

Corporate Taxation

131 Undergraduate Public Economics
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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

Debt finance: The raising of funds by borrowing from lenders such as banks, or by selling corporate bonds.

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

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: The periodic payment that investors receive from the company, per share owned.

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). So taxing corporate income (profits) was attractive

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

3) Back-up for individual taxes: With no corporate tax, individuals who own shares in corporations could postpone taxes indefinitely if corporations never pay out their earnings. Individuals could also incorporate their economic activity and be taxed only when they take their money out

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

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)

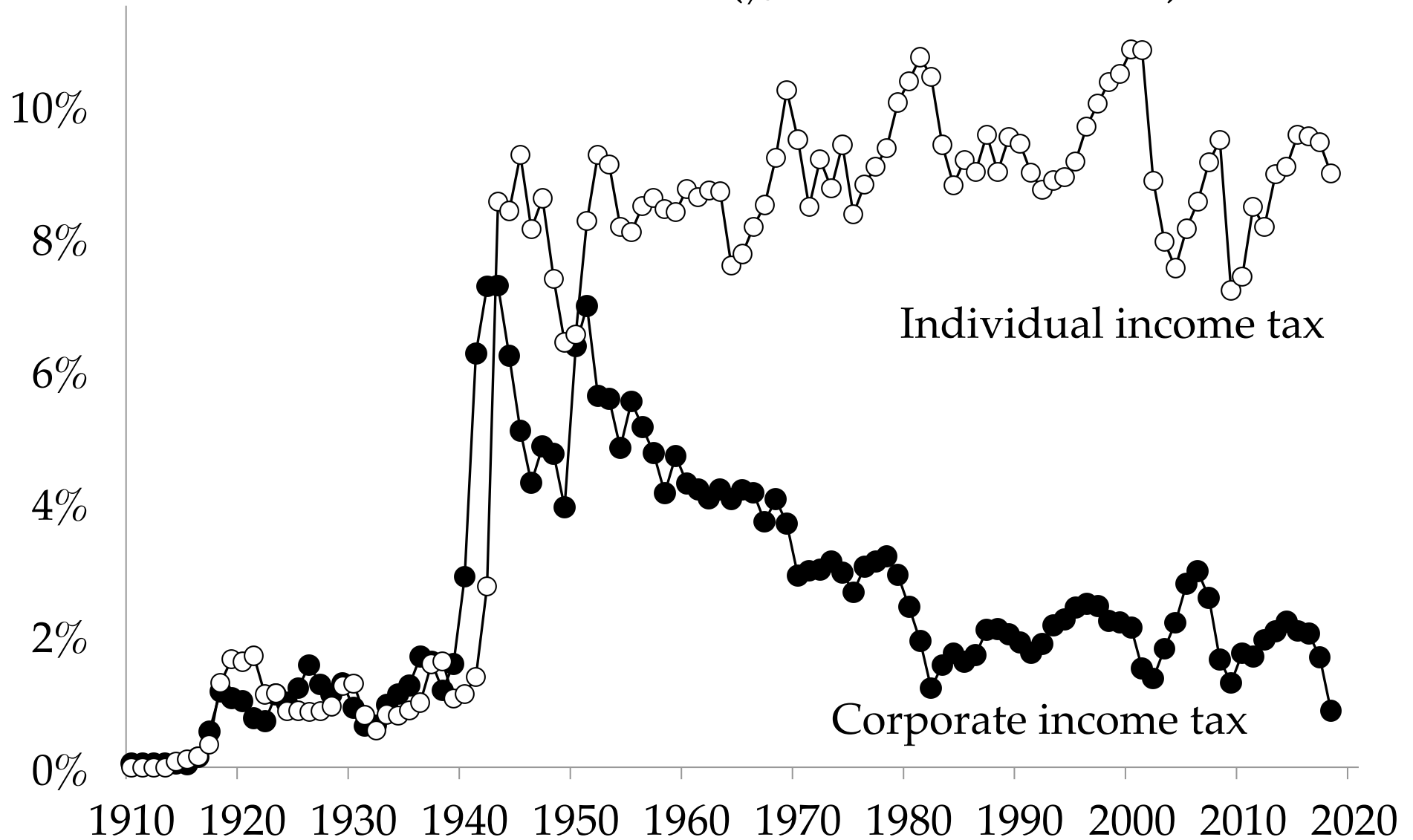
2) Progressivity: Corporate tax is quite progressive because corporate share ownership is concentrated at the top of distribution (slightly less so in recent decades due to rise of pension funds which democratize share ownership).

