THE GLOBAL INITIATIVE
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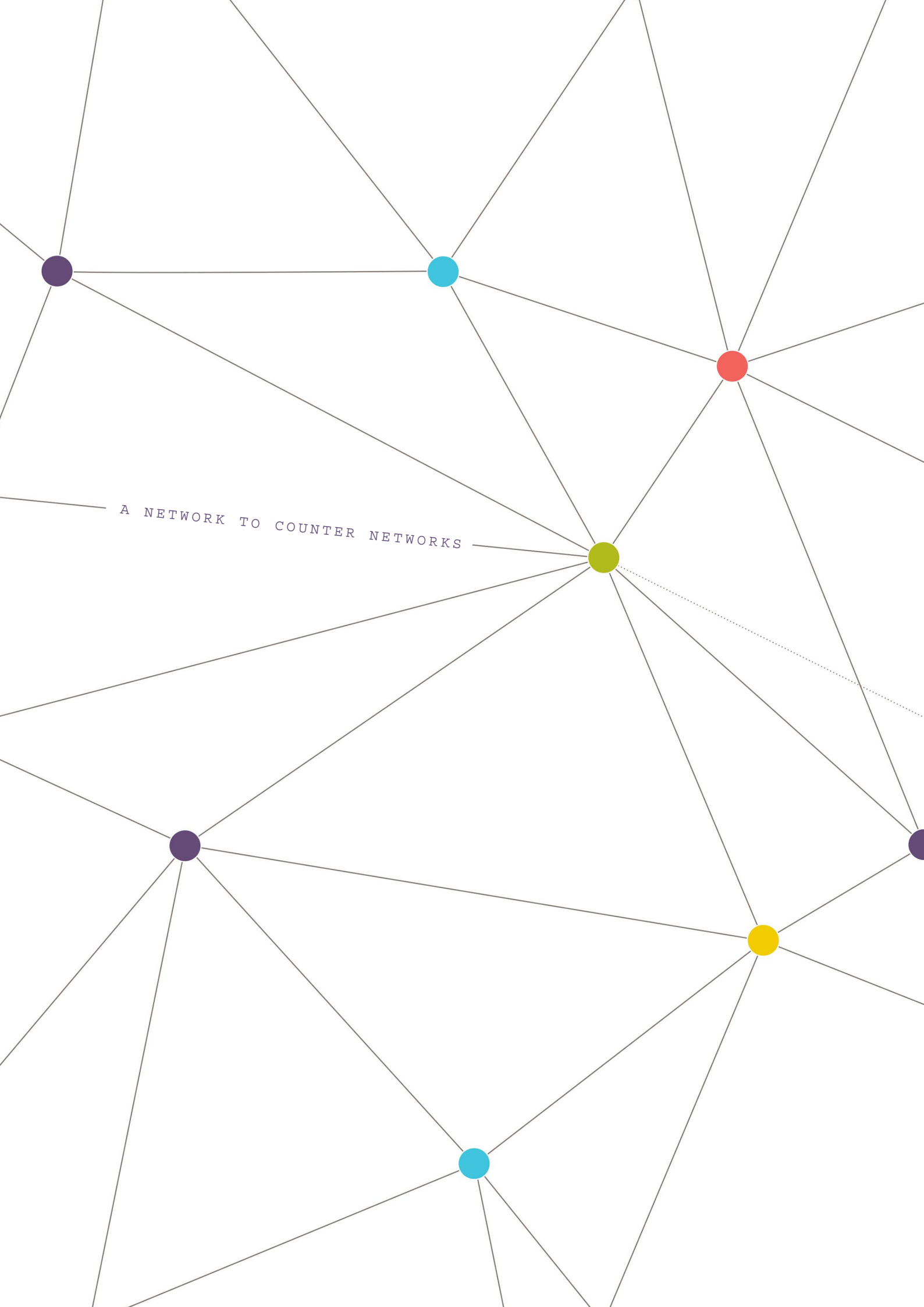
Measures that Miss the Mark

Marcena Hunter

Capturing the proceeds of crime in illicit financial flow models

June 2018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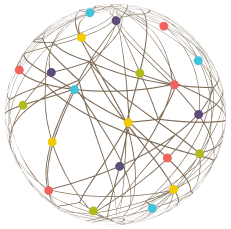

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Abstract

Illicit financial flows (IFFs) are generally viewed as the financial side of criminal activity, and there is widespread agreement IFFs are a global threat. There is also agreement that IFFs, particularly prevalent and damaging in the context of weak, developing and fragile states, are a threat to sustainable development. However, the concept remains vague and its content controversial. Furthermore, misalignment between terminology used to define IFFs and methodology to measure the scale of IFFs has troubling implications for policy response. Terminology encompasses a wide variety of illicit flows, while existing measures tend to be narrower and inherently give greater weight to IFFs linked to the classifications of commerce, as compared to those generated by crime and corruption. Furthermore, IFFs from the least developed states are at high risk of being undervalued. Continuing to treat IFFs as a single, indivisible phenomenon inhibits the development of comprehensive and effective responses. Disaggregation of analysis and measures of IFF types is therefore essential. This report examines how terminology and measurement frameworks can better reflect the form and scale of IFFs linked to crime. Due to the complex nature of the phenomenon, a more accurate and multifaceted approach to defining and measuring crime-related IFFs is critical to better reflect the detrimental impact these types of flows have on development and to formulating effective responses.

Acronyms and abbreviations

AfDB	African Development Bank
AML	anti-money laundering
ASGM	artisanal and small-scale gold mining
BOP	balance of payments
c.i.f	value at the point of final destination, including the costs of freight and insurance
CED	change in external debt
FATF	Financial Action Task Force
FDI	foreign direct investment
FfD	financing for development
f.o.b	value of goods at the initial point of departure
GDP	gross domestic product
GER	gross excluding reversals
GFI	Global Financial Integrity
GNP	gross national product
IATF	Inter-Agency Task Force
IFFs	illicit financial flows
MIMIC	multiple indicators, multiple causes
NOEs	non-observed economies
SDGs	Sustainable Development Goals
TBML	trade-based money laundering
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
UNODC	United Nations Office on Drugs and Crime

Executive summary

Generally viewed as the financial side of criminal activity, there is widespread agreement that IFFs are a global menace. Particularly prevalent and damaging in the context of weak, developing and fragile states, IFFs exploit and exacerbate weaknesses in state institutions, undermine governance and empower those who operate outside of the law.[1] The threat to sustainable development is also reflected by the explicit recognition of IFFs in the Sustainable Development Goals (SDGs). However, even in what are considered strong and prospering states, IFFs and criminality have a serious corrosive effect. There is a very real danger of internal decay as IFFs, crime and the associated corruption undermine state institutions.[2]

Yet, efforts to combat IFFs are significantly hobbled by a lack of consensus around terminology and significant obstacles to measuring the scale and direction of flows.

Definitions of IFFs tend to be broad, reflecting the complex and multifaceted nature of illicit international trade and finance. As such, the term IFFs tends to be applied, in practice, as an umbrella, grouping a wide range of both transnational and domestic threats. The absence of a coherent definition has implications beyond academic debate, obscuring nuances relevant for appropriate policy and programmatic responses.[3] For example, the United Nations Economic Commission for Africa (UNECA) found that the lack of terminological clarity limits the emergence of effective policy options.[4]

In parallel, there are considerable challenges to developing a robust estimate of global IFFs. As a result, current prominent measures of IFFs are based on data-driven models, which focus on a select number of indicators – namely, discrepancies in trade and balance of payments (BOP) data as proxies for all forms of IFFs. The practice is problematic, as it inherently gives greater weight to IFFs linked to commerce than to those linked to crime and corruption, a common breakdown of IFF typologies.

The troubling misalignment between the broad terminology used to describe IFFs and the narrow methodologies used to measure the scale of IFFs leads to disproportionate importance being given to financial channels, which may not necessarily pose the greatest threat to development aims. This is especially true of IFFs resulting from crime, which are largely ignored in prominent estimates of the scale of IFFs. Additionally, there is a high risk of understating flows from less developed nations.

Further, the research on the drivers, development impacts and policy aspects of IFFs has been minimal. Little attention has been given to the composition of IFFs or the factors affecting variation across countries and over time.[5] This is reflected by the United Nations Development Programme's call for a wider range of indicators for target 16.4,[6] and by the World Bank, which asserts:

> Policy responses to IFFs need to be informed by information on the developmental impact of the different activities that fuel illicit fund flows. … A comprehensive engagement by the international community will stretch from strengthening financial regulations and enforcing anti-money laundering (AML) rules, to combating organized crime, all the way to enhancing border controls and tracking revenues related to mineral extraction. [7]

However, calls for a more holistic understanding of and response to all forms of IFFs have largely not translated into more nuanced terminology or measurement models, especially in relation to what we shall call 'crime IFFs' and flows from less developed states.

To improve understandings, and subsequently responses, a more accurate and multifaceted approach to defining and measuring crime IFFs is essential. This requires the disaggregation of analysis and measures of IFFs. In addition, it is essential to move away from data-driven analysis, and instead towards models that are shaped and informed by expert insight. Continuing to treat IFFs as a single, indivisible phenomenon inhibits the development of more comprehensive understandings of IFFs and effective responses.

The following recommendations are proposed:

1. **Develop more accurate terminology and definitions, including better accounting for elements especially relevant to developing nations and crime IFFs.**

Assessments of whether a flow is illicit must account for local perceptions of legitimacy. Terminology that does not take legitimacy into account cannot adequately address how or to what degree informal economies and flows are included in IFFs. This is especially problematic in developing countries.

Similarly, if the term 'financial' is narrowly interpreted, to include only money and other easily liquidated assets, a sizeable number of other criminal flows will thus be ignored. To acknowledge the complex and varied nature of criminal activity, a flexible, broad definition of 'financial' is needed.

It is also critical to differentiate between types of IFFs. Standardizing the use of the term 'crime IFFs' is necessary to facilitate a richer dialogue, as well as measures and responses to IFFs linked to criminal activity.

2. **Represent estimates of IFFs more accurately and transparently**

Estimates of IFFs need to more clearly and transparently represent findings and methodologies, including limitations and inherent biases. Often, reports claim to offer estimates of global IFFs, but it is often only upon a close inspection of the methodology that it becomes clear only a limited number of IFFs types were accounted for. The lack of transparency is particularly detrimental in the case of crime IFFs, which have severe negative consequences for development and are likely to be under-represented, or even overlooked entirely, by prominent estimates. When this is not made clear, policymakers may not appreciate the significant threat of crime IFFs to stability and other development aims.

3. **Adopt a multi-step model that makes use of both crime- and country-specific assessments and the gravity model, as well as information from both quantitative and qualitative sources, such as that employed in UNODC**[8]

A multi-step process, which combines models and makes use of both quantitative and qualitative information, is critical to building better measures and maps of crime IFFs. The methodology applied in the 2011 UNODC publication 'Estimating illicit financial flows resulting from drug trafficking and other transnational organized crimes' can be used to form the basis for estimates. The methodology both triangulates information and data from various sources and applies the gravity model. This approach is especially valuable because it has the flexibility to adapt to various gravity factors and, in addition to putting a monetary value on flows, offers insight into the direction and drivers of flows. In particular, because the gravity model accounts for transport and transaction costs, it offers greater insight into intra-regional flows, especially those between less developed countries, than models that rely exclusively on BOP and trade data. This is important information for policymakers tasked with combating the threat of IFFs. The UNODC methodology is valuable in providing guidance on how this approach would be executed.[9]

Application of the model is without doubt a costly, and time- and labour-intensive undertaking. However, if stakeholders hope to build more accurate measures of IFFs that better reflect threats to development, a transition away from data-driven models is vital.

