviors are not the same thing as the tax-planning structures referred to as base erosion and profit shifting: BEPS does not depend on hiding or misreporting transactions to the tax authorities but on using tax rules advantageously. Trade misinvoicing is often misinterpreted as representing commercial tax avoidance (related to transfer mispricing).

Perhaps another reason it is attractive to include tax avoidance under IFFs is that BEPS is easier to measure—or at least it is easier to generate annual figures from readily available statistics. This reflects the fact that multinational corporations tend to be legally compliant registered companies that file tax returns and, in many countries, publish accounts. This information is accessible from databases such as Orbis and can also be estimated from macroeconomic statistics. In some countries, microdata is available to researchers through tax authority data labs, which provide access to anonymized tax return data. The data can be used to investigate how sensitive corporate profitability is to tax rates and whether the pattern of revenues, profits, assets, and taxes reveals higher profitability in low tax jurisdictions and vice versa.[42] The G20/OECD-led BEPS Action Plan has established a system of country-by-country reporting for large companies whereby they have to submit data about their sales, profits, assets, and taxes paid on a jurisdiction-by-jurisdiction basis. While this information is confidential to tax authorities, the OECD will compile it and release statistical aggregates starting in 2019.[43]

The differences in the challenge of estimating tax avoidance versus IFFs is also reflected in official country assessments. For example, in the United Kingdom, the revenue authority produces an annual tax gap estimate, which includes figures for tax evasion and avoidance based on a combination of bottom-up and top-down analyses. Although the authority recognizes that uncertainty and potential error can come from many sources, it is able to generate annual estimates differentiated by type of

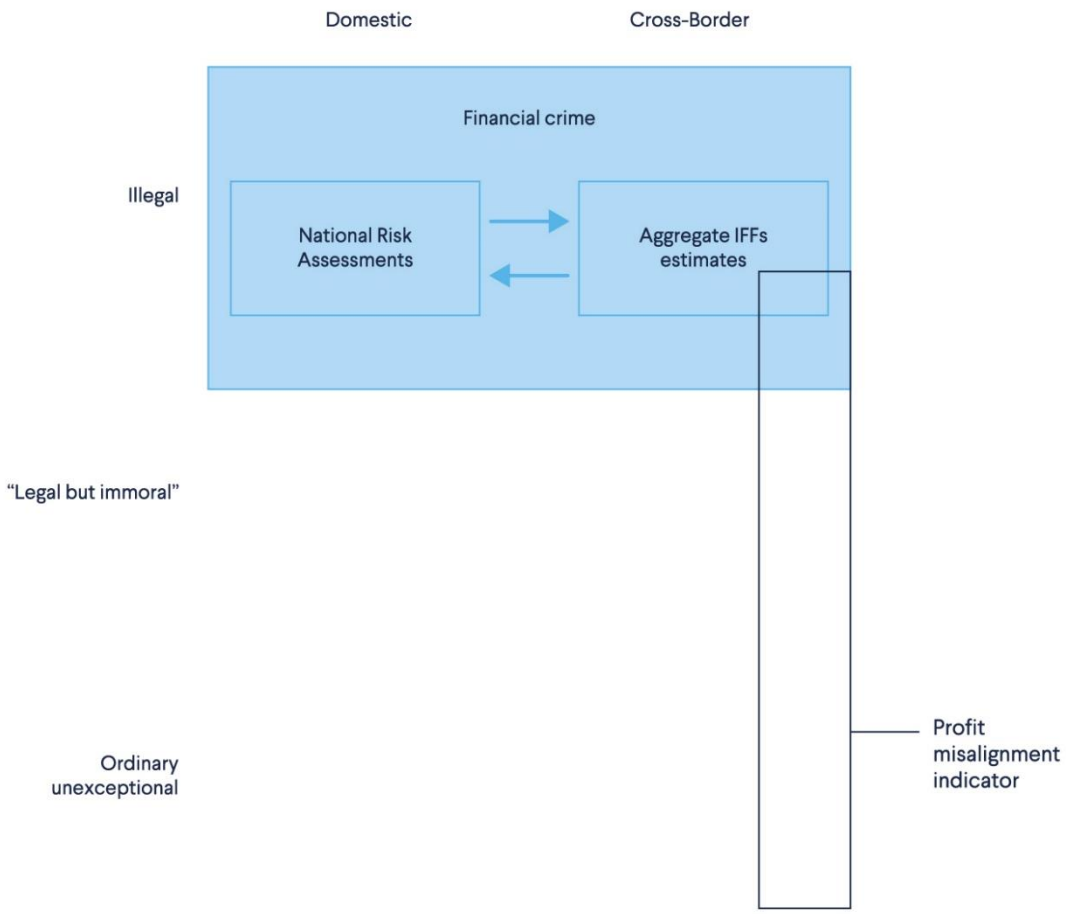
taxpayer and type of behavior. However, the UK National Crime Agency is only able to say that the amount of money laundered in the country in 2016 "could be between £36 billion and £90 billion"; the amount now is likely to be higher.[44]