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

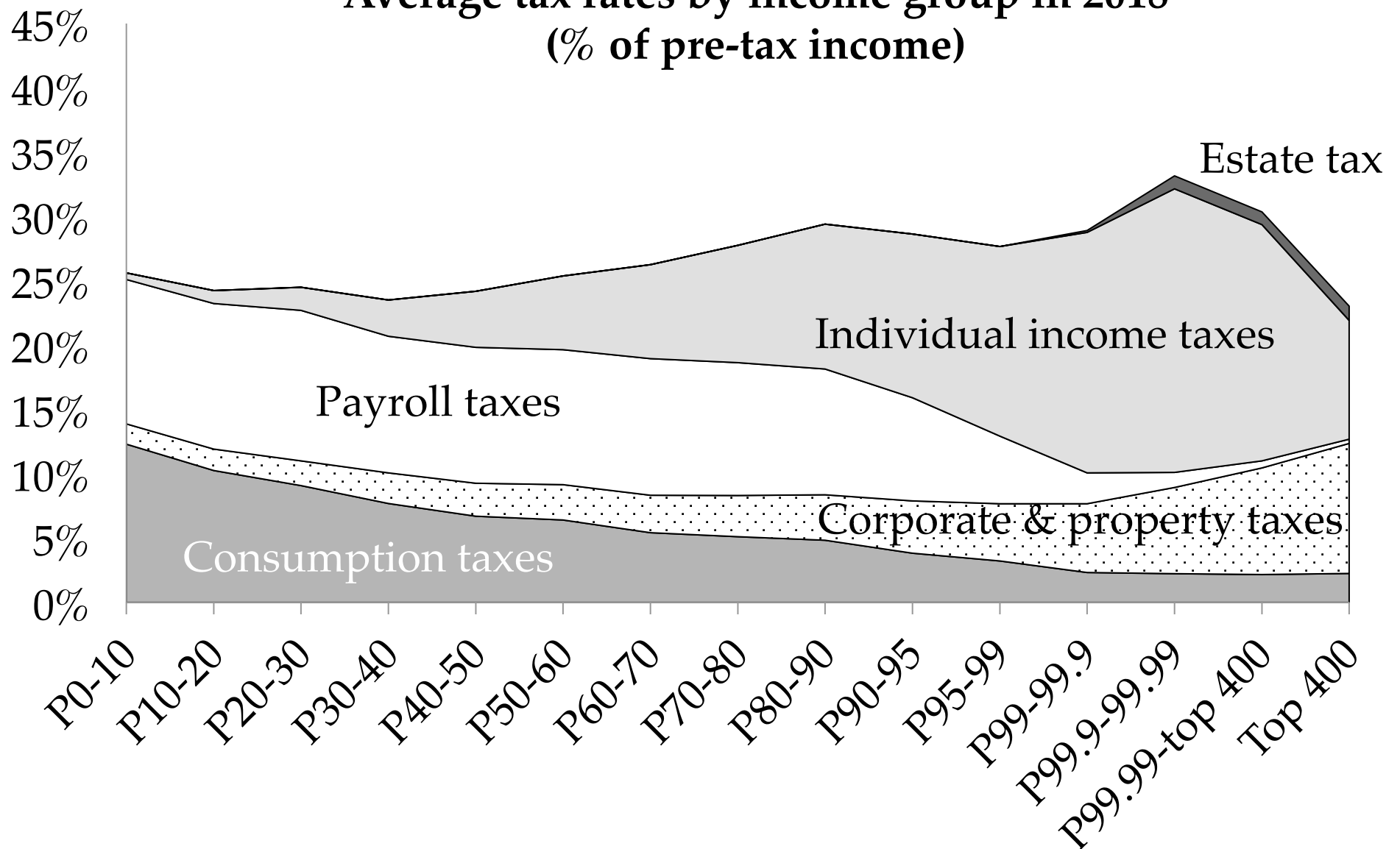
Corporate tax was backbone of progressivity in the US in mid-20th century (tax at source of 50% of real corporate profits)

