

# Corporate Taxation

131 Undergraduate Public Economics  
Emmanuel Saez  
UC Berkeley

## Basic Definitions

**Corporation** is a for-profit business owned by shareholders with limited liability (if business goes bankrupt, share price drops to zero but shareholders not liable for unpaid bills/debt)

**Shareholders:** Individuals who own the stock of the company.

**Ownership vs. control:** owners are shareholders. Managers (CEO and top executives) in general do not own the company but run the corporation on behalf of shareholders

**Agency problem:** A misalignment of the interests of the owners and the managers of a firm

**Corporation objective:** Economic view is that corporations should maximize profits to benefit shareholders. Corporate social responsibility view is that corporations should also care about their workers, customers, and community

# FIRM FINANCING

Firms can finance themselves through debt or through equity

**1) Debt finance:** The raising of funds by borrowing from lenders such as banks, or by selling corporate bonds. Pay back loan with interest.

**Corporate bonds** are promises by a corporation to make periodic interest payments, as well as ultimate repayment of principal, to the bondholders (the lenders)

**2) Equity finance:** The raising of funds by sale of ownership shares in a firm. Shareholders receive dividends from corporation and capital gain if the share price increases

Bondholders have priority on shareholders for repayment in case of bankruptcy

## Profits and corporate tax

Corporations use capital (land, buildings, machines, equipment) and labor (workers) to transform inputs (raw materials) into outputs (goods/services produced and sold to customers).

Profits = revenues from sales - expenses (labor costs, inputs, capital depreciation, interest payments on debt)

Profits are taxed by corporate tax at 21% (since 2018). After-tax profits can be distributed to shareholders (called payouts) as dividends or as a share buyback (share repurchase), or retained in the corporation (retained earnings).

**dividend:** periodic payment to shareholders from the company

**retained earnings:** Any net profits that are kept by the company rather than paid out to debt or equity holders.

**capital gain:** The increase in the price of a share since its purchase. Retained earnings increase the value of the corporation and hence the share price.

## Why Do We Have a Corporate Tax?

Corporations are not people but are ultimately owned by people. In principle, we want to tax people based on their economic resources but:

**1) Tax collection convenience:** Historically, corporations are more convenient to tax than individuals because they are large, visible, and have detailed accounts (for transparency for their shareholders).

**2) Taxing foreign owners:** Corporations often have foreign owners. Countries want to tax economic activity on their territory. E.g., developing country with foreign owned mineral/oil extraction companies

**3) Taxing Pure Profits:** Some firms have market power (e.g., Apple) and hence earn pure profits. Taxing pure profits does not distort behavior because firms maximize profits anyway

**4) MOST IMPORTANT: Back-up for individual taxes:** With no corporate tax, shareholders could postpone taxes indefinitely if corporations never pay out their earnings. Individuals could also incorporate their economic activity and be taxed only when taking their money out

## Corporate tax revenue and progressivity

**1) Revenue:** Aggregate corporate tax revenue has fallen sharply since 1950s: in 2018, Fed corporate tax revenue less than 1% of national income (was 5%+ in the 1950s)

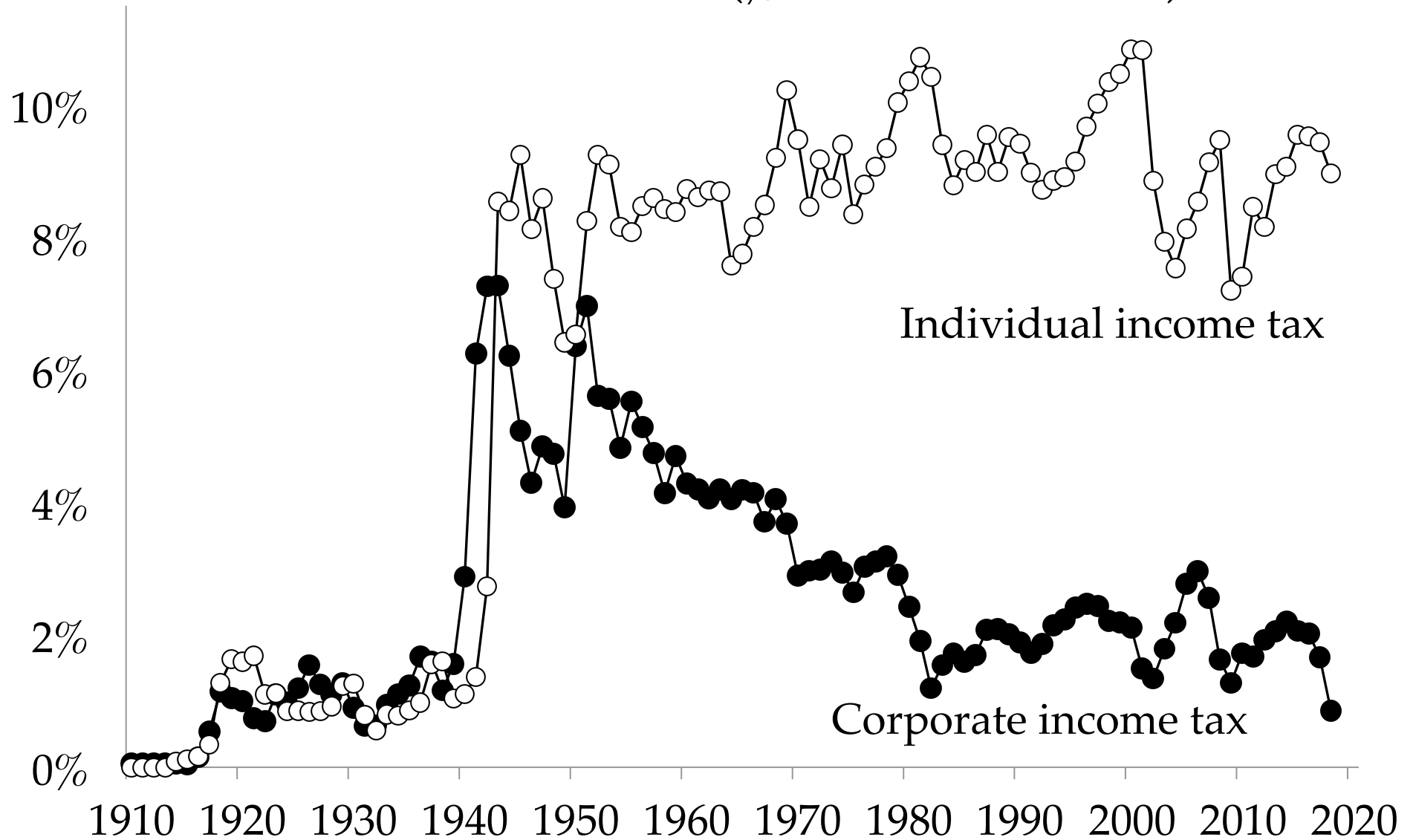
**2) Progressivity:** Corporate tax is quite progressive because corporate share ownership is concentrated at the top of distribution (slightly less so in recent decades due to rise of pension funds which democratize share ownership).

Among billionaires, wealth is primarily in the form of corporate stock (Amazon for Bezos, Tesla for Musk, etc.)

