Counting the Cost: Defining, estimating and disseminating statistics on illicit financial flows in Africa
Contents

I. Background and introduction

Introduction ................................................................. 2
Project strategy ........................................................... 3
  Project plan ................................................................ 3
Project custodians and key organisations ........................... 4
Conceptual Framework .................................................... 5
  Defining illicit financial flows ........................................ 5
  Types of illicit financial flows ........................................ 6
  Methods for measuring tax and commercial illicit financial flows .................................................... 7
  Tax and commercial illicit flows: sources, transfers
  and methods for each category .................................... 8

II. Guidelines and tools for measuring tax and commercial illicit financial flows

Step-by-step journey to start measuring illicit financial flows .................................................... 10
Measurement journey: checklist ...................................................................................... 12

III. National Activities

Statistical outcomes .......................................................... 14

IV. Country Profiles

Angola ........................................................................ 16
Benin ........................................................................ 18
Burkina Faso ................................................................. 20
Gabon ........................................................................ 22
Ghana ........................................................................ 24
Mozambique ................................................................. 26
Namibia ....................................................................... 28
Nigeria ...................................................................... 30
Senegal ...................................................................... 32
South Africa ................................................................. 34
Zambia ...................................................................... 36

V. Resources

Resources ........................................................................ 39

VI. Annexes

ANNEX 1: A decision tree to identify activities generating illicit financial flows .......................... 41
ANNEX 2: Definition of Statistical Method and Market Price Method ......................................... 42
SECTION I

Background and introduction

Introducing the types of illicit financial flows, the measurement methods available and how this project is structured.
Countries with high IFFs spend on average (UNCTAD, 2020):

- 25% less on health
- 58% less on education

Introduction

Illicit financial flows (IFFs) have a substantial and crippling effect on societies and economies, not only on the African continent, but also around the world. The COVID-19 pandemic, the war in Ukraine and the increasing costs of climate change and environmental challenges have had a particularly devastating impact on developing economies, highlighting the critical need for addressing the financing gap.

IFFs drain resources that would be needed to fulfil human rights and pursue sustainable development. Domestic resource mobilisation, assets recovery and curbing IFFs is more critical than ever.

Illegal practices such as trade misinvoicing, tax evasion and corruption, as well as some legal practices, such as tax avoidance are often used to divert funds earmarked for social development to tax and financial havens.

Those most affected are the poor, who have no choice but to rely on the government for social services. Research found that countries with high IFFs spend an average of 25% less on health and 58% less on education (UNCTAD, 2020)\(^1\).

The 2030 Agenda for Sustainable Development, specifically Target 16.4 of Sustainable Development Goal (SDG) 16, outlines the impact and risk of IFFs to countries. The indicator aims to “significantly reduce IFFs and arms flows, strengthen the recovery and return of stolen assets, and combat all forms of organised crime” by 2030. Echoing this, the Addis Ababa Action Agenda on financing for development, calls for participating countries to prioritise efforts to reduce IFFs by 2030.

Reducing IFFs requires the global community to work collectively to understand the overall problem, the extent of the flows, their origins, routes and destinations, and country-specific circumstances. This information is key to taking action to curb IFFs. However, the absence of a globally accepted, standardised method for measuring these flows has been a persistent obstacle to working together.

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Section I: Background and introduction

“By 2030, [Target 16.4 of SDG 16 aims to] significantly reduce IFFs and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organised crime.”

Project plan

A United Nations Development Account Project on Defining, estimating and disseminating statistics on illicit financial flows in Africa was initiated to address the lack of accepted standards in measuring flows. The project has led to globally agreed definitions, methodology and tools for producing more reliable and comparable estimates of the flows. This in turn has strengthened the statistical capacity of African countries and empowered them to develop more effective policies for measuring and tackling these flows. [IS2]

These resources are now available at the UNCTAD website for all countries dedicated to tackling IFFs and to enable them to measure and report on SDG indicator 16.4.1 “Total value of inward and outward illicit financial flows”.

Project activities

The project’s activity plan comprises of three steps:

1. Produce a draft standardised methodology to be tested in pilot countries.

2. Create easy-to-follow guidelines and training materials based on the defined methodology for participating countries.

3. Test the methodology to gather initial estimates, characteristics of the flows and an overview of the flows in each country.
# Project custodians and key organisations

The United Nations Conference on Trade and Development (UNCTAD) and the United Nations Economic Commission for Africa (UNECA) have jointly coordinated the IFF project in Africa, which is mirrored by similar projects in other regions. These projects include:

<table>
<thead>
<tr>
<th>Region</th>
<th>Project</th>
<th>Start/end date</th>
<th>Focuses on</th>
<th>Pilot countries</th>
<th>Key organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America</td>
<td>Developing indicator on illicit financial flows and monitoring them in Latin America</td>
<td>July 2017 – December 2020</td>
<td>Criminal activities</td>
<td>Colombia, Ecuador, Mexico, Peru</td>
<td>UNODC, UNCTAD, ECLAC</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>Statistics and data for measuring illicit financial flows in the Asia-Pacific region</td>
<td>July 2020 – December 2022</td>
<td>Criminal activities and tax and commercial practices</td>
<td>Bangladesh, Maldives, Nepal, Viet Nam, Kyrgyzstan, Uzbekistan</td>
<td>UNODC, UNCTAD, ESCAP</td>
</tr>
</tbody>
</table>
Section I: Background and introduction

Conceptual Framework

Defining illicit financial flows

The definition of illicit financial flows in SDG indicator 16.4.1 (see right) was endorsed by the UN Statistical Commission in March 2022 as part of the Conceptual Framework for the Statistical Measurement of Illicit Financial Flows.

Main features for defining illicit financial flows

1. Was the flow illicitly generated, transferred or used?  
2. Has an exchange of value (goods and services or financial and non-financial assets) taken place?  
3. Has the flow taken place over a given time?  
4. Has the flow crossed a border?

“IFFs are financial flows that are illicit in origin, transfer or use, that reflect an exchange of value and that cross country borders.”
Types of illicit financial flows

SDG indicator 16.4.1 calls for the measurement of the “total value” of IFFs, which is useful for gaining an overall, high-level view of the problem. However, for deeper insights into the IFFs at country levels, it is useful to categorise the flow by type and source.