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

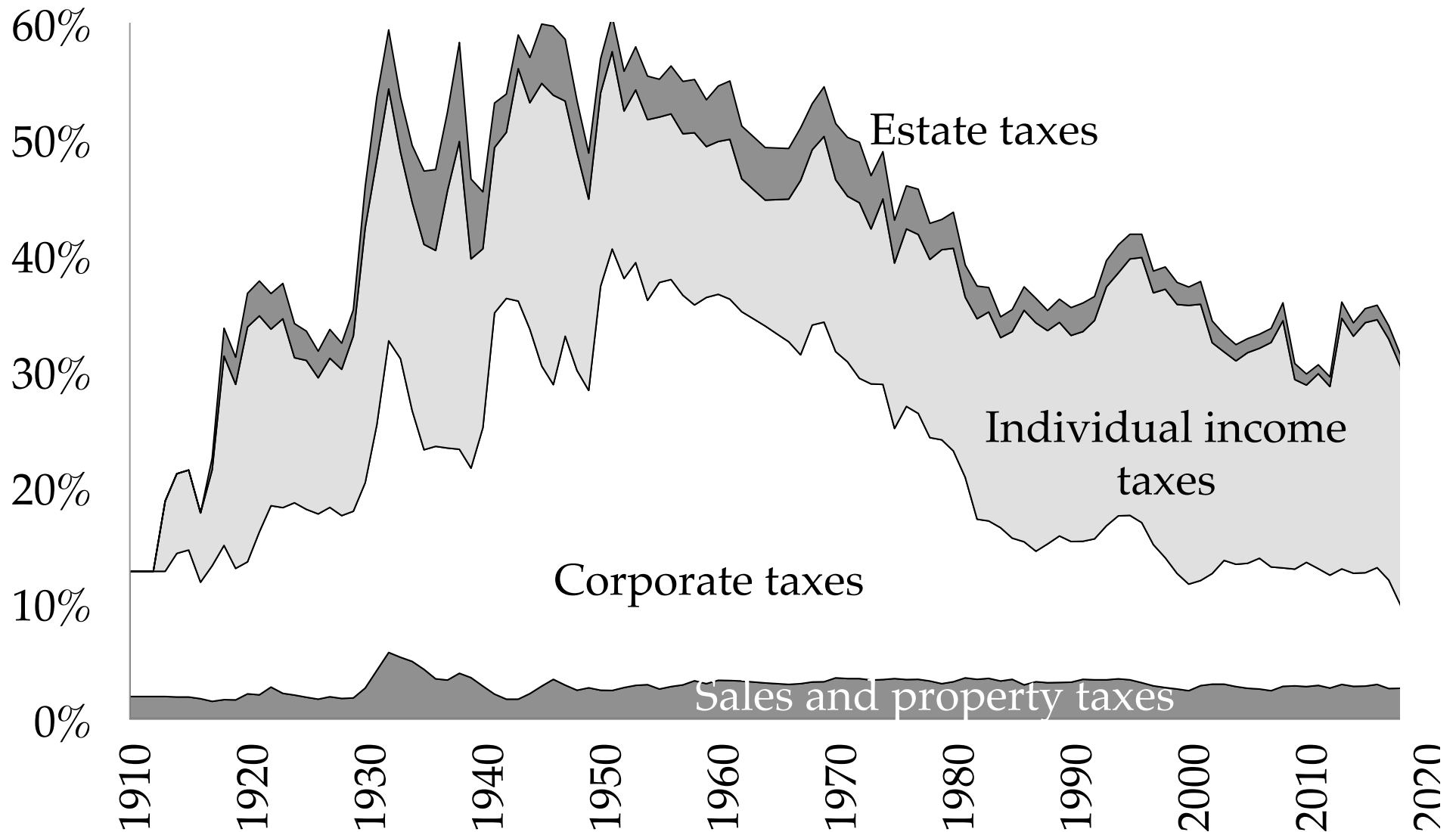
Federal tax revenue (% of national income)



