

13TH IMF STATISTICAL FORUM



MEASURING
CROSS-BORDER ECONOMIC
and **FINANCIAL LINKAGES**
in a Dynamic World

#StatsForum



STATISTICS

Detecting Illicit Financial Flows

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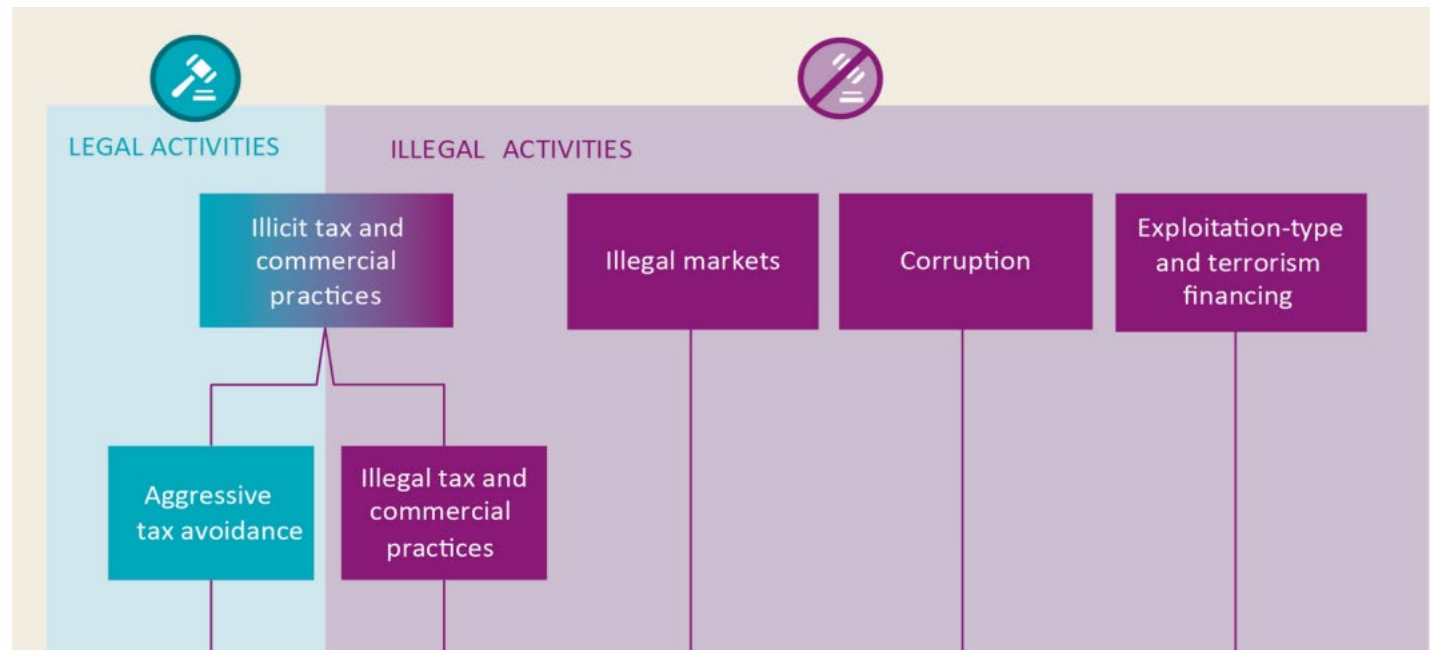
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The views expressed are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

Definitional challenges

- Measuring and addressing IFF as part of the UN's Sustainable Development Goals
- Broader definitions of IFF and treatment of tax avoidance
- Policy and operational implications of various definitions, similar data challenges

Illicit Financial Flows: Flows associated with illegal activities in their (i) origin, (ii) transfer, or (iii) destination.



Measurement challenges

Data availability and limitations: IFF and underlying economic crimes are deliberately hidden

Fintech and disintermediation: fragmentation of the payment chain, challenge to the traditional AML/CFT system design, including IFF detection and measurement

