# Globalization, Taxes & Inequality

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### Introduction

#### Globalization has created new ways to avoid taxes:

- ▶ Multinational firms shift profits to low-tax places

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)

- "Global Wealth Inequality"

#### Two goals of this research agenda:

- ▷ Positive macro-distributional analysis of globalization (data: 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 shift paper profits to tax havens

#### If there was a perfect international tax coordination:

- ▶ Which countries would gain/lose profits?

# New data: foreign affiliates statistics $\rightarrow$ wages, profits, etc. of foreign firms

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Structural business statistics (sbs) (New activity classification (NACE Rev 2))
SBS - main indicators (sbs_na)
        SBS - industry and construction (sbs_ind_co)
        SBS - trade (sbs dt)
BS - services (serv)
B SBS - regional data - all activities (sbs_r)
Access to finance (acf)
Business demography statistics - all activities (bd)
Factors of Business Success statistics - all activities (fobs)
Foreign controlled EU enterprises - inward FATS (fats)
   Foreign control of enterprises - from 2008 onwards (NACE Rev.2) (fats 08)
        Foreign control of enterprises by economic activity and a selection of controlling countries (from 2008 onwards) (fats, g1a, 08)
            Foreign control of enterprises by controlling countries (from 2008 onwards) (fats_g1b_08)
         Foreign control of enterprises: research and development characteristics by economic activity (NACE Rev.2, B-F) and a selection of controlling countries (from 2009 onwards) (fats_g1a_rd)
   Foreign control of enterprises - 2003-2007 (NACE Rev. 1.1) (fats 03)
   Foreign control of enterprises - 1996-2002 (NACE Rev. 1.1) (fats 96)
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—> 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

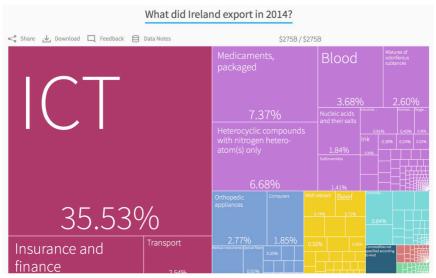
We compute **capital shares**  $\alpha$  **in foreign vs. local firms** across the world. Striking global pattern:

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

**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

- $\triangleright$  Services: focus on royalties, management fees, fin. services, etc.  $\rightarrow$  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)
  - $\triangleright$  Will update annually  $\rightarrow$  make it possible to study dynamics (eg, effect of policies)

### Main results

### **40% of multinat'l profits** ( $\approx$ \$600bn) shifted to havens

- ▶ Main losers: non-haven EU countries
- Profit shifting swamps tax-driven tangible capital mobility (different welfare implications)
- $\triangleright$  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

## 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)

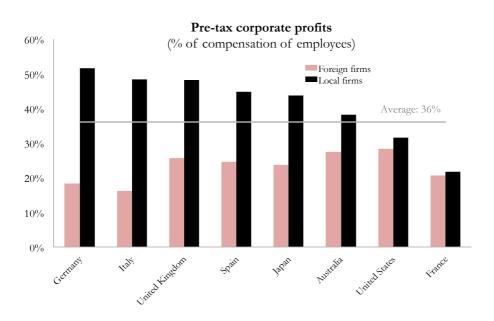
- ▷ Census-like confidential surveys
- $\triangleright$  No double-counting ( $\neq$  financial accounting)
- $\triangleright$  Missing countries (eg, Caribbean): use balance of payments and partners' FATS  $\rightarrow$  global coverage

### Conceptual framework

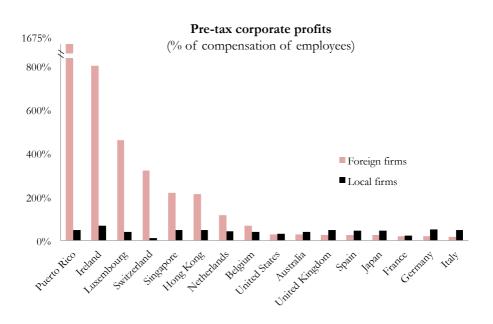
## Compute profitability $\pi$ of foreign vs. local firms (foreign: >50% foreign-owned)