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 used

[in contrast, individual income tax is tax based on where individual owners reside regardless of where their capital is invested]

1) Perfectly internationally mobile capital: returns to capital (after corporate tax rate) in US need to be equal to return abroad $r^* \Rightarrow r^{US} \cdot (1 - \tau_c) = r^* \Rightarrow$ net-of-tax return on US based capital not affected by $\tau_c \Rightarrow$ Corporate tax is fully borne by labor

2) Capital not mobile internationally but fully mobile within country: net return to corporate capital needs to equal return to non-corporate capital (non-corporate businesses) \Rightarrow All forms of capital affected by τ_c as assumed by CBO incidence calculations

Small open country more likely to be in situation 1), while big country like US is probably still more like in situation 2).

3) Capital not even perfectly mobile within country: 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

Debt vs. Equity financing

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 increases the cost of 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)

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 corporate tax cut does not seem to have generated a surge in investment in 2018+

No evidence the TCJA is working as advertised

Year-over-year change in real, nonresidential fixed investment, 2003Q1–2019Q4



Source: EPI analysis of data from table 1.1.6 from the National Income and Product Accounts (NIPA) from the Bureau of Economic Analysis (BEA).

Dividend Tax Effects: Empirical Analysis

Chetty and Saez QJE'05 use large dividend tax cut (for the individual income tax) from 35% to 15% in 2003. Key results:

1) \$50 billion increase in dividend payments per year among large publicly traded firms

2) Increase came primarily from firms where “key players” had a strong change in tax incentives (firms with large executive share ownership)