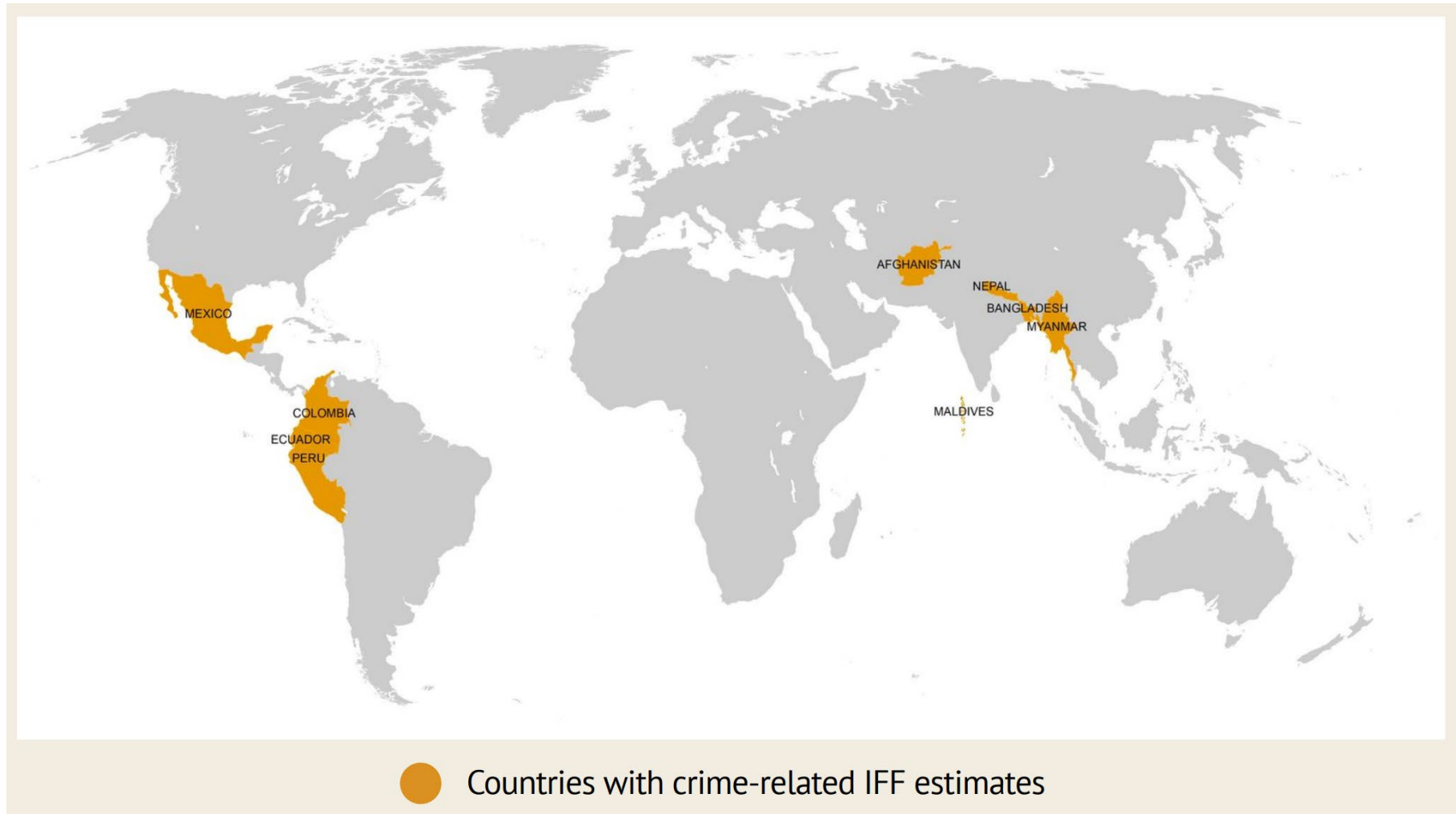
Top-down methodologies tend to focus on inconsistencies between macro-economic data sets and indicators:

- Trade analyses (eg. trade gaps, transfer pricing), balance of payments inconsistencies (eg. net errors and omissions, international portfolios/deposits), deviations from model-based forecasts (eg. models of FDI, economic fundamentals)

Bottom-up methodologies take a sectoral approach, aggregating/projecting IFF sources by the types of economic offences:

- Proceeds of crime studies (eg. drug production, illegal mining/logging, tax gap analysis)

Limited coverage under the UNODC Framework – global bottom-up approach



Why measure? Wide ranging impacts, across multiple channels and differing across countries and over time...