As Kahler notes in this collection's introduction, the boundaries of legal behavior are not immutable, and actions that were once seen as acceptable (such as bribery of public officials by multinational corporations) have become unacceptable and illegal. Similarly, legalization of previously illicit drugs can lead to illegal enterprises becoming (or being replaced by) legal ones. Where a state is captured by criminal, corrupt, or despotic rulers, arguably its rules are themselves illegitimate. Nevertheless, replacing the legal boundary on IFFs with a vaguer one referring to social norms or morality makes the whole concept amorphous. In practice, this broader conceptualization is only applied in the argument about including tax avoidance under IFFs.

An initial proposal on Measurement of Illicit Financial Flows, commissioned by UNCTAD, argues for a sub-indicator based on "misaligned profits" of multinational corporate taxation with the site of economic activity, using the soon-to-be-available country-by-country reporting data produced as a result of the BEPS reforms.[45] The sub-indicator would capture economic activity as the simple average of single indicators of production (the share of full-time equivalent employees in a jurisdiction) and consumption (final sales within each jurisdiction), and would define misalignment as the total excess profits declared in jurisdictions with a greater share of profits than would be aligned with their share of economic activity.

As the UNCTAD proposal notes, this sub-indicator would cast a wide net, including lawful and unlawful avoidance, along with criminal evasion, as well as companies simply following tax rules that do not explicitly seek alignment with this formula (see figure 3 for an illustration of how the profit misalignment indicator and other IFF measurements map to IFF definitions). This measure, as defined, would be easy and inexpensive to determine, without the need to collect additional data. But it would be assessing something that is not close to what countries are seeking to assess in terms of national risk assessments for IFFs.

Figure 3. Mapping Different Approaches to Measurements Against Definitions and Concepts



Source: Author.

CONCLUSION AND RECOMMENDATIONS

While popular estimates of IFFs have been influential in drawing attention to the issue, the idea that IFFs can be assessed at a distance through simple calculations using official statistics from global databases is overoptimistic. Calculations tend to rely more strongly on assumptions than on empirical analysis, and the resulting estimates are not much more than simply indicative of the orders of magnitude. They shed light on neither specific policy measures nor progress over time.

Yet the expectation that IFFs can be measured in this way and that the large estimate amounts can be interpreted simply and directly as lost funds for international development has become strongly established. Large and ostensibly accurate estimates have whetted public, policymaker, and press appetites for more of the same, and have run ahead of discussions about whether the numbers themselves are meaningful. This trend risks diverting the focus on IFFs away from crime and corruption toward the fashionable—and more politically appetizing—target of multinational tax avoidance.

The existing system of AML standards has been patchily implemented and largely ineffective in tackling transnational organized crime and grand corruption among political leaders.[46] Uncertainty

of measurement and difficulty in assessing IFFs should not stop governments from taking action to address this gap, but the fact that countries are taking action should not be reason to ignore the problems of definition and measurement.