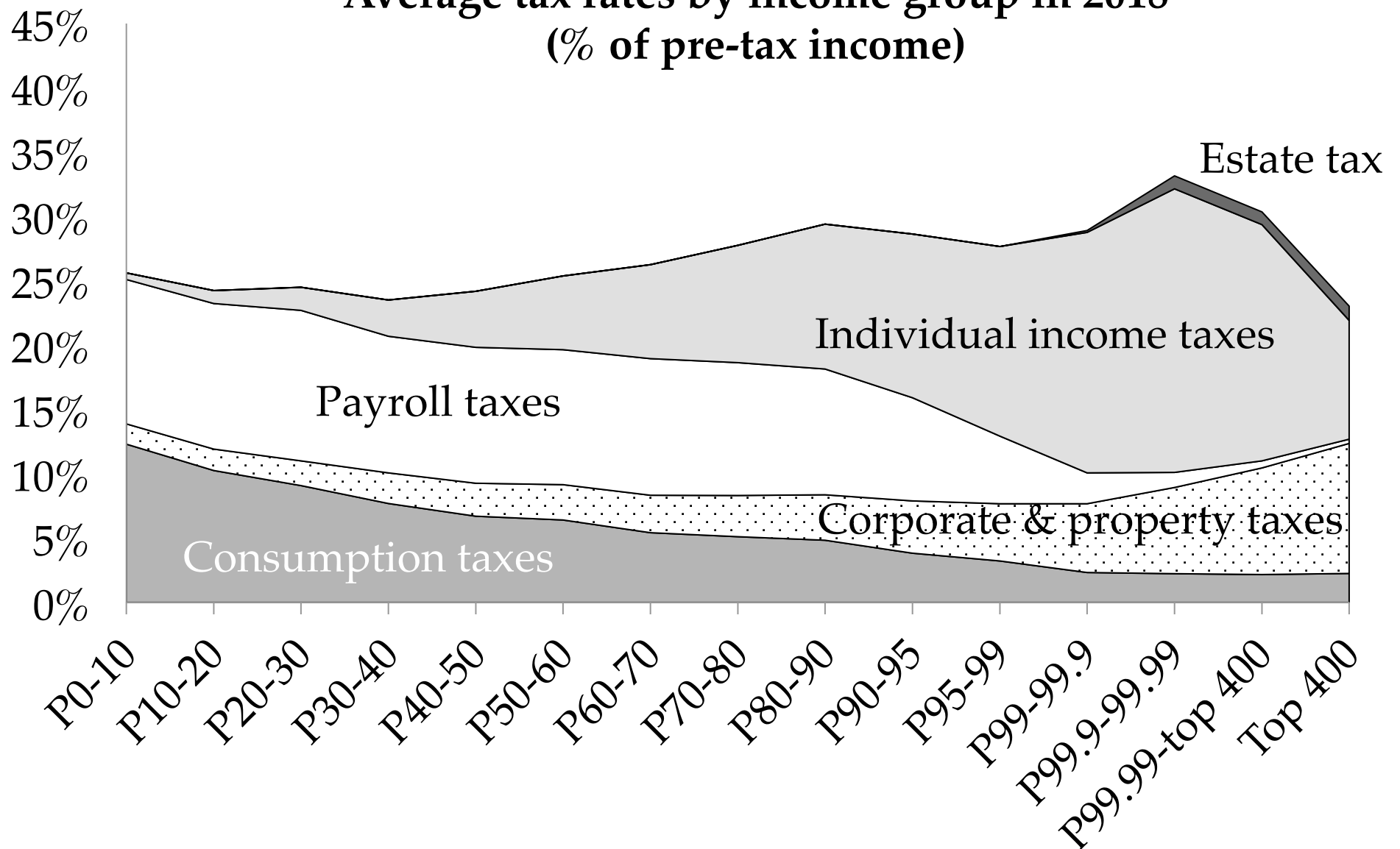
Corporate tax was backbone of progressivity in the US in mid-20th century (tax at source of 50% of real corporate profits)

2018 Trump tax reform cut Fed corporate tax from 35% to 21% and lowered revenue by almost half  $\Rightarrow$  Explains why the top 400 face a lower rate than other income groups in 2018

## Federal tax revenue (% of national income)

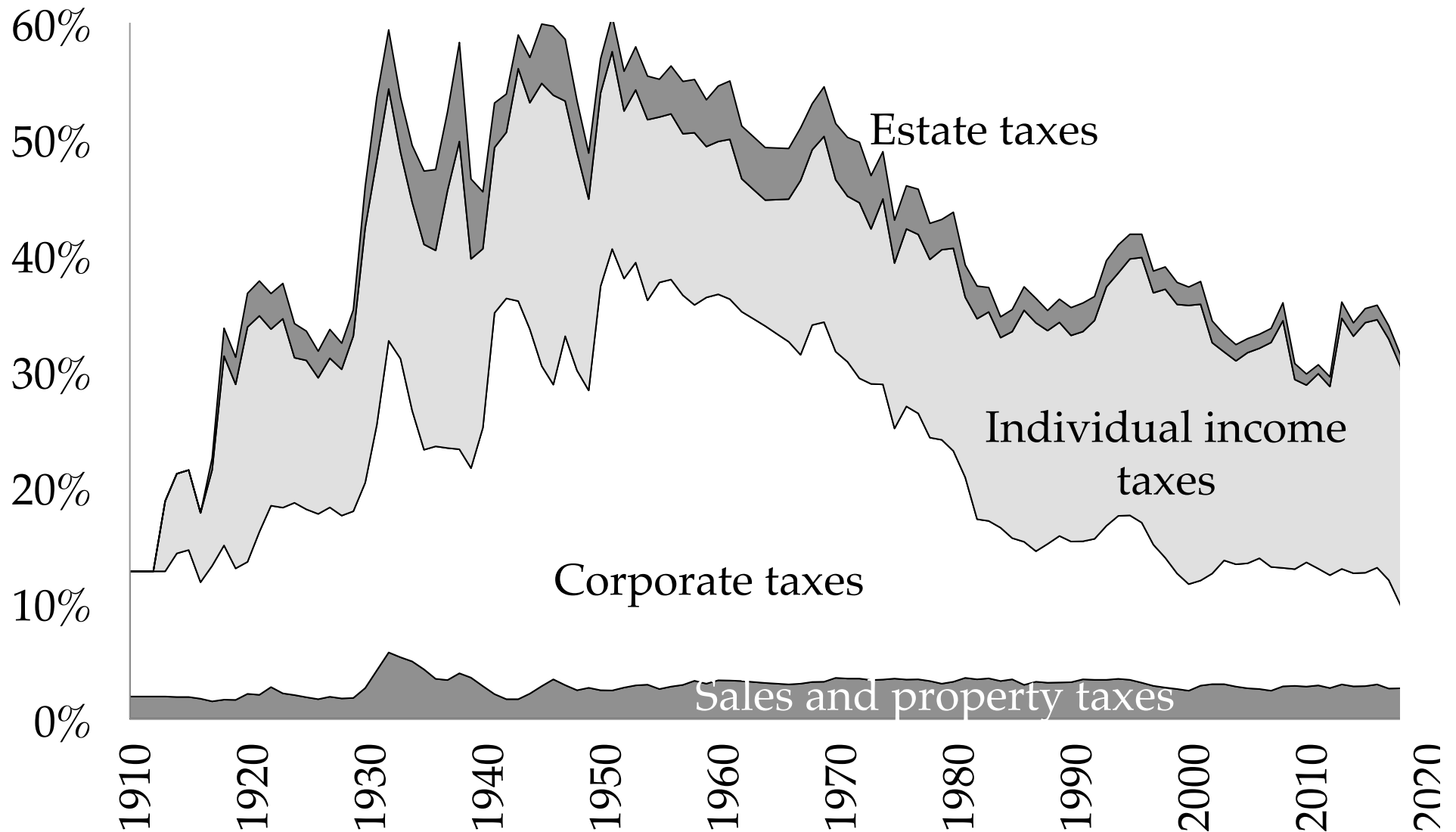


# Average tax rates by income group in 2018 (% of pre-tax income)





## Average tax rate of the top 0.1% (% of pre-tax income)



# THE INCIDENCE OF THE CORPORATE TAX

Theoretically, incidence depends on whether capital is **mobile** internationally and within country because corporate tax is based on where capital is deployed and used

In contrast, individual income tax is tax based on where individual owners reside regardless of where their wealth is invested

**1) If Capital is perfectly mobile internationally:** if US taxes corporations more, capital moves abroad until rate of return to capital after taxes is the same in US and abroad  $\Rightarrow$  US corporate tax is borne by US labor

