

Eco L3 - Globalization, Inequality, and Redistribution

Lecture 7: Global profit shifting and tax competition

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Roadmap

- How capital taxes can be avoided in a globalized world
- The magnitude and revenue costs of profit shifting
- Tax competition for profits vs. capital

1 Residence vs. source taxation

To think about capital taxation in an open economy, key distinction is **residence** vs. **source** base capital taxation

- Residence: capital tax based on residence of owner of capital (or location of headquarter for firms)
- Most individual income tax systems are residence based (with credits for taxes paid abroad)

- Can only escape tax through evasion or changing residence
- Source taxation: capital income tax based on location of capital
- Most corporate income tax systems are source based

Three main consequences of source-based taxation:

- Profit shifting to low-tax countries
- Relocation of capital to low-tax countries
- Tax competition leading to equilibrium where tax rates are too low

2 International profit shifting

- Corporate taxes are to be paid where profits have been made
- Problem: easy to manipulate location of profits
 - Manipulating intra-group import / export prices (*transfer prices*)
 - Intra-group borrowing
 - Locating intangibles in tax havens

Transfer price manipulations

- Subsidiaries of a same group are supposed to compute their profits as if unrelated (*arm's length pricing*)
- In practice, relatively easy to manipulate transfer prices, and reference prices sometimes do not exist
- Sizable evidence that intra-group prices differs from arm's length prices (Clausing NTJ 2003)

Strategic location of debt and intangibles

- Booking assets in low-tax countries enables firms to deduct income in high-tax countries and earn interest & royalties in tax havens
- Transfer of intellectual property can be done through outright sale (Google 2003)
- Or cost sharing: offshore subsidiary contributes part of the cost of developing IP (→ exports of rights to use IP from US to, eg, Ireland in US trade data)

Treaty shopping

- Anti-avoidance rules are supposed to limit ability of multinationals to shift profits: thin capitalization, controlled foreign corporations
- Can be avoided by exploiting inconsistency in tax laws across countries (*treaty shopping*)
- For instance, inconsistent definition of what a corporation is or where it is located

Microeconomic studies

- Large literature profit shifting using Orbis accounting micro-data

- Profit shifting is estimated by running

$$\log(\pi_{ic}) = \alpha + \beta(\tau_p - \tau_c) + \delta Firm_i + \gamma Country_c + \epsilon_{ic}$$

- where π_{ic} denotes pre-tax profits booked by company i in country c , τ_c the tax rate in country c , τ_p the tax rate in the partner's country (eg, the parent country, see below), and $Firm_i$ and $Country_c$ firm and country controls.

Limits of Orbis

- Orbis provides accurate information about global consolidated profits
- But relies on info in public business registries to record the profits made by multinationals in their various subsidiaries
- No or very limited profit data available in countries with no public registry or no public income info in registry

Are the coverage gaps in Orbis a problem?

- β unbiased if semi-elasticity of profit shifting with respect to tax rate differentials is constant
- But evidence that shifting elasticity is nonlinear, with more responsiveness at lower tax rates than at higher ones
 - Dowd et al. (2017) using IRS tax data find tax semi-elasticities of 4.7 at corporate tax rates of 5% and 0.6 at tax rates of 30%
 - Bilicka (AER 2019) studies profit shifting out of UK using UK

tax data, and finds that accounting data underestimate true size of profit shifting relative to more comprehensive tax data.

- Can also lead to biased inferences about the location of shifted profits.
- E.g, If only high-tax countries have public registries, then one can find that all profit shifting takes place between high-tax countries...
- ... whereas this shifting may be second-order relative to the shifting to low-tax countries.

