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

Niels Johannesen (University of Copenhagen) and Jukka Pirttilä (University of Tampere and UNU-WIDER)

UNU-WIDER and National Treasury Conference (Pretoria, 1 December 2016)
Outline

Introduction

Capital flight by individuals
  Estimates by Zucman
  Alternative estimates

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

Discussion
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
Outline

Introduction

Capital flight by individuals
Estimates by Zucman
Alternative estimates

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

Discussion
Outline

Introduction

Capital flight by individuals
  Estimates by Zucman
  Alternative estimates

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

Discussion
Outline

Introduction

Capital flight by individuals
  Estimates by Zucman
  Alternative estimates

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

Discussion
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.
Outline

Introduction

Capital flight by individuals

Estimates by Zucman

Alternative estimates

Cross-border activities by firms

Some influential macro-level estimates

Micro-data based estimates

Discussion
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
Outline

Introduction

Capital flight by individuals
  Estimates by Zucman
  Alternative estimates

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

Discussion
Outline

Introduction

Capital flight by individuals
   Estimates by Zucman
   Alternative estimates

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

Discussion
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.
Outline

Introduction

Capital flight by individuals
   Estimates by Zucman
   Alternative estimates

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

Discussion
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:
  - 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
Outline

Introduction

Capital flight by individuals
   Estimates by Zucman
   Alternative estimates

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

Discussion
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.


References II