**2) If Capital fully mobile within country:** if US taxes corporations more  $\Rightarrow$  capital moves to non-corporate businesses until rate of return to capital after taxes is the same in corporate and non-corporate sector  $\Rightarrow$  Corporate tax borne by all capital

However, in practice, many firms depend on local amenities [pool of workers, other firms]: Apple or Google could not costlessly move away from Silicon Valley  $\Rightarrow$  Such firms bear more of the corporate tax burden

$\Rightarrow$  US Treasury assumes that 60% of corp tax borne directly by shareholders

## **Debt vs. Equity financing (skip)**

For corporations, financing investment with debt instead of equity is fiscally advantageous because interest on debt can be deducted from corporate tax base [while dividends payout to shareholders are not deductible]

However, financing project with debt is more risky, if investment does not pay off, firm will be unable to pay back debt and will go bankrupt

2018 tax reform: limits for 5 years deductibility of interest and in exchange allows firms to write off (=expensing) the value of investment immediately (instead of depreciating investment assets over the course of asset life)

## EVIDENCE ON TAXES AND INVESTMENT

There is a large literature investigating the impact of corporate taxes on corporate investment decisions. Two effects:

Price effect: corporate tax reduces the returns on investment

Income effect: corporate tax reduces cash available for investment

In principle, income effect should be zero if the corporation is not credit constrained (= can invest as much as it wants in any profitable project by borrowing as needed)

Recent studies show significant income effects (cash flow matters), some evidence of price effects (but mostly shifting around temporary investment tax credits) [see Zwick and Mahon AER'17]

## **Trump Tax Cut: C vs. S Corporations Comparison**

Kennedy et al. (2024): difference-in-difference analysis of 2018 Trump corp tax cut using IRS business micro-data

**Treatment group: C-corps:** affected by corporate tax cut

**Control group: S-corps:** passthrough businesses not affected by corporate tax (profits pay individual income tax only)

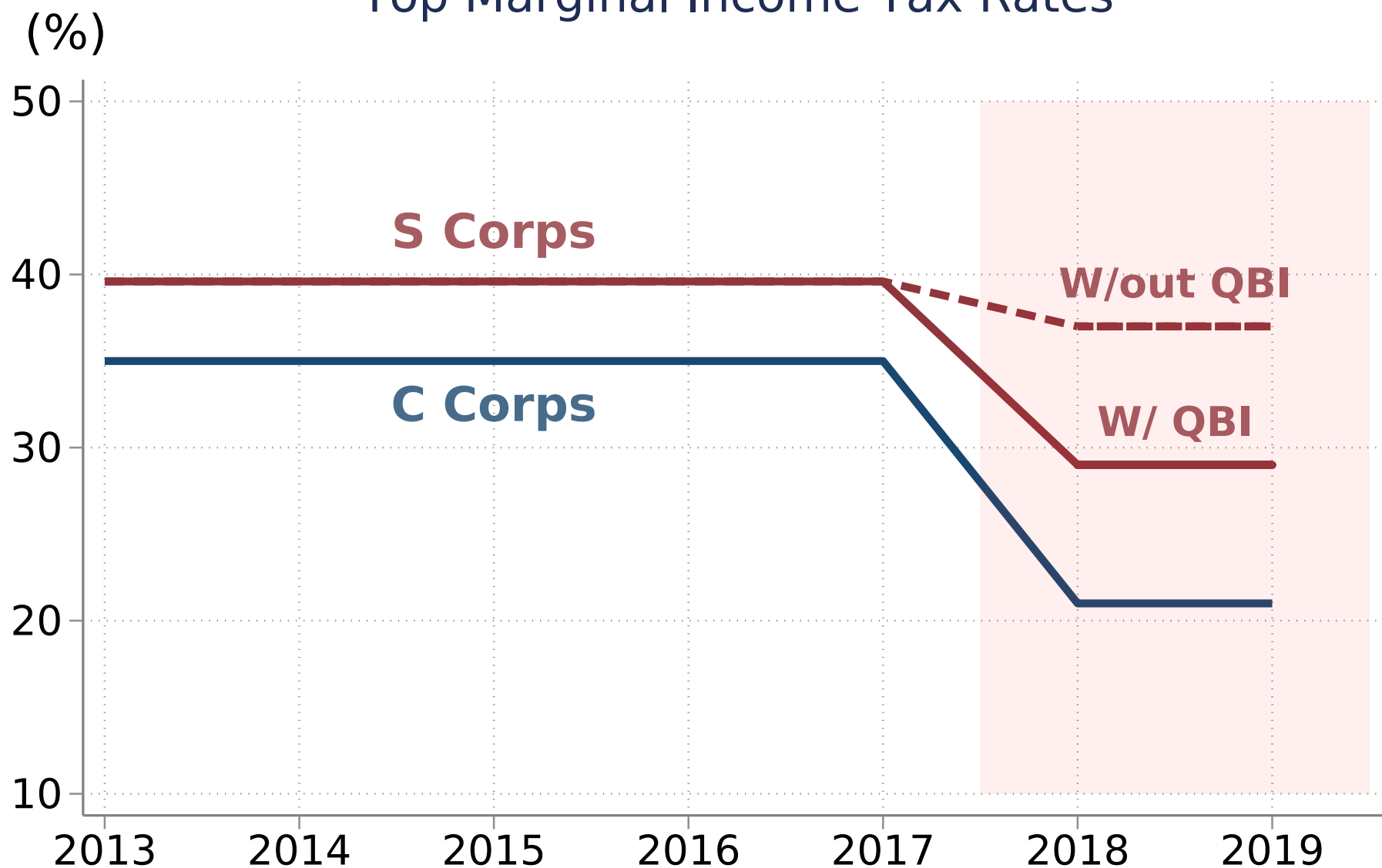
### **Key findings:**

- (a) small positive effect on investment and employment
- (b) no effect on median earnings
- (c) large effect on executive earnings

C-corporate tax cut has some positive effect on economic activity but very regressive