IFFs can be classified into four types: tax and commercial activities, illegal markets, corruption, exploitation-type activities and financing of crime and terrorism. The pilot studies in Africa focused on the measurement of tax and commercial IFFs, which is also the focus of this report (see Annex 1 for ‘Decision tree for IFF taxonomy’).

IFFs from aggressive tax avoidance

This can take place through the manipulation of transfer pricing, strategic location of debt and intellectual property, tax treaty shopping and the use of hybrid instruments and entities. These flows need to be carefully considered, as they generally arise from legal business transactions and only the illicit part of the cross-border flows belongs within the scope of IFFs.

IFFs from illegal commercial and tax practices

These include illegal practices such as tariff, duty and revenue offences, tax evasion, competition offences and market manipulation. Most of these activities are non-observed, hidden or part of the “shadow economy”, the underground economy or the informal economy that may generate IFFs.
Measuring illicit financial flows from tax and commercial activities

The Conceptual Framework provides a standardised basis for measuring and comparing IFFs consistently and comprehensively. Several specific measurement methods are recommended for IFFs arising from tax and commercial activities (see table). These include:

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Partner Country Method Plus</strong></td>
<td>Discrepancies in reported bilateral trade flows are reviewed in this method. For example, country A’s reported imports from country B are cross-checked against country B’s reported exports to country A. Each possible reason for a discrepancy, such as valuation and partner country attribution, is addressed systematically to ascertain which asymmetries may have contributed to IFFs.</td>
</tr>
<tr>
<td><strong>2. Price Filter Method Plus</strong></td>
<td>This method uses granular, transaction-level microdata rather than relying on partners’ reported transactions. It applies a price filter to identify abnormally priced transactions in international trade that could be contributing to IFFs. The limitations and uncertainties of this method are somewhat offset by the involvement of national customs experts.</td>
</tr>
<tr>
<td><strong>3. Global distribution of multi-national enterprises’ (MNEs) profits and corporate taxes</strong></td>
<td>The underlying assumption here is that an MNE is likely to shift its profits from one country to another to benefit from lower tax rates there. This method identifies potential IFFs by examining how an MNE’s profits are distributed among its units globally relative to the effective corporate tax rates in different countries and the economic activities of specific units. Using unit-level microdata where it is available produces the most reliable estimates of profit-shifting by MNEs.</td>
</tr>
<tr>
<td><strong>4. MNE versus comparable non-MNE profit shifting</strong></td>
<td>By comparing MNE units with domestic (non-MNE) units with a similar profile, this method identifies potentially tax-avoidance behaviours and estimates the amount of profit that may have been shifted as a measure of IFFs. The method is based on business statistics microdata readily available to statistical authorities in many countries, although it may be more challenging to fully implement in smaller economies where the number of businesses may be lower.</td>
</tr>
<tr>
<td><strong>5. Flows of undeclared offshore assets indicator</strong></td>
<td>IFFs sometimes arise from undeclared offshore assets. This method compares an individual’s declared offshore assets with internationally reported estimates of offshore assets held by that individual. This method has significant data requirements and several assumptions must be made to transform stock measures into flow measures for approximating outward IFFs for a country.</td>
</tr>
<tr>
<td><strong>6. Flows of offshore financial wealth by country</strong></td>
<td>In this method, estimates of global offshore financial wealth are first derived by studying global imbalances between international portfolio assets and liabilities. This is then broken down by country of ownership and by the International Financial Centre, and the level of illicit flows is identified by making an assumption about the non-compliance rate on offshore wealth. As in the previous method, transforming stock into flow measures is a challenge and constrained by the data availability.</td>
</tr>
</tbody>
</table>
Tax and commercial illicit flows: sources, transfers and methods for each category

**Tax and commercial illicit flows**
- IFFs from illegal commercial and tax practices
- IFFs from legal aggressive tax avoidance

**Sources (acts)**
- Acts against public revenue provisions
- Acts against commercial or financial regulations
- Market manipulations/insider trading
- Acts of commercial fraud
- Other illegal commercial and tax acts

- Acts departing from the arm’s length principle
- Acts related to strategic location of debt, assets, risks, or other corporate activities
- Other acts of aggressive tax avoidance

**Transfer (flows)**
- Transfer of wealth to evade taxes
- Trade mis-invoicing by entities
- Transfer mispricing
- Debt shifting
- Assets and intellectual property shifting

**Measurement methods**

**METHOD 1** Partner country method plus

**METHOD 2** Price filter method plus

**METHOD 3** Global distribution of multinational enterprise (MNE) profits and corporate taxes

**METHOD 4** MNE vs comparable non-MNE profit shifting

**METHOD 5** Flows of undeclared offshore assets indicator

**METHOD 6** Flows of offshore financial wealth by country
Guidelines and tools for measuring tax and commercial illicit financial flows

This section provides a step-by-step guide to measuring IFFs from tax and commercial practices. It includes a flow diagram that leads national statistical authorities through the measurement journey, a checklist for each step and links to necessary tools.
Section II: Guidelines and tools for measuring tax and commercial IFFs

Step-by-step journey to start measuring IFFs

**Step 1**
Self-assessment with an initial IFFs risk assessment

As the types and extent of IFFs differ across countries, it is essential to assess each country's unique situation before starting the measurement journey.

A useful first step is to conduct an IFF risk assessment to review existing statistics and information.

This will help to:
- Highlight priorities and challenges
- Allow the pilot project team to tailor the measuring process to the country's particular needs

**Tools used**
- Self-assessment questionnaire to prepare for the measurement of IFFs
- IFF risk assessment template

**Step 2**
Mapping of national agencies and their roles

To ensure the ideal combination of technical skills, it is vital to identify and involve the relevant national institutions in the measurement process. These may include:
- National statistical authority
- Policy-making bodies
- Tax and regulatory bodies
- Financial intelligence centres/ intelligence and security services
- Law enforcement/prosecutorial authorities
- Ministries of foreign affairs and trade
- Chambers of commerce
- International/foreign partners

**Tools used**
- Mapping of national agencies
- Terms of reference for the Technical Working Group

**Step 3**
Data availability and quality review

This step involves determining what data is available and assessing its usefulness and quality.

As IFFs are clandestine in nature, accessing accurate data is often a challenge and should be factored in when undertaking a statistical measurement process.

