Trade Misinvoicing:
Why we need a common approach for detection, measurement and prevention







"Anything that can be priced can be mispriced. False pricing is done every day, in every country, on a large percentage of import and export transactions. This is the most commonly used technique for generating and transferring dirty money."

Raymond W. Baker, President - Global Financial Integrity





What is the Scale of Trade Misinvoicing?





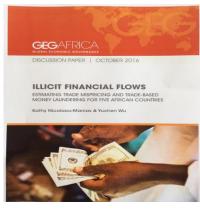


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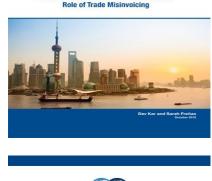




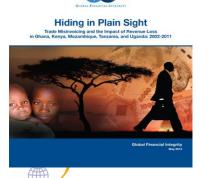




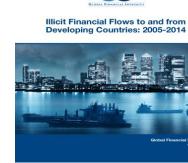




Illicit Financial Flows from China and the









Why the focus on trade misinvoicing?



Plausible reasons...

- Easy to detect through mirror statistics?
- Increasing importance of international trade and increasing share of a country's GDP?
- The principle conduit for IFFs therefore a reasonable benchmark for estimating the magnitude of IFFs?

"Illicit financial flows of nearly \$1 trillion leave developing countries annually, with over 83% due to trade mispricing... These flows mean reduced revenues to the fiscus to invest in socio-economic infrastructure and pro-poor growth strategies."





- "... trade misinvoicing is the primary measurable means for shifting funds in and out of developing countries illicitly..."
- "...an average of 87 per cent of illicit financial flows were due to the fraudulent misinvocing of trade."
- "...the dominant channel for IFFs in and out of developing Countries is trade misinvoicing accounting for at least 66% of measurable IFFs outflows and 97% of measurable inflows in 2014"

GFI, Illicit Financial Flows to and from Developing Countries 2005 -2014, April 2017





So many estimates, but which one is right?



Selected Estimates of Trade Misinvoicing

Country	Туре	Source	Period	Estimate	Yearly Average	Remark
Chile	Export misinvoicing	Ndikumana (2016), Table 3	1990-2014	-44.4 bn. US\$	-3.0 bn. US\$	Copper only, constant US\$
		Kar and Spanjers (2015), Table A6	2004-2013	-15.4 bn. US\$	-1.5 bn. US\$	
Côte d'Ivoire	Export misinvoicing	Ndikumana (2016), Table 8	1995-2014	3.8 bn. US\$	0.2 bn. US\$	Cocoa only, constant US\$
		Kar and Spanjers (2015), Table A6	2004-2013	-9.5 bn. US\$	-0.9 bn. US\$	
Nigeria	Export misinvoicing	Ndikumana (2016), Table 5	1996-2014	-89.7 bn. US\$	-4.7 bn. US\$	Oil only, constant US\$
		Kar and Spanjers (2015), Table A6	2004-2013	-39.3 bn. US\$	-3.9 bn. US\$	
South Africa	Export misinvoicing	Ndikumana (2016), Tables 9-11	2000-2014	102.9 bn. US\$	6.9 bn. US\$	Silver, platinum, iron ore and gold only, constant US\$
		Kar and Spanjers (2015), Table A6	2004-2013	85.7 bn. US\$	8.6 bn. US\$	
Turkey	Gross trade misinvoicing	Yalta and Demir (2010), p. 57	1990-2007	145.7 bn US\$	8.1 bn. US\$	
		Kar and Spanjers (2015), Table A6	2004-2013	499.8 bn US\$	50.0 bn. US\$	
Zambia	Export misinvoicing	Ndikumana (2016), Table 4	1995-2014	-17.3 bn. US\$	-0.9 bn. US\$	Copper only, constant US\$
		Kar and Spanjers (2015)	2004-2013	-38.3 bn. US\$	-3.8 bn. US\$	

Source: Volker Nitsch. 2017. "Trade Misinvoicing in Developing Countries." Table 1: Selected Estimates of Trade Misinvoicing, p.13



But we should be careful because...



These varying big figures

For example consider two recent estimates on trade misinvoicing from Africa

- High Level Panel on Illicit
 Financial Flows (2015) estimates
 capital outflow due to trade
 misinvoicing of USD 40 billion
- Kar and Spanjers (2015) in contrast estimates a capital outflow due to trade misinvoicing of USD 55 billion for sub-Saharan Africa alone
- **Result** = a difference of more than 37%

... can create great expectations in developing countries



Source: Daily Nation, July 18, 2016





Methodologies used in Detecting or Estimating Trade Misinvocing







"Quantitative findings are heavily dependent on the underlying assumptions in the empirical analysis, making estimation results on trade misinvoicing practices largely a matter of faith."