# Panel A: Top MTR (Statutory)

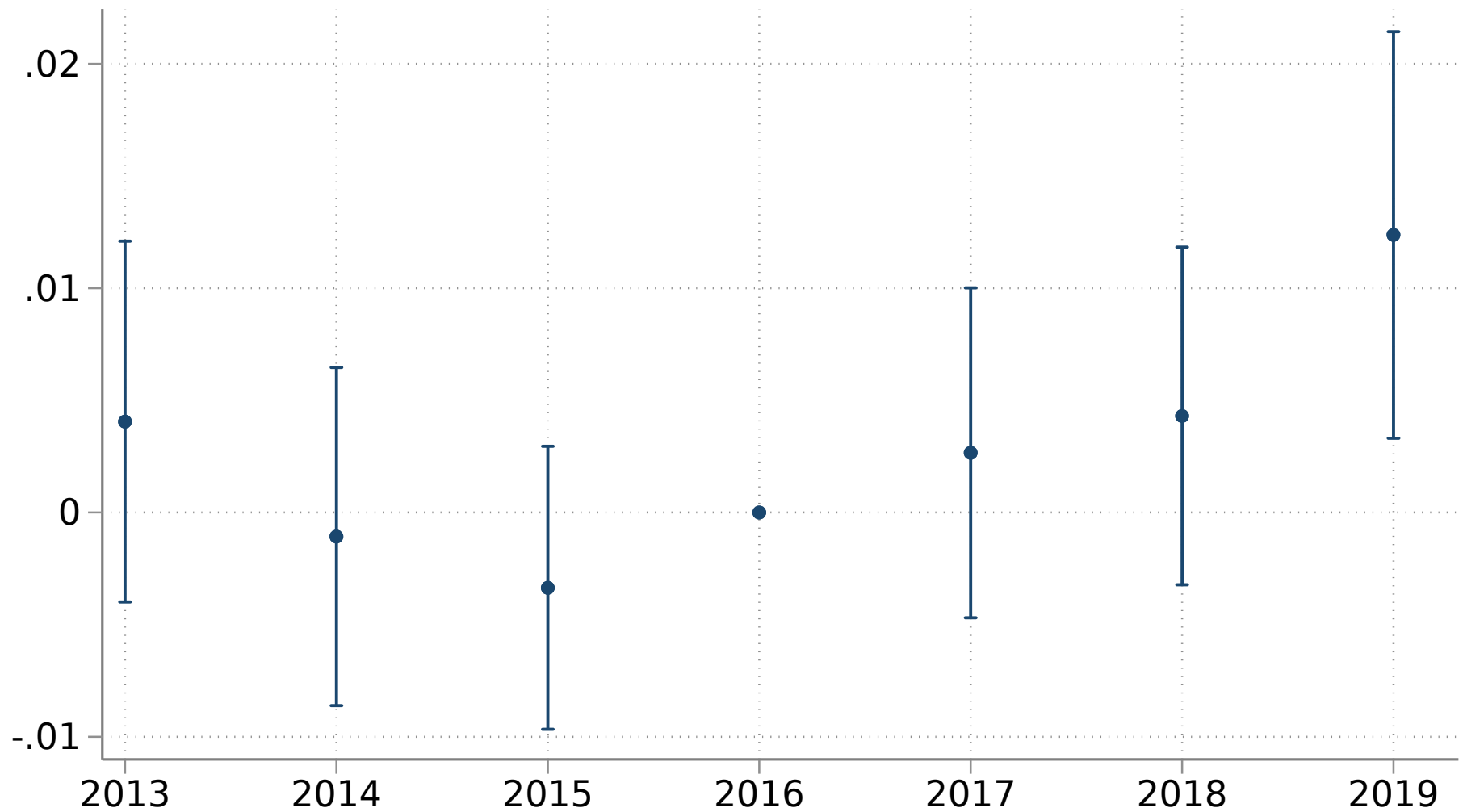
## Top Marginal Income Tax Rates



Source: Kennedy et al. (2023)