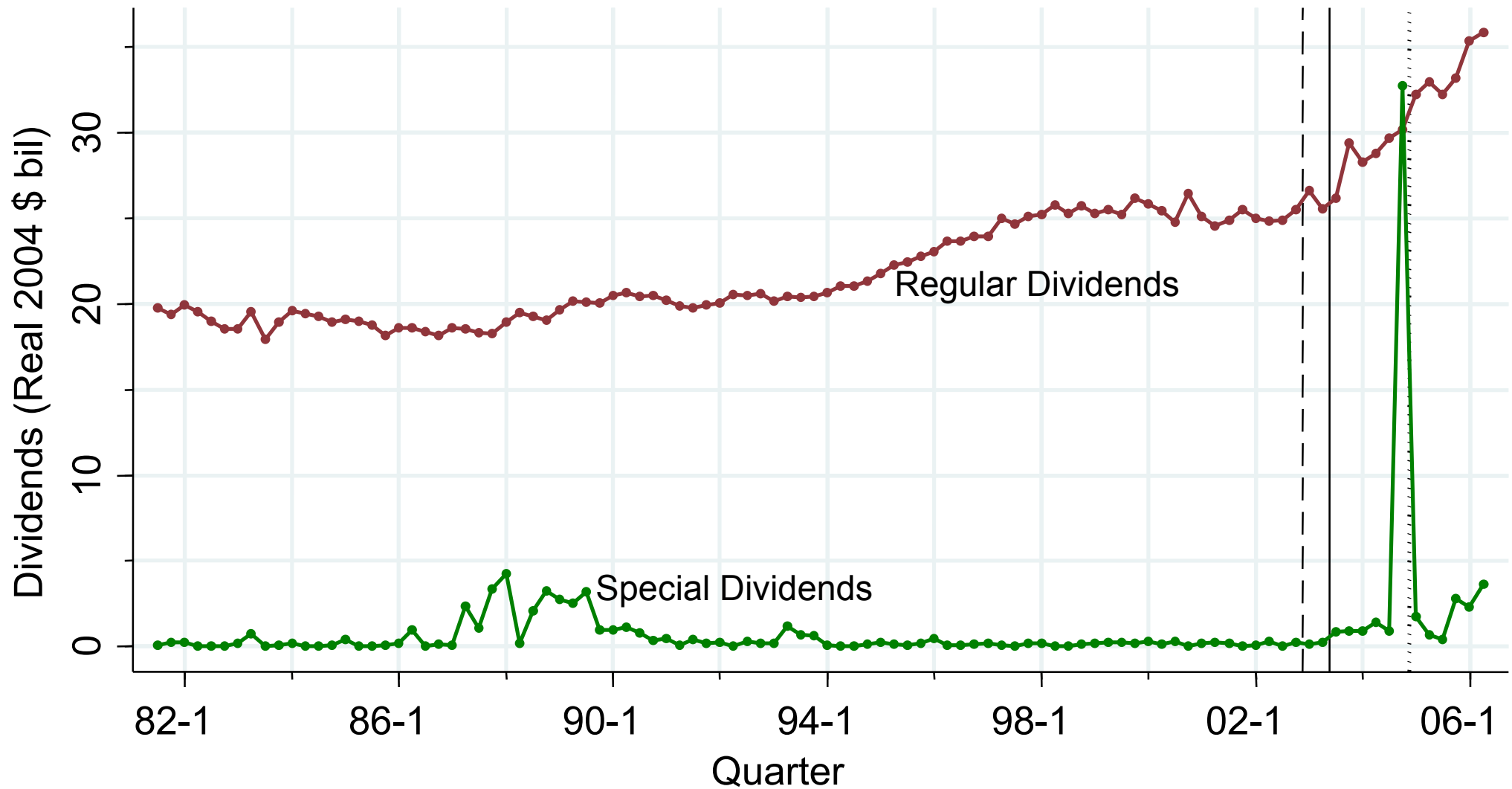
3) No impact on aggregate investment levels [Yagan '15 compares corporations affected by tax cut to pass-through businesses (S-corporations) not affected by tax cut]

These results are not consistent with the traditional model

Point instead toward an “agency model” where executives do what is in their interest, not necessarily what is in the interest of shareholders

