Globalization, Taxes & Inequality

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Globalization has created new ways to avoid taxes:

- Multinational firms shift profits to low-tax places
- Countries compete by cutting their tax rates
- Wealthy households can move assets to tax havens

How does this tax avoidance redistribute income between nations and between social groups?

→ Key question to think about about the economic and political sustainability of globalization
This talk is based on 4 papers

- “The Missing Profits of Nations” (w. Tørsløv, Wier)
- “The Exorbitant Tax Privilege” (w. Wright)
- “Tax Evasion & Inequality” (w. Alstadsæter, Johannesen)
- “Global Wealth Inequality”

Two goals of this research agenda:

- Positive **macro-distributional analysis of globalization** (data: [http://gabriel-zucman.eu](http://gabriel-zucman.eu))
- Design policies to make globalization more sustainable
The Missing Profits of Nations

How much profits move across countries because of differences in corporate tax rates?

▷ Firms move capital to low-tax countries
▷ Firms shift paper profits to tax havens

If there was a perfect international tax coordination:

▷ Which countries would gain/lose profits?
▷ How? Relocation of capital, or reduced profit shifting?
New data: foreign affiliates statistics → wages, profits, etc. of foreign firms

→ Use these new data to provide first global map of where multinationals book their profits
How we estimate the amount of profits shifted to tax havens

We compute **capital shares** $\alpha$ in **foreign vs. local firms** across the world. Striking global pattern:

- Foreign firms have lower $\alpha$ than local firms...
- ... Except in tax havens: hugely higher $\alpha$

**Benchmark estimate:** set profitability of foreign firms in havens equal to profitability of local firms in havens

- Transparent
- Robust
New data: bilateral service trade

Use these new data to allocate shifted profits to the countries where they have been made.
How we allocate the shifted profits

**Benchmark:** follow destination of tax havens’ service exports and intra-group interest receipts

- **Services:** focus on royalties, management fees, fin. services, etc. → most conducive of shifting
- **Outcome:** granular estimates of profit shifting (eg, France–Ireland, Germany–Switzerland, etc.)

→ **New global database** to study (some of) the redistributive effects of globalization (2015)

- Will update annually → make it possible to study dynamics (eg, effect of policies)
40% of multinat’l profits ($\approx$ $600bn) shifted to havens

- Main winners: Ireland, Luxembourg, Singapore, etc. (impose low rates but on big $600bn$ base)
- Main losers: non-haven EU countries
- Profit shifting swamps tax-driven tangible capital mobility (different welfare implications)
- Rise of capital share is higher than in official data $\rightarrow$ provide corrected estimates of $\alpha$, GDP, trade
Why should we care?

Whatever one’s view about efficiency costs of capital taxation, global profit shifting raises policy issues:

▷ Distorted competition
▷ Inequality
▷ Loss of tax revenue
How multinationals shift profits offshore

Three ways firms shift profits to low-tax countries:
- Manipulation of intra-group export and import prices
- Intra-group interest payments (tax deductible)
- Strategic location of intangibles (eg, Google)
Data to estimate global profit shifting

Directly observable profits booked in tax havens based on foreign affiliates statistics (FATS)

- Census-like confidential surveys
- Harmonized definitions and guidelines
- No double-counting (≠ financial accounting)
- Missing countries (eg, Caribbean): use balance of payments and partners’ FATS → global coverage
Conceptual framework

**Compute profitability \( \pi \) of foreign vs. local firms**

(foreign: >50% foreign-owned)

- Country’s corporate output \( Y = F(K, AL) = rK + wL \)
- Labor share = \( wL/Y \); capital share = \( 1 - \) labor share
  = \( rK/Y \) (\( r = \) normal + above-normal return) \( \equiv \alpha \)
- Net interest paid = \( p\% \) of \( rK \)
- Pre-tax profits/wage ratio: \( \pi = (1 - p) \cdot \alpha/(1 - \alpha) \)
- Recorded \( \pi = f(\text{shifting, other}) \)
In non-havens, foreign firms are less profitable than local firms.
In tax havens, foreign firms are much more profitable than local firms.