The availability of data also determines which flows can be measured and which methods are chosen, thus affecting the next steps in the process.

**Tools used**
- Data availability and quality review by method
Section II: Guidelines and tools for measuring tax and commercial IFFs

Step-by-step measurement journey

Step 4

**Method selection**

The selection of a method is based on the availability and quality of data on tax and commercial flows in a specific country. Useful tools include:

- A tier-classification assessment is suggested to choose the most appropriate method based on the national circumstances.
- Method fact sheets have also been made available to further refine the process of selection.

Where possible, more than one method should be applied when estimating and measuring IFFs to cross-validate the results and confirm their reliability.

**Tools used**

- Criteria for assigning points in the quality assessment framework
- Method fact sheets

Step 5

**Measurement plan with an operational definition**

The national statistical authority, with input from experts and stakeholders, draws up a pilot testing plan based on the country’s specific circumstances.

Measuring all IFFs in a country is a nearly impossible task. A more pragmatic focus would be to identify:

- The most prevalent and detrimental types of flows
- The most crucial data needs of that country

An operational definition is a clear, concise and detailed description of what an indicator aims to capture.

**Tools used**

- Action plan template
- Pilot study report template
- Proposed work plan

Step 6

**Compilation and dissemination of IFF statistics**

This step involves testing the chosen measurement methods with the available data in one or two aspects or sectors to produce initial estimates of the flows.

Through iteration and testing, the process can then be refined until a comprehensive analysis of IFFs is conducted at the country level.

Estimates can be published and shared with participating pilot countries, policy makers and wider audience through official statistics dissemination process.
# Measurement Journey: checklist

This checklist is a guide to the steps of IFF measurement with reference to relevant sections of the *Methodological guidelines to measure tax and commercial illicit financial flows*.

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
<th>Reference in guidelines</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFF risk assessment</td>
<td>Review official statistics on illegal economy, informal economy, non-observed economy.</td>
<td>Part III, Chapter 1, p. 79</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Review research, studies, literature on IFFs.</td>
<td>Part III, Chapter 1, p. 79</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Interviews with experts.</td>
<td>Part III, Chapter 1, p. 79</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Preliminary analysis (early assessment) of IFFs.</td>
<td>Part III, Chapter 1, p. 80</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Develop priorities for statistical work.</td>
<td>Part III, Chapter 1, p. 80</td>
<td>✔</td>
</tr>
<tr>
<td>Mapping of national agencies</td>
<td>Identify relevant national agencies through a set of questions.</td>
<td>Part III, Chapter 2, p. 82-83</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Determine roles of agencies: lead, supporting, other.</td>
<td>Part III, Chapter 2, p. 84; Part IV, Chapter 3, Section B, p. 129</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Determine agencies’ involvement in the statistical process: compiling or data providing agency.</td>
<td>Part III, Chapter 2, p. 84; Part IV, Chapter 3, Section B, p. 129</td>
<td>✔</td>
</tr>
<tr>
<td>Data availability</td>
<td>Consider practical questions, such as who has the data, what data etc.</td>
<td>Part III, Chapter 3, p. 85</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Assess national statistical context for measuring IFFs.</td>
<td>Part IV, Chapter 3, Section A, p. 119</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Process data availability and quality review of data sources by method.</td>
<td>Part IV, Chapter 3, Section C, p. 133-139</td>
<td>✔</td>
</tr>
<tr>
<td>Method selection</td>
<td>Select method(s) to measure IFFs using evaluation framework, tier-classification of methods and method fact sheets, basing decision also on data availability.</td>
<td>Part III, Chapter 4, p. 88-90; Part IV, Chapter 3, Sections D and E, p. 140-158</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>If possible, triangulate methods, use more than one method.</td>
<td>Part IV, Chapter 3, Sections D and E, p. 140-158</td>
<td>✔</td>
</tr>
<tr>
<td>Operational definition</td>
<td>Based on IFFs risk assessments, available data and feasible methods, and consultation with experts and stakeholders, the statistical authority defines what is feasible to measure - operational definition.</td>
<td>Part III, Chapter 5, p. 91</td>
<td>✔</td>
</tr>
<tr>
<td>Compile and disseminate IFF statistics</td>
<td>Test the measurement of IFFs covering only some aspects or sectors, produce preliminary and early estimates of IFF statistics.</td>
<td>Part III, Chapter 6, p. 92</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Conduct in-depth and thorough analysis of IFFs, when possible.</td>
<td>Part III, Chapter 6, p. 92</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Compile estimates disaggregated by relevant types of IFFs (minimum and additional disaggregation levels).</td>
<td>Part III, Chapter 6, p. 92</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Publish IFF estimates clearly and transparently.</td>
<td>Part III, Chapter 6, p. 92</td>
<td>✔</td>
</tr>
</tbody>
</table>
What are the initial results?
A snapshot of statistical outcomes from pilot countries across the continent.
Statistical outcomes

This map shows the results of 2021-2022 pilot testing, with countries using different methods and covering different types of IFFs, commodities and activities. Therefore, direct comparison between countries’ preliminary estimates is not possible. Even though there is a requirement to report inward and outward IFFs for SDG Indicator 16.4.1, not all preliminary estimates provide this breakdown. These preliminary estimates still need to be fine tuned by national technical working groups in pioneering countries.

**Burkina Faso**
(Trade misinvoicing with PCM+)
Both inward and outward IFFs
US$6.8 billion

**Ghana**
(2000-2012, Trade misinvoicing with PCM+ and PFM+)
Both inward and outward IFFs
US$8.4 billion
with USA and EU

**Gabon**
(2010-2021, Trade misinvoicing with PCM+ and PFM+)
Both inward and outward IFFs
US$65 billion

**Namibia**
(Trade misinvoicing with PFM+)
Inward IFFs
US$19.6 billion

**Outward IFFs**
US$4.7 billion

**Zambia**
(2012-2020, Trade misinvoicing with PCM+)
Both inward and outward IFFs
US$44.9 billion

**South Africa**
(2017, Trade misinvoicing with PCM+)
Inward IFFs
US$21.9 billion

**Outward IFFs**
US$40.4 billion

This means that efforts to curb IFFs in these countries, based on clear and robust evidence provided by a monitoring tool, could free important resources that could be used to finance development interventions, with a potentially high impact on the economy and the living conditions of the population.
SECTION IV

Country Profiles

A snapshot of the process and results for each of the eleven pilot countries.
Pilot country profile: Angola

During the project, Angola was led by the National Statistics Institute. They plan to define a country-level task force to be able to identify the source of IFFs and produce preliminary results.