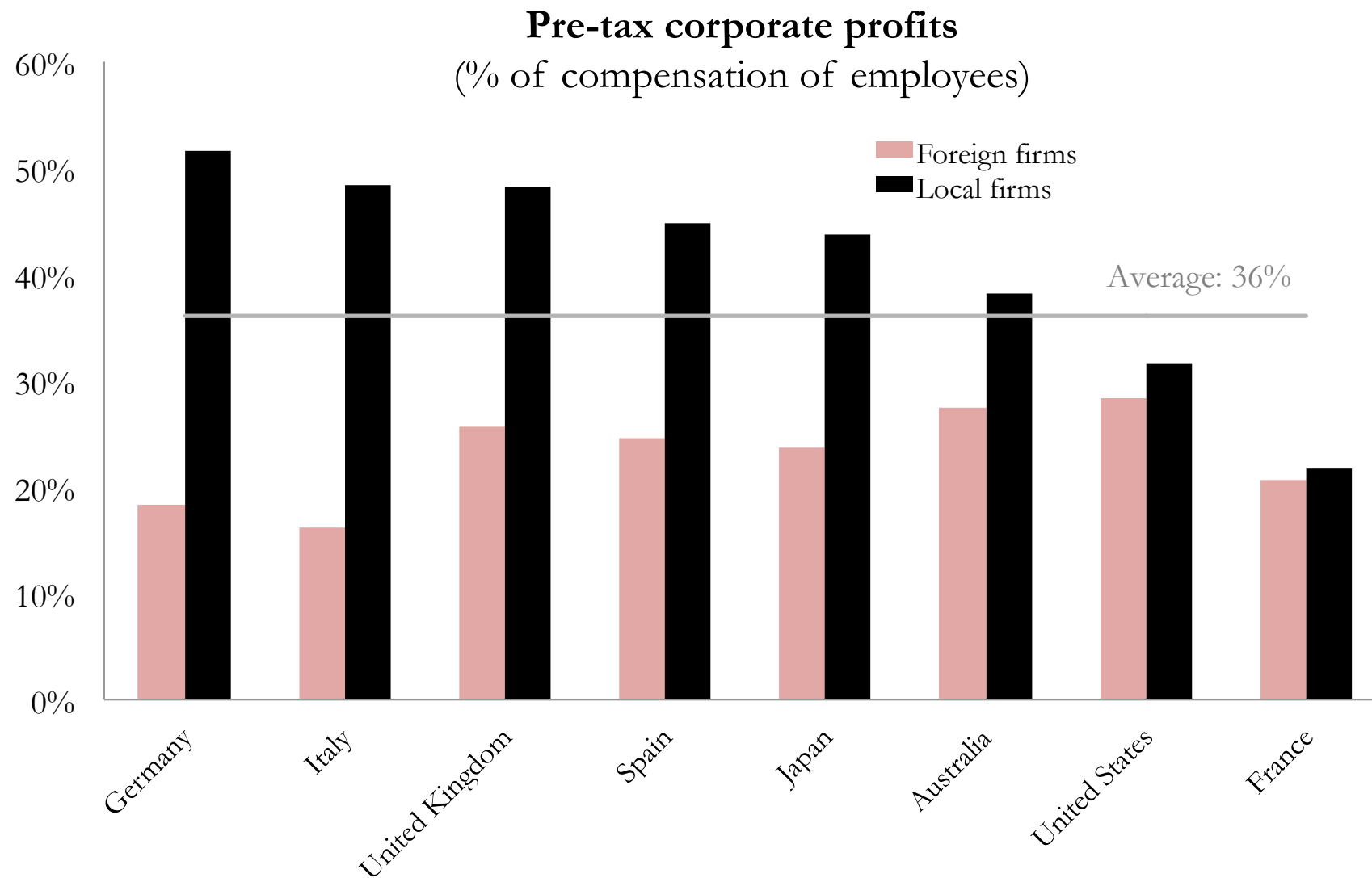
Macro evidence on profit shifting

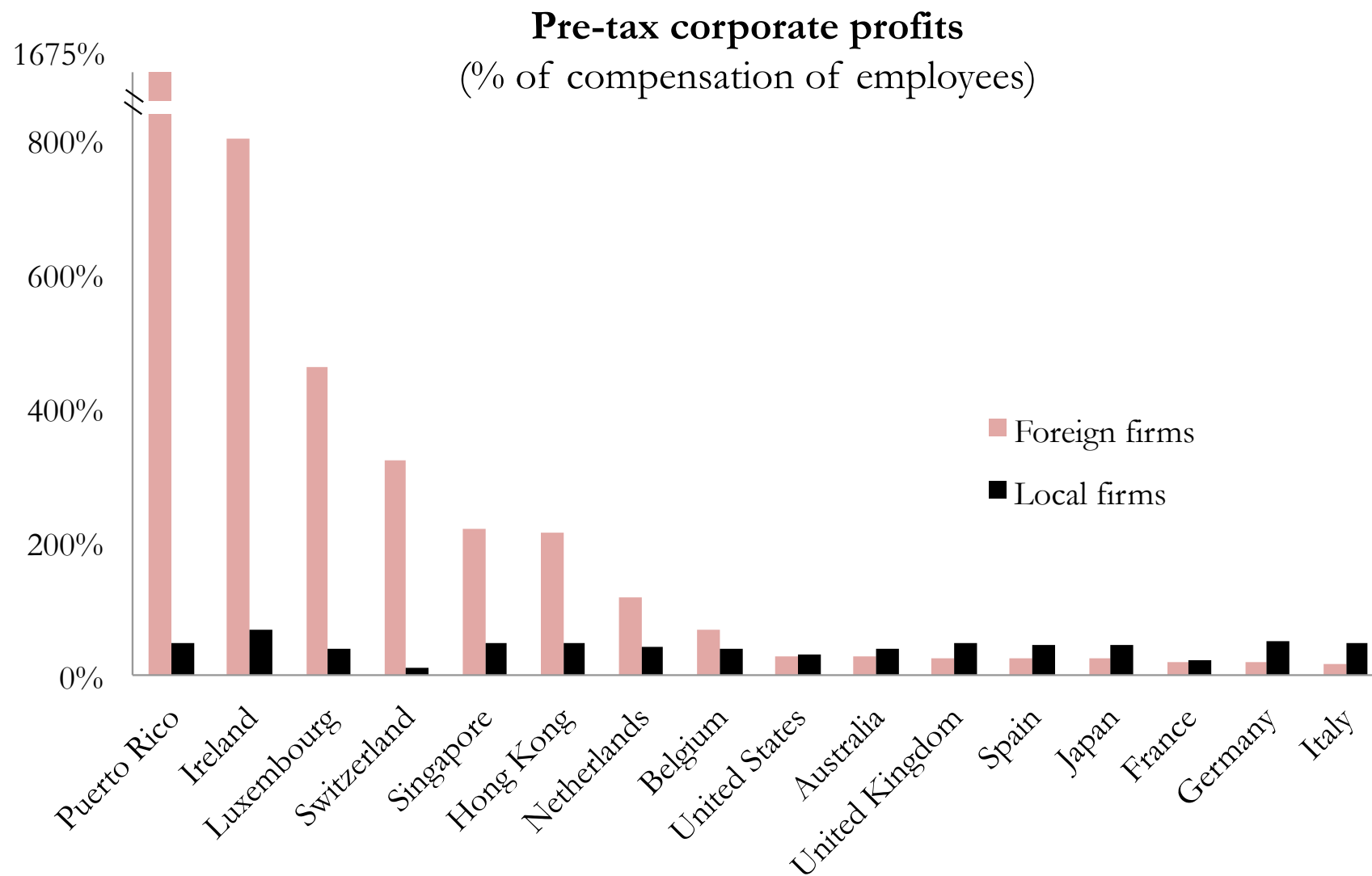
- Recent work takes a macro perspective to study profit shifting.
- Mostly uses US data hence focus on US multinationals (Clausing, 2009, 2016; Gravelle, 2009; Guvenen et al., 2018).
- Key US data source: detailed surveys of foreign activities of US multinationals
- Similar data recently released in other countries (Torslov et al 2018)

Global profit shifting: methodology (Torslov et al., 2018)