- Unrestricted IFFs facilitate/incentivize predicate activities
- Sectoral effects: fiscal, real, financial, external
- Short-term effects: financial and external sector instability
- Long-term effects: lower productivity and growth; corrupting institutions and governance; social cohesion
- Impact varies for originator / transit / destination countries

Limits of measuring only financial sector transactions in addressing illicit flows

Efforts to identify and measure non-financial ways to transfer illicit proceeds should be part of the IFF discussion:

- Trade-based money laundering (cross border movement of value, stored in goods, mis-invoicing)
- Hawala-type operations
- Cash movement (banknotes)
- High-value goods (gold, precious stones)
- Barter

New IFF methods: virtual assets

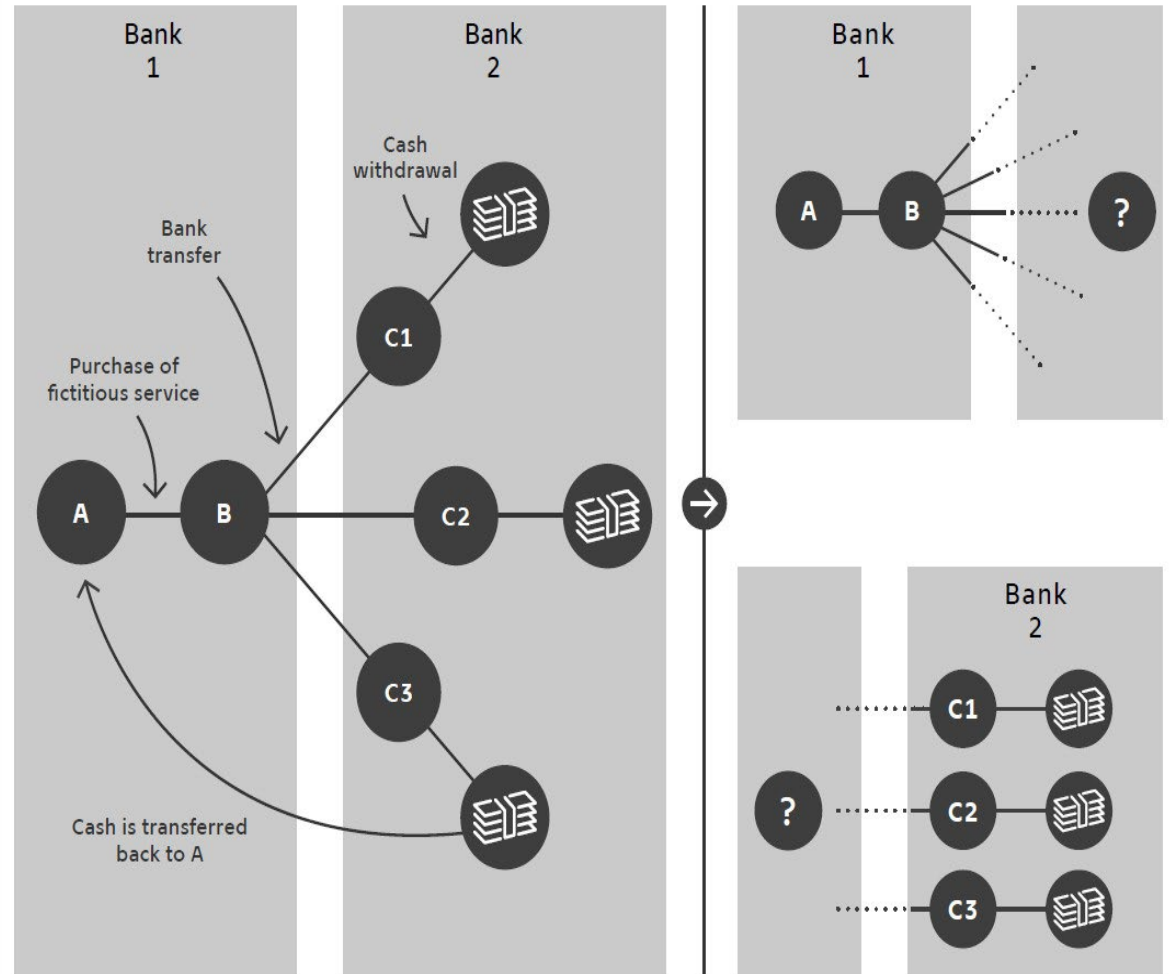
Addressing IFF via virtual assets is increasingly a policy priority

Some of their properties represent ML/TF vulnerabilities as well as measurement challenges:

- (Pseudo) anonymity of ownership
- Lesser traceability of transactions
- Higher opacity in the origin of funds
- Instantaneous cross-border reach

Fundamental challenges to IFF detection and measurement

- Current AML/CFT set-up: transaction intermediaries are responsible for detecting suspicious transactions
- Technology impacts: payment platforms, AML/CFT compliance costs
- Fundamental shortcomings of detection and reporting system: decentralization
- Fundamental shortcoming of the current reporting system: class imbalance