1. Pilot country process

2. Organisations of the Technical Working Group

To create national buy-in, meetings were held with Secretaries to the President on both economic and judicial affairs. The UN in-country team (UNDP, RCO, UNODC) enabled key institutions to prepare for the training.”
3. Methods used

**Method 1**
Partner Country Method Plus

**Method 2**
Price Filter Method Plus

**Method 1**: Worked well but with slight weaknesses in practical implementation.

**Method 2**: Worked well with some weaknesses and lack of definition of criteria for excluding abnormal prices up to half of the sample. Trade mispricing occurs when the unit price of a given transaction differs from the normal prices assumed by a price filter, i.e., when an abnormal price of a particular transaction is identified.

4. Magnitude of IFFs

**Method 1** results: Inflows and outflows of IFFs were significant.

The cumulative illicit flows for the year 2017 were also high.

5. Benefits and Challenges

**Benefits**
- Capacity building and strengthening
- National buy-in
- Support from UNCTAD/ECA
- Collaboration with UN-in country teams

**Challenges**
- Allocating time to the task
- Absence of exchange platform with pilot countries
- Language and communication

The way forward...
- Define a country-level task-force on IFFs
- Adopt good practices from neighbouring or partner countries in identifying possible IFFs
- Build capacity on identifying IFFs
Pilot country profile: Benin

The Pilot country process in Benin is being led by the National Institute of Statistics and Demography (INStaD). INStaD has the support of relevant institutions working together to identify the source of IFFs.

1. Pilot country process

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Self-assessment questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>July - September 2022</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Mapping of national agencies</td>
</tr>
<tr>
<td>March 2022</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>Data availability and quality review by method</td>
</tr>
<tr>
<td>October 2021</td>
<td>Benin and Senegal receive a joint training on the methods</td>
</tr>
<tr>
<td>Step 4</td>
<td>Method selection</td>
</tr>
<tr>
<td>March 2022</td>
<td></td>
</tr>
<tr>
<td>Step 5</td>
<td>Pilot testing plan</td>
</tr>
<tr>
<td>March 2022</td>
<td></td>
</tr>
<tr>
<td>Step 6</td>
<td>Compile and disseminate IFF statistics</td>
</tr>
<tr>
<td>June - September 2022</td>
<td>Final report with preliminary estimates</td>
</tr>
</tbody>
</table>

2. Organisations of the Technical Working Group

**Lead institution**
- National Institute of Statistics and Demography

**Data providers and support**
- Central Bank of West African States
- National Financial Information Processing Unit
- Directorate General of Customs and Indirect Taxation
- Directorate General of State Holdings and Denationalisation
- General Tax Administration
- General Administration of Trade
- General Directorate of the Treasury and Public Accounting
- Professional Association of Banks and Financial Institutions
- National Agency for the Supervision of Decentralized Financial Systems

**Law enforcement**
- National Anti-Corruption Authority
- Central Office for the Repression of Cybercrime
- General Directorate of the Republican Police
- Central Office for the Repression of Illicit Drug Trafficking and Precursors

**Private institutions**
- Webb Fontaine and Benin Control
3. Methods used

**Method 1**
Partner Country Method Plus

**Method 2**
Price Filter Method Plus

Both methods were easy-to-use and allowed access to data. However, more information was required from partner countries and there were difficulties accessing contractual data.

4. Magnitude of IFFs

Both methods were chosen to assess the extent of IFFs in the export of cashew nuts and cotton. These two commodities are considered essential to Benin's export industry.

Cashew nuts

Both methods' results differed significantly demonstrating the need to further refine the data collected to achieve reliable results.

Cotton fibre

Estimations of IFFs on the export of cotton fibre, using the PCM+ and PFM+, are not yet finalised due to a lack of available data.

No estimations were carried out for imports of cotton or cashew nuts. This is due to the weakness of inward flows in these categories.

5. Benefits and Challenges

**Benefits**
- Awareness raising
- Establishment of the TWG
- National consultant

**Challenges**
- Insufficient governmental support
- Data availability and confidentiality
- Lack of support from UNCTAD and ECA

The way forward...

- Review the report on the results of the pilot tests
- Continue the Technical Working Group
- Make a plan for the measuring of IFFs
- Get buy-in from stakeholders
- Improve data gathering
- Coordinate efforts to report on SDG indicator 16.4
Section IV: Country Profiles

Pilot country profile: Burkina Faso

In Burkina Faso, the pilot project was led by the National Institution of Statistics and Demography. The country benefited from close collaboration with UNCTAD experts.

1. Pilot country process

- **Step 1** Self-assessment questionnaire
  - Submission of the evaluation questionnaire to key stakeholders
  - 30 August 2021 Start of project

- **Step 2** Mapping of national agencies
  - Stakeholder mapping

- **Step 3** Data availability and quality review by method
  - Data availability assessment was made for methods 1, 2 and 3
  - December 2021 Interregional training workshop with all pilot countries

- **Step 4** Method selection
  - IFF estimation workshop using Method 1

- **Step 5** Pilot testing plan
  - Workshop to present the first results and evaluate the process

- **Step 6** Compile and disseminate IFF statistics
  - 31 June 2022 End of project

2. Organisations of the Technical Working Group

**Lead institution**
- National Institute of Statistics and Demography

**Data providers and support**
- General Directorate of Taxes
- General Directorate of Customs
- General Directorate of Treasury and Public Accounting
- National Directorate of the Central Bank of West African States
- Directorate of Criminal Affairs and the Seal, Prosecutor of Faso
- General Directorate for Sectoral Studies and Statistics of the Ministry of Justice
- West African Economic and Monetary Union

**Private institutions**
- Journal l’Économiste du Faso
- Professional Association of Banks and Financial Institutions

**Civil society organizations**
- Integrity Lab Architecture and Anti-corruption Building in Afrika
- Organisation pour le Renforcement des Capacités de Développement
- National Anti-Corruption Network
- Norbert Zongo Cell for Investigative Journalism

