Enabling more efficient auditing in developing countries: Profit shifting by multinational corporations in transaction-level data

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PRESENTATION LAYOUT

- Introduction
- Illicit Financial Flows
- Data
- Empirical Strategy
- Pilot study
- Implications for Policy
- Proposed Policy Interventions

INTRODUCTION

- Multinational corporations exploit existing tax arbitrage opportunities.
- The overall scale of profit shifting and the resulting tax revenue losses economically significant.
- It has an important negative effect on economic growth.
- Undermines countries' capacity to mobilize its revenue resources.
- Which countries are likely to be affected more?

INTRODUCTION CONT'D

\$427 billion in tax is lost every year





IFFs by source/destination

- Considering all of a country's external economic relationships, **where** is the highest risk for illicit financial flows?
- Geographic risk: Which partner countries are relevant?
 - E.g. Cayman Islands are the largest global contributor to financial secrecy, but how important are they for North Macedonia?
- What data sources exist to answer these questions?



Basic intuition

- Illicit Financial Flows are enabled by legislative opportunities:
 - Secrecy → Provides anonymity. Typically involves an offshore corporate structure.
 - Lax legislation → Provides motivation and opportunities for corporations and individuals to escape tax or other regulation.

Financial secrecy

- Corporate ownership secrecy
- Non-cooperation
- No exchange of information
- Lax anti-money laundering measures
- Loopholes, exemptions, gaps, tax holidays
- Secrecy on economic activity and tax paid
- Tax treaty aggressiveness

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TAX JUSTICE

WORK

Vulnerability to IFFs

Vulnerability score

Average of Secrecy Scores of partners, weighted by the value of the flow

(= how harmful is the secrecy provided by a country's partners)





http://iff.taxjustice.net/



Inward direct investment to North Macedonia





DATA – MACRO VS MICRO

	MACRO	MICRO
Level	Country level	Firm level
Channels	Economic aggregated (Trade/FDI/Bank/Portfolio)	Transfer pricing transactions
Intensity	Compared with GDP	Compared with Revenue or Gross Profit
Goal	Understand vulnerabilities, target policy	Red-flag transactions or companies for audit

DATA CONT'D

PART D: SUMMARY OF CONTROLLED TRANSACTIONS WITH CONNECTED PERSONS

Controlled Transaction	Amount	Currency	Connected Persons	Jurisdiction of Connected Persons	Classification
ADVERTISING SERVICES	30,296,295			Note: Home country	INCOME
INTEREST ON LOAN	12,428,593				INTEREST EXPENSE
INTEREST ON LOAN	2,322,825			Annual States and the second second second	INTEREST EXPENSE
	ADVERTISING SERVICES INTEREST ON LOAN	ADVERTISING SERVICES 30,296,295 INTEREST ON LOAN 12,428,593	ADVERTISING SERVICES 30,296,295 INTEREST ON LOAN 12,428,593	ADVERTISING SERVICES 30,296,295 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	ADVERTISING SERVICES 30,296,295 Image: Connected Persons Persons INTEREST ON LOAN 12,428,593 Image: Connected Persons Persons

◆Use a new source of administrative data: Transfer Pricing Disclosure Forms (TPDFs).

*To estimate the relative importance of five transaction categories: (i) tangible goods, (ii) services and fees, (iii) royalties, (iv) interest, and (v) reimbursements.

EMPIRICAL STRATEGY

Our empirical strategy to using transaction-level data to estimate the relative importance of individual profit shifting channels consist of two steps. First step;

$$T_{i,x} = \sum_{x,c} \tau_{x,c} \cdot X_{i,x,c}$$

We calculate the hypothetical total tax paid on the transaction's value, $T_{i,x}$, defined as the sum across x and c of the products of the applicable tax rate, $T_{x,c}$, and the value of the transaction category, $X_{i,x,c}$

EMPIRICAL STRATEGY CONT'D

Second step, we move from transaction-level data to the company-level

$$\log(\pi_i) = \beta_0 + \beta_x \cdot \log(\mathbf{T}_{i,x}) + \gamma_x \cdot \log(\mathbf{V}_{i,x}) + \delta_\chi \cdot \chi_i + \epsilon,$$

- Use hypothetical taxes in a variation approach pioneered by Hines and Rice (1994)
- *Ti,x* is a vector of hypothetical taxes applicable to transaction *x*;
- *Vi,x* is the value of transaction *x*;
- xi is a vector of controls containing the company i's financial information available in the TPDFs
- and ε is the error term

PILOT STUDY IN NIGERIA

Figure 1: Average Haven Score of partner countries for Nigerian MNCs' intra-group transactions, by type of transaction



Figure 2: Destinations of outgoing transactions classified as Interest



In Nigeria, we analyzed a sample of 87 companies.

- Risk profiles were created for each company based on the value of the transactions and the location of the subsidiary.
- Six companies were selected to be audited: three using the old methodology, three using vulnerability analysis.
 The audits are underway and are expected to be completed soon.

PROPOSED POLICY INTERVENTION

Proposed policy intervention in two phases;

- Phase one identify companies with the high risk of profit shifting.
- Phase two- send letters to a randomly chosen subgroup of companies.

Assess the treated companies' change in behavior by analyzing TPDFs in the year following the intervention.

CONCLUSION

- We use administrative data and we are happy to help you do that too.
- To identify transactions that are most often used by multinationals to shift profits out of developing countries, or by the wealthy to hide their assets and evade tax and other regulation.
- Interest payments to affiliates in low-tax countries emerge as the likely most important channel of profit shifting for our sample of Nigerian companies.