Definition

Develop a common definition of illicit financial flows—one that can be recognized by experts and actors in AML, anticorruption, and revenue compliance, and one that would support coherent action.[47] The concept of IFFs has become tied up with the confusion between trade misinvoicing and transfer pricing. However, that these two different phenomena are often confused and conflated is not a good reason to adopt a measure for IFFs that includes legal tax planning, a practice far removed from the core concept. Nor is the convenient availability of annual data to construct an internationally comparable set of numbers on misalignment. Conflating legal and illegal behavior risks offers a way to drive attention away from criminal and corrupt finances toward more politically attractive targets. The narrower view of IFFs relates closely to AML. However, it goes beyond the specific set of practices, compliance standards, and financial regulations developed under the international AML/CFT system. The idea of illicit financial flows is important because it highlights the international aspect of financial crime; crime and corruption are not just the problem of the country where they happen but also of the countries that allow their financial systems, goods trade, or real estate markets to be used as getaway vehicles for ill-gotten money. The concept also focuses attention on the need for an effective international response that goes beyond AML compliance.

Aggregate Estimates

Recognize the limitations of aggregate measurements of IFFs, and put more focus on disaggregate analysis. AML/CFT regulators need to know about threats and vulnerability at activity and sector levels to focus on preventive action, while law enforcement authorities and investigators need to know about where to focus their attention to monitor, prevent, attack, and seize flows of criminal finances. Refinements to existing methods could reduce error. For example, recent revisions to GFI's methodology have led to reductions in its global estimates of IFFs, with large reductions in countries such as India and Zambia.[48] However, without reliable, representative data on actual illicit activity, it is impossible to gauge how close these estimates are to reality, nor how much noise remains in the data. Randomized audits and mystery shopper studies can help reveal the amount of illicit finance or noncompliant actors in a given sample. More detailed research on customs records could help authorities identify genuine misinvoicing.[49]

Publish the data and code for IFF estimates. Large-scale estimates involving the manipulation of detailed bilateral trade data are costly to calculate and replicate, and the full details of calculations are rarely published; therefore, estimates often enter the public discourse before they have been verified. Recently, for example, the UNECA increased its estimate of IFFs from Africa from $50 billion to $72 billion, but it has not published the underlying calculations.[50] Opening up the data and code to public scrutiny would make it easier for researchers to spot problems and suggest improvements. Donors funding analytical work in this area could encourage this practice.

Address the possible limitation to measuring IFFs as a Sustainable Development Goal indicator. IFFs are included in the UN Sustainable Development Goals under target 16.4, and the UN Statistical Commission has agreed that IFFs would be measured using the indicator "total value of inward and outward illicit financial flows." If this indicator cannot be possibly—or meaningfully—measured, the governments, international organizations, and expert committees involved should recognize the limitation and not substitute in dollar estimates of multinational profit shifting.

National Risk Assessments and Other Local Analysis

Evolve and improve national risk assessments. Approaches to national risk assessments are new and evolving, and quantitative approaches are still a long way from producing comparable policy-relevant data. In the first rounds, authorities have focused on building qualitative understanding of risks and identifying sectors that need stronger action, and have highlighted limits of knowledge and data. Future rounds of risk assessment should strengthen both the conceptual basis for risk analysis and the quantitative and qualitative analyses. Better dialogue and closer cooperation between the public and private sectors to inform national risk assessments will be crucial to this.[51] Countries should report on their methods so that they can learn from one another's experience and approach.

Address overseas crime and corruption risks. Developed countries and international financial centers should assess their role as conduits and facilitators of IFFs, and their role in supporting stolen asset recovery. Domestic IFF control efforts in developing countries will likely have limited influence.[52] Therefore, the role of countries that tend to attract or act as conduits for international assets, both legitimate and illegitimate, such as the United States, Dubai, Singapore, Switzerland, and the United Kingdom (and its overseas territories and crown dependencies) is critical. They should address overseas crime and corruption risk in their NRAs.

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