- General Directorate for Sectoral Studies and Statistics of the Ministry in charge of Energy and Mines
- Extractive Industries Transparency Initiative
- National Financial Information Processing Centre
3. Methods used

**Method 1: Partner Country Method Plus**

**What worked:**
- Stakeholder engagement
- Access to statistical data
- Data collection
- In-depth and detailed estimates at product level
- Training of stakeholders

**What can be improved:**
- Estimates were not completed
- Delay in updating Burkina’s UNComtrade data
- Automate the gap calculation for easy annual calculation
- Visualization of data
- Exchange of information agreements with countries

4. Magnitude of IFFs

Preliminary estimates suggest the presence of potential IFFs in different sectors including:

- **Beverages**
  - US$185 million of total imports per year

- **Petroleum**
  - US$5.4 billion of total imports per year

- **Ore**
  - US$1.2 billion of total exports per year

5. Benefits and Challenges

**Benefits**
- Mapping of institutions
- IFFs have been identified
- Establishment of the TWG
- National Action plan
- Support from UNCTAD and ECA

**Challenges**
- Support from the government
- Provide the institutions with appropriate softwares
- Data availability and confidentiality
- Absence of exchange platform with other countries

**The way forward...**
- Strengthen the TWG’s technical capacity on measurement methods
- Strengthen technical capacity of institutions in charge of monitoring and verification
- Enhance local expertise at different levels of the extractive industry value chain
- Build technical capacity of the Tax Intelligence Unit on transfer pricing and international taxation
- Set up databases in operational structures such as General Directorate of Taxes, General Directorate of Customs, General Directorate of Treasury and Public Accounting, Extractive Industries Transparency Initiative
- Strengthen the collection of specific data in order to allow the use of other evaluation methods
Section IV: Country Profiles

Pilot country profile:

Gabon

Pilot process in Gabon is being led by the National Commission for the Fight Against Illicit Enrichment (CNLCEI). With CNLCEI’s support, more integrated policies and actions will be implemented to combat IFFs.

1. Pilot country process

- **Step 1**: Self-assessment questionnaire
- **Step 2**: Mapping of national agencies
- **Step 3**: Data availability and quality review by method
- **Step 4**: Method selection
- **Step 5**: Pilot testing plan
- **Step 6**: Compile and disseminate IFF statistics

Risk analysis report to identify activities and practices at the level of administrations and companies that could generate IFFs.

**Assessment of trade-related IFFs based on official foreign trade statistics covering 2010-2020**

**December 2021**

**Interregional training workshop for all pilot countries**

**Awareness raising sessions for CNLCEI Bureau members to ensure ownership of the concepts and issues**

2. Organisations of the Technical Working Group

**Lead institution**: National commission against corruption and illicit enrichment (CNLCEI)

**Civil society stakeholders**: Brainforest, Malachie Gabon, ROLBG

**Law enforcement**: Court of Audit, Bureau de Documentation et de l’Immigration, Bureau Central National Interpol

**Private institutions**: Chamber of commerce, Gabonese Employers’ Confederation, Union Pétrolière Gabonaise, Union of Mining Professionals, Union des Forestiers et Industriels du Bois du Gabon, National Order of Cartered Accountants, Association Professionnelle des Etablissements de Crédit

3. Methods used

**Method 1**
Partner Country Method Plus

**Method 2**
Price Filter Method Plus

These methods were used to produce estimates of trade-related IFFs for the period 2010-2021.

The quality of the results was affected by erroneous estimations of the weight and quantities of certain products. This influenced the unit price and distorted evaluations made using the price filter. No adjustments were made to this inaccurate data.

4. Magnitude of IFFs

Between 2010 and 2021, Gabon suffered from trade mis-invoicing in the following areas:

- **Mining sector**: US$7.6 billion
- **International trade**: <US$65 billion
- **Export operations**: US$50.8 billion
- **Oil sector**: US$33.4 billion
- **Forestry sector**: US$9.7 billion

5. Benefits and Challenges

**Benefits**
- National Consultant
- National Action Plan
- Establishment of TWG

**Challenges**
- Funding
- Data availability and confidentiality
- Absence of an exchange platform with pilot countries

The way forward...

- Operationalise the TWG and set up a monitoring and information-sharing system to reduce risks on the various activities that are generating IFFs.
- Strengthen national capacities, including those of the CNLCEI and National Statistical System institutions to measure and monitor IFFs.
- Train a panel of national experts on different methods assessing IFFs to ensure the production of annual monitoring reports for SDG indicator 16.4.
Section IV: Country Profiles

Pilot country profile:
Ghana

The Ghana Statistical Service has been leading the country’s IFF measurement process.

1. Pilot country process

- **Step 1**: Self-assessment questionnaire (August 2021)
- **Step 2**: Mapping of national agencies (June 2021)
- **Step 3**: Data availability and quality review by method (August 2021)
- **Step 4**: Method selection (March 2022)
- **Step 5**: Pilot testing plan (August 2022)
- **Step 6**: Compile and disseminate IFF statistics

- **September 2021**: National training workshop
- **December 2021**: Action plan and interregional training workshop with all pilot countries

2. Organisations of the Technical Working Group

- **Lead institution**: Ghana Statistical Service
- **CSOs / Academia**:
  - University of Ghana - Academia
  - University of Cape Coast
  - ISODEC/Tax Justice Network - Civil Society
- **Data providers and support**:
  - Ghana Revenue Authority
  - Financial Intelligence Centre
  - Minerals commission
  - Petroleum Commission
3. Methods used

**Method 1**
Partner Country Method Plus

**Method 2**
Price Filter Method Plus
These methods were used to produce estimates of IFFs for the period 2012-2021.

4. Magnitude of IFFs

For the period 2000-2012, preliminary estimates for gold, cocoa and other extractive industries show that between Ghana, the US and the EU, inward and outward IFFs amounted to US$8.44 billion.

5. Benefits and Challenges

**Benefits**
- Awareness raising
- Set-up of TWG
- Support from UNCTAD and ECA

**Challenges**
- Support from Government
- Data availability/confidentiality
- Exchange platform with pilot countries

The way forward...