4. **Utilize assessment frameworks that go beyond monetary values and account for harm**

While unquestionably problematic for wealthy countries, illicit flows have devastating consequences for poor ones. Measuring the impact of IFFs solely in monetary terms gives disproportionate importance to the highest-value flows, without recognizing that IFFs may have a diverse array of potentially more damaging impacts. A new framework that analyzes and prioritizes responses based upon a wider analysis of harm would be beneficial to informing development policy and programme development. The OECD, in 'Illicit financial flows', lays out the five target areas of physical harm, societal harm, economic harm, environmental harm and structural/governance harm.[10] These questions add value because, when analyzed congruently, they allow stakeholders to better understand the extent and nature of the harm.

Introduction

IFFs are a widely recognized global threat and pose a direct threat to sustainable development. International acknowledgment of IFFs as a development threat include the Addis Ababa Action Agenda, which identifies curbing IFFs as integral to promoting peaceful and inclusive societies,[11] and SDG Target 16.4, whose objective is to 'significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime' by 2030.[12]

Despite widespread agreement that IFFs thwart development advances, the concept of IFFs remains vague and its content controversial.[13] The term was coined by Washington-based organization Global Financial Integrity (GFI), which defines IFFs as 'illegal movements of money or capital from one country to another'.[14] An alternative definition, one that has increasingly gained traction, is 'money illegally earned, transferred or used'. However, there is far from universal consensus that these, or other, definitions accurately encapsulate IFFs. Rather, the term tends to be applied as an umbrella, grouping previously disconnected issues related to the movement of funds and assets across borders in contravention of national or international laws.[15] This is reflected by SDG indicator 16.4.1, 'Total value of inward and outward illicit financial flows',[16] which is all-encompassing and vague.

Although settling on a definition of IFFs is a challenge, measuring the scale of IFFs has proven to be a momentous undertaking. As stated by the Inter-Agency Task Force (IATF) on Financing for Development (FfD), 'currently no single tool or process can effectively establish a comprehensive measure of IFFs at the global or country level'.[17] Obstacles include reaching a consensus on what financial flows and activity ought to be included in measures, developing a sound methodology, and a dearth of data. In regard to the last point, due to the very nature of IFFs, which are inherently hidden and difficult to track, compiling comprehensive and reliable data is an incredibly difficult task.

'To improve on current efforts, the disaggregation of analysis and measures of IFF types is essential.'

To help build a more nuanced measure of IFFs, the framework developed by GFI founder, Raymond Baker, is useful. Baker classifies IFFs as i) commerce, ii) crime or iii) corruption. The separate classifications highlight not only the diverse nature of illicit flows, but also the need for multifaceted responses that tackle the threat from various angles.

Yet, while there have been calls for greater disaggregation of IFFs, this has not been reflected in prominent estimates of the scale of IFFs.

The result is a disconcerting misalignment between the terminology used to describe IFFs and the methodologies used to measure the scale of IFFs. Definitions are broad and encompass a wide array of illicit flows. In contrast, measurement models tend to be data-driven and rely on a limited number of sources, typically BOP and trade data to inform the estimates, without triangulating estimates with other sources. As such, they are at risk of over-representing measures of capital flight and trade mispricing (i.e. commerce IFFs) as estimates of all IFFs, and they suffer from a lack of reliable trade data (especially from less developed nations), and employ questionable assumptions.

Consequently, representations that claim to be indicative of all IFFs are apt to misrepresent the form and scale of IFFs. This has concerning consequences, especially for less developed nations. Measurement models that intrinsically give greater weight to certain types of IFFs over others, without making this clear in representations of estimates, may result in the misprioritization of IFF types and impacts, and thus the level of resources directed at the threat. As a result, it is foreseeable the development and application of policy interventions will be inequitably biased towards commerce IFFs and more developed states.

GFI definitions, methods and reports are the targets of much criticism, including within this report. However, GFI is a recognized leader in the field of IFFs and the only organization that has consistently studied the phenomenon

since its establishment in 2006 (see Reuter, 2017 above). Furthermore, there are important concurrences between GFI and the contentions made here, namely, that IFFs have significant negative implications for governance, crime and reducing poverty, as well as overall development goals, and that IFFs warrant international attention and investment in responses. As such, while there are differences in opinion, the wholesale discounting of GFI's work is not advocated here. Rather, due to the complex nature of the phenomenon, what is called for is a more varied and multifaceted approach to defining and measuring IFFs stemming from crime, which better reflects the detrimental impact these types of flows have on development.

To improve on current efforts, the disaggregation of analysis and measures of IFF types is essential. The emphasis on aggregates of IFFs to date has been instrumental as an advocacy tool, generating significant interest and momentum around the issues.[18] However, assessments of IFFs must recognize the definitional and methodological limitations that encumber the development of comprehensive measures of and responses to IFFs. Continuing to treat IFFs as a single, indivisible phenomenon inhibits the development of more comprehensive understandings of IFFs and effective responses to them.

Recognizing the need for disaggregating measures of the different forms of IFFs, this report focuses on crime IFFs; it provides a critique of current terminology and methodologies, and offers recommendations on how to better define and measure illicit flows linked to crime.

Definitional challenges

It is difficult to develop a definition of IFFs that is narrow enough to be instructive while at the same time broad enough to enable a holistic understanding of what is a complex and multifaceted phenomenon. The challenge is compounded by the multiplicity of sources generating illicit funds, the variety of ways used to shift funds to hide their origin and the range of actors involved.[19] When broken down, three major definitional issues arise:

- How to define 'illicit'
- How to define 'financial'
- By definition, should the 'flows' in IFFs be cross-border?

How these individual components are defined has important implications for understanding and measuring IFFs.

Table 1: Definitions of IFFs

Organization/year	Definition
GFI (2017) Illicit Financial Flows to and from Developing Countries: 2005–2014	'Illegal movements of money or capital from one country to another.'
UNODC (2017) The Drug Problem and Organized Crime, Illicit Financial Flows, Corruption and Terrorism	'The most widely used definition nowadays considers illicit financial flows to be generated when crime-related proceeds (including money illegally earned, transferred or used) cross borders.' (Does not provide its own definition of IFFs.)
African Development Bank (AfDB) (2016) Strategic Framework and Action Plan on The Prevention Of Illicit Financial Flows In Africa (2016–2020)	'… money illegally earned, transferred or used.'
World Bank (2016) The World Bank Group's Response to Illicit Financial Flows: A Stocktaking.	'… the term "IFFs" to cover both the flow of illicit funds and assets across borders and the underlying activities that generate the flows. Money and activities that have a clear connection with illegality – corruption, illegal natural resource exploitation, smuggling and trafficking, money laundering, tax evasion and fraud in international trade – fall under IFFs. Tax avoidance activities, such as legal tax planning and optimization, do not belong to IFFs … The principle adopted by the [World Bank] is that cross-border movement of financial assets are considered illicit only when they are associated with activities that are deemed to be illegal in the local jurisdiction.'
OECD (2014) Illicit Financial Flows from Developing Countries: Measuring OECD Responses	'There are various definitions of illicit financial flows, but essentially they are generated by methods, practices and crimes aiming to transfer financial capital out of a country in contravention of national or international laws.'
AfDB and GFI (2013) Illicit Financial Flows and the Problem of Net Resource Transfers from Africa: 1980–2009	'Broadly speaking, illicit financial flows involve the transfer of money earned through corruption, kickbacks, tax evasion, criminal activities, and transactions involving certain contraband goods. Likewise, funds earned through legal business activity but transferred abroad in violation of exchange control regulations also become illicit.'
UN (2016) Summary of the IATF expert group meeting on Illicit Financial Flows – mapping out a way forward on tax avoidance and evasion	Participants of an IATF on FfD expert group meeting to discuss tax-related IFFs agreed that: i) IFFs constitute money that is illegally earned, transferred or used and ii) that crosses borders. Three types of flows are generally considered, which are not mutually exclusive or comprehensive: IFFs originating from (a) criminal activity; (b) corruption-related IFFs; and (c) tax-related IFFs.

'Illicit'

Many definitions of IFFs are limited to flows that are illegal. However, determining whether a flow is illicit goes beyond assessing its legality. This is reflected in dictionary definitions of 'illicit', which range from 'not permitted'[20] to 'forbidden by law, rules, or custom'[21] to 'illegal or disapproved of by society'.[22] Assessments that take into consideration other factors (e.g. rules, customs, fairness) account for the legitimacy of the flow. Colloquially, 'legitimacy' is understood to be social acceptability based on the norms, values and beliefs of large groups in society. The broader understanding is reflected in dictionary definitions of 'illegitimate', which include the following:

- 'Not sanctioned by law; not authorized by good usage'[23]
- 'Not authorized by the law; not in accordance with accepted standards or rules'[24]
- 'Not legal or fair'[25]

Differentiating between legality and legitimacy is especially important in countries with large informal institutions. All societies have both formal institutions (i.e. those codified laws and regulations) and informal institutions (i.e. socially shared, unwritten rules that express the wider norms, values and beliefs of the population) that govern behaviour. Informal institutions can be either complementary, if they reinforce formal institutions, or substitutive, if the rules they prescribe are incompatible with the formal institutions. The greater the non-alignment of formal and informal institutions, the greater the likelihood of participation in the informal economy.[26] If policies are not aligned with informal institutions, they may have the unintended impact of driving individuals to engage in the informal or illicit economy.[27]

The recognition that 'illegal' and 'illicit' are not interchangeable terms is reflected in some definitions of IFFs. The UNECA 2012 report states that the term 'illicit' includes activities that, while not strictly illegal in all cases, go against established rules and norms. However, in its analysis it emphasises 'illegality'.[28] Yikona et al. apply the term 'ill-gotten money', which includes the proceeds of crime, fraud and corruption, and tax evasion – even when not criminalized in a given jurisdiction.[29] Also, Blankenburg and Kahn argue the 'illicit' nature of IFFs is met when 'illegitimate from the perspective of an existing consensus about the social (developmental) good'.[30]

The debate around the meaning of 'illicit' has implications beyond academic discourse. If IFFs are limited to illegal activity, due to the differences in national legal frameworks, the determination of what constitutes IFFs will depend on the legislation of the particular state. For example, the definitions of predicate offences to money laundering differ from one jurisdiction to the next, which is an obstacle to building comparative data sets of money laundering, as it is not clear to what extent national studies are comparable.[31] Consequently, a focus on legality may undermine the application and effectiveness of international efforts to combat IFFs. International mechanisms designed to tackle IFFs can be impaired by differences in national legislation as well as by a lack of capacity or willingness to enforce the laws.[32]

Focusing on crime IFFs, there is little dispute that the flow must be illegal; criminality requires violating the law. However, it is less clear to what degree a flow must be illegitimate. Further complicating analysis, in practice it can be very difficult to determine both the legality and the legitimacy of a flow.