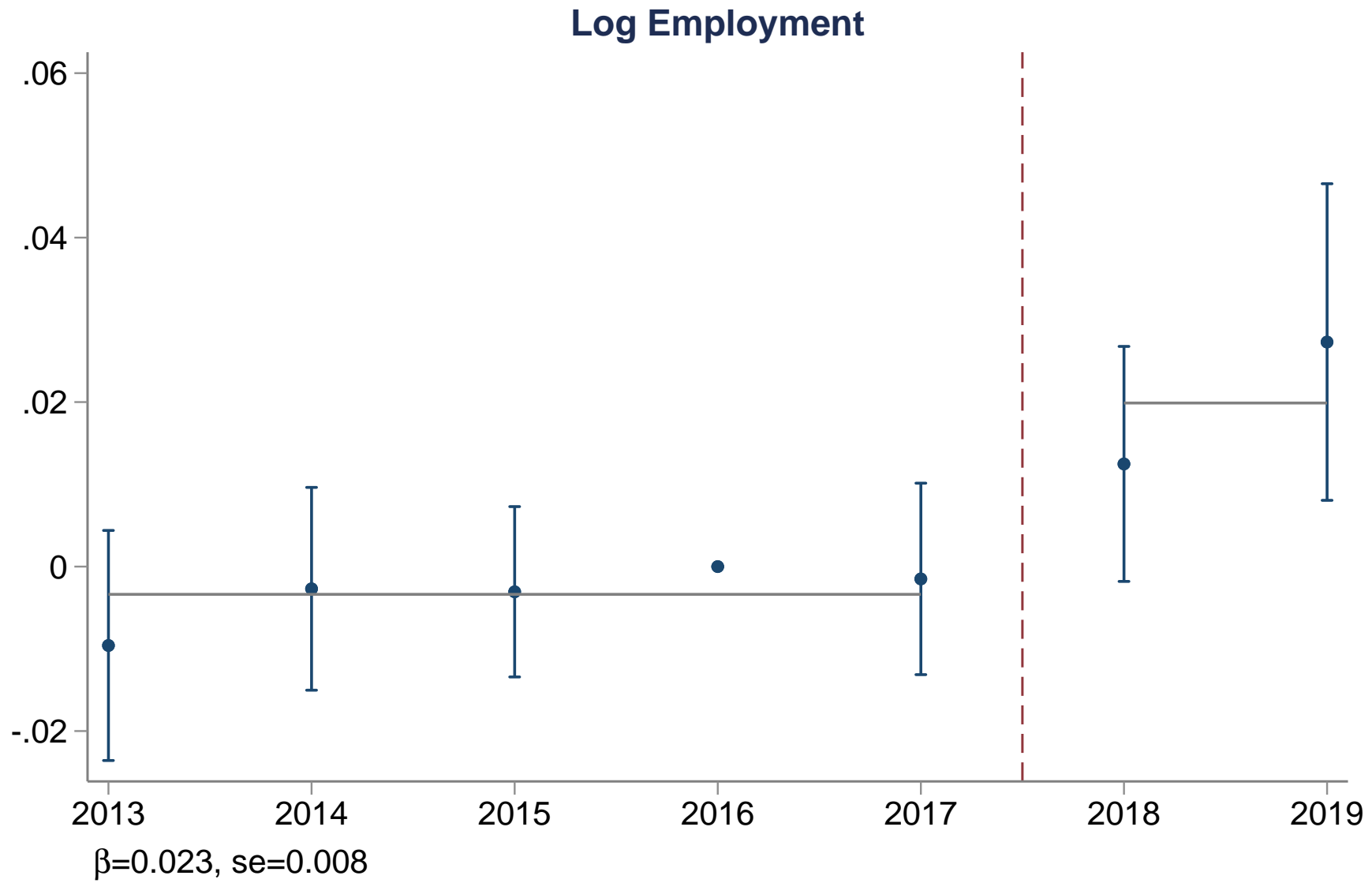
# Panel C: Net Investment / 2016 Sales

**Net Investment / 2016 Sales**  
Difference Between C-Corps and S-Corps Over Time



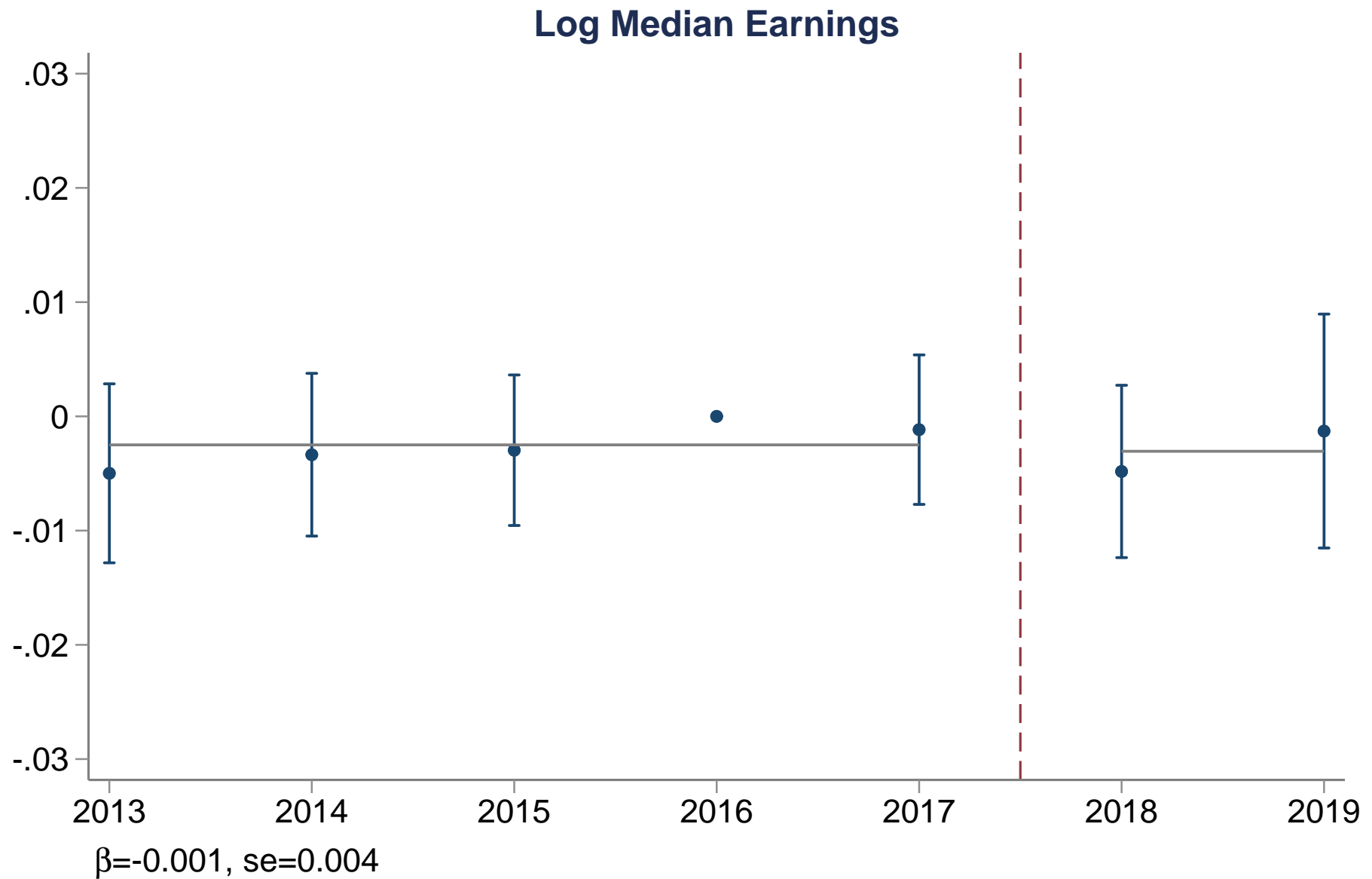
2016 Outcome Mean: 0.01

# (A) LOG EMPLOYMENT

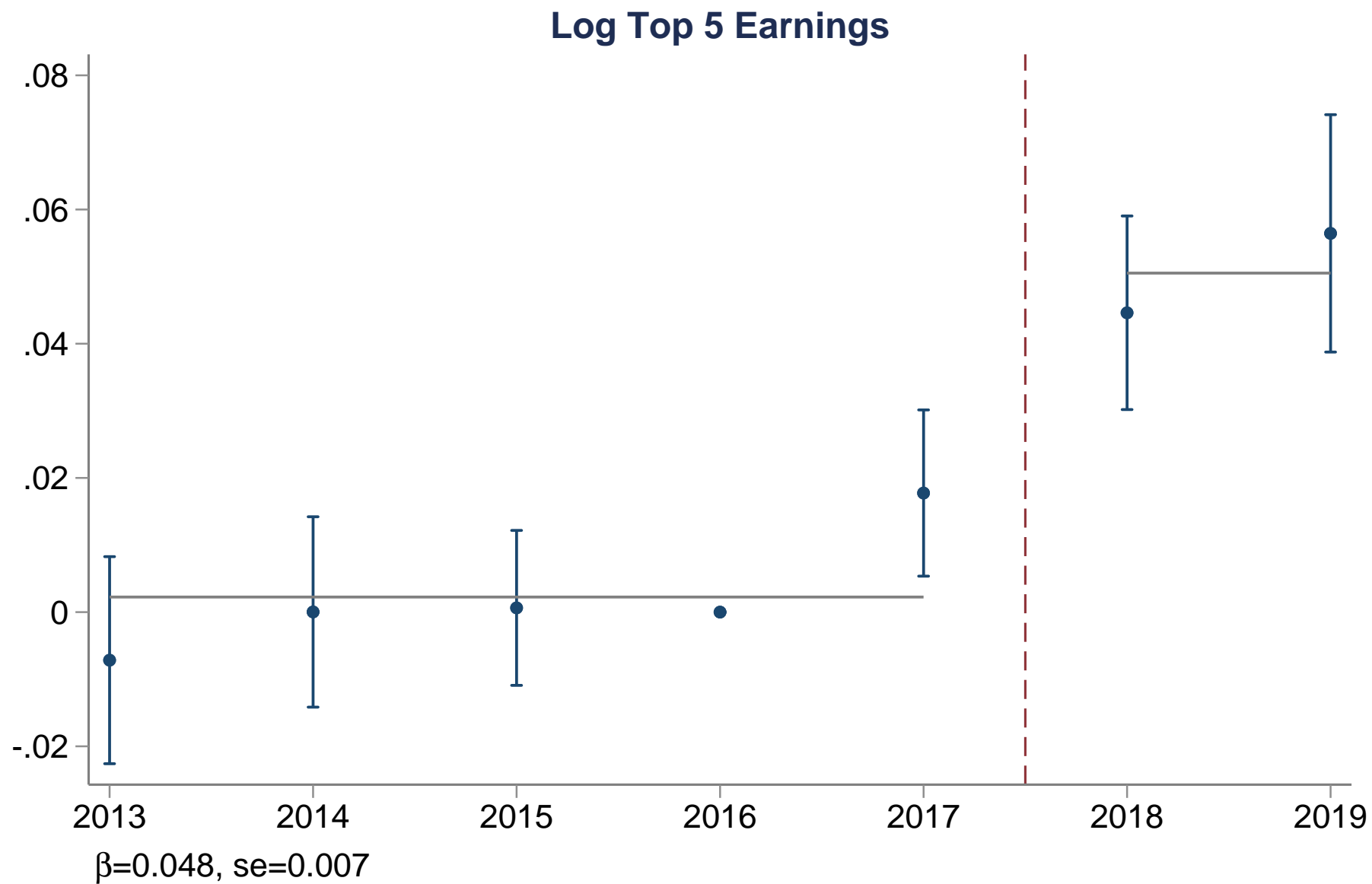




# (C) LOG MEDIAN EARNINGS



# (E) LOG TOP 5 EARNINGS



## CORPORATE TAX INTEGRATION (skip)

Profits from corporations are taxed twice:

- 1) Corporate income tax on corporate profits
- 2) Individual income tax on corporate payout to shareholders: dividends and realized capital gains

US reduced tax on dividends in 2003 to alleviate double tax.  
Problem: not all corporations pay tax on profits (avoidance)

Better way to alleviate double taxation is **corporate tax integration** where corporate tax is just a pre-paid tax . 2 forms:

- a) Old form with lag: shareholders taxed when dividends are paid out with corp tax credit
- b) New form realtime: shareholders taxed immediately on profits with corp tax credit

US passthrough taxation (S-corps and partnerships) shows taxing directly shareholders on profits is feasible even for large complex businesses

## How State Level Corporate Taxes Work

Most states have specific state corporate taxes (typically in the 5-10% tax rate range, CA tax rate is 8.83%)

Many companies operate across various states. Before mid-20th century, firms had to report where they made their profits across states  $\Rightarrow$  Easy to game

**Formulary apportionment solution:** Since 1950s, multi-state companies apportion profits across states using formulas based on payroll, tangible capital, and sales in each state

Most states have switched to using sales only in recent decades: Apple has 20% of its US sales in CA, then 20% of Apple US corporate profits are taxed in CA

Sales only apportionment removes incentives for firms to locate production (workers+capital) outside the state

## **Multinational companies and taxation**

**Multinational firms:** Firms that operate in multiple countries. Foreign branches of the firm are called subsidiaries.

**Territorial tax system:** Corporations earning income abroad pay tax only to the government of the country in which the income is earned (most countries use this system)

**Global tax system:** Corporations are taxed by their home countries on their income regardless of where it is earned (with tax credit for foreign corporate taxes paid)