This project has generated interest among policymakers and academics who want to understand the impact of IFFs, locally, and so take the necessary steps to prevent further damage. Data availability has been the biggest challenge so far, with detailed, item-level (HS10) trade data needed from Ghana and partner countries. Efforts to collect this data from Ghana’s customs are currently underway with the help of the Ministry of Finance, which will collate the figures and ensure general acceptability for all stakeholders.
Pilot country profile: Mozambique

Under the leadership of the National Statistical Office, Mozambique was able to produce preliminary results of IFFs.

1. Pilot country process

- **July 2021**: Project initiated with the inception meeting
- **October 2021**: Mapping of relevant institutions
- **March 2022**: Specific training on selected methodologies for statistical measurement of IFFs
- **June 2022**: Presentation, discussion and validation of pilot estimates
- **Step 1**: Self-assessment questionnaire
- **Step 2**: Mapping of national agencies
- **Step 3**: Data availability and quality review by method
- **Step 4**: Method selection
- **Step 5**: Pilot testing plan
- **Step 6**: Compile and disseminate IFF statistics

December 2021
Action plan and interregional training workshop with all pilot countries

2. Organisations of the Technical Working Group

- **Lead agency**
  - National Statistical Office
- **Data providers and support**
  - Tax authority
  - Bank of Mozambique
  - Ministry of Finance
  - Ministry of Industry and Commerce
  - Ministry of Agriculture
  - Ministry of Mineral Resources
- **Private institutions/CSOs/Academia**
  - LIN RCO
- **Law enforcement**
  - Anti-corruption Central Office
  - National Criminal Investigative Service
  - Financial Intelligence Unit
  - Republic General Attorney
3. Methods used

Method 1
Partner Country Method Plus
This method was used to produce estimates of trade misinvoicing for the period 2017 to 2020

Estimation accuracy is achieved when limitations of the method are overcome. In this case no adjustments were made for:
- time difference
- special classifications related to miscellaneous category (defence)
- data coverage
- legal informal trade and registration errors
- misclassification

4. Magnitude of IFFs

There are no reported results for the magnitude of IFFs.

5. Benefits and Challenges

Benefits
- Capacity building
- Support
- Networking

Challenges
- Funding
- Maintaining technical skills & knowledge
- Data availability / confidentiality

The way forward...
- Consolidate and continue to develop capacities among TWG members
- Improve the quality of statistical information to allow for PFM to be applied to the country
- UNECA/UNCTAD to continue to provide specific and in-depth training on the remaining methods suggested in the methodological guidelines
- Build partnerships with other countries to enable collaboration on the various aspects, from data crossing to IFFs measurement

“At the end of the Training Workshop, 10 members of the TWG, with knowledge of statistical tools, were selected to be part of a small group in charge of the pilot estimation and report drafting. During the process, the group met once a week under the leadership of INE to discuss results.”
Pilot country profile: Namibia

During the project, the process was led by the Bank of Namibia. They plan to further strengthen their capacity by appointing a Secretariat to continue the measurement of IFFs.

1. Pilot country process

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
<th>Step 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2021</td>
<td>November 2021</td>
<td>February 2022</td>
<td>May 2022</td>
<td>June 2022</td>
<td></td>
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<tr>
<td>Self-assessment questionnaire</td>
<td>Mapping of relevant institutions</td>
<td>National training in methodologies</td>
<td>Method selection</td>
<td>Pilot testing plan</td>
<td>Compile and disseminate IFF statistics</td>
</tr>
<tr>
<td>November 2021</td>
<td>November 2021</td>
<td>December 2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFF risk assessment</td>
<td>National training in methodologies</td>
<td>Interregional training workshop with all pilot countries</td>
<td></td>
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</tr>
</tbody>
</table>

2. Organisations of the Technical Working Group

**Lead Institution**
- Bank of Namibia

**Public institutions/agencies**
- Bank of Namibia
- National Planning Commission
- United Nations agencies in Namibia

**Resource management**
- Ministry of Fisheries and Marine Resources
- Ministry of Mines and Energy

**Law enforcement agencies and intelligence**
- Namibia Statistics Agency
- Financial Intelligence Centre
- Namibia Revenue Agency
- Namibia Financial Institutions Supervisory Authority
- Anti-Corruption Commission
- Namibian Police
3. Methods used

**Method 1**
Partner Country Method Plus

**Method 2**
Price Filter Method Plus

4. Magnitude of IFFs

Results using **Method 2** have been summarised as the following:

<table>
<thead>
<tr>
<th>Statistical Method</th>
<th>Market Price Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inward IFFs</strong></td>
<td><strong>Inward IFFs</strong></td>
</tr>
<tr>
<td>US$4.5 billion</td>
<td>US$19.6 billion</td>
</tr>
<tr>
<td><strong>Outward IFFs</strong></td>
<td><strong>Outward IFFs</strong></td>
</tr>
<tr>
<td>US$34.1 billion</td>
<td>US$4.7 billion</td>
</tr>
</tbody>
</table>

(See Annex 3 for definition of methods)

5. Benefits and Challenges

**Benefits**
- Capacity building and strengthening
- National ownership
- Establishment of the TWG

**Challenges**
- Funding
- Not able to meet in person
- Absence of exchange platform with pilot countries

The way forward...
- Train participating countries on the other four methodologies from UNECA and UNCTAD
- Set up a secretariat with sole responsibility for IFFs
- Improve data capture at customs, ensure data verifications and strengthen correct declarations
- Implement mechanisms for the independent verification of the number of commodities exported and imported from and into Namibia

All members of the TWG were trained on the six methodologies and attended specific training on the Partner Country Method Plus and Price Filter Method Plus. All members now know how to measure IFFs using these two methods and can comfortably extract the data and apply the methods to achieve IFF estimates.”
Section IV: Country Profiles

Pilot country profile:

Nigeria

In Nigeria, the pilot project was led by the National Bureau of Statistics. Further training and collaboration is needed in order to give reliable estimates.