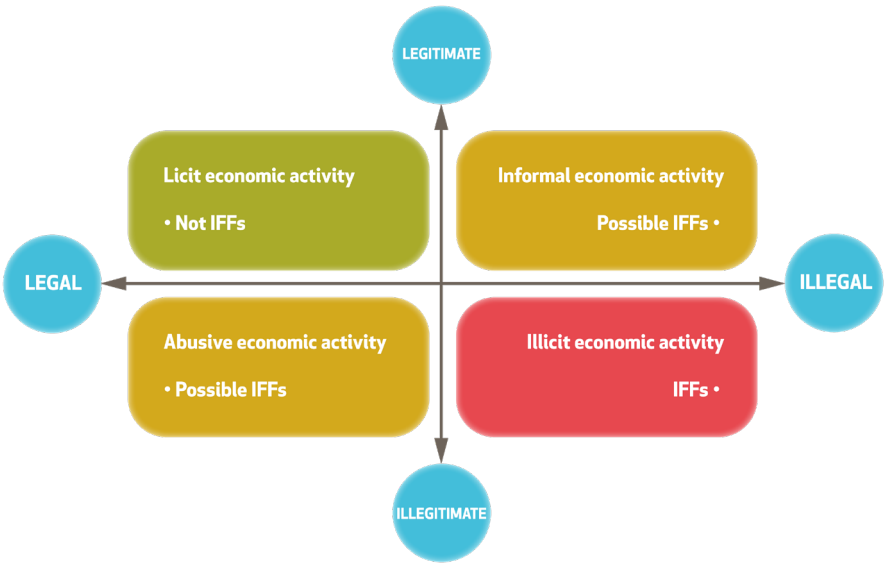
It can be difficult to determine if a flow is illegal in states or regions with an expansive informal economy. A great deal of economic activity takes place in a context where the applicable legal framework is not enforced, or there is an absence of such a framework.[33] Alternatively, legal precedents are not always well defined, making it unclear to what degree new laws or legal rulings replace old legislation. As such, when assessing whether a flow 'qualifies' as an IFF, it is important to identify the applicable legal framework, how and to what degree laws and regulations are enforced, and the burden on or ability of citizens to comply with the law.[34]

Tests for determining whether a transaction is legitimate are less clear, with the legitimacy of a flow depending on perspective. For example, legal frameworks may not reflect overall societal values or central social and economic interests.[35] Furthermore, where a state is unrepresentative and predatory, its adjudications over legality may be

considered illegitimate by local populations.[36] For example, a government may implement natural-resource laws, in particular in the minerals sector, which, rather than acting in the best interest of the state, merely consolidate the economic power of government actors and well-connected businesspeople.

Frameworks used to measure harm can be adapted to assess legitimacy. Like harm, legitimacy is viewed in different ways by stakeholders depending on whether they are upstream, midstream or downstream; or in source, transit and destination countries. Similarly, legitimacy can be analyzed at the individual, community, national and international levels, and there may well be differences based on demographics, gender and specific vulnerable groups.[37] As an example, unlicensed artisanal and small-scale gold mining (ASGM) is illegal in many developing nations, but is widely viewed as a legitimate economic activity in many communities. In parallel, while such activities may be viewed as legitimate by local communities, they may have detrimental long-term impacts for development. Therefore, the activity may be considered illegitimate at the national and international level. Consequently, whether a flow is deemed illegitimate will depend on the context and the judge.[38]

Figure 1: Identifying IFFs



In applying the test, it is important to recognize that not all transactions or activities within certain crime types will qualify as IFFs. Returning to the example of ASGM, assessors may find that upstream transactions at mine sites do not qualify as illicit, while downstream transactions are illicit, such as the smuggling of gold to international destination hubs.

Accounting for the legitimacy of flows is important for developing policy responses. Driven by countries of the northern hemisphere destination markets – Europe and North America – analysis of global IFFs tends to measure only the scale of IFFs, and less who has enabled the flows and their impact, including the people affected. Accordingly, there is little evidence on implications for local-level communities, including the degree to which flows undermine principles of social organization. By judging the legitimacy of flows from a local perspective, decision makers are better positioned to appreciate local and long-term development impacts.

'By judging the legitimacy of flows from a local perspective, decision makers are better positioned to appreciate local and long-term development impacts.'

'Financial'

The financial component of IFFs is commonly understood to refer to money and, to a lesser degree, capital, an interpretation that fits squarely with dictionary definitions of 'financial' and common usages of the word. Where IFFs are understood to include practices such as trade mispricing or money laundering through formal economic mechanisms, the term is clearly fit for the purpose.

However, criminal activity takes on a wide array of forms, with the movement of goods, profits and other forms of value not fitting neatly into formal financial frameworks. A wide variety of mechanisms are used to move value linked to criminal activity, especially in regions whose nations are at the low end of the development scale. For example, natural-resource crime is rampant across Africa, such as illegal, unreported and unregulated fishing, wildlife poaching, and the illegal mining and smuggling of mineral resources. When these goods are smuggled across borders, source and transit countries are disadvantaged economically, but, because they are not generally accepted media of exchange, they may not be included in definitions and measures of IFFs. Similar challenges are faced when seeking to value the crimes of migrant smuggling and human trafficking. Therefore, crime IFFs do not always involve money or easily liquidated capital.

Although measures of IFFs that include trade mispricing may capture these flows, narrow interpretations of 'financial' would not include trading of goods and may not fully capture crime IFFs. This is likely to have a disparate impact on the estimates of the scale of IFFs flowing from less developed nations.

'Flows': Cross-border transactions

A common requirement is that IFFs must be cross-border transactions. Although, on the face of it, this is not problematic, in application two issues arise.

The first issue is the conflation of the term 'IFFs' with the terms 'capital flight' and 'trade mispricing'. The terms are often used interchangeably, and wrongly so. As an illustration, capital flight, sometimes driven by macroeconomic and governance factors, can be entirely licit.[39] Furthermore, and importantly, measures of capital flight and trade mispricing hinge on trade statistics. Hence, methodologies used to measure the flows do not easily translate to broader measures of IFFs, as they inherently give greater weight to commerce IFFs over crime and corruption IFFs. Also, terminology can influence assumption of responsibility, with the shift from using 'capital flight' to 'IFFs' emphasizing the two-way nature of flows and the shared responsibility of developing and developed countries to address the threat.[40]

Despite the increasing recognition of the need for differentiation, the terms continue to be applied interchangeably. For example, the joint AfDB and GFI report employs a broad definition of IFFs, found in Table 1, and explicitly states that the concept of IFFs differs from that of capital flight. However, the methodology refers only to measures of 'capital flows' and 'trade mispricing'.[41] There is no issue with offering estimates of capital flight and trade mispricing as a portion of IFFs, but to extrapolate on the estimates and claim they represent all IFFs, in particular crime IFFs, is misleading.

'To date, no single measurement model has been able to generate reasonable, consistent and robust estimates of all types of IFFs.'

The second issue is that the cross-border component of the definition neglects to account for flows generated and spent domestically, which are likely to be very sizeable. Internal flows include both those that facilitate corruption and those spent on daily needs, real estate and luxury goods. The use of criminal profits to fuel corruption is well documented and thought to account for a large portion of criminal profits – including those generated by narcotics, migrant smuggling[42] and wildlife crime.[43] Furthermore, when flows cross a border, it is unclear whether they would be classed as a crime or corruption IFFs. The challenge of differentiating between crime and corruption is particularly great when public officials are directly involved or engaged in criminal activities, and not just abusing their power.[44]

With regard to personal spending, Yikona et al. found the proceeds of crime and corruption in Malawi and Namibia are spent based on Maslow's pyramid of needs. Reflecting Maslow's needs hierarchy, most of the proceeds of crime or corruption will be spent on daily consumption (family expenses). Once these daily needs are met, money is spent on goods further up the hierarchy, such as houses, and luxury or lifestyle items, such as cars. Entrepreneurial investments (other than investment in the original crime business) will be a third level of preference, with a bias toward 'sterile investments', such as real estate.[45] As such, a significant portion of criminal profits are spent domestically and will not be accounted for in measures of IFFs.

The question also arises, if the term 'IFFs' applies only to cross-border transactions, what term can stakeholders use to describe domestic illicit flows, which often feed or are intermingled with transnational flows? The requirement that flows be cross-border is a useful parameter for commerce IFFs, which are often motivated by tax evasion or trade-based money laundering (TBML), and which require movement across borders, but the limitation constrains a more comprehensive understanding of crime IFFs.

Limiting the scope to cross-border flows, however, is not a fundamental pitfall. In fact, to develop a standardized model to measure the scale of illicit flows linked to crime, it is even recommended. However, the exclusion of domestic flows must be made clear in presenting estimates, as must the considerable size of domestic flows in many instances. In addition, thought must be given to terminology that may be applied to domestic illicit flows. By acknowledging the potential drawbacks, it is possible to retain the condition that illicit flows be cross-border without misrepresenting IFFs, and subsequently misinforming policy development.

Measuring IFFs

First-generation estimates of the scale of global IFFs have played a critical role in drawing attention to the issue of IFFs.[46] However, to date, no single measurement model has been able to generate reasonable, consistent and robust estimates of all types of IFFs[47] and no single method is regarded as the 'gold standard'.[48] The lack of a coherent model highlights the need for disaggregated measures of IFFs, especially those that clearly assess the scale of crime IFFs.

This is not the first time there has been a call for the disaggregation of IFF analysis. For example, Reuter argues analytic progress will be made through disaggregation of sources and channels and the methods used to move funds internationally, and that this has important implications for responses, as different IFF types will respond to the various control mechanisms in different ways.[49]

There have been efforts to specifically measure crime IFFs, although these are often formulated as measures of money laundering, and not total crime IFFs. However, even more targeted methods have faced challenges and criticism. Revenues from transnational organized crime are defined differently in almost every country and there is little empirical evidence of where dirty or 'white-washed' financial flows stay or are transferred to.[50]

As such, there is no golden standard when it comes to measuring crime IFFs, much less global IFFs as a whole.