US had global tax system before 2018 (but foreign profits were taxed only when “repatriated”)

US system in 2018+: territorial system but with modest minimum tax of 10.5% on foreign profits (with foreign tax credit)

## **Repatriation Tax Holidays (before 2018)**

In US pre-2018, owners eventually wanted the income repatriated from abroad and paid out to them as dividends

Corporations paid normal (old) corporate tax 35% tax on foreign profits upon repatriation

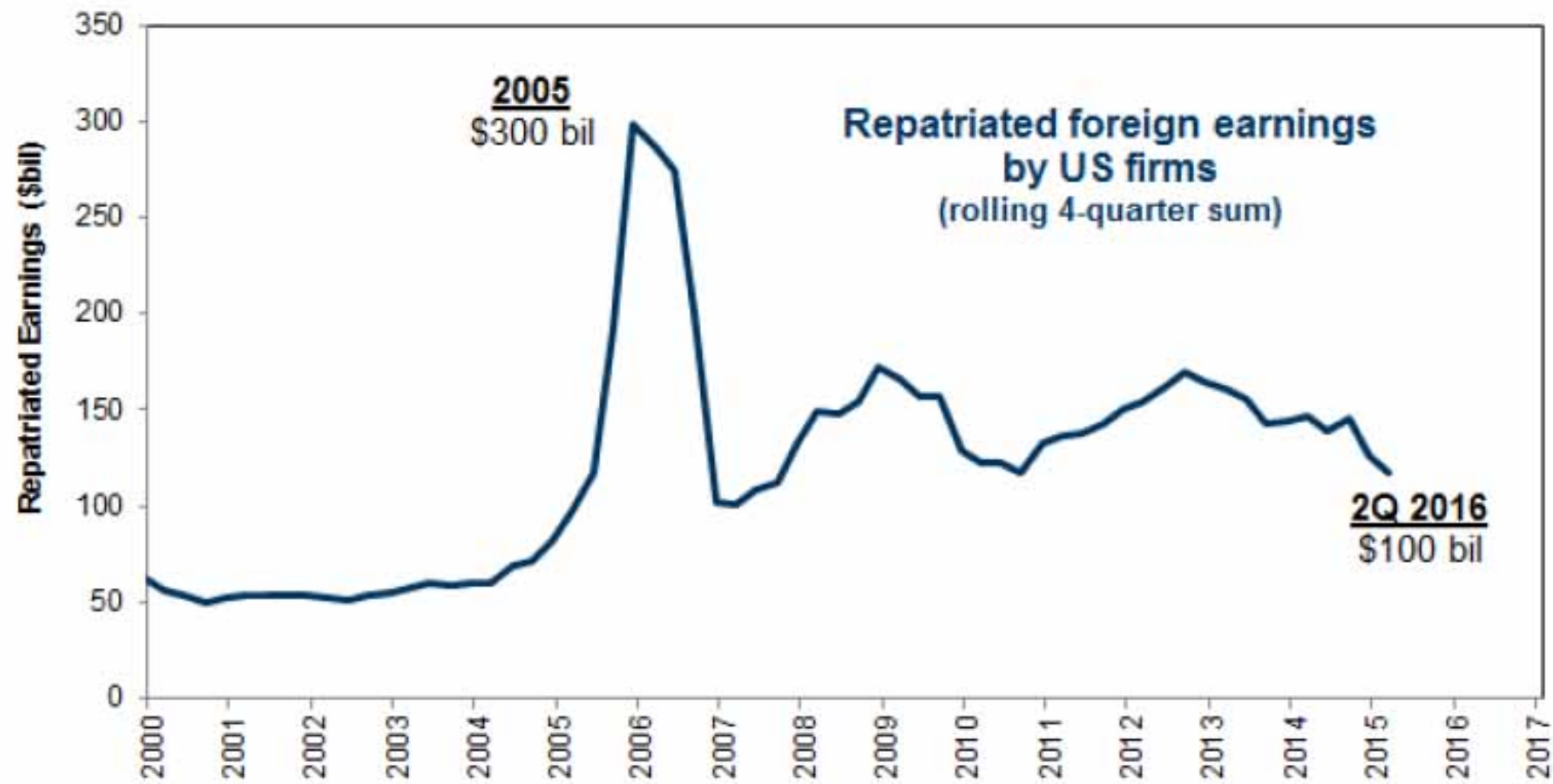
Massive amount of profits accumulated abroad (about \$2.5 Tr by 2018) ⇒ Temptation for politicians to offer repatriation tax holiday

American Jobs Creation Act of 2004: Reduced tax rate on repatriated profits from 35% to 5.25% for 2005 only: surge in repatriations in 2005 (by \$250bn) followed by reductions in repatriations in subsequent years

⇒ Net tax loser and no surge in investment

2018 Trump tax reform forces repatriations over 2018-2025 with 15.5% tax on cash and 8% on other assets and imposes min tax of 10.5% on foreign profits with foreign tax credit moving forward

**Exhibit 5: Earnings repatriated by all US firms**  
as of 2Q 2016



Source: Bureau of Economic Analysis, Goldman Sachs Global Investment Research

## Tax Avoidance of Multinationals (Zucman '14)

Share of profits made abroad by US corporations is about 1/3 today (was less than 5% in the 1930s)

50% of foreign profits of **multinationals** are reported in tax havens (such as Ireland)

Multinational companies are particularly savvy to avoid corporate income tax by reporting most of their profits in low tax countries using **transfer pricing**: one subsidiary buys/sells to another at manipulated prices to transfer profits

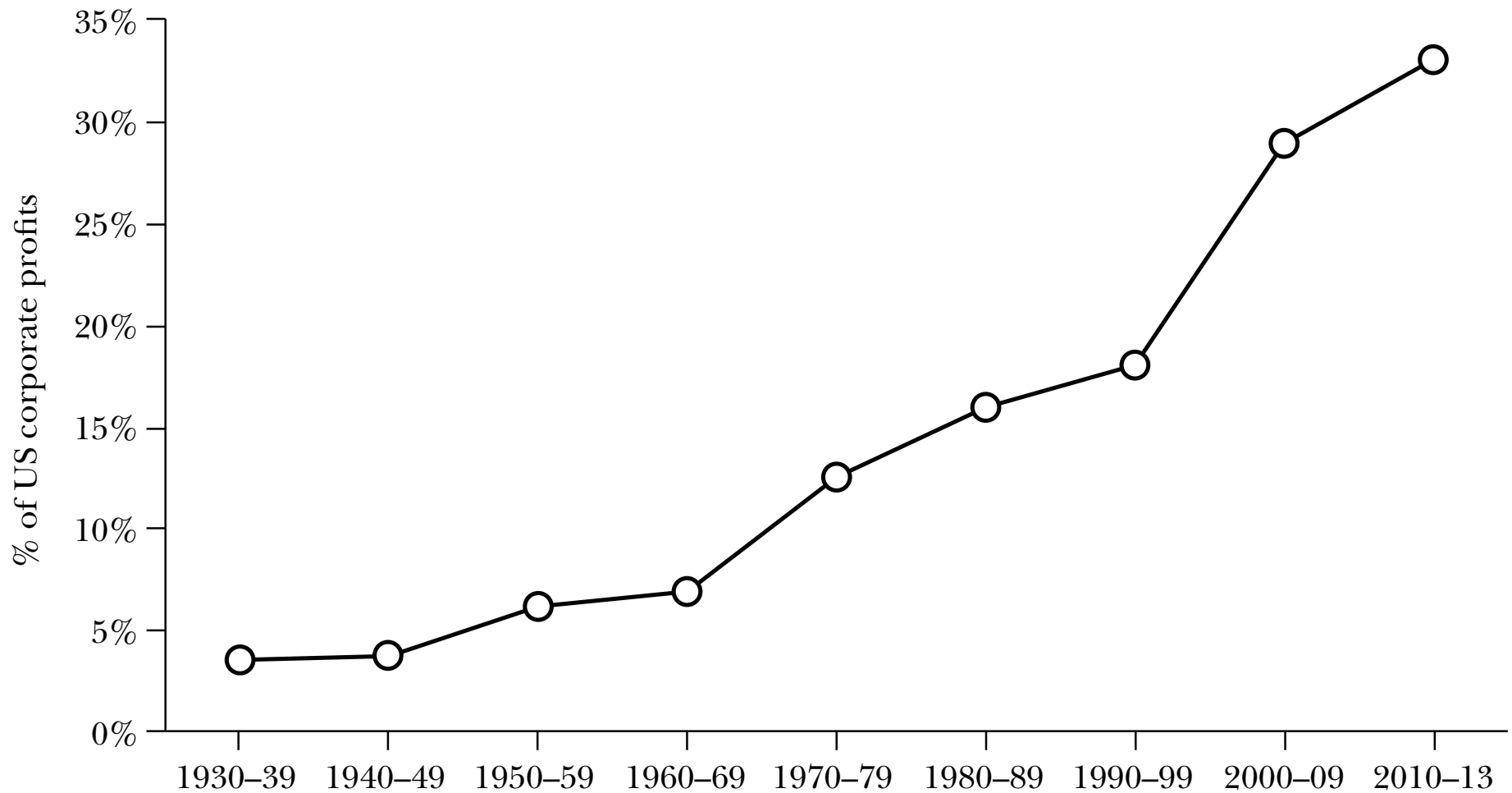
Example: Google located its search engine algorithm in Bermuda and Google Bermuda leases it to Google US, Google EU, etc.