- $\triangleright$  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)  $\equiv \alpha$
- $\triangleright$  Net interest paid = p% of rK
- $\triangleright$  Pre-tax profits/wage ratio:  $\pi = (1 p) \cdot \alpha/(1 \alpha)$
- $\triangleright$  Recorded  $\pi = f(shifting, other)$

# In non-havens, foreign firms are less profitable than local firms



# In tax havens, foreign firms are much more profitable than local firms

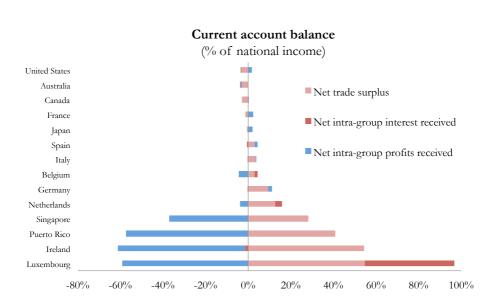


## Benchmark estimate of profits shifted to tax havens

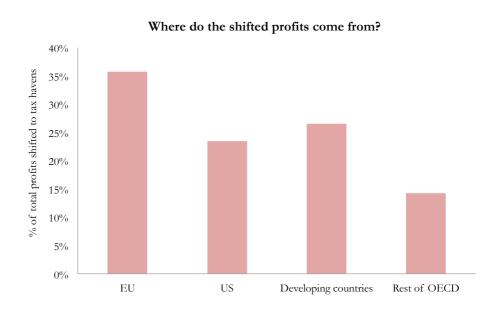
### Set $\pi_f$ in havens equal to local firms profitability $\pi_I$

- $\triangleright$  Allows havens to have  $\pi$  higher than other countries
- ▶ Robust
  - $\triangleright$  Vary  $\pi_I$  in havens  $\rightarrow$  little difference
  - $\triangleright$  Sectoral composition  $\rightarrow \pi_f >> \pi_I$  within sector

# To study who loses profits, follow the money in balances of payments of havens

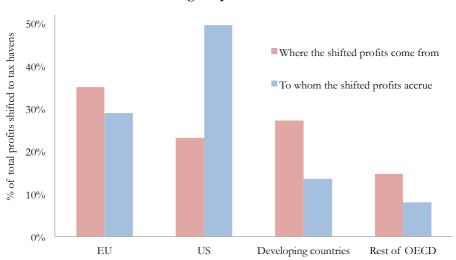


### Who loses most? The EU.



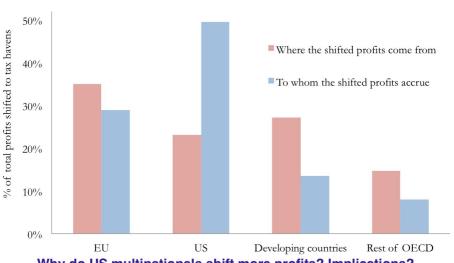
## Who loses most? The EU. Who shifts most? The US.

#### Allocating the profits shifted to tax havens



## 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

## The Exorbitant Tax Privilege

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

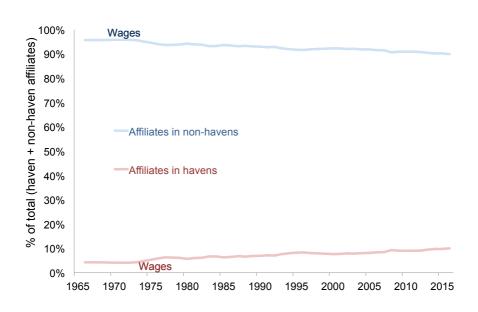
⊳ Annual since 1982, every 5 years back to 1966

Supplement with IRS tabulations (form 5471)