Macro-models based on economic statistics

Models based on BOP data

The World Bank residual model, one of the most popular methods to estimate unrecorded flows, measures the difference between a country's source of funds (inflows) and the recorded use of these funds (use). The inflow of funds is defined as any increase in foreign debt plus incoming foreign direct investment (FDI). Funds used are those necessary to finance the deficit in the current account plus additions to the country's official reserves.[51] If there are more funds coming in than being used, the resulting shortfall is considered to be IFFs. A rigorous application of the

model takes into account debt forgiveness, exchange rate fluctuations, inflation variability and the existence of a sovereign wealth fund.[52] The model can be illustrated as follows:

Illicit flows = (increase in foreign debt + increase in FDI) – (financing of the current account deficit + additions to the country's reserves)[53]

The change in external debt (CED) model is a modified version of the World Bank residual model. Traditional application of the World Bank model nets out illicit inflows from outflows, but the CED measure includes all illicit outflows.[54]

The hot money model analyzes the errors and omissions in BOP data. In theory, all funds received by a country (credit) should be offset by funds going out or being used to pay debts (debt). However, in practice, BOP data usually shows unexplained 'leftovers'. In order to achieve a zero balance, these discrepancies are captured in a catch-all line item called 'net errors and omissions'. The hot money model considers the errors to be IFFs.[55]

Illicit flows = all funds coming in (credit) – all funds going out (debt)[56]

Of the BOP models, the World Bank residual model is likely to generate the most reliable estimates because it collects raw data from each country and then calculates the discrepancy between the sources and the uses of funds. In contrast, the hot money model simply takes the 'leftovers'.[57]

Models based on trade data

Models based on trade data largely measure trade mispricing. Trade mispricing is a common method used to launder money, commonly known as TBML. Launderers can create fake high-value invoices for low-value goods or reverse this procedure as a way of concealing ill-gotten gains.[58] It is thought TBML is on the rise. In 2012 the Financial Action Task Force (FATF) concluded that 'the rapid growth in the global economy has made international trade an increasingly attractive avenue to move illicit funds through financial transactions associated with the trade in goods and services'.[59]

One method to measure trade mispricing is the gross excluding reversals (GER) method.[60] GER calculations are based on the difference between reported exports and imports of countries trading with one another. The absolute value of the export under-invoicing is added to import over-invoicing to arrive at a GER estimate.[61] More intensive applications of the GER model consider both the country risk and merchandise risk when assessing which flows are vulnerable to TBML. For example, John Zdanowicz has analyzed US trade data to identify and quantify suspicious merchandise, the share of trade subject to money laundering for each country, and the amount of money laundering between the US and countries on the al-Qaeda watch list. He provided both country risk and merchandise risk indices, flagging the countries and products most threatened by money laundering.[62] However, operating on the assumption all unusual transactions have a criminal intention and are not due to error is a serious weakness of the method.

Combination models

Other models combine measures of BOP and trade data to generate estimates of IFFs. This is the approach of GFI and the African Development Bank (AfDB). GFI and AfDB estimate IFFs from a specific country using the CED version of the World Bank residual method adjusted for trade mispricing (using the GER method). For the study, normalized estimates required that capital outflows exceed a minimum of 10 per cent of the country's exports, the assumption being that lower levels may be due to data discrepancies rather than genuine IFFs. Non-normalized IFFs include all estimates of IFFs, no matter how small. To address gaps in data, the research team assumed that net recorded transfers are equal to the opposite of the net of current account balance.[63] Using this method, the AfDB and GFI estimate Africa lost between US$1.2 and 1.4 trillion dollars over the period 1980–2009, with the caveat the estimates are likely to be understated due to missing data and the inability of economic models to capture all types of illicit flows (such as those arising from drug trafficking or smuggling).[64]

GFI has applied the same methodology in other studies to estimate global IFFs. GFI estimated that illicit outflows from Africa between 1970 and 2008 amounted to US$854 billion.[65] More recently, GFI estimated that Africa lost between US$36 billion and US$52 billion from 2005 to 2014, an amount equivalent to between 7.5 and 11.6 per cent of the region's total trade. More broadly, GFI estimated that total IFFs to and from developing countries amounted to between 13.8 and 24.0 per cent of total developing country trade (exports plus imports) in 2014.[66]

Based on a similar methodology, UNECA found that IFFs from Africa are large and increasing. Research, focusing mainly on the merchandise trade sector, found that illicit financial outflows from Africa had increased from about US$20 billion in 2001 to US$60 billion in 2010.[67]

A similar model is used by Boyce and Ndikumana, whose estimates of the scale of IFFs include trade misinvoicing as well as unrecorded remittances. Using this approach, it is estimated that between 1970 and 2010 total capital flight from 33 sub-Saharan African countries was $814.2 billion (in constant 2010 dollars) between 2005 and 2010, and that these countries lost US$202.4 billion.[68] The biggest difference between GFI's methodology and that of Boyce and Ndikumana is that the latter allows for the possibility that there can be 'reverse' flows of capital flight and for the possibility that net import misinvoicing (and net trade misinvoicing overall) can result in a downward adjustment of capital flight estimates.[69] In contrast, GFI sets to zero the values of capital flight and its components when they are negative, arguing that 'there is no such thing as net crime'.[70]

Drawbacks: Data challenges and disparate weighting of commerce IFFs

Measurement models based exclusively on BOP and trade data are inappropriate proxies for estimating crime IFFs for a number of reasons.

The first challenge is that macro-models based on economic statistics suffer from a dearth of comprehensive trade statistics, especially from less-developed countries. While BOP and trade data is unreliable on a global scale, this is especially true for developing nations, where robust trade and economic data may not be available, nor can the accuracy of existing data be easily verified. For example, statistics are compiled by the International Monetary Fund in a database called Direction of Trade Statistics, but the data suffers from weaknesses, including poor statistics-gathering procedures in developing countries.[71]

'A further drawback of macro-models that rely on economic data is that they inherently give greater weight to commerce IFFs.'

In addition, because crime IFFs may cross over borders in a number of ways and forms, many crime IFFs will not appear in BOP and trade data. Large-scale, official data sets are not able to take into account flows resulting from illicit activities, such as contraband, smuggling and black market activity, since profits from such activities are not captured in national accounts.[72] Moreover, any trade mispricing will not be picked up in the model if there was collusion between importers and exporters to fake invoices.[73] Also, if criminal income is laundered domestically before being transferred abroad, it would still conceptually constitute an IFF, but it would not be reflected in models that rely on BOP and trade data.[74] Furthermore, the wide use of informal financial networks, such as *hawala*, enables illicit flows to easily cross borders without any records.[75]

Further heightening the risk of missing crime IFFs is the issue of cash-based societies and massive informal sectors, most often found in less-developed countries. Cash-based economies with large informal sectors are able to launder large volumes of cash – both legitimate and ill-gotten money – without any formal records. Ill-gotten money may be injected directly into the legitimate economy through the use of cash to purchase durable consumer goods (such as cars), the acquisition of real estate, and for investment and business purposes.[76] This is reinforced by the World Bank study on IFFs within and out of Malawi and Namibia, which found ample opportunities to spend or transfer illicit funds without entering the formal financial system, such as the common practice of buying and selling real estate privately using cash.[77]

Another drawback is that trade asymmetries will inevitably occur for a variety of, often valid, reasons and do not necessarily reflect trade mispricing or other IFFs. For example, trade data needs to be adjusted for transport costs. Exporting countries report the value of goods at the initial point of departure (f.o.b.), while import values refer to the value at the point of final destination, thereby including the costs of freight and insurance (c.i.f.). The World Bank residual model does not account for discrepancies such as time lags and different calculation conventions in its calculations of IFFs.[78] When assumptions are made, typically, a 10 per cent difference in the c.i.f./f.o.b. ratio is assumed and any differences that exceed this figure are attributed to mispricing. For example, GFI adopts a fixed c.i.f/f.o.b. conversion factor, irrespective of trade distance and commodity composition. However, in practice, transport and transaction costs can vary widely. Without a more nuanced approach to transport and transaction costs, estimates of IFFs based solely on trade data are better treated as an indication that trade mispricing may be occurring, rather than as confirmation of IFFs.[79]

Furthermore, countries will have different reporting practices, which will result in discrepancies in trade data. As explained by Forstater, a 2016 report by the UN Conference on Trade and Development (UNCTAD) illustrates how variations in reporting can result in false positives of IFFs. The UNCTAD report analyzed mismatches in international trade data in the UN Comtrade database for seven country–commodity pairs, including gold exports from South Africa. The original report calculated that 'virtually all gold exported by South Africa leaves the country unreported', accusing mining companies of smuggling billions of dollars' worth of gold. The findings were disputed by the South African government, which, in response, commissioned a report from economics consultancy Eunomix. Eunomix found that mining companies and public agencies report gold exports, but not in a format compatible with UN Comtrade's requirements. As such, they were able to provide explanations for three-quarters of the discrepancy in trade statistics.[80] The experience of UNCTAD highlights that it cannot automatically be assumed that discrepancies in trade statistics are indications of IFFs.

A further drawback of macro-models that rely on economic data is that they inherently give greater weight to commerce IFFs over crime and corruption IFFs. This is largely a result of the much greater availability of data and statistics linked to flows, such as capital outflows and trade mispricing, than illicit flows generated by criminal or corrupt activity. Forstater highlights the problem of such an approach with an apt analogy: 'A man is searching for car keys under a lamppost. After joining his search you ask whether he is sure that this is where he lost the keys. "No, I'm pretty sure I lost them down the road," he replies, "but the light is better here."'[81]

Unfortunately, this philosophy appears to drive current efforts to quantify the scale of IFFs. The most widely referenced models estimating the scale of IFFs are shaped by the availability of statistics and, consequently, largely fail to account for IFFs beyond trade mispricing and capital flight. For example, although acknowledging the very negative impacts of criminal IFFs, UNECA focused on trade mispricing, mainly because of the availability of data and the fact that UN Comtrade data enables the use of trade data.[82] As a result, the resulting figures are at high risk of understating the contribution of corruption and criminal proceeds to global IFFs.[83]

An examination of GFI's methodology and conclusions illustrates how a reliance on economic data can disparately weight commerce IFFs over crime and corruption IFFs, and influence policy response.[84] GFI has asserted that the proceeds of commercial tax evasion, mainly through trade mispricing, are by far the largest component of global IFFs, accounting for some 60 to 65 per cent of the global total, while bribery accounts for about 3 per cent of global IFFs and proceeds generated through drug trafficking, racketeering, counterfeiting, and other crimes, are about 30 to 35 per cent of the total. This same breakdown of IFFs has been applied to Africa, even though GFI explicitly acknowledges that it has made no attempt to verify the percentages for Africa.[85]

Table 2: Cross-border flows of global dirty money (US$ billions)

Crime	Global		Developing and transitional economies	
	High	*Low*	*High*	*Low*
Criminal	549	331	238	169
Corrupt	50	30	40	20
Commercial	1 000	700	500	350

Source: Raymond Baker, *Capitalism's Achilles Heel*. Hoboken: John Wiley & Sons, 2005, 172.

The original source of the breakdown can be traced to the chapter 'Magnitudes and misunderstandings' in Baker's work, which asserts global IFFs are 31 to 34 per cent crime; 3 to 5 per cent corruption; and 63 to 65 per cent commerce[86] (see Table 2). However, the evidence and methodology employed to generate estimates of cross-border flows stemming from crime are problematic. Baker reports that global organized crime is estimated to have annual revenues of around US$1.5 trillion, which is sourced from a 2001 speech, which seems to be based on a 1999 UN report.[87] While the use of this figure could be criticized due to the lack of evidentiary support and dated nature, Baker dismisses the figure to generate his own assessment of global crime IFFs, valuing them as shown in Table 3:

Table 3: Cross-border flows of global dirty money by type (US$ billions)

Crime	Global		Developing and transitional economies	
	High	*Low*	*High*	*Low*
Drugs	200	120	90	60
Counterfeit goods	120	80	60	45
Counterfeit currency	4	3	2	1
Human trafficking	15	12	12	10
Illegal arms trade	10	6	4	3
Smuggling	100	60	40	30
Racketeering	100	50	30	20

Source: Raymond Baker, *Capitalism's Achilles Heel*. Hoboken: John Wiley & Sons, 2005, 172.