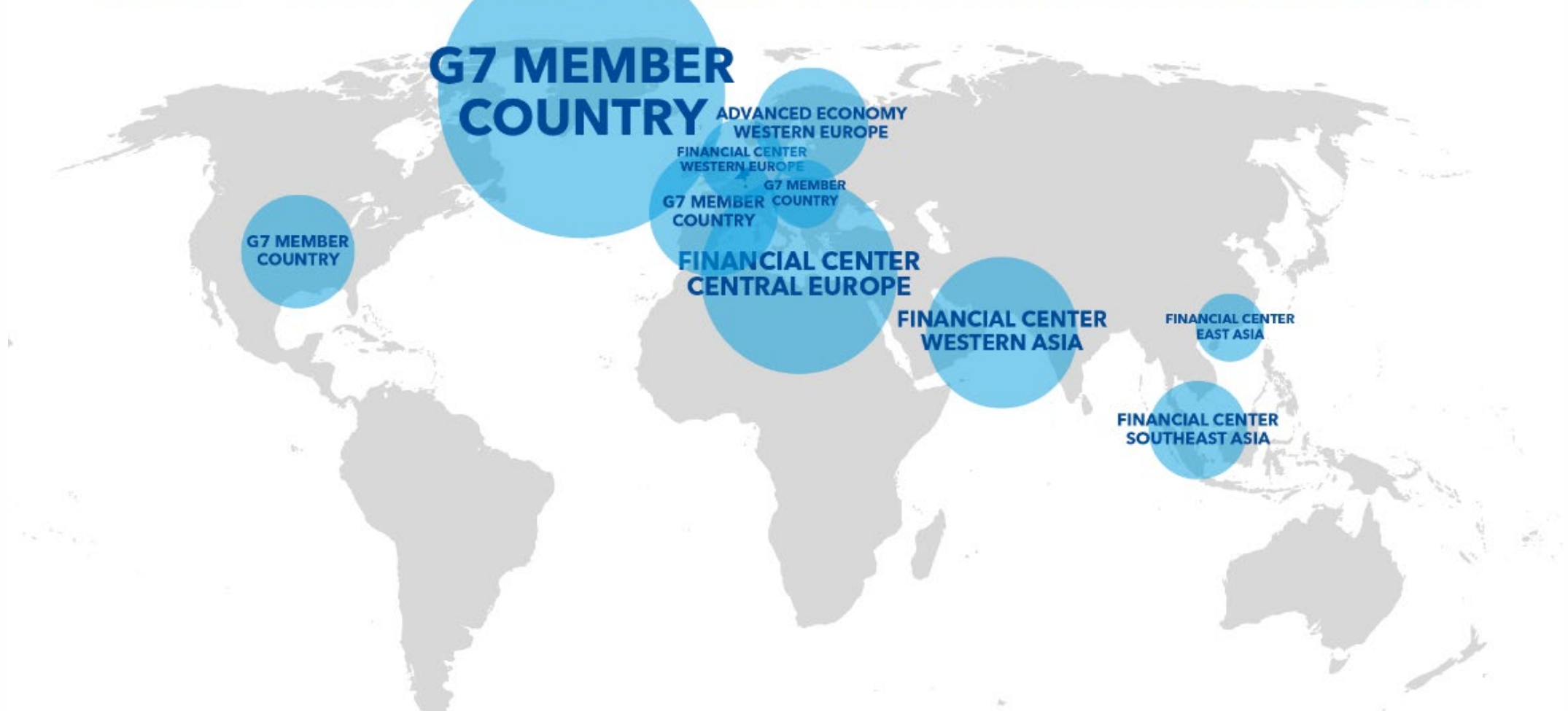


An in-house approach to identification of IFF risks

- Fund's access to SWIFT data allows unique analysis of patterns of financial flows on a global scale
- Goal is to identify unusual ("outlier") pattern of flows potentially related to illicit financial flows or other policy-relevant developments in payments
- Red flag system to identify higher risk payment corridors and patterns of flows to inform staff's work and provide early warnings
- Based on an outlier detection method using unsupervised machine learning (Isolation Forest)
- Leveraging the idea of outlier detection ("few and different") by carefully selecting relevant input data on ML/TF risk factors

Screening of outlier cross-border payments: Results

TOP 10 RECIPIENT JURISDICTIONS



Financial flows data and analysis to monitor and mitigate risks

- Growth of non-bank payment service providers and, recently, virtual asset platforms impacts data visibility and risk mitigation
- Safeguarding financial integrity and stability, as well as supporting other state functions, requires understanding of the “flows” variables, including broader data coverage and more sophisticated analytics of payments data
- Transactional big data and advanced analytical methods: pilots and adoption by the private and public sector, associated challenges
- Strengthened data coverage is required to inform targeted IFF risk mitigation policies