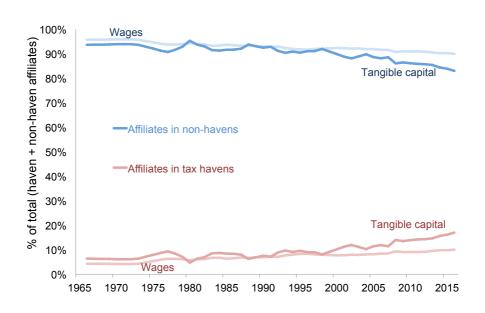
▶ Main advantage: annual back to early 1960s

 $\rightarrow$  First long-run series on effective tax rate paid by US firms on their foreign operations

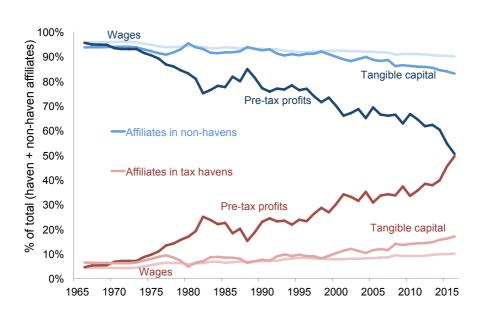
### Where do US multinationals operate?



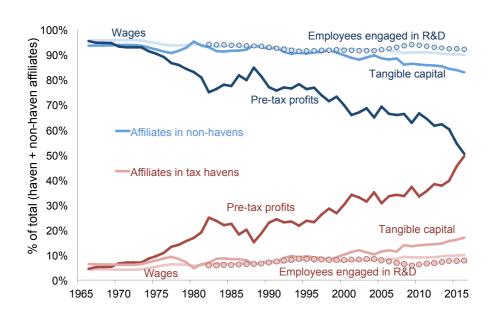
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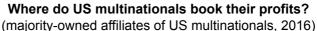
# Where do US multinationals book their profits?

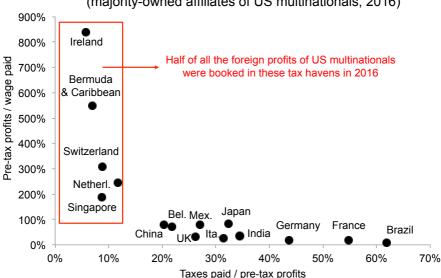


# Where do US multinationals produce intangibles?



# In 2016: 50% of profits in havens (taxed at 7%), 50% elsewhere (taxed at 27%)





# 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
- $\triangleright$  If foreign profits booked in 0 tax places: no credits given  $\rightarrow$  more tax revenue in US upon repatriation
- $\triangleright$  1996: US Treasury facilitates shifting to tax havens (check-the-box regulations)  $\neq$  other countries

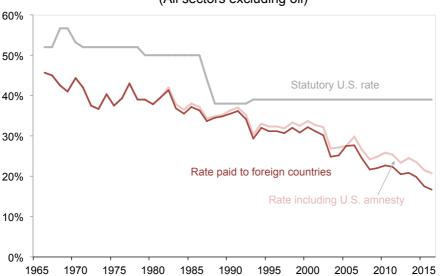
## Did profit shifting enhance US tax collection?

#### It did not:

- $\triangleright$  Haven profits perpetually retained  $\rightarrow$  avoided U.S. tax
- hd Rising untaxed profits o rising lobbying for amnesty
- $\triangleright$  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)



## The redistributive effects of profit shifting

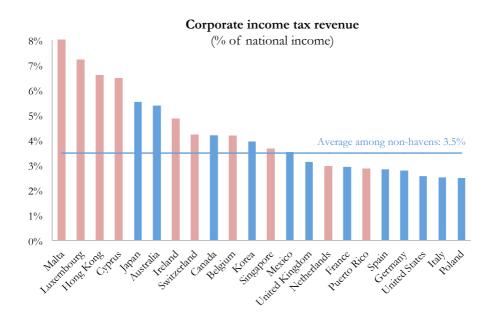
### 1) Redistribution across income groups:

- 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:

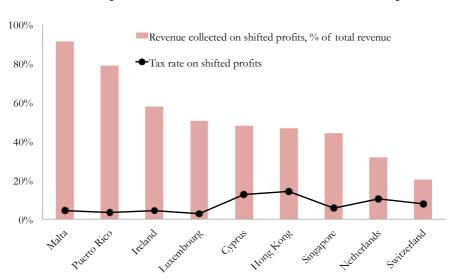
- $\triangleright$  For small countries, revenue-max. rate  $0 < \tau^* < 5\%$ : havens with  $\tau \approx \tau^*$  generate very large tax revenue
- Can explain the rise of the supply of tax avoidance schemes (e.g., tax rulings: Apple − Ireland)

## Many havens collect a lot of tax revenue...

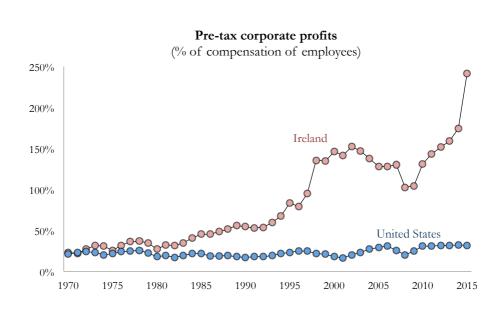


# ... By applying low rates to the huge tax base they attract

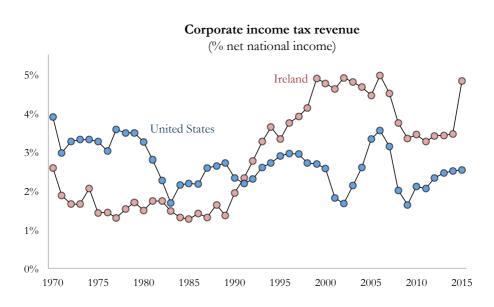
#### Corporate tax revenue collected & tax rate on shifted profits



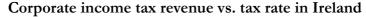
## As profit shifting rose...

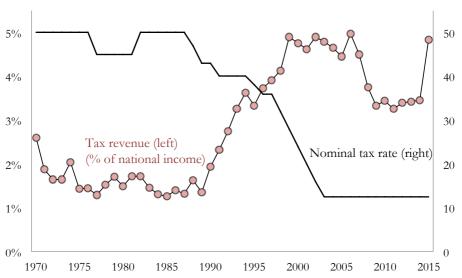


# ...Tax revenue rose in many havens, while they $\downarrow$ or stagnated in high-tax countries



## The lower the rate, the higher the revenue





Tax Evasion in a Globalized World:

Evidence from Leaks

### Tax Evasion and Inequality

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")

- ▶ Match to tax records in Norway, Sweden, Denmark (ongoing work in US with D. Reck et al.)

### Two key findings:

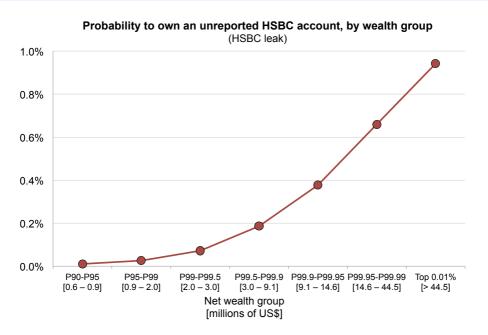
- Offshore evasion very concentrated
- ▶ At the top, way larger than evasion detected in random audits

### The HSBC leak

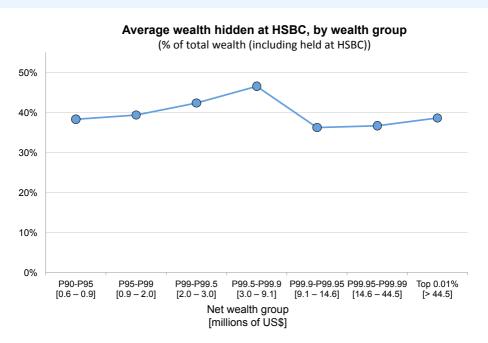
#### **Key strengths:**

- ▶ Large bank (among top 10 Swiss banks)
- ▶ Representative
- Clear-cut way to identify evasion

# The proba to have an unreported HSBC account rises sharply within the top 1%



## HSBC evaders hide close to half of their wealth at HSBC



### Other samples

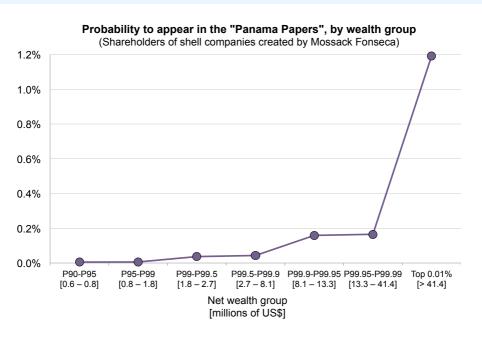
#### **Panama Papers:**

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

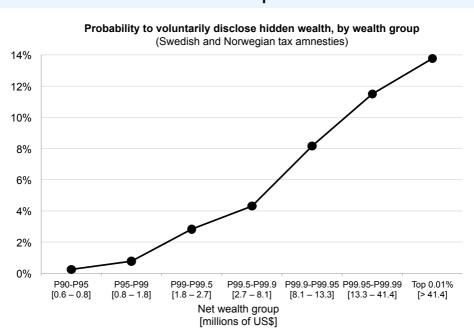
#### **Amnesty participants:**

- ▷ Big samples (1,422 hholds Norway; 6,811 Sweden)
- > Tax evasion by definition involved

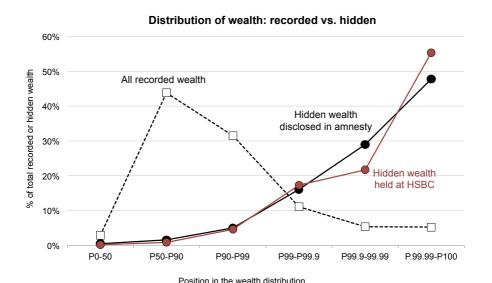
# The Panama Papers confirm that the use of tax havens rises sharply with wealth



# Amnesty data show widespread evasion at the top



### Hidden wealth is extremely concentrated

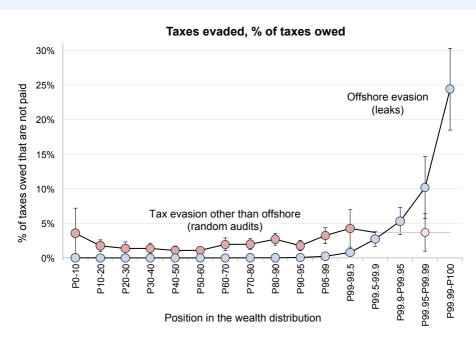


# Estimating tax evasion through offshore intermediaries

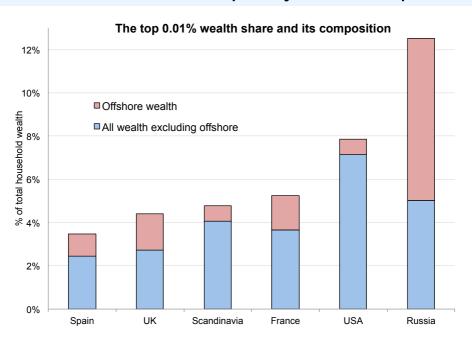
#### Five steps:

- ▶ Macro stock of offshore wealth
- ▶ What fraction hidden v declared
- Distribute like in HSBC and amnesties
- ▷ Apply rate of return

## Offshore tax evasion vs. tax evasion detected in random audits



# Factoring in offshore wealth is important to measure inequality at the top



## Conclusion

### The redistributive effects of globalization

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

- ▶ 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