The reliability of the data and information used to inform the estimates are questionable, and analysis is minimal. For example, focusing on natural-resource crimes, the sole assessment of the wildlife trade is: 'Smuggling of endangered species may be overestimated at $8 billion a year', and the smuggling of conflict diamonds and other gems out of Africa and Asia appears to be arbitrarily valued at 'millions a year', without offering any figures or evidence to support the claim. In addition, the assessment does not include some crimes that currently have a significant presence and impact, including migrant smuggling and cybercrime.[88]

Although Baker is formative and instrumental in drawing attention to the issue of IFFs, the approach and statistics employed to generate the percentage breakdown of IFFs into crime, corruption and commerce are methodologically disputable, based on questionable statistics and dated.

Further cracks appear when the methodology and findings of various GFI reports are compared. According to GFI, IFFs from developing and emerging economies kept pace at nearly US$1 trillion in 2014.[89] However, GFI also reports that the retail value of transnational organized crime is US$1.6 trillion to US$2.2 trillion.[90] In turn, GFI appears to employ a broad definition of IFFs (including illicit flows resulting from crime) while applying a much narrower methodology to measure the scale of IFFs.

The distortion is problematic, as it misleads stakeholders attempting to identify and combat the biggest threats to development. Approaches that claim to measure all types of IFFs but inherently give greater weight to commerce IFFs draw attention away from crime IFFs, as well as corruption IFFs, which are likely to represent a significant

amount of IFFs.[91] This misrepresentation has significant implications for assessing the damaging impacts of IFFs and developing policy responses. For example, the percentage breakdown advanced by GFI and Baker has been widely cited, including in the development context, for prioritizing responses to commerce IFFs. In fact, the lack of knowledge on the scale and form of crime IFFs has created a tendency to dismiss this IFFs type.[92]

This is not to say BOP and trade data should be ignored. The data sources are instructive in flagging where IFFs may exist, can be used to triangulate other information sources and are a valuable resource for measuring commerce IFFs. For example, there are strong indicators that immense quantities of gold are smuggled for tax evasion and money-laundering purposes, with gold trade data shedding light on the scale of illicit flows linked to the gold sector. However, understanding the limitations of the data and the need for triangulating data with other information sources is critical.

Lessons learned from measures of non-observed economies

It is valuable to take from lessons learned from efforts to measure non-observed economies (NOEs), or shadow economies, a closely related field to IFFs. As is the case with IFFs, there is also a lack of consensus on how to define, as well as measure, NOEs. In particular, there is debate as to whether illegal activity ought to be included. Friedrich Schneider, a prominent academic in the field, excludes illegal activities in his definition of the shadow economy. In contrast, both the UN System of National Accounts, the European System of National Accounts and the OECD all include illegal activity.[93] A common working definition is 'all currently unregistered economic activities that would contribute to the officially calculated (or observed) Gross National Product (GNP) if observed'.[94]

In 2002 the OECD produced 'Measuring the non-observed economy: A handbook', the work of a community of national income accountants who collaborated to generate exhaustive and internationally comparable estimates of NOEs.[95] A primary motivation for this publication was reports of alarmingly large NOEs generated by macro-model methods. Also, measures of gross domestic product (GDP) inform and influence key policy decisions of international agencies, so national accounts of developing nations (which have sizeable NOEs) need to accurately and exhaustively measure the level and growth of their productive capacities.[96] The drivers mirror the dialogue around IFFs. There are enormous estimates of IFFs generated by macro-model methods and, with the reduction of IFFs a target of the SDGs, measures of IFFs are being used to inform policy and measure progress.

However, the OECD handbook found macro-model estimates of NOEs unhelpful, criticizing macro-model estimates and calling into question the validity of assumptions, stability, reliability and precision. The handbook discusses macro-model estimates 'not because they are considered useful in obtaining exhaustive estimates of GDP or in estimating underground production, but because they tend to produce spectacularly high measures, which attract much attention from politicians and newspapers'.[97] These same criticisms could easily be levelled against macro-models of IFFs.

As such, lessons learned in relation to NOEs are highly relevant to IFFs, in particular the need for greater transparency in reporting results and for distinguishing between different types of economies or flows.

Measures of money laundering

Unger offers a useful overview of different methods used to measure money laundering, which is often utilized as a proxy for crime IFFs. In addition to models based on statistical discrepancies, such as those already discussed, models used to measure money laundering include the multiple indicators, multiple causes (MIMIC) model and the gravity model.[98]

The focus on money laundering influences responses to crime IFFs, with a large investment into AML regimes. While there are positive outcomes from AML efforts, such as enabling prosecutors to bring additional charges against individuals who might otherwise be able to avoid prosecution and generating databases that help investigations,

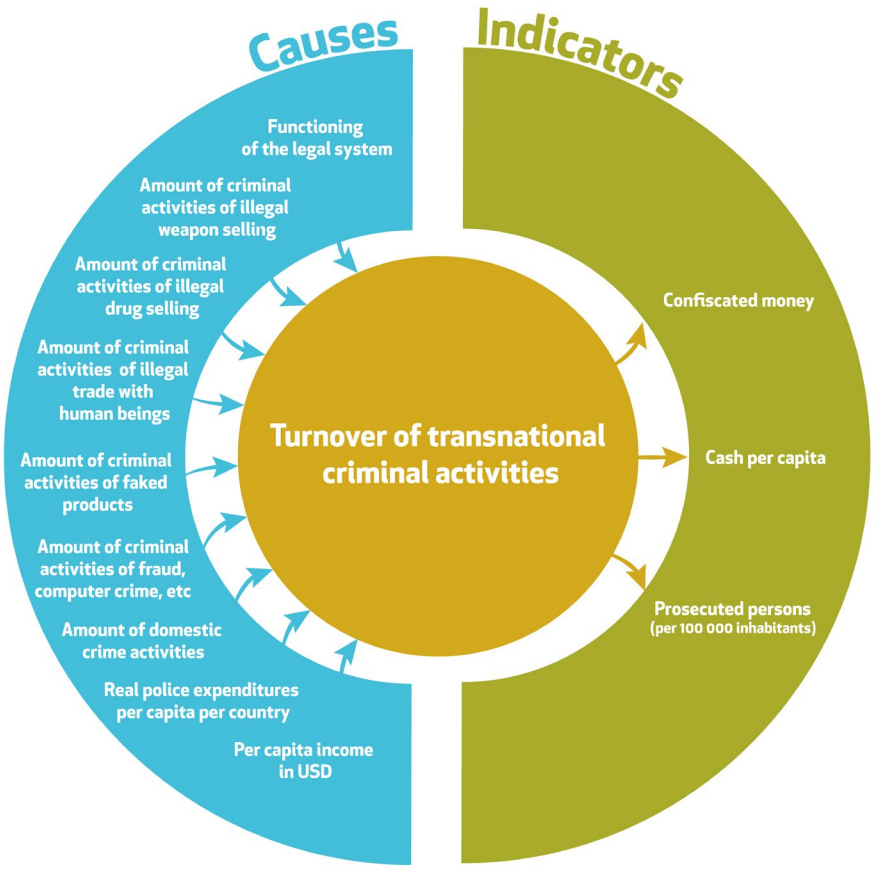
there is little evidence that AML regimes have reduced global IFFs or the scale or severity of underlying, predicate crimes.[99] According to UNODC, less than 1 per cent of the amount of money being laundered is detected. In comparison, more than 20 per cent of globally produced illicit opiates are seized and more than 40 per cent of cocaine.[100] These figures warrant a discussion about whether resources would be better used to treat the cause of IFFs (predicate crimes) rather than the symptoms (money laundering).

MIMIC model

The MIMIC model, a version of the latent variable method, adapts methods to measure the shadow economy, also known as NOEs, to measure money laundering. Buehn and Schneider used the MIMIC method to estimate the volume of assets laundered and its time series trajectory between 1995 and 2006 for 20 OECD countries. The authors estimate that for the countries included in the study, money laundering from transnational organized crime increased from US$273 billion in 1995 to US$603 billion in 2006, albeit with the clearly stated contention that the figures are preliminary with a relatively large margin of error.[101]

The MIMIC model uses two sets of observable variables (causes and indicators) and links them as a proxy to the unobservable variable. To estimate the scale of money laundering, the MIMIC model measures various causes for more laundering (i.e. various criminal activities, regulations and taxation, etc.) and indicators (confiscated money, prosecuted persons, growing demand for money, less official growth, and/or increases in crime rates, etc.) to get an estimation of the latent variable (the volume of money laundering).[102]

Figure 2: MIMIC model



Source: Adapted from Andreas Buehn and Friedrich Schneider, A preliminary attempt to estimate the financial flows of transnational crime using the MIMIC method, in Brigitte Unger and Daan van der Linde (eds), *Research Handbook on Money Laundering*, Edward Elgar Publishing, 2013.

A strength of the MIMIC model is that it can be applied to all countries and jurisdictions in the world, and it accounts for legitimacy.[103] Other arguments in support of the MIMIC method include the fact it takes a wider approach than most other competing methods, since it allows one to take multiple indicator and causal variables into consideration at the same time, and the flexibility of the method does not require restrictive assumptions to operate.[104]

A drawback of the MIMIC model is that the choice of cause and indicator variables is arbitrary and not reinforced theoretically.[105] The model uses factor analysis to determine how well the different cause variables explain the unobservable variable and those that can be grouped together. The same is then done for the indicator variables. This means statistics decide which indicators form the relevant bundle of causes of the shadow economy (or money laundering) and which are relevant for the parallel indicators of a shadow economy (or money laundering).[106] Consequently, the resulting set of variables is rather arbitrary and not necessarily reinforced theoretically.[107]

To further understand this criticism, it is valuable to assess the MIMIC model in relation to NOEs, or shadow economies. In a criticism of Schneider's use of the MIMIC model, Feige points to studies such as Helberger and Knepel's, which concluded that MIMIC results 'are extremely unstable and cannot be regarded as reliable statements about the shadow economy',[108] and Breusch's, who expresses concern about the 'control that the researchers exercise over their methods to ensure that the results are interesting, and reasonable (meaning challenging but not too outlandish)'.[109] Feige also argues that Schneider achieves consistent substantive results conforming to his prior beliefs by selecting indicator variables and normalization coefficients that vary from study to study.[110]

The MIMIC model, like other models, also suffers from a lack of adequate data on criminal activity. Hence, estimations are couched within wide margins of error (+/–20.0 per cent), and can be seen only as preliminary scientific estimates, or in some cases even 'guesses'. This is readily acknowledged by Schneider, who clearly states 'the data is quite erroneous, rather incomplete and the estimation is not robust'.[111]