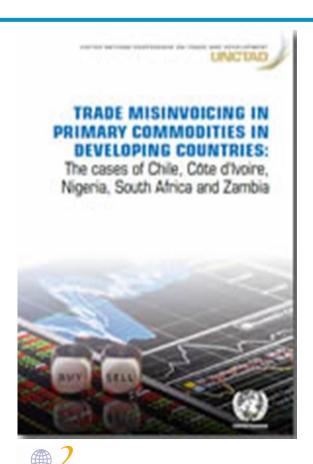
Volker Nitsch, "Trade Misinvoicing in Developing Countries" CGD Policy Paper 103, Washington, DC: Center for Global Development, February 2017





Consider the 2016 UNCTAD Report





The findings:

"Some commodity dependent developing countries are loosing as much as 67% of their exports worth billions of dollars to trade misinvoicing..." in particular that:

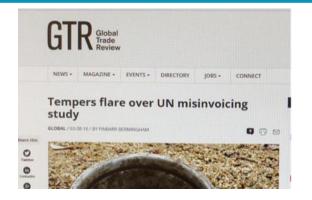
- Between 2000 and 2014, underinvoicing of gold exports from South Africa amounted to \$78.2 billion, or 67% of total gold exports.
- Between 1996 and 2014, underinvoicing of oil exports from Nigeria to the United States was worth \$69.8 billion, or 24.9% of all oil exports to the US.
- Between 1990 and 2014, Chile recorded \$16.0 billion of copper exports to the Netherlands, but these exports did not show up in the Netherlands' books.
- Between 1995 and 2014, Zambia recorded \$28.9 billion of copper exports to Switzerland, more than half of all its copper exports, but these exports did not show up in Switzerland's books.

By interpreting trade dada as evidence of systematic large scale invoicing



Opened a floodgate of reactions ...





SARS MEDIA STATEMENT ON UNCTAD REPORT

PRETORIA – FRIDAY, 29 July 2016 South Africa's Trade Statistics are compiled according to the United Nations International Merchandise Trade Statistics (UN IMTS) guidelines which are based on the movement of goods in and out of the country's economic territories.

The UNCTAD report states that there are 'major discrepancies' between the gold that South Africa reported it had exported to its trading partners and the gold imports from South Africa reported by trading partners for the period 2000-2014. Also, it alleges that most of the gold leaving South Africa is through smuggling operations.

The report indicates that South Africa's gold exports were \$34.5 billion and gold imported by South Africa's trading partners was \$116.2 billion. Thus the difference in the export value of gold is \$81.7bn.







A review of the UNCTAD report on trade <u>misinvoicing</u>, with a full counterfactual on South African exports Final report

5 June 2017





Allegations of flaws in data, theory and methodology used followed ...



- Criticism on theoretical approach and methodology
 - Complexity of reporting destination country in case of re-exports
 - Complexity of reporting destination country in case of storage
 - Complexity of reporting destination country due to 'virtual' trading hubs
 - Rebuttal that discrepancies caused by data error are self correcting in succeeding years
- Ignored or overlooked alternative data sources and used incorrect statistics?
 - South African Revenue Service provides simpler explanations for the data gaps e.g. on discrepancy data for gold exports, publication of country of destination and double counting of exports
 - StatsSA disputed the veracity of the data used and difficulties in reconciling exports and imports statistics
 - Tax Justice Network: mismatches in the trade data can arise from either deliberate manipulation, genuine data errors or different rules of reporting
 - Eunomix: the discrepancy can be accounted for simply by cross-checking other publicly available official statistics
- Flawed conclusions
 - Lack of consensus that:
 - ✓ Discrepancies in trade data correlate with actual trade discrepancies
 - Trade misinvoicing is the primary cause of discrepancies in trade data
 - Mismatches in trade data should therefore not be directly interpreted as misinvoicing because the discrepancy may imperfectly reflect actual trade discrepancy and may or may not indicate trade misinvoicing.





Methodology – potential difficulties



- Measuring trade misinvoicing in an accurate, cogent and evidence-based manner is difficult owing to:
 - The secretive, hidden and illicit nature of these transaction makes them difficult to detect and track; and
 - Data limitations (available data, unavailability of data and its accuracy)
- However, attempts have been made to overcome these challenges and provide estimates of both the magnitude and development implications of trade misinvoicing using empirical methods.
- The most common approach is indirect estimation due to the secretive, hidden nature of activities
- Mostly focusing on developing countries





General methodologies for measuring IFFs



Methods dominating empirical literature

The Hot Money Method

Records IFFs through net errors and omissions in payment balances

The Dooley Method

 Relies on the privately held foreign assets reported in the balance of payments that do not generate investment income

The World Bank Residual Method

 Estimates IFFs as the difference between the source of funds (external debt and foreign direct investment) and the use of funds (current account deficit and reserves)

The International Monetary Fund (IMF) Direction of Trade Statistics (DOTS)-based Trade Mispricing Method:

- Developed further by GFI (Kar and Cartwright-Smith, 2008).
- Assesses IFFs by looking for disparities arising from overinvoicing of imports and underinvoicing of exports after adjusting for ordinary price differences.
- Imports are generally recorded after adjusting for the cost of insurance and freight, while exports are usually valued free-on-board





Measuring Trade Misinvoicing: Mirror Trade Statistics



- Looks for flows that have not been recorded in official statistics i.e. deliberately concealed from authorities
- Compares the bilateral data of the same trade flow (i.e. reported export value of product A in Country Y with Country Z's import of product A from Country Y)
- And the resulting differences being interpreted as trade misinvoicing
- Assumes that:
 - All transactions are recorded in one the partner states statistics
 - The statistics have at least one correct entry in one of the partner states data
 - Misinvoicing is limited to only one side of the transactions i.e. there is only an incentive to misdeclare only one side of the transaction





Methodologies for measuring trade misinvocing: Mirror Trade Statistics Cont'd



Challenges

- Not all fraudulent trade activities are taken into account trade activities which remain hidden completely from public authorities may not be quantified
- Exports (FOB) versus imports declaration (CIF)
- Different classification nomenclature used of the same product by partner countries
- Mistakes in reporting the origin and value of the flows
- Re-direction of shipments when en-route
- Delays in the export and import process
- Unavailability of or incomplete transaction level data

Practical solutions

- Overcoming the challenges arising from different statistical treatment through adjusting imports and exports for insurance and freight
- Alternative data sources (UNCTAD, SARS, South African Chamber of Mines, Eunomix)?
- Focusing on transactional level data rather than aggregate trade data





Methodologies for measuring trade misinvocing: Abnormal Prices



- The Harmonized Commodity Description and Coding System (HS) encourages uniform classification by providing allowing for disaggregated product classification with very detailed and specific product descriptions.
- Consequently, unit values for transactions with a similar HS code should therefore display minimal variations.
- The unit values reported in customs declarations can therefore be systematically used to detect misinvoicing. Large deviations from country average may therefore be an indication of misinvoicing.
- World market prices may also be used as a reference point for homogenous products.
- This approach is less data demanding and may be implemented in a reasonably consistent manner because only hinged on analysis of transaction level data from individual customs declarations with a focus on unit values.
- Challenges
 - Misinvocing is not limited to unit price. It may also affect the weight or quantity.
 - Determination on normal unit value is usually based on arbitrary limits.





Policy Recommendations









"The existing evidence clearly demonstrates that while **trade misinvoicing cannot be measured precisely**, the sheer
magnitude of the estimates suggests that the problem is real and it
must be tackled with all the attention it deserves. In the meantime,
a healthy, dispassionate debate on the data, methodology and other
aspects of the research on trade misinvoicing constitute an integral
part of the learning process towards generating policy relevant
results."

Leonce Ndikumana, Trekking the Gold Trail: Misinvoicing in Primary Commodity Exports, December 16, 2016





Some Policy Recommendations



A. Coordinated policy response

- Coherent policy agenda at the international level incorporating all stakeholders on how to detect and prevent trade misinvoicing.
- A joint statistical task force incorporating the UN (UNCTAD), IMF, World Bank, OECD and WCO with representation from stakeholders in the civil society working in this area e.g. the GFI, TJN to come up with an agreed methodology?

B. Improved trade statistics

- Improve the consistency and transparency in the recording and collection of trade statistics by both exporting and importing countries.
- Greater consistency in the classification of products at product and country level by improving data gathering.
- Greater accuracy in recording the origin and destination of products to help especially for tran-shipped goods through enhanced reporting standards (harmonisation).
- Improved coordination between national statistics and international statistical databases such as UN ComTrade and the IMFs Direction of Trade Statistics.

C. Cooperation

- Better coordination and cooperation at the domestic levels bringing together customs administrations, tax authorities, central banks, statistical authorities, financial intelligence units and other relevant stakeholders
- Universal adoption of the Unique Consignment Number (UCR)?
- Improved exchange of customs information?



Some Policy Recommendations



C. Harnessing Technology

- Harness technology to compile and manage better trade statistics.
- Facilitate customs officers with tools to identify mispriced goods e.g. by exploring possible advantages to be obtained from deploying online real time benchmarking pricing tools.
- Customs officers should make use of available databases with information on comparable pricing of goods to analyse imports and exports and identify transactions requiring additional scrutiny.

D. Capacity building

 Increasing the awareness of customs officers on the risks indicators for and measures for dealing with trade misinvoicing

E. Transparency

More transparency by commodity trading hubs and multinationals on origin and destination of commodities.

F. Research

Coordinated and sustained research on detecting and preventing trade misinvoicing.





Selected Readings



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- Ila Patnaik, Abhijit sen Gupta and Ajay Shah, "Determinants of Trade Misinvoicing" Open Econ Rev (2912) 23:891-910









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