Capital flight and development: An overview of concepts, methods, and data sources

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Outline

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Capital flight by individuals
- Estimates by Zucman
- Alternative estimates

Cross-border activities by firms
- Some influential macro-level estimates
- Micro-data based estimates

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Background

- Much emphasis in tax and development debates on the potential losses of tax revenues that is due to capital flight
- Capital flight (sudden outflow of cash and securities) can partly be illicit / at least in the gray area
- Such activities can be undertaken by both individuals (not reporting capital income they hold offshore) or firms (by transfer pricing)
- How severe are the revenue losses due to such activities?
- Our recent UNU-WIDER study (Johannesen and Pirttilä, 2016) offers a critical review of current estimates

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Estimates of hidden wealth by individuals

- Zucman (2013, 2015) estimates the extent of financial wealth held by private individuals offshore
- The method relies on anomalies in countries' portfolio securities data (assets and liabilities positions of countries)
  - worldwide total liabilities exceed total assets
  - because assets held in tax havens are not reported
- there is also a systematic pattern that tax havens feature the largest discrepancies

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The sources-and-uses and hot-money methods

- Uses countries' balance of payments data
  - Sources: (net) increases in foreign debt and (net) increases in foreign direct investment
  - Uses: the deficit on the current account and increases in the country's foreign reserves
- If sources exceed uses, it is thought that this must be due to transfers of capital to foreign countries by private individuals
- This includes errors and omissions + some other flows (such as deposits by foreign banks + short-term capital flows)
- Therefore, recent hot money estimates concentrate only on errors and omissions

Results from these methods

- Zucman estimates that 8% of financial wealth is hidden in tax havens
  - Using assumptions on rates of return and effective capital income tax rates, the stock can be changed into a flow of revenue losses
  - worldwide summing up to around 200 billion USD annually
- Sources and uses
  - United Nations Development Programme (2011): US$20 billion from the least developed countries
  - Henry (2012):US$150–200 billion from all developing countries
- Hot money narrow
  - Global Financial Integrity (2015): US$200 billion from developing countries

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Corporate tax spillovers

- Using country-level panel data, the IMF (Crivelli, de Mooij, and Keen, 2015) examines responses of
  - countries' tax bases on their neighbours' tax rates
  - countries' tax rates on their neighbours' tax rates
- The former, the base spillovers, more important in relative terms for countries outside of the OECD
  - Their tax revenue losses amount to approximately 1.3 per cent of their GDP

Gross excluding reversals

- Estimates by Global Financial Integrity (2015) have attracted much attention
- Their method
  - hot-money-narrow + trade misinvoicing = total illicit flows
  - 200 billion USD + 800 billion USD = 1 trillion USD
- The trade misinvoicing part responsible for the great majority of flows
  - whether this part is right is decisive

Trade misinvoicing channel

- If rich country imports exceed exports from developing country + trade costs (10%) = seen as evidence of export underinvoicing = illicit outflow
- Similarly overinvoiced imports lead to unreported outflows
- Some problems
  - estimates can be sensitive to what is assumed of trade costs
  - all false claims are assumed to be made by developing countries
  - estimates very fragile (fluctuate a lot from year to year)
  - products differently categorized in origin and destination countries (that is why product-level analysis often misleading)

Trade misinvoicing channel II

- Perhaps most puzzling is that if one estimates also illicit inflows using the same method (but a mirror image), they exceed illicit outflows. So on average, developing countries benefit from these flows
- Bottom line: it is hard to use their numbers to come up with convincing estimates (see also Nitsch 2016)
- Even if numbers were correct, one needs to remember that the greatest outflows are from large middle-income countries, meaning that public finance issues in poorest countries would not be solved if these flows were curtailed

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Utilizing international enterprise data sets

- This research strategy utilizes firm-level panels where parents and their subsidiaries are linked to study transfer mispricing
  - firms can use within-company-chain pricing to shift profits across borders
- The profit shown in an affiliate is explained by the tax variables (e.g. the tax difference between the destination and the origin)
- The method has been used outside of developed countries only very recently:
  - OECD (2015): estimated annual global loss of government revenue from base erosion and profit shifting of around US$100–240 billion
  - Johannesen, Tørsløv, and Wier (2016): develop methods that are less demanding in terms of data requirements and apply them to a global sample of multinational firms. Reported profits are roughly twice as sensitive to tax incentives in developing countries as in developed countries.

Some new approaches

- Using customs data to impute transfer pricing
  - Cristea and Nguyen (2016): Danish firms + foreign tax variation
- Event studies
  - Johannesen and Larsen (2016): study the adoption of new financial reporting standards by the European Commission for the value of oil, gas, and mining firms (value dropped up to 10%)
- Leaks
  - Galizia and Galizia (2016): leaked data by International Consortium of Investigative Journalists used to study the responses to European savings directive

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What do the numbers mean for Africa?

- Zucman (2015) calculates that Africa loses tax revenues amounting to 14 billion USD due to capital held offshore by individuals
- Applying the estimates of Crivelli, de Mooij, and Keen (2015) implies that the revenue loss from income-shifting by MNEs is approximately 20 billion USD
- At the same time, ODA to Africa (50 billion USD) exceeds the revenue loss due to illegal capital flight in Africa
  - the revenue loss is around 10% of their tax revenues
  - also smaller than FDI or remittances
- To sum up: illicit capital flight is a serious problem but unlikely to solve African revenue issues. Domestic sources must continue to be responsible for the bulk of tax collection

Conclusion

- It is true that developing countries are more vulnerable to capital flight (also because of the greater relative importance of the CIT)
- Research on illicit financial flows benefits from shifting attention to more credible micro-data based estimates
  - also studies evaluating the effectiveness of policies designed to combat these flows
  - using peer review to screen the results before publishing
- Investing in technical assistance to help tax agencies to raise revenues from both domestic actors and multinationals holds considerable promise
  - Supporting international tax units in the revenue authorities in developing countries to benefit more from international tax information exchange would be one example of such initiatives.

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