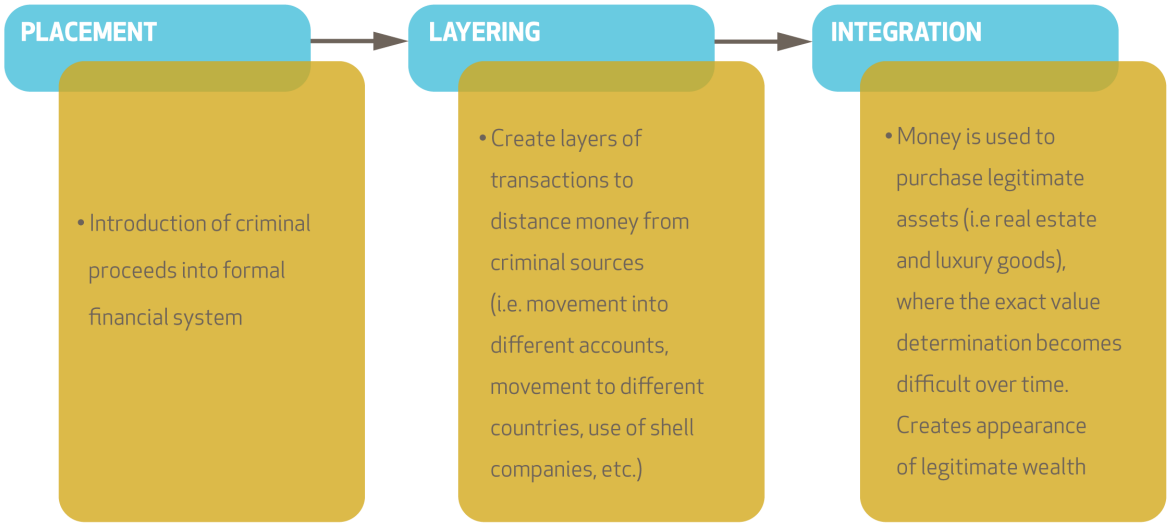
The gravity model

The gravity model is a two-step model developed by John Walker in 1994 in an effort to generate a global estimate of money laundering by measuring illicit flows of money in and out of 220 countries. The model assumes that: i) crime generates income in all countries; ii) criminal income depends on the prevalence of different types of crimes and on the average profit per criminal offence; iii) organized crime is more productive than simple crime; iv) crime is more profitable in higher-income countries; v) income inequality allows the existence of a criminal class even in poor countries; and vi) not all criminal profit is laundered. In a 2004 application of the study, Walker estimated the benefits of crime for the Australian economy to be between 2.8 and 6.3 billion Australian dollars.[112] In 2005 Walker applied the gravity model to predict global drug money flows, and Unger et al. used the gravity model to estimate money laundering for the Netherlands.[113]

The gravity model employs a multi-step process to map the scale and direction of money laundering. The model first estimates the total amount of proceeds of crime. To calculate total amount of money available for laundering, official estimates of volume of illicit goods are multiplied by the market price of such goods. Then, as not all proceeds of crime are laundered, an estimate of the percentage of proceeds of crime likely to be laundered is made.[114] In the second stage, the principles of gravity are applied to determine the likelihood (and magnitude) of flows between countries. The distance between countries, if countries share a border, and the attractiveness of a country to dirty money are taken into account.[115] A number of newer models in international trade theory, including work by the International Monetary Fund, have shed light on the role of gravity (distance and borders) in determining the attractiveness of countries for trade, which can also be applied for improving estimates of money laundering.[116] The results of the two steps are then combined to calculate the total amount of IFFs into any given country.

Illicit flows = proceeds of crime available for laundering [(volume x market price of illicit goods) x percentage laundered] x gravity (attractiveness/distance)

Figure 3: Money-laundering process



In quantifying 'gravity', a number of factors are taken into account to judge the attractiveness of a location to money launderers. Many crime types generate proceeds in the form of cash, so laundering the money requires placement processes to layer and integrate the funds (see Figure 3). Banking systems that are cash-friendly, rather than particularly sophisticated, and geographically close, due to challenges in transporting cash, will be attractive at this phase. The money may then proceed to other countries, where more sophisticated banking systems perform the layering and integration processes. Offences that generate non-cash financial proceeds may generate funds already placed and may be layered in financial accounts, and do not require these initial laundering stages. Also, when proceeds are transferred electronically, the bank's proximity has little relevance. Of more significance is the willingness of the banking system to protect the identity of the customer, and the capacity of the banking system to provide the necessary services. In other contexts, offences that generate proceeds in the form of commodities may require processes that disguise the illicit nature of their origins – for example, integration into legitimate businesses.[117]

A strength of the gravity model is that it accounts for transport and transaction costs. For example, distance will have an impact on transaction costs, such as the search for trading opportunities, the establishment of trust between partners, and cultural barriers. As with licit transactions, when assessing illicit flows, the roles of cultural distance (clashes in negotiation style, language, etc.), of historical common backgrounds and of trade relations can heavily influence flows.[118] In addition, countries trade more if they share a border. Irrespective of distance, trade is about 65 per cent higher among countries that share the same border than those that do not have a common border.

Also, measures of the rule of law may indicate the unwillingness of a country's operators to launder illicitly generated funds. Compliance with the FATF's recommendations may be an indicator of the unwillingness of a country's operators to launder illicitly generated funds. At the same time, the existence of a large shadow economy tends to facilitate effective hiding of illicit funds and is therefore likely to act as an incentive for money launderers to invest their funds in such countries.[119]

However, due to a lack of high-quality data on the value of criminal activities, the model does rely on 'expert knowledge' and a number of assumptions, leaving it up to experts in the field to judge whether or not the results are reasonable. This takes the form of calibration, which consists of finding the value of each parameter of the model (constant and exponents) to ensure that the estimated results are similar to the observed flows. It is impossible to know if the process of calibration is accurate without comparing estimated results with empirical evidence.[120]

Money laundering not necessarily indicative of criminal IFFs

It is argued that measures of money laundering are an appropriate representation of crime IFFs because money laundering is essential to moving and using criminal profits in the formal economy without detection.[121] However, there are a number of reasons why this is not necessarily true.

Due to the clandestine nature of money laundering, only a small proportion of cases surface. This is especially true for developing nations where large amounts of criminal proceeds are thought to be spent, invested or laundered using cash, which is unlikely to show up in measures of money laundering.[122]

Furthermore, there are indications that only a small portion of criminal profits are laundered. A model developed by UNODC for the 2009 cocaine market estimated that only about 30 per cent of cocaine proceeds at the global level translated into IFFs, a finding reinforced by a study based on interviews with prisoners involved in the drug trade in Italy suggesting that roughly a third of the money spent by cocaine users was being laundered across borders.[123] If this proportion applies to all crime types, measures of money laundering would reflect only a fraction of illicit flows stemming from crime.

There is also the risk of double-counting flows. Since money laundering involves many stages, the same money may go through many different transactions in the laundering process. Therefore, financial transaction data is at risk of double-counting (or more than double-counting) crime IFFs.[124] For example, the proceeds of crime may be counted once as crime IFFs and again as commerce IFFs if laundered through trade mispricing.

In addition, indicators of money laundering may misdirect stakeholders seeking to identify the source of the illicit flows. Often, funds generated in a country facing high levels of insecurity are laundered in a more stable neighbouring country. With the layering phase, the launderer might choose a location with a sturdier financial or business infrastructure, such as a large regional business centre. Similarly, at the integration phase, launderers might choose to invest laundered funds in other locations if they were generated in unstable economies or locations offering limited investment opportunities.[125] As such, models limited to measuring money laundering are in danger of attributing crime IFFs to transit, or even unrelated countries rather than source countries.

Consequently, it is important to consider the question, what do we want to measure? While there is arguably more data to estimate the scale of money laundering as opposed to overall crime IFFs, this leads to the trap of the availability of data shaping questions rather than questions determining the pursuit of data.[126] Relying on money laundering ignores the predicate crimes and provides little insight into the source, impact or intended use of the IFFs.[127] In turn, policymakers are unable to distinguish the reasons why funds are illicit and address root causes.[128]

Crime-based models

A different approach to estimating the scale of crime IFFs is to limit investigation and estimation to a crime type or geographic region, most often the country level. For example, the World Bank has undertaken efforts to improve understandings and measures of IFFs at the regional and domestic levels, working to create a methodology tailored to countries on the basis of their exposure to IFFs and conducting a country-specific study that explores how to monitor and measure specific aspects of IFFs at the domestic level.[129] This more tailored approach is both a strength and weakness: although it is likely to generate more accurate estimates, it does not allow for mapping and comparison on a large scale.

One example of focusing on a single crime type is efforts to quantify the illicit small-arms trade. As it does with IFFs, SDG 16 also aims to reduce illicit arms flows. Indicator 16.4.2 seeks to measure the 'proportion of seized small arms and light weapons that are recorded and traced, in accordance with international standards and legal instruments'. However, as is the case with IFFs, there are significant challenges to measuring the trade in illicit small arms. The 2016 Small Arms Survey reports that only limited information is available on the types, quantities and value of illicit

arms circulating worldwide, and that national reporting is patchy. For example, neither existing firearms protocol reports nor the data that various states provided for the UNODC 2015 firearms study provide a comprehensive, global measure of the proportion of seized small arms that are recorded and traced. The Small Arms Survey argues that even if states give full effect to Indicator 16.4.2, this will provide only partial information on illicit arms flows and on its own will do little to reduce illicit arms flows over time. In fact, the emphasis on measures could result in a presumption in favour of the retention (and recording and tracing) of such weapons. While this would be useful for data-collection purposes, the best way of ensuring that seized weapons are not diverted back into the illicit market is to destroy them. As such, efforts to develop measures for Indicator 16.4.2 could divert energy away from the broader range of existing measures that are already in place.[130]

Estimates by crime type can be compiled to generate larger estimates of the value of criminal activity. One such study is May's, which provides an estimate of value by crime type. The report compiles data sets and price statistics from governments, non-governmental bodies, law enforcement and other experts, with more targeted and varied methodologies used depending on the crime type. Using this approach, May estimates that, on a global scale, revenues generated from the 11 crimes covered range from US$1.6 trillion to US$2.2 trillion a year.[131] However, often these estimates cannot be equated with IFFs, as efforts are not made to determine the value that moves across borders.

Table 4: The retail value of transnational organized crime (May 2017)

Transnational crime	Estimated value (US$ billions)
Drug trafficking	426–652
Small arms and light weapons trafficking	1.7–3.5
Human trafficking	150.2
Organ trafficking	0.84–1.7
Trafficking in cultural property	1.2–1.6
Counterfeiting	923–1 130
Illegal wildlife trade	5–23
Illegal, unreported, unregulated fishing	15.5–36.4
Illegal logging	52–157
Illegal mining	12–48
Crude oil theft	5.2–11.9
Total	**US$1 600–$2 200 billion**

Source: Channing May, Transnational crime and the developing world, Washington DC: GFI, 2017.

A dearth of information encumbers efforts at quantifying all forms of illicit activity, while relying on a limited number of information sources is problematic. As such, triangulating information sources is imperative to informing assessments of illicit flows. Information sources can be quantitative (statistics on seizures, arrests, prosecutions, etc.) as well as qualitative (interviews, surveys, expert analysis, etc.).

The triangulation of data is useful in helping overcome hurdles relating to the availability and reliability of data. For example, seizure statistics can be questionable. In many cases, seizure statistics are thought to be a better reflection of the capacity of law enforcement than the scale of the criminal activity.[132] Also, surveys and interviews can suffer from biases; the sample might not be representative, the people interviewed or questioned might have had their own perception biases, and there may be interpretation biases. In addition, reports covering suspicious or unusual transactions are difficult to compare on a cross-country basis because of variations in reporting requirements, particularly thresholds that trigger a report and the extent to which non-monetary payment instructions (such as bearer instruments) should be included.