Pre-tax corporate profits (% of compensation of employees)

- Foreign firms
- Local firms
Benchmark estimate of profits shifted to tax havens

Set $\pi_f$ in havens equal to local firms profitability $\pi_l$

- Easy to track for policymakers
- Allows havens to have $\pi$ higher than other countries
- Robust
  - Vary $\pi_l$ in havens $\rightarrow$ little difference
  - Sectoral composition $\rightarrow$ $\pi_f \gg \pi_l$ within sector
To study who loses profits, follow the money in balances of payments of havens.
Who loses most? The EU.

Where do the shifted profits come from?

- EU: 35% of total profits shifted to tax havens
- US: 25%
- Developing countries: 20%
- Rest of OECD: 10%
Who loses most? The EU.
Who shifts most? The US.

Allocating the profits shifted to tax havens

<table>
<thead>
<tr>
<th>% of total profits shifted to tax havens</th>
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<td>EU</td>
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<td>Developing countries</td>
</tr>
<tr>
<td>Rest of OECD</td>
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</table>

- Where the shifted profits come from
- To whom the shifted profits accrue
Who loses most? The EU. Who shifts most? The US.

Allocating the profits shifted to tax havens

Why do US multinationals shift more profits? Implications?
Profit Shifting by U.S. Multinationals
Study profits, wage, capital, rates of returns, and taxes of US multinationals back to 1966

Key source: BEA survey of activities of US multinat’l
  ▶ Annual since 1982, every 5 years back to 1966

Supplement with IRS tabulations (form 5471)
  ▶ Main advantage: annual back to early 1960s

→ First long-run series on effective tax rate paid by US firms on their foreign operations
Where do US multinationals operate?

![Chart showing the percentage of total (haven + non-haven affiliates) for affiliates in non-havens and havens over time. The chart includes a line for wages and shows a slight increase in wages over time.]
Where do US multinationals operate?

![Graph showing the percentage of total (haven + non-haven affiliates) for wages and tangible capital over years from 1965 to 2015. The graph compares affiliates in non-havens and tax havens.]
Where do US multinationals book their profits?

- **Wages**, **Pre-tax profits**, **Tangible capital**, and **Affiliates in non-havens** show a decrease from 1965 to 2015.
- **Affiliates in tax havens** show an increase from 1965 to 2015.

The graph indicates a shift from booking profits in non-havens to tax havens over the years.
Where do US multinationals produce intangibles?
In 2016: 50% of profits in havens (taxed at 7%), 50% elsewhere (taxed at 27%)

Where do US multinationals book their profits?
(majority-owned affiliates of US multinationals, 2016)

Half of all the foreign profits of US multinationals were booked in these tax havens in 2016.
Why do US multinationals shift so much profits to tax havens?

**Perceived national interest of the US:** good to let US multinationals shift out of foreign high-tax countries

- Until 2017, US taxed worldwide profits, with credits given for foreign taxes paid
- If foreign profits booked in 0 tax places: no credits given → more tax revenue in US upon repatriation
- 1996: US Treasury facilitates shifting to tax havens (check-the-box regulations) ≠ other countries
Did profit shifting enhance US tax collection?

It did not:

- Haven profits perpetually retained $\rightarrow$ avoided U.S. tax
- Rising untaxed profits $\rightarrow$ rising lobbying for amnesty
- 2017 law: mandatory one-time tax at low rate ($< 8\%$) of past untaxed profits

$\rightarrow$ We can now compute total taxes on foreign profits of US multin’ls (already paid $+$ owed to US due to 2017 law)
Total tax rate on foreign profits, including effect of 2017 mandatory repatriation

Tax rate paid by U.S. multinationals on foreign profits
(All sectors excluding oil)

- Statutory U.S. rate
- Rate paid to foreign countries
- Rate including U.S. amnesty
The redistributive effects of profit shifting

1) Redistribution across income groups:
   ▶ Rise of global after-tax profits ↗ income for shareholders
   ▶ Ongoing work (with C. Gaubert & W. Sandholtz) to estimate how much various income/wealth groups gain/lose in each country

2) International redistribution of tax revenues:
   ▶ For small countries, revenue-max. rate $0 < \tau^* < 5\%$: havens with $\tau \approx \tau^*$ generate very large tax revenue
   ▶ Can explain the rise of the supply of tax avoidance schemes (e.g., tax rulings: Apple – Ireland)
Many havens collect a lot of tax revenue...

Corporate income tax revenue
(% of national income)

Average among non-havens: 3.5%
... By applying low rates to the huge tax base they attract
As profit shifting rose...