1. Pilot country process

- November 2021 Inception Meeting
- November 2021 Establishment of the TWG
- November 2021 - January 2022 IFF risk assessment and mapping of national agencies
- December 2021 - January 2022 selection of methods and pilot testing plan
- February - May 2022 Training and estimation of IFFs and report writing

2. Organisations of the Technical Working Group

- Central Bank of Nigeria
- Economic and Financial Crimes Commission
- Federal Ministry of Finance, Budget and National Planning
- Federal Inland Revenue Service
- National Bureau of Statistics
- National Drug Law Enforcement Agency
- Nigeria Customs Service
- Nigeria Extractive Industries Transparency Initiative
- Nigerian Financial Intelligence Unit
- Independent Corruption Practices & Other Related Offences Commission
- UN Resident Coordinator's Office

"The process has been very inclusive as all agencies had representatives. The Technical Working Group also received a refresher tutorial on some of the statistical software."
3. Methods used

**Method 1** Partner Country Method Plus

**Method 3** Global distribution of multi-national enterprises’ (MNEs) profits and corporate taxes

**Method 1:** Estimated IFFs based on trade misinvoicing. Compares import (or export) values reported by one country with the corresponding export (or import) values reported by its partner country. It is based on a trade gap, defined as discrepancy in the values of a trade transaction, independently reported by both trading partners (1).

**Method 3:** Estimated IFFs by examining the distribution of profits of an MNE among its units globally based on microdata and relates it to the corresponding corporate (effective) tax rates and underlying economic activity of a particular unit. It assumes that an MNE unit is likely to shift profits out of the country if another unit’s tax regime induces a lower tax rate (2).

4. Magnitude of IFFs

**Exploratory estimations**

Data limitations and time constraints meant that no definite results of IFFs could be obtained.

5. Benefits and Challenges

**Benefits**
- Capacity building and strengthening
- National ownership
- National action plan

**Challenges**
- Low levels of funding
- Inadequate technical skills and knowledge of TWG
- Limited time to the task

**The way forward...**
- Have regular meetings of the TWG
- Discuss data issues and create data-gathering templates
- Increase collaboration and data gathering amongst all agencies
- Comprehensive data gathering to facilitate robust estimation of IFFs


Pilot country profile: Senegal

In Senegal, the pilot project was led by the National Institute of Statistics and Demography. Support from UNCTAD contributed significantly to success in the project.

1. Pilot country process

- **Step 1**: Self-assessment questionnaire
  - September 2021

- **Step 2**: Mapping of national agencies
  - September 2021

- **Step 3**: Data availability and quality review by method
  - October 2021

- **Step 4**: Method selection
  - November 2021

- **Step 5**: Pilot testing plan
  - November 2021

- **Step 6**: Compile and disseminate IFF statistics
  - May 2022

**Timeline:**
- **November 2021**: Choice of methods 1, 2 and 3
- **December 2021**: Interregional training workshop with all pilot countries
- **January - February 2022**: Technical sub-committee working on measurement exercise with methods 1, 2 and 3 with national customs data and customs data from partner countries

2. Organisations of the Technical Working Group

- **Lead institution**
  - National Agency for Statistics and Demography

- **Data providers and support**
  - Central Bank of West African States
  - National Financial Information Processing Unit
  - General Directorate of Taxes and Domains
  - General Directorate of Customs
  - Directorate General of the Financial Sector

- **CSOs / Academia**
  - Legs Africa
  - Forum Civil

- **Private institutions**
  - Extractive Industries Transparency Initiative

- **Law enforcement**
  - National Office for the Fight against Fraud and Corruption

- **Ministry of the Interior**
- **Ministry of Fisheries**
- **Ministry of the Environment**
- **Human Rights Directorate/Ministry of Justice**

**During this project, institutions such as the National Institute of Statistics and Demography, the Directorate-General for Customs and the General Directorate of Taxes and Domains, learned about IFF estimation methodologies and how to understand what adjustments need to be made to data to achieve reliable estimates.”**
Section IV: Country Profiles

3. Methods used

Method 1 Partner Country Method Plus
Method 2 Price Filter Method Plus
Method 3 Global distribution of multinational enterprises’ (MNEs) profits and corporate taxes

These methods were used to estimate IFFs from trade mis-invoicing from 2015 to 2019.

Method 1 – Several adjustments were made to improve the accuracy of estimates.
Method 2 – The PFM+ was implemented on a single product (pepper) because of its relative price stability.
Method 3 – National tax declarations of MNEs operating in Senegal have been used as a data source.

4. Magnitude of IFFs

Using Methods 1, 2 and 3, the following IFFs were identified:

- **Financial and insurance activities**
- **Information and communication services sector**
- **Extractive activities**

Estimates show that IFFs are concentrated in the following sectors:

Profit shifting by multinationals accounts for a significant share of annual reported taxable profits, on average, from 2017 to 2019. This was calculated using Method 3.

Incoming IFFs represent a significant share of Senegal’s annual foreign trade over the period 2015-2019. This was calculated using Methods 1 and 2.

Outgoing IFFs are weak compared to Senegal’s foreign trade. This was calculated using Methods 1 and 2.

5. Benefits and Challenges

**Benefits**
- Capacity building and strengthening
- Establishment of the TWG
- Support from UNCTAD/ECA
- National action plan

**Challenges**
- Funding
- Absence of exchange platform with pilot countries
- Allocating time to the task

The way forward...
- Improve the quality of customs and tax data
- Implement a permanent framework for data exchange and statistics estimates on IFFs
- Expand external sources of information (e.g., access to the COMMOPRICE database on international goods prices, access to and collection of data on international banking transactions)
South Africa benefited from an Inter-Agency Working Group which established a sub-committee to measure IFFs. IFFs and key role players were identified, and results were provided using the methodological processes.

1. Pilot country process

Step 1: Self-assessment questionnaire
- Step 2: Mapping of national agencies
- Step 3: Data availability and quality review by method
- Step 4: Method selection
- Step 5: Pilot testing plan
- Step 6: Compile and disseminate IFF statistics

South Africa

- National Treasury
- Statistics South Africa
- South African Revenue Services (tax and customs)
- South African Reserve Bank (Financial Surveillance Department)
- Financial Intelligence Centre
- South African Police Service (Crime intelligence)
- Directorate Priority Crime Investigation (DPCI)
- Asset Forfeiture Unit
- National Prosecuting Authority
- Secret Service Agency
- Financial Sector Conduct Authority

March 2022: Conducted a 3 day workshop
April 2022: Worked through methodologies and coded the data to produce the results
December 2021: Interregional training workshop with all pilot countries
March 2022: Presented results to IAWG and principals
3. Methods used

**Method 1** Partner Country Method Plus

4. Magnitude of IFFs

South Africa’s IFFs are most prevalent in the following countries:

- United Kingdom: US$4.4 billion
- Saudi Arabia: US$3.4 billion
- India: US$2.4 billion
- China: US$14.3 billion

Total IFFs using the PCM+ for 2017:
- $21.9 billion of total inflows
- $40.4 billion of total outflows

The net outflow amounted to $18.4 billion and the cumulative illicit flows amounted to $62.3 billion.