Profits are moving to tax havens but not workers nor real capital  $\Rightarrow$  This is a tax avoidance story



*Figure 1*

## The Share of Profits Made Abroad in US Corporate Profits

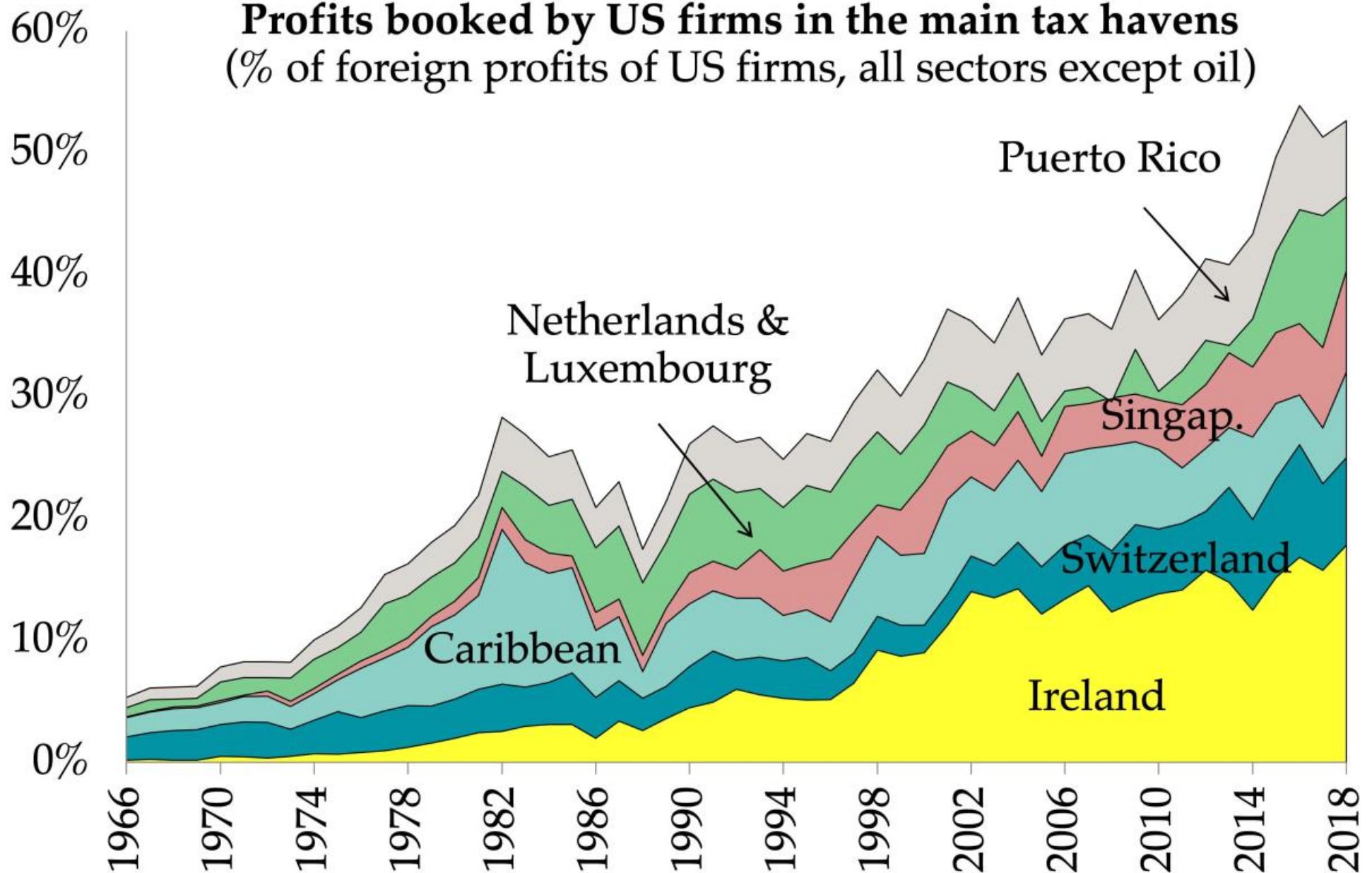


*Source:* Author's computations using National Income and Product Accounts data.

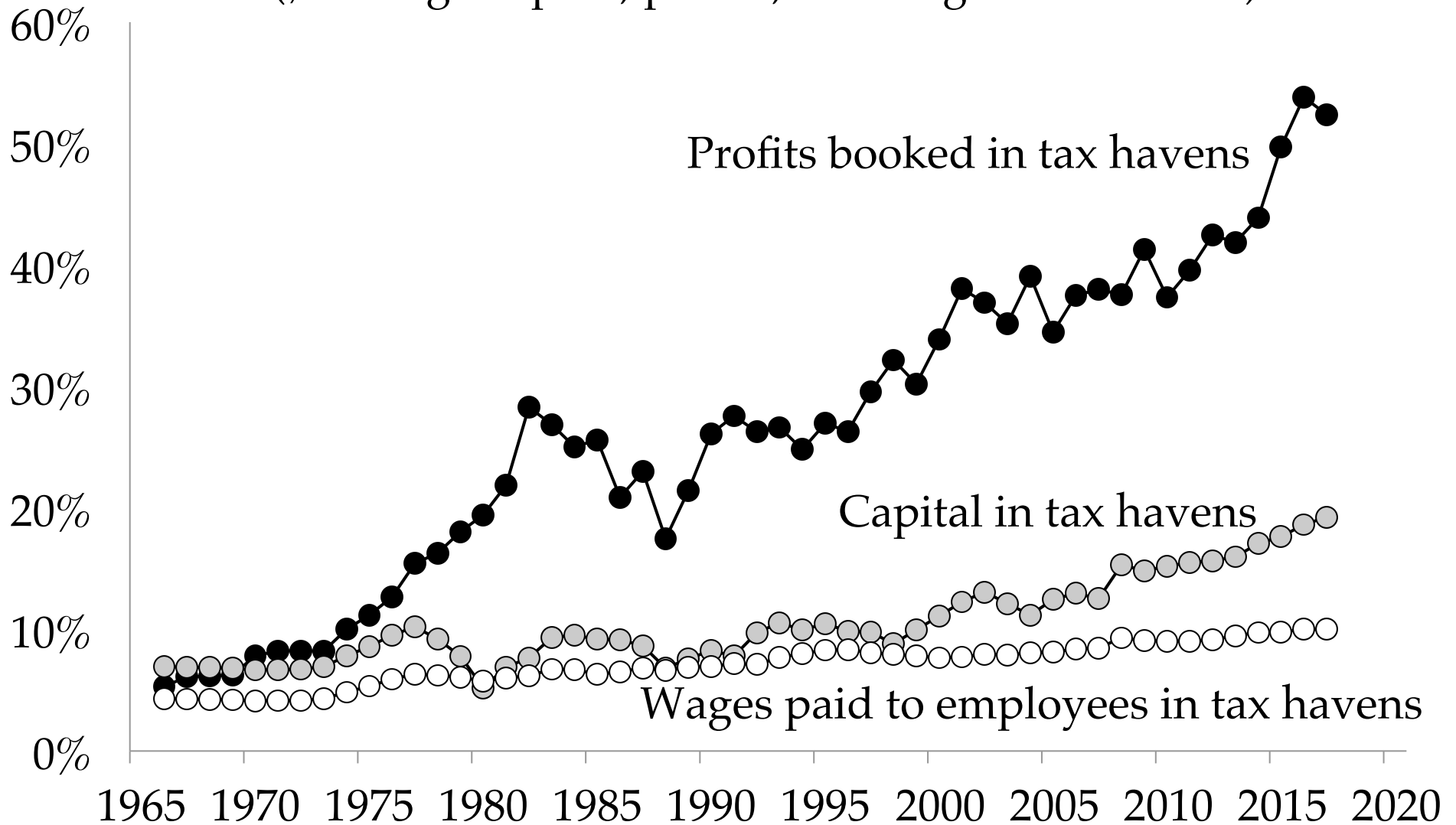
*Notes:* The figure reports decennial averages (that is, 1970-79 is the average for years 1970, 1971, through 1979). Foreign profits include dividends on foreign portfolio equities and income on US direct investment abroad (distributed and retained). Profits are net of interest payments, gross of US but net of foreign corporate income taxes.