Pre-tax corporate profits
(% of compensation of employees)

Ireland
United States
...Tax revenue rose in many havens, while they ↓ or stagnated in high-tax countries.
The lower the rate, the higher the revenue

Corporate income tax revenue vs. tax rate in Ireland

Tax revenue (left) (% of national income)

Nominal tax rate (right)
Tax Evasion in a Globalized World: Evidence from Leaks
Anecdotal evidence that wealthy conceal assets abroad (UBS, Credit Suisse, Panama Papers, Manafort...)

- How important is this form of tax evasion?
- How concentrated is it?
- How does it change what we know about inequality?
We analyze new data capturing evasion by the wealthy

Massive leaks from HSBC Switzerland and Mossack Fonseca ("Panama Papers")

- Leaks random & from big offshore wealth managers
- Match to tax records in Norway, Sweden, Denmark (ongoing work in US with D. Reck et al.)
- Combine with macro stats on wealth hidden in havens

Two key findings:

- Offshore evasion very concentrated
- At the top, way larger than evasion detected in random audits
The HSBC leak

Key strengths:

- Large bank (among top 10 Swiss banks)
- Representative
- Recorded identity of beneficial owners
- Clear-cut way to identify evasion
The proba to have an unreported HSBC account rises sharply within the top 1%

Probability to own an unreported HSBC account, by wealth group
(HSBC leak)
HSBC evaders hide close to half of their wealth at HSBC

Average wealth hidden at HSBC, by wealth group
(% of total wealth (including held at HSBC))

<table>
<thead>
<tr>
<th>Net wealth group [millions of US$]</th>
<th>Average wealth hidden at HSBC</th>
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<tbody>
<tr>
<td>P90-P95 [0.6 – 0.9]</td>
<td></td>
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<tr>
<td>P95-P99 [0.9 – 2.0]</td>
<td></td>
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<tr>
<td>P99-P99.5 [2.0 – 3.0]</td>
<td></td>
</tr>
<tr>
<td>P99.5-P99.9 [3.0 – 9.1]</td>
<td></td>
</tr>
<tr>
<td>P99.9-P99.95 [9.1 – 14.6]</td>
<td></td>
</tr>
<tr>
<td>P99.95-P99.99 [14.6 – 44.5]</td>
<td></td>
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<tr>
<td>Top 0.01% [&gt; 44.5]</td>
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Other samples

Panama Papers:

▷ Another large intermediary
▷ But not possible (yet) to identify evasion v avoidance

Amnesty participants:

▷ Big samples (1,422 hholds Norway; 6,811 Sweden)
▷ Tax evasion by definition involved
▷ But self-selection
The Panama Papers confirm that the use of tax havens rises sharply with wealth.
Amnesty data show widespread evasion at the top

Probability to voluntarily disclose hidden wealth, by wealth group
(Swedish and Norwegian tax amnesties)
Hidden wealth is extremely concentrated

Distribution of wealth: recorded vs. hidden

% of total recorded or hidden wealth

Position in the wealth distribution

All recorded wealth

Hidden wealth disclosed in amnesty

Hidden wealth held at HSBC
Estimating tax evasion through offshore intermediaries

Five steps:

▷ Macro stock of offshore wealth
▷ What fraction hidden vs declared
▷ Distribute like in HSBC and amnesties
▷ Apply rate of return
▷ Use tax simulator to estimate evaded tax
Offshore tax evasion vs. tax evasion detected in random audits

Taxes evaded, % of taxes owed

% of taxes owed that are not paid

0% 5% 10% 15% 20% 25% 30%

Position in the wealth distribution

Offshore evasion (leaks)

Tax evasion other than offshore (random audits)
Factoring in offshore wealth is important to measure inequality at the top.

The top 0.01% wealth share and its composition:
- Offshore wealth
- All wealth excluding offshore

% of total household wealth:
- Spain
- UK
- Scandinavia
- France
- USA
- Russia
Conclusion
The redistributive effects of globalization

Much attention has been paid to redistributive effects of international trade:

- Large academic literature
- Major effort to coordinate trade policies post-WW2

Less attention has been paid to challenges raised by tax competition, profit shifting, financial opacity:

- Major redistribution of revenue both across countries and social groups
- Need to design policies to address these challenges