Additionally, EUROPOL highlights the challenges of employing asset seizure data to generate estimates of IFFs. At present, data is not harmonized across the EU, where different standards are used to collect information by each EU member state, and there are differences in the organization and structure of the EU national agencies. Also, the availability of statistics can vary according to the types of assets. Statistics on cash, real estate, and movable and registered assets are usually more complete and richer sources of information than statistics about companies or shares. Furthermore, although it is easy to determine and preserve the value of cash, it is not the same for other types of assets and criteria adopted because the estimations may vary from country to country. In addition, a significant amount of seized assets are returned to victims before final court decisions, and are therefore not included in confiscated assets statistics. All of these elements combine to produce a fragmented analysis of the recovery of assets and are an obstacle to building a comprehensive data set and generating an estimate of IFFs at the EU level.[133]

Despite the challenges, EUROPOL estimates that about €1.2 billion is confiscated each year in the EU, which represents 0.009 per cent of EU GDP. For a country with a GDP of €200 billion (roughly the 2014 GDP figure for Finland, Portugal or the Czech Republic), this amounts to about €17.7 million; for a country with a GDP of €1 trillion (e.g. Spain in 2014), the figure is about €88.7 million; for a country with a GDP of about €2.2 trillion (similar to the 2014 GDP of France or the UK), it is about €195.2 million.[134]

Case studies

Crime-based models most often appear in the form of case studies, which can provide a good indication of the extent of IFFs or money laundering on a small scale. These are helpful in order to understanding the behaviour of actors. However, their limited nature requires a number of additional assumptions to be made if the estimate is to be extrapolated to estimate larger flows, which may not reflect reality. Even the most targeted estimates are questionable and subject to major error margins.[135] As such, it is unclear how representative case studies are of global flows. In addition, case studies often use different methodologies, which may not enable comparison. Despite the drawbacks, case studies, and the methodologies developed to inform them, provide an incredibly important evidence base that can be used to inform macro-models. Some valuable case studies are summarized here.

- The World Bank study *Ill-gotten Money and the Economy: Experiences from Malawi and Namibia*. Yikona et al. attempted to quantify the economic magnitude of ill-gotten money generated by different kinds of criminal, illegal and unethical activities in Malawi and Namibia. The five-step analysis consisted of: 1) identifying the main crimes or sources of ill-gotten money; 2) generating a rough estimate of the magnitude of the flows of money involved; 3) drafting a narrative description on how the money is spent or recycled within the economy or across its borders; 4) analyzing the economic effects in a narrative way; and 5) analyzing the initial results of AML policies in conjunction with the observed magnitude and effects of money laundering. Findings were based on a combination of available crime statistics and other relevant data, suspicious transactions reports, a literature review, anecdotal information, perceptions of various experts in Malawi and Namibia, and basic macroeconomic research. While the approach adopted for the study was acknowledged to be methodologically disputable, it was deemed 'good enough' for the purpose of the study.[136]
- *Pirate Trails Tracking: Illicit Financial Flows from Pirate Activities off the Horn of Africa*. The World Bank 2013 attempted to track the financial flows from proceeds of piracy off the Horn of Africa in order to follow what happens to the ransom monies. Due to the lack of data, it was deemed research be conducted in the broadest way possible, and to apply a more experience-based approach. Thus, analysis and conclusions were largely based on structured interviews combined with analysis of several open and closed sources, and cross-checked with multiple sources. Using this methodology, the study calculated that an estimated US$339 million to US$413 million was paid in ransoms between April 2005 and December 2012.[137]

- *Illicit Activity and Money Laundering from an Economic Growth Perspective: A Model and an Application to Colombia.* In this study, Villa et al. assessed the size of illicit income and asset laundering relating to drug trafficking in Colombia. To calculate the illicit income from drug trafficking, the volume of cocaine production (from UNODC) was multiplied by the average of the point-of-export and US point-of-import price of the drug, minus the portion confiscated by the authorities. The authors find that the estimates of illicit income, money laundering and laundered assets are reasonable when compared to the history of the country.[138]
- *Illicit Financial Flows: Criminal Economies in West Africa.* In this most recent study, the OECD examines the inter-relationship between criminal economies and their generated revenue in West Africa, moving towards a qualitative understanding of the impacts of crime IFFs. The report is supplemented by five case studies, which focus on human smuggling, illicit narcotics trafficking, illicit trade in counterfeit and substandard goods, illicit ASGM and al-Qaeda in the Islamic Maghreb. Findings were based on a combination of a comprehensive desk review, key informant interviews and field research. While the study deliberately shied away from quantifying the scale and value of specific flows, for comparative analytical purposes estimates of the scale of illicit flows were made in each of the case studies (as well as select other types of crime). Each of the case studies adopted a methodology that best suited the crime type. Rough estimations of organized crime types in West Africa included ASGM (over US$3 billion); cocaine (over US$2 billion); illegal/unreported fishing (over US$1.25 billion); piracy (over US$500 million).[139]

A hybrid approach: The UNODC model

The 2011 UNODC model is a multi-step process, which makes use of both tailored crime- and country-specific estimates and the gravity model to generate more instructive estimates and mapping of crime IFFs. The study approximates the value available for laundering, estimating that US$2.1 trillion is generated every year by crime, of which US$1.6 trillion is available for laundering. Specifically, in relation to global cocaine trafficking, the UNODC 2011 study concluded that out of more than US$84 billion in gross profits, some US$26 billion leave the jurisdictions where the profits were generated. The largest outflows were from countries in North America (US$10 billion), South America (US$7 billion) and Europe (US$7 billion). The model suggests that the main destination outside the regions where the profits were generated would be the Caribbean. The study acknowledges that the outcomes rely on a large number of assumptions whose validity needs to be tested.[140]

The UNODC method consists of the following subcomponents:

1. What is the value of crime-related flows in various subregions?

Illicit trade networks are often complex and cover many countries. There are countries of production, wholesalers in a range of other intermediate or transit countries and retailers in countries of consumption, all of which need to be quantified. Where numbers of producers, wholesalers and retailers can be estimated, and sales volumes and unit prices are known, estimates can be made of the average per capita income of these groups in the network.[141]

Analysis ought to start with the mapping of a basic flow (such as the supply chain), and identify the routes (entity, geography, people) by which flows are generated and assess to what degree actors are extracting value, specifically a best estimate of the value at the point of export. In addition to scale, this line of questioning will shed light on who is adding value to or extracting value from the trade, and in what ways.[142]

Triangulation of various research techniques will be essential. Understanding the limitations of data is critical, and recognition of those limitations should steer research design, investigations and the analysis and interpretation of results obtained.[143] Different approaches (including interviews, seizure data, expert insight, etc.) ought to inform estimates.

2. How much of these flows enter the financial system?

The next component estimates 'launderable' incomes, asking how much of these flows enter the financial system, as opposed to being spent on personal consumption or business costs. When crime generates proceeds in small amounts, the offender will spend a significant proportion of this income on living costs and minor luxuries, leaving only a small proportion available for laundering. In contrast, offenders whose proceeds of crime accrue in large amounts are likely to launder a greater proportion of their income.[144]

One approach to estimating the proportion of criminal profits laundered is to estimate average income per wholesaler and retailer of cocaine in each country and then to subtract 'reasonable living expenses'. Yet, the results from such a model could be grossly misleading, as the 'average drug trafficker' does not exist and the income distribution of drug traffickers tends to be very uneven. Therefore, UNODC developed a more sophisticated model, which, firstly, estimates the number of traffickers involved at the retail and wholesale levels in key countries; secondly, analyzes the market structure; and, thirdly, applies the analyzed market structure to the estimated number of traffickers at the retail and wholesale levels.[145]

While standard frameworks are a useful starting point, methodologies will need to be adapted on a crime-specific basis because spending patterns, money laundering methods, and economic effects can differ from crime to crime.[146] For example, some crimes are cash-based (such as the trade in illicit drugs), whereas others are mainly bank-based (such as various forms of fraud).[147] Also, models will need to be simple, flexible and adaptable to low-income and middle-income countries alike.[148]

'IFFs deprive developing countries of resources that could be used for public investment and service delivery, and they shrink private investment.'

Estimates of the value of criminal profits entering the financial system need to be conducted on a country-by-country basis. The reason for this is twofold.

First, goods have different values at different points in their supply chain. The 'street' or 'market' value is not necessarily reflective of the value of the good at the source or transit country. For example, UNODC found that the proportion of profits available for money laundering from the cocaine trade greatly varies along the supply chain. At the wholesale level, an estimated 92 per cent of gross profit from cocaine was available for money laundering, while at retail level the figure dropped to 44 per cent.[149]

Secondly, if estimates are given only at a regional or continental level, they are likely to hide large variations between countries.[150] For example, Herkenrath found a clear intraregional variance in GDP-weighted IFFs in the African context. The differences indicate that regional dynamics play a smaller role in the creation of IFFs than country-specific factors. It would therefore be misleading to attempt to generalize at a regional level (or continental level) the ratio of flows entering financial systems.[151]

3. How much of the flows cross borders for money-laundering purposes, reflecting the actual transnational illicit financial flows from the proceeds of transnational crime?

The gravity model can then be used to map transnational flows. The gravity model is especially valuable because it has the flexibility to adapt to various 'gravity' factors and not only seeks to put a monetary value on flows, but also offers insight into the direction of flows and the drivers that shape global IFFs. This is important information for policymakers tasked with combating the IFFs threat, as it is useful to developing a multi-pronged response that goes beyond AML regimes and also addresses a more diverse range of drivers.

In particular, because the gravity model accounts for transport and transaction costs, it is likely to offer greater insight into intra-regional flows, especially those between less developed countries, than models that rely exclusively on BOP and trade data.

Although also cited as a weakness of the model, the use of calibration allows for expert input. In the context of crime IFFs, where there is a significant dearth of data, allowing for expert input is constructive.

Beyond tax losses: Implications for development

IFFs deprive developing countries of resources that could be used for public investment and service delivery, and they shrink private investment.[152] However, measuring the impact of IFFs solely in monetary terms gives disproportionate importance to the highest-value flows, without recognizing that other types of IFFs may have more damaging impacts. In particular, the focus on commerce IFFs often fails to capture the extensive and multidimensional nature of harms that derive from criminal economies and the resulting crime IFFs. Recognizing how various definitions of IFFs and their measurement models may limit the understanding of impacts is of particular relevance now as international will and action coalesce around SDG Target 16.4.