Source: Zucman JEP 2014

**Profits booked by US firms in the main tax havens**  
(% of foreign profits of US firms, all sectors except oil)



# Capital, profits & wages of US firms in tax havens (% foreign capital, profits, and wages of US firms)



## **Issues with new US Corporate Tax System**

Since 2018, US has a very low corporate tax rate of 21%

⇒ Strong incentives for successful business owners to incorporate and keep profits inside the corporation and pay only 21% (instead of higher top individual tax rate)

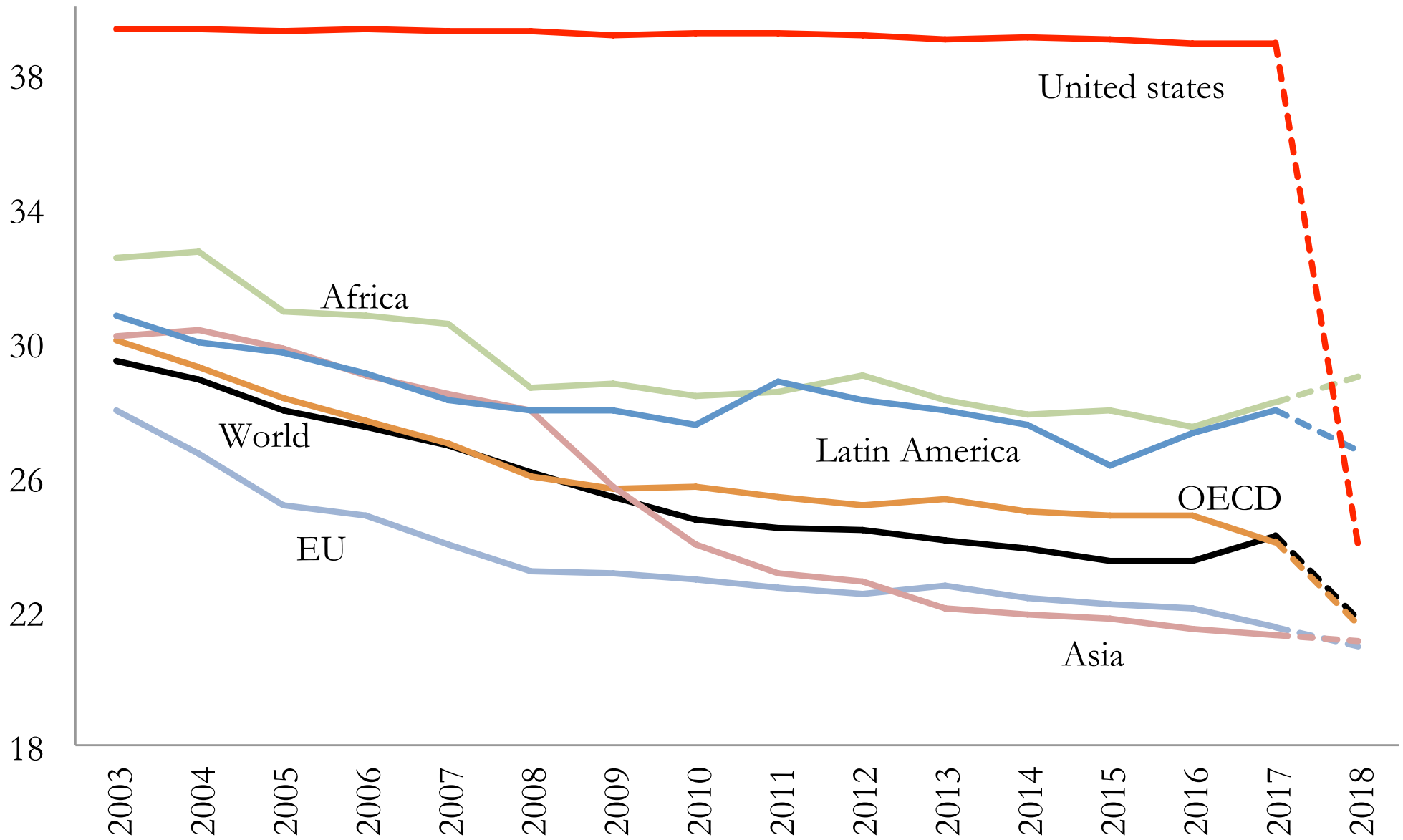
⇒ This can undermine the progressive individual income tax

If business is a multinational: profits abroad are taxed at an even lower 10.5% tax rate (with foreign tax credit)

⇒ Multinationals still have strong incentives to shift profits abroad in tax havens

Declining corporate tax rates across the world because of harmful tax competition (re-inforces inequities created by globalization)

## Global corporate tax rates (%)



## **Taxing Multinational Companies more Effectively**

Current territorial system where multinationals choose where to report profits is easy to game. Need a better system: Several possibilities:

- 1) Tax on global profits in real time (each country taxes its multinationals on global profits with credit for foreign taxes paid)
- 2) Minimum tax on foreign profits country-by-country: min tax needs to be high enough to discourage reporting in tax havens
- 3) Apportioning profits based on sales in each country [as states are doing within the US]

Probably need to combination of these and have strong anti-inversion regulations so that it's hard for multinationals to change nationality [Saez-Zucman 2019 discussion]

## 2021 Global minimum tax agreement

Recent international agreement October 2021 (136 countries)

Each country will police its own multinationals by imposing a minimum tax of 15% on foreign profits country-by-country:

Apple pays 5% on its profits in Ireland, US charges extra 10%

If country A does not participate, multinationals from country A will be charged by participating countries

⇒ Kills the pure tax haven model but 2 weaknesses:

- a) 15% min tax rate is low (but higher than Trump 10.5%)
- b) Carveout: Min tax applies only on profits in excess of 5% of payroll+tangible capital ⇒ Multinationals have incentives to move **real operations** to low tax places

Conclusion: tax low but shows this is technically solvable. US has not passed it yet. EU is going ahead. US unlikely to join under Trump 2.

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