5. Benefits and Challenges

**Benefits**
- Capacity building and strengthening
- National consultant
- Support from UNCTAD/ECA

**Challenges**
- Allocating time to the task
- Absence of exchange platform with pilot countries
- Capacity to measure, since this is outside the scope of the day-to-day activities of TWG officials

**The way forward...**
- Improve interagency collaboration
- Make measurement a function of the IAWG through the sub-committee
- Automate the PCM+ and PFM+ methods with SARS and develop machine learning to identify trade mis-invoicing at a consignment level and identify perpetrating firms
- Improve the quality of data
- Train and refine the methodologies
Pilot country profile: Zambia

Zambia was able to produce early estimates with the Zambia Statistics Agency, who led the methodological process with support from the Zambia Revenue Authority. A plan has been put in place to produce the first set of reliable estimates.

1. Pilot country process

- **January 2022**: Mapping of relevant institutions
- **March - April 2022**: IFFs risk assessment and data availability review
- **May 2022**: Preliminary measurement using methods 1 and 3
- **June - July 2022**: Measurement and compilation of IFFs
- **February 2022**: Appointment of the TWG by Secretary to the Treasury
- **March 2022**: National training workshop
- **December 2021**: Interregional training workshop with all pilot countries
- **April 2022**: Pilot testing plan
- **August 2022**: Sharing of final report and preliminary estimates
- **Step 1**: Self-assessment questionnaire
- **Step 2**: Mapping of national agencies
- **Step 3**: Data availability and quality review by method
- **Step 4**: Method selection
- **Step 5**: Pilot testing plan
- **Step 6**: Compile and disseminate IFF statistics

2. Organisations of the Technical Working Group

- **Lead institution**: Zambia Statistics Agency
- **Data providers and support**: Ministry of Finance and National Planning, Ministry of Mines and Minerals Development, Financial Intelligence Centre, Bank of Zambia (Central Bank), Zambia Revenue Authority
- **Law enforcement**: Anti-Corruption Commission, Drug Enforcement Commission, Zambia Police Service
- **Others**: Zambia Institute for Policy Analysis & Research (Think Tank)

“All institutions have complementary roles in the process. The members were appointed by the Secretary to the Treasury to ensure buy-in at the highest level and day-to-day activities delegated to the National Statistical Office, an authority in data collection, measurement and dissemination.”
3. Methods used

**Method 1**
Partner Country Method Plus
Led by the Zambia Statistics Agency

**Method 3**
Global distribution of multinational enterprises’ (MNEs) profits and corporate taxes
Led by Zambia Revenue Authority

4. Magnitude of IFFs

**Method 1**
The preliminary findings based on seven major trading partners, show that US$44.9 billion was potentially mis-invoiced during the period 2012-2020:

- Obtained trade statistics (merchandise imports and exports) for 2012-2021 and compared between ZamStats and UN Comtrade data
- Used at least 80% of the total trade by year to determine major partners
- Identified 22 countries as major partners
- Highlighted countries with significant mirror discrepancies for both inbound and outbound trade

**Method 3**
Obtained database of MNEs operating in Zambia during 2019-2020 from International Taxation Unit, Zambia Revenue Authority:

- Classified MNE’s based on number of employees; total value of sales; operating profit; profit before tax; profit after tax; tax paid; total fixed assets; and total assets
- Profiled MNEs based on the above variables to determine which thresholds to use

5. Benefits and Challenges

**Benefits**
- Capacity building and strengthening
- Establishment of TWG
- Awareness raising
- Network

**Challenges**
- Low levels of funding
- Data availability and confidentiality
- Allocating time to the task

The way forward...

- Determine a more holistic picture of trade mis-invoicing
- Account for remaining asymmetries
- Establish a mechanism for better tracking the effective destination of Zambian exports
- Explore the use of weighting procedures
- Complement the findings with qualitative methods
- Further analysis on the use of the Price Filter Method
List of resources relating to IFFs
Resources

Define IFFs: https://www.youtube.com/playlist?list=PLji49uujoC9rySbe6hNQ2ZXPomyFWctTS

Interviews and other videos: https://www.youtube.com/watch?v=j4OyF_yw10o&list=PLji49uujoC9o1CJneBwpN52Je-_zP4L_

Statistical measurement of tax and commercial IFFs: https://www.youtube.com/playlist?list=PLji49uujoC9o0E2QBbsoZbWMOFE4Td8o7

UNCTAD Africa IFF project: stats.unctad.org/iffs

UNCTAD Stat Youtube channel: https://www.youtube.com/channel/UCbRSDgH8NS-U6aAJ_Q6B14w

UNCTAD website dedicated to IFFs: https://unctad.org/statistics/illicit-financial-flows


ANNEX 1. A decision tree to identify activities generating illicit financial flows

The decision tree for IFF taxonomy

Each activity is being analysed considering three aspects:

- Change in income: This considers whether the activity is economic (directly or indirectly generating a change of income) or non-economic;
- Direct or indirect flows: This activity generates a change of income with or without direct exchange of resources;
- Productive or non-productive activities: falling within or outside the production boundary as defined in the SNA.

Such taxonomy allows for addressing not only whether each activity generates IFFs, but also which part (e.g., income generation or income management) thus guiding IFF measurement. For more information, see: Statistical measurement of illicit financial flows (unctad.org).
ANNEX 2. Definition of Statistical Method and Market Price Method

**Statistical Price Filter Method:** The statistical determination of the price filter uses statistical elements, mostly regarding the variation or the range of the price filter (lower- and upper-bound prices). A 3-day moving average in Namibia was used for the estimation.

**Market Price Filter Method:** The market price calculation of the price filter is when the international market price has been used as the central price, with an agreed variation of 10% (up and down) to determine the price filter. This technique was applied in Namibia.