When impacts beyond revenue losses are taken into account, it is evident that IFFs, especially crime IFFs, have wide-reaching and multifaceted negative impacts on development aims. In fact, the Global Initiative Against Transnational Organized Crime found that organized crime could directly and significantly impair the ability to achieve 23 of the 169 SDG targets.[153] IFFs, together with the underlying activities, distort economic and political competition, subvert government institutions, generate conflict and violence, and undermine the integrity of legal and financial systems.[154]

The threat from IFFs to society and development depend upon the nature of the flow and the underlying criminal activities. As UNODC argues, the socio-economic impact of the actual amounts generated by transnational organized crime is less significant than the underlying criminal activities, particularly for some of the smaller countries in the developing world.[155] The varied and significant nature of organized crime's injurious impacts felt by both fragile and developed nations in many parts of the world has been well documented by the Global Initiative Against Transnational Organized Crime. For example, the Global Initiative's report 'Organized Crime: A Cross-Cutting Threat to Sustainable Development' documents how organized crime poses a direct and indirect threat to achieving the SDGs. In a number of theatres, criminal groups and IFFs have been proven to fund conflict and perpetuate the very conditions that allow criminality to thrive, resulting in a self-perpetuating cycle of insecurity and diverted development. Organized crime and related corruption have also been seen to reach up to the highest levels of government and the state, impacting stability, governance, development and the rule of law. Furthermore, poverty and inequality are exacerbated by IFFs and are associated with increases in organized crime. Moreover, there is a growing body of anecdotal evidence of the myriad ways in which organized crime negatively impacts the environment.[156]

'The focus on commerce and cross-border money laundering, by neglecting to develop a better understanding of local drivers of IFFs, puts development interventions at risk of being ineffective.'

Knowledge of the processes surrounding illicit flows at the country level would also more clearly link these flows to their impact on poverty reduction efforts.[157] While problematic for rich countries, illicit flows have devastating consequences for poor ones. A country-level perspective is especially important for stakeholders seeking to develop a better understanding of illicit flows and working to develop responses.

The focus on commerce and cross-border money laundering, by neglecting to develop a better understanding of local drivers of IFFs, puts development interventions at risk of being ineffective, or even having unintended, adverse impacts. For example, responses to IFFs can have the unintended effect of increasing barriers to accessing formal financial systems as a result of financial institutions adopting de-risking strategies. This can have severe negative developmental consequences, especially in less-developed nations. Low levels of financial inclusion due to the vast majority of ordinary people having limited access to the formal banking system create demand for alternative, informal financial systems. Thus, governments' ability to regulate financial flows is much more limited,

increasing the risk of IFFs. To avoid jeopardizing development goals, regulation of the financial sector needs to avoid undermining the ability of those in the margins of the economy to access formal banking systems, while still developing sufficient safeguards to prevent IFFs flowing through the banking system.[158]

Narrow measures that focus on monetary value are arguably an unintended result of analysis being driven by northern-hemisphere destination countries, namely in Europe and North America, which tend to commission the global studies on illicit trade. There is a significant gap between developed and developing nations in terms of membership of international financial institutions.[159] Accordingly, little evidence is generated that documents local-level community implications in source and transit countries, including changes in wealth distribution, empowerment of nefarious actors and the degree to which illicit money may undermine principles of social organization.[160] For example, current calculations of IFFs at the international level have often only considered outflows. However, evidence of the developmental harm associated with IFFs suggests that measuring both outflows and inflows might be a more appropriate way to gauge developmental impact.[161]

The heavy influence of North American and European actors is also reflected in reporting on organized crime. As an example, the report a *Comprehensive Assessment of Drug Trafficking and Organised Crime in West and Central Africa* found that while some 51 per cent of all UN Security Council pronouncements on organized crime relate to West or Central Africa, only 8 per cent of the documents upon which the report is based were produced by West or Central African sources. The domination of the literature by external, usually Western, sources has meant that organized crime is generally framed in terms of the threat it poses to foreign actors, for example as an issue of security and border control, rather than African domestic priorities, such as reducing vulnerability and improving development.[162] When responses are prioritized by value rather than the severity of impacts, by default, programmatic priorities are narrowed.[163] The wide array of financial transactions encompassed by IFF definitions warrants a wide array of policy responses. Even within the crime IFFs typology, a variety of methods are used to illegally move money and other forms of value across borders, ranging from the unsophisticated (bulk cash smuggling) to the very elaborate (e.g. TBML). Reuter points out that the variation matters because controls are likely to be quite channel-specific and therefore have differential effects across channels.[164] Effective responses require a more systematic framework for analysis and response, which bring together a wider cross section of actors to the development table, to target both the flows as well as the predicate crime and underlying illicit activity.[165]

A new framework that analyzes and prioritizes responses based on a wider analysis of harm would be beneficial to informing development policy and programme development. The harm framework put forth by the Global Initiative Against Transnational Organized Crime, and elaborated upon by the OECD, lays out five target areas:

- Physical harm: harm to persons (homicides, violence, violent crime) or to physical infrastructure (damage to property).
- Societal harm: harm that creates or exacerbates societal tensions, as well as economic or social marginalization or exclusion.
- Economic harm: harm to the economy, both direct and indirect.
- Environmental harm: harm caused by unsustainable use of environmental resources and through by-products of criminal activity.
- Structural/governance harm: this form of harm includes damage to the quality of the governance system due to corruption, or to rule of law by the erosion of the reputation, legitimacy and authority of the state.[166]

Additional considerations can focus on the source and direction of flows. Three questions, again laid out and explained in further detail in the OECD 2018 report, that can guide the analytical exercise around impact are:

1. Where is the good sourced? This is an initial starting point to determining the nature and extent of harm.
2. Is there a local market for the good? This question guides understanding of the extent to which local communities have vested interests in perpetuating the flow and the legitimacy of the actors who facilitate the flow.
3. Where are the IFFs earned and invested? IFFs that generate income locally will contribute to informal economic activity, which will grow the economy as a whole and create livelihood opportunities. Also, where IFFs generate local income, they will warrant the protection of those to whom the income accrues. Criminal economies with local markets and locally invested IFFs will also play into local power hierarchies, thereby resourcing and strengthening those that control the flow.[167]

Recommendations

IFFs are a recognized threat to stability and development, especially for the least developed countries. However, very little agreement exists around terminology and there are significant challenges to developing measures of IFFs. As a result, there is a dichotomy between broad definitions, which encompass a wide range of illicit flows, and data-driven measures, which emphasize commerce IFFs and are at great risk of understating IFFs and their impact on the least developed nations. The recommendations put forth here aim to address the troubling misalignment and to improve on models that seek to map the scale and direction of crime IFFs, laying the foundations for more informed policy, which better reflects the detrimental impact criminal IFFs have on development.

1. **Develop more accurate terminology and definitions, including better accounting for elements especially relevant to developing nations and crime IFFs.**

   The adoption of more accurate definitions and terminology is needed to enable a greater understanding of crime IFFs, especially in the context of developing nations.

   'The adoption of more accurate definitions and terminology is needed to enable a greater understanding of crime IFFs, especially in the context of developing nations.'

   Broken down into its individual components, definitions of 'illicit' need to account for both the legality and legitimacy in order to adequately address how or to what degree informal economies and flows are included in IFFs. In particular, local perceptions of legitimacy ought to be considered in developing countries, where formal and informal institutions may not be aligned. The degree to which flows inhibit development prospects for the most vulnerable stakeholders should guide assessments of legitimacy. This approach ought to account for moral and societal values, heavily weighting local and national views.[168] Considerations for both legality and legitimacy must be made clear and maintained when assessing whether a flow is 'illicit' in order to preserve the integrity of the term and estimates.

   Similarly, 'financial' should not be limited to only money or other easily liquidated assets. The term 'value' would arguably better acknowledge the complex and varied nature of criminal activity, because definitions of 'value' centre on the monetary worth of the good.[169] However, while the term 'illicit value flows' may be a better reflection of criminal flows, to introduce a new term would likely further confuse an already complex debate. As such, the more feasible option is to continue to employ the term 'IFFs', but apply flexible definitions of 'financial' that clearly include forms of value beyond currency and easily liquidated assets.

   Thirdly, representations of IFFs must make clear they do not account for domestic flows. This is of particular importance among developing nations, where large portions of illicit value are likely to be generated and spent

domestically, and cross-border flows are unlikely to show up in trade data, and thus would not be included in measures. Also, the issue of domestic illicit flows must be addressed. Either the term 'IFFs' ought to also be applicable to domestic flows or new terms that specifically describe domestic illicit flows need to be developed.

Lastly, there is a need to adopt terms that clearly differentiate between types of IFFs. In this case, standardizing the use of the term 'crime IFFs' would be beneficial. This will aid in tailoring estimations of the scale of illicit flows stemming from crime, thus promoting more targeted dialogues on and responses to the threat.

2. **Represent estimates of IFFs more accurately and transparently.**

   There is a need to report estimates of IFFs more accurately and transparently in a way that is easy to digest for stakeholders who may not be well versed in the nuances of IFFs. The call by Feige for 'a greater willingness to acknowledge the critical limitations of what we too often claim to know' is applicable.[170] The limitations of reports that offer estimates of global IFFs tend not to be clearly communicated, and it is often only upon a close inspection of the methodology that it becomes clear only a limited number of IFF types were accounted for. Rather, presentations of estimates of IFFs must clearly and transparently represent i) how flows included in measures differentiate from the broad definition of IFFs; ii) which types of flows were included in measures; and iii) that certain types of flows (most often crime and corruption-related IFFs) are likely to be under-represented, or not represented at all, in the estimate. Such qualifications must be made clear in prominent report sections, such as an Executive Summary or Introduction, in addition to a description of methodology, as well as other presentations of the findings.

3. **Adopt a multi-step model that makes use of both crime- and country-specific assessments and the gravity model, as well as information from both quantitative and qualitative sources, such as that employed in the UNODC 2011 report.**

   Such a process, as well as the gravity model, is needed to generate more instructive estimates and mapping of crime IFFs. A combination of the two approaches is critical because more tailored methodologies, which make use of both quantitative and qualitative information, will improve estimates of the scale of criminal economies, while the gravity model will enable comparison of flows and offer insight into the direction and drivers of crime IFFs.

   The UNODC report is valuable in providing guidance on how this approach would be executed. Application of the model is without doubt a costly, and time- and labour-intensive undertaking, as it is a complex exercise, requiring detailed insight knowledge by experts in order to generate reasonable results.[171] However, if stakeholders hope to build more accurate measures of IFFs, ones that better reflect threats to development, a transition away from data-driven models is vital.

4. **Make use of assessment frameworks that go beyond monetary values and account for harm.**

   To better appreciate the threat that IFFs pose to development aims, a wider, more holistic analysis of harm is needed. The harm framework put forth by the Global Initiative Against Transnational Organized Crime and elaborated upon by the OECD ought to inform development policy and programme development, and the prioritization of responses. The framework can be further enhanced by giving consideration to the source and direction of flows, again detailed in the OECD 2018 report. (Both are explained more fully in the preceding section.)

   The proposed framework suggests using these harm areas as a shared assessment exercise to determine the impact of specific criminal economies. These questions add value because, when analyzed congruently, they allow stakeholders to better understand the extent and nature of the harm. This would help to alleviate criticisms of current large-scale estimates of IFFs, which have been accused of being intrinsically vague and difficult to estimate due to noisy data, which does not allow us to disentangle simultaneity issues from causes and effects.[172]

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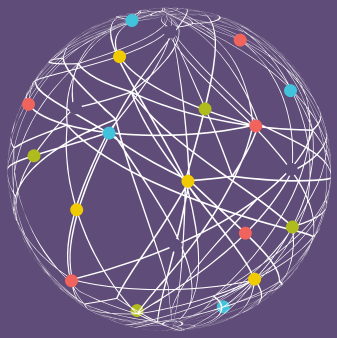

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