Figure 1

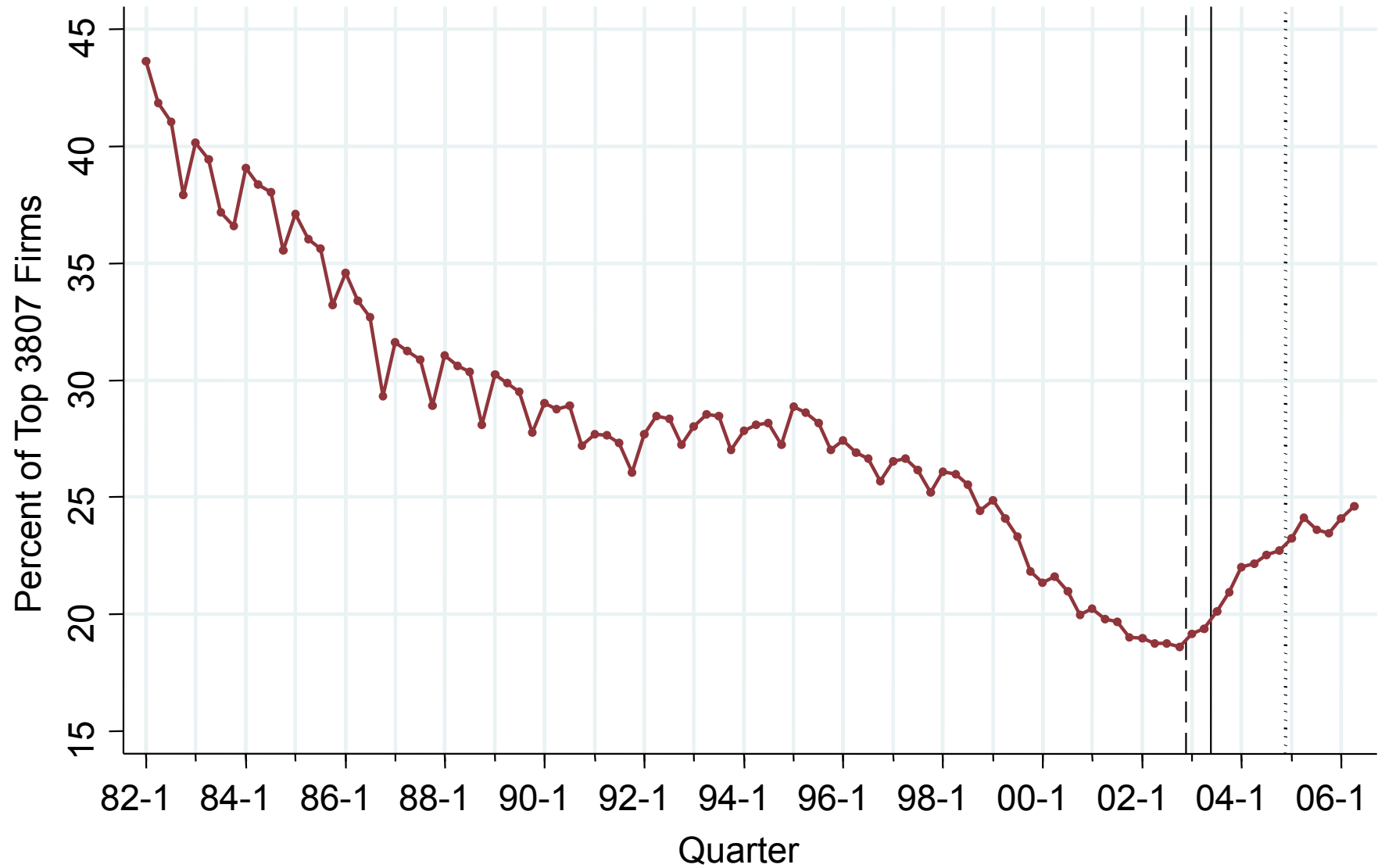
Total Regular and Special Dividends (Updated to 2006Q2)



Source: Chetty and Saez (2005), using data through 2006Q2.

