The Data Agenda

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Tax and development - setting the agenda (Helsinki 1 Nov 2016)
Outline

Introduction

Illicit financial flows from developing countries: Estimating the magnitudes

The impacts of taxation on firm behavior and growth

Another important topic: tax-benefit microsimulation

Conclusion
This presentation

- Gives an overview about our understanding at UNU-WIDER on
  - what kind of research should be conducted to help policymakers improve the tax systems in developing countries
  - what kind of data would be required to successfully carry out such research
- Approach: utilize methods from current best practices in applied tax research in economics to study key policy problems in the taxation area in poor countries
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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?
- A recent UNU-WIDER study (Johannesen and Pirttilä, 2016) offers a critical review of current estimates
Some well-known estimates

- 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 former is based on errors and omissions in the balance of payments
- It is the trade misinvoicing part that is 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.
Estimates of hidden wealth by individuals

- Zucman (2013, 2015) estimates the extent of financial wealth held by private individuals offshore
- The method relies on discrepancies in assets and liabilities positions of countries
  - worldwide total liabilities exceed total assets as not all assets are reported
  - there is also a systematic pattern that tax havens feature the largest discrepancies
- He 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, summing up to around 200 billion USD annually
Estimates of income shifting by MNEs

- While not necessarily illicit, income shifting by deliberate manipulation of transfer pricing by multinational companies is also quite obviously problematic.

- A recent UNU-WIDER study (Johannesen, Tørsløv, and Wier, 2016) utilizing firm-level data indicates that the problem is a more severe one for countries outside of EU.

- Estimates by the OECD (2015) and the IMF (Crivelli, de Mooij, and Keen, 2015) suggest that revenue losses would be in the range of 100-240 billion globally or 200 billion from the non-OECD countries.
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.
- 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.
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The broad research question

- The tax take of developing countries, although gradually rising, is still low
- These countries would need to increase tax revenues to finance necessary public spending on poverty-reducing activities
  - in other words, fiscal capacity needs to be improved
- But increasing the tax burden can come with a cost
  - higher effective tax rates (broadening the base or increasing the rates) can lower the incentives for firm growth and generation formal sector jobs
- This gives rise to potential trade offs
  - one needs to quantify what the actual impacts of tax incentives are on behavior to be able to make the right choices
Tax take is lower

Source: Own calculations based on the GRD of the ICTD (see Prichard, Cobham, and Goodall (2014))
The importance of CIT is limited

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Source: Own calculations based on the GRD of the ICTD (see Prichard, Cobham, and Goodall (2014))
Getting more focused: taxes and SME behaviour

- To mitigate the impact of distortive taxes on small and medium sized firm birth, growth and employment, many countries have special tax incentives targeted to these firms.
- These include:
  - a threshold for mandatory registration to the VAT system
  - offering small firms lower CIT rates
- On the other hand, governments want to curb tax evasion:
  - small firms are subject to presumptive turnover tax instead of the normal CIT system
- We know very little about how these incentives work:
  - To what extent taxes (or tax allowances) impact firm behaviour (their taxable income)
  - If we detect responses, do they stem from changes in real economic activity (sales, employment, investment) or is it just evasion?
Data needed for research about this topic

- Current research from developed countries uses large (often population wide) panel data available directly from administrative sources (revenue authorities).
- Using such data to examine cases where some taxpayers face different tax incentives than others opens up a way for credible identification of causal impacts of taxes on individual and firm behaviour.
- For a long time, there were no studies from developing countries based on similar data.
- The situation has changed in the most recent years in some countries.
Research is currently being done using data from the South African Revenue Service.

Data include, for example, tax returns (directly from e-filing systems) of all S-A corporations.

In my paper with colleagues (Boonzaaier, Harju, Matikka, and Pirttilä, 2016) we use these data to examine how S-A firms react to special SME corporate income tax system:

- the marginal tax rate jumps at around 60,000 rand and 300,000 rand from 0 to 10 and from 10 to 28, respectively.
An example
Way forward

- Discussion ongoing to get access to similar data elsewhere
  - Tanzania, Mozambique, other African countries
- Liaise with researchers at the revenue authorities and other local researchers
- Match revenue authorities and researchers from e.g. Nordic countries with colleagues from African countries to work together for improving data access and conducting policy-relevant research
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What is tax-benefit microsimulation?

- Models that combine
  - representative household-level data on incomes and expenditures
  - detailed coding of the tax and benefit legislation in a country
- “Simulation” – because the user can design alternative social policies or tax structures and examine their impacts on
  - income distribution
  - government budget
  - work incentives etc.
- These models in everyday use in developed countries by ministries but also by researchers
  - econometric tax analysis often requires information on (effective) marginal tax rates. These can be obtained from a microsimulation model
Why essential for developing countries?

- Many developing countries are (or should be) moving away from scattered individual social protection programs to actual systems of protection.
- At the same time, they need to find ways to increase tax revenues.
- Microsimulation is a tool that is needed to understand the economy-wide impacts of such changes.
- Yet, very few developing countries have access to such models.
Our work on microsimulation

- Joint undertaking with the EUROMOD team at the University of Essex and SASPRI (Cape Town)
- EUROMOD
  - both a microsimulation model for European countries
  - a software for building new microsimulation models
- SASPRI has successfully built models for Namibia and South Africa based on the EUROMOD structure
- The three institutions together will build models for selected developing countries, educate local stakeholders to use the models, and prepare research papers utilizing the new tools
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Some concluding thoughts

- Research on illicit financial flows would benefit from shifting attention to more credible micro-data based estimates
  - also studies evaluating the effectiveness of policies designed to combat these flows
- We know extremely little on the perhaps more important topic of tax responsiveness of domestic firms and individuals in developing countries
  - crucial to understand how to build tax incentives
  - optimistic that progress can be made since data have / will become available
- Studies that combine the entire tax/benefit system are key for being able to build effective social protection systems
- Technical assistance to tax authorities in developing countries, and evaluating its effectiveness, is one promising way forward


References II