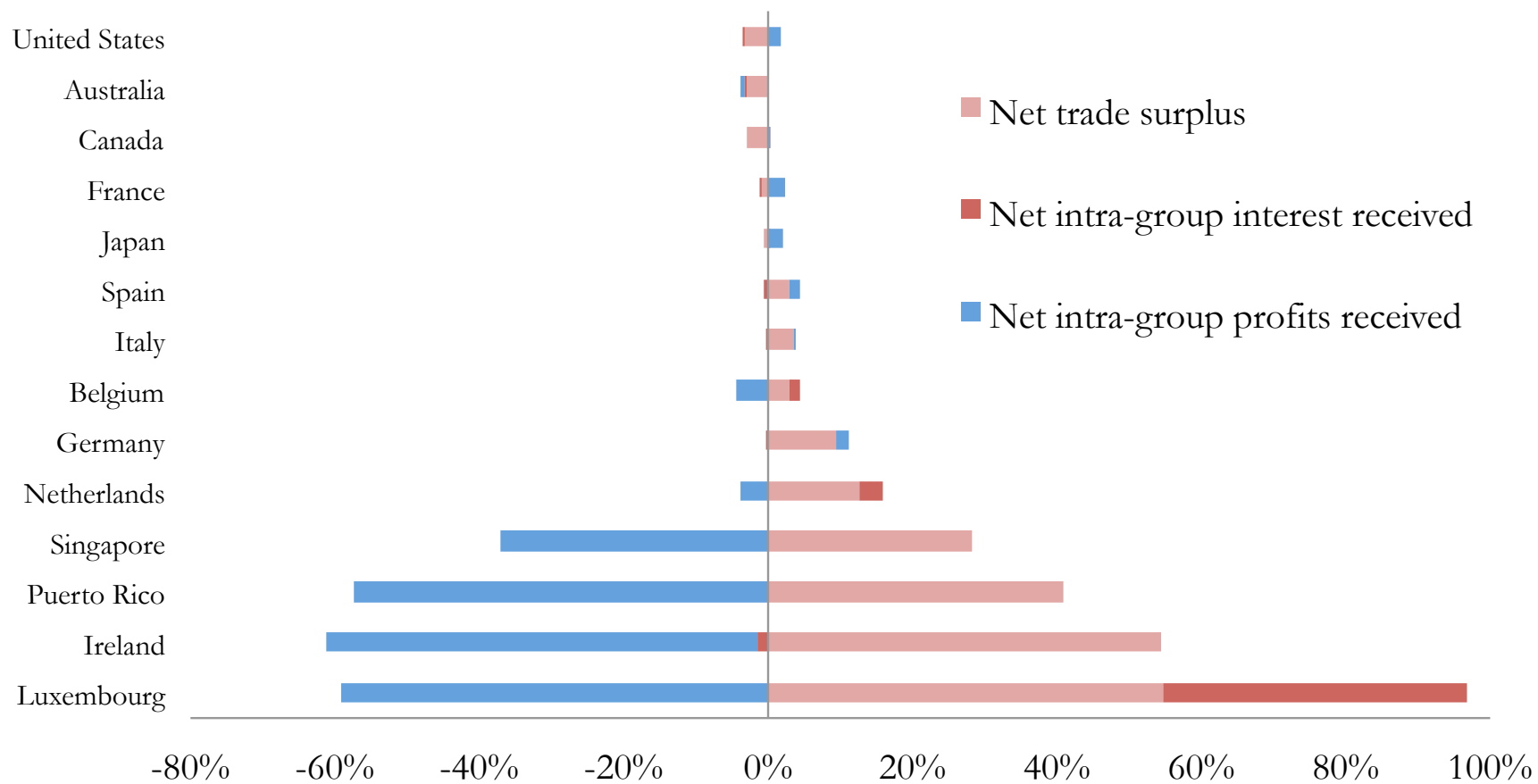
Idea: study capital share of local vs. foreign firms across the world.
Striking global pattern:

- Foreign firms have lower α than local firms...
- ... Except in tax havens: hugely higher α
- Estimate of globally shifted profits: set profitability of foreign firms in havens equal to profitability of local firms in havens