Figure 3

Dividend Payers in Top 3807 Firms

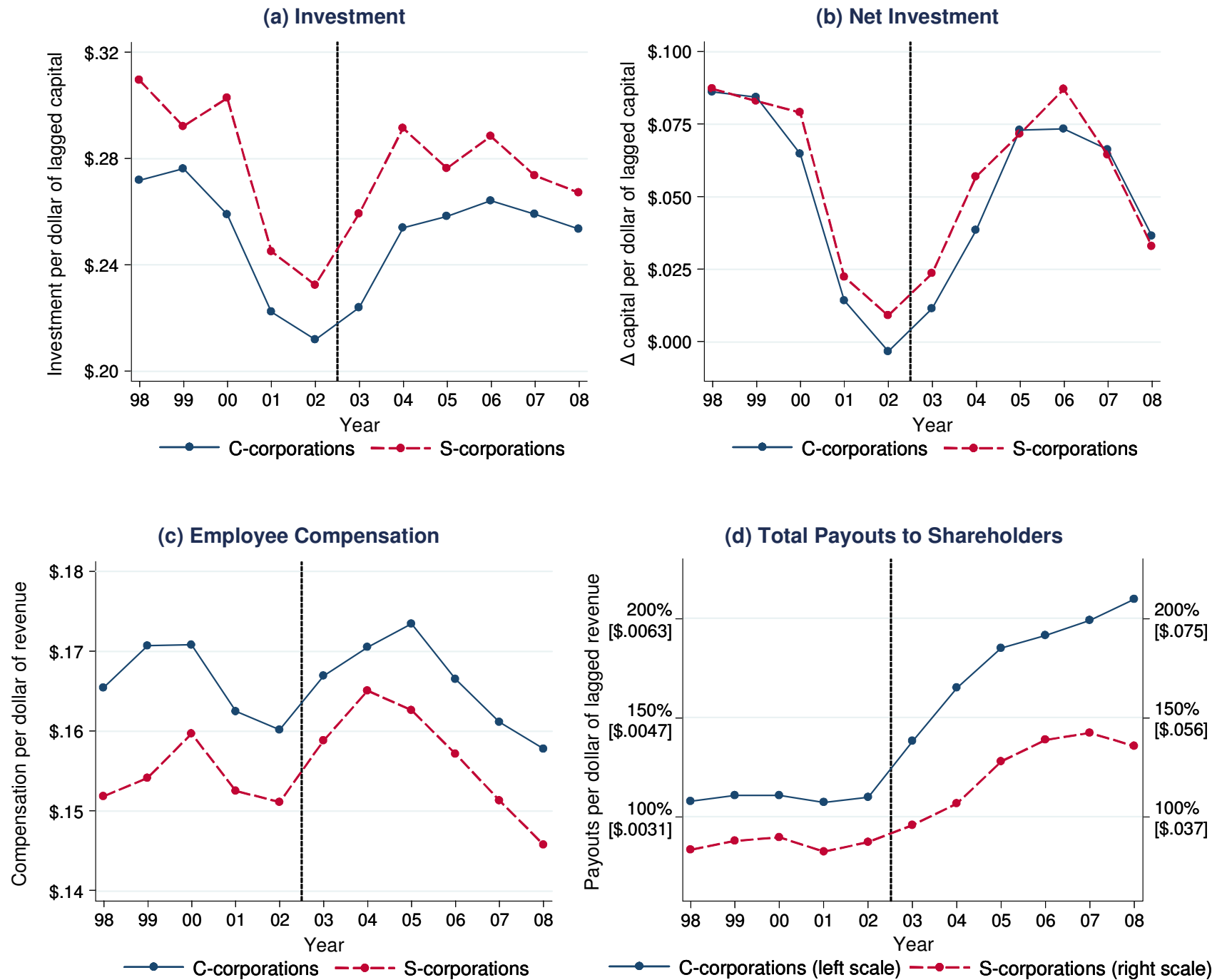


Source: Chetty and Saez (2005)

FIGURE 2

Effects of the 2003 Dividend Tax Cut

Source: Yagan (2015)



CORPORATE TAX INTEGRATION

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 corporate profits because of tax avoidance

Better way to alleviate double taxation is called **corporate tax integration**

Corporate tax becomes like a withholding pre-paid tax that is refunded when dividends are paid out to individuals (Europe used to have such a system)

How State 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)

Biden campaign proposed to beef up minimum tax

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

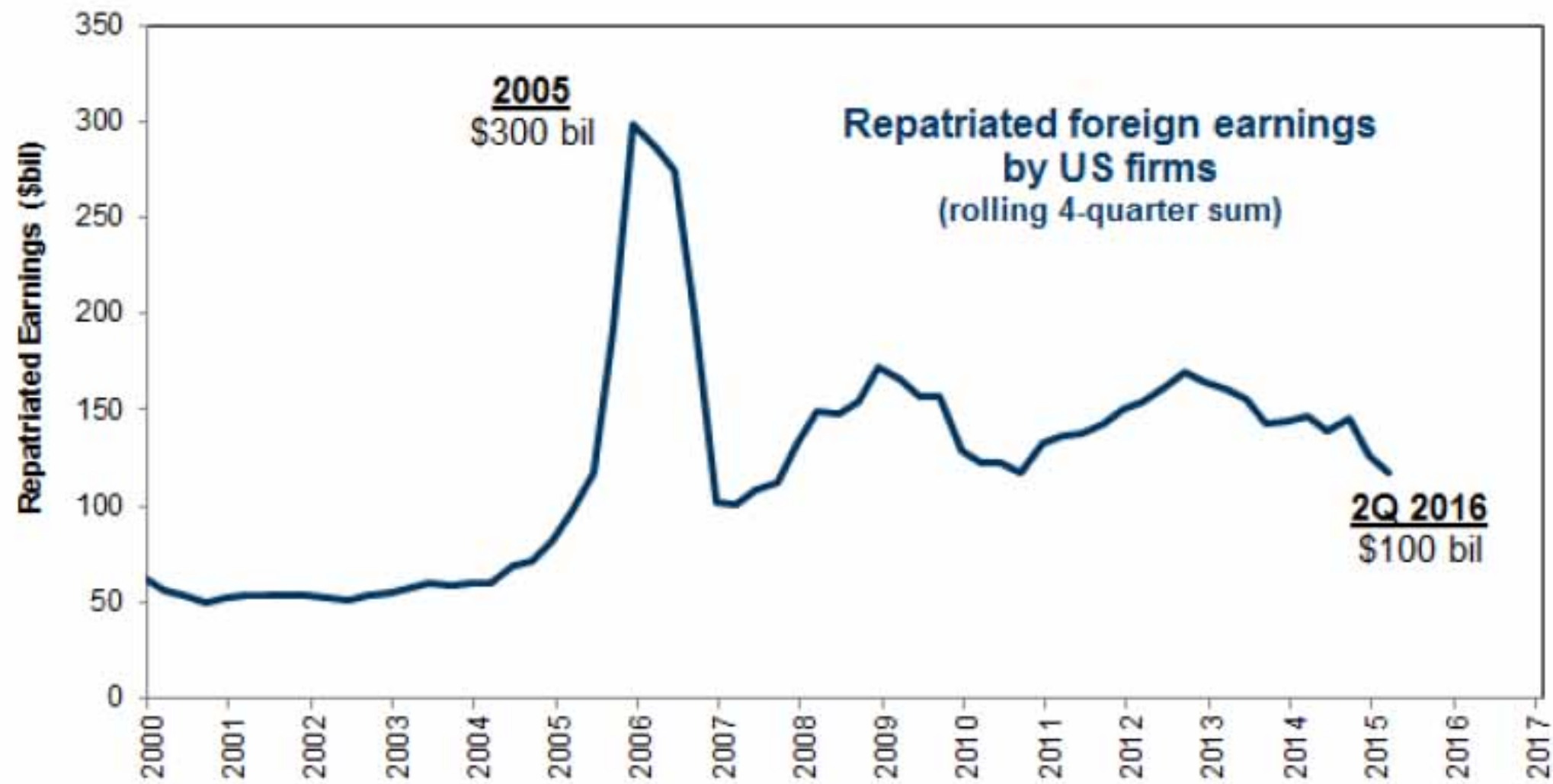
Massive amount of profits accumulated abroad (about \$2.5 Tr by 2018) \Rightarrow Temptation for politicians to offer repatriation tax holiday

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

\Rightarrow 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

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)