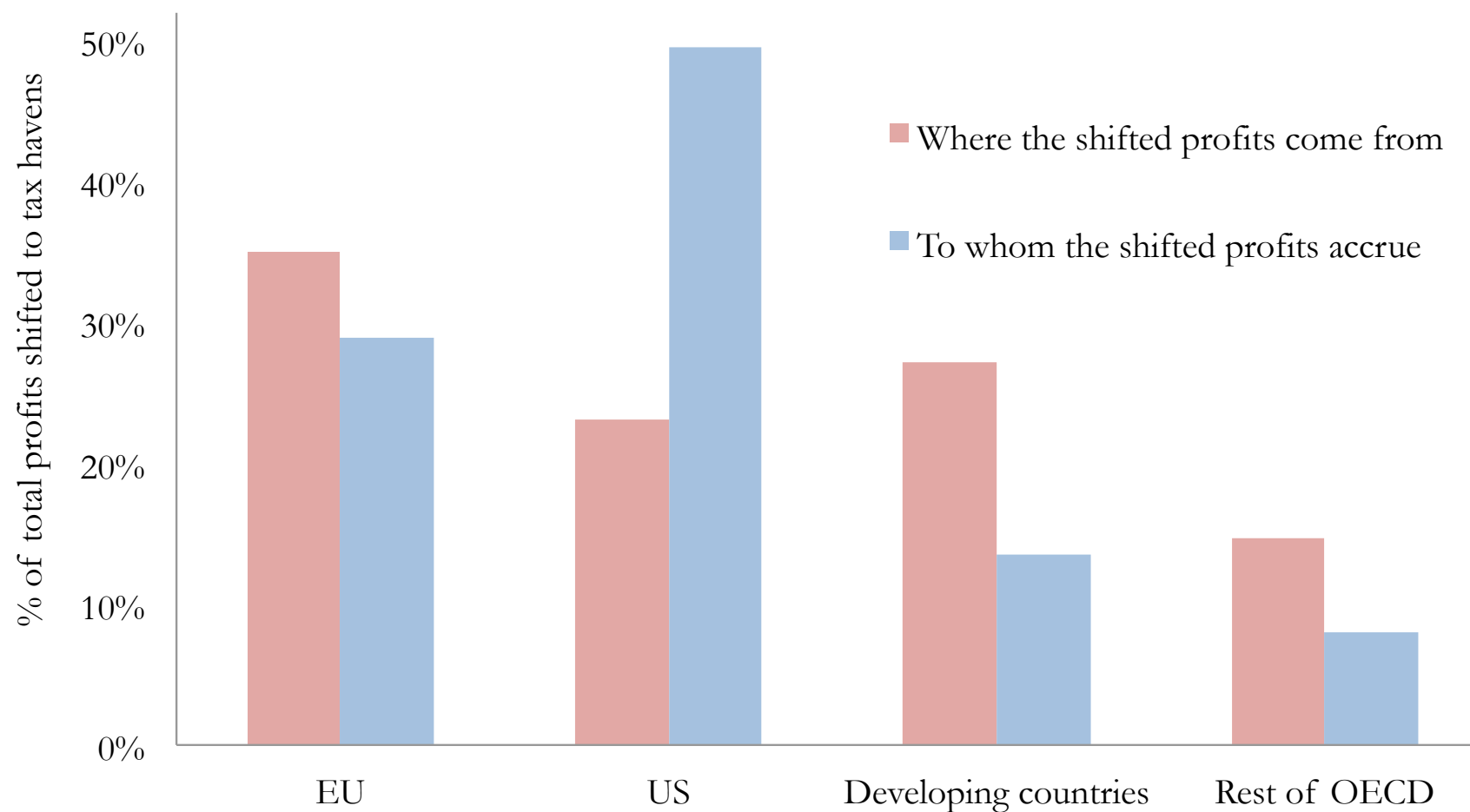




Current account balance (% of national income)



Allocating the profits shifted to tax havens



3 Tax competition

- Lower corporate tax rate → attracts capital from abroad → gives incentives to other countries to cut their own rate
- Key driver behind global decline in corporate tax rates (49% on average globally in 1985 vs. 24% today)
- Similar issues between sub-national govts. (such as US states).
Difference: Federal gov. can help coordinate

Capital mobility vs. profit shifting: the case of US multinationals

Quantitatively, how does capital mobility and profit shifting compare?

- Wright-Zucman (2018) study profits, wage, capital, rates of returns, and taxes of US multinationals back to 1966
 - Using BEA of activities of US multinationals
 - Data Annual since 1982, every 5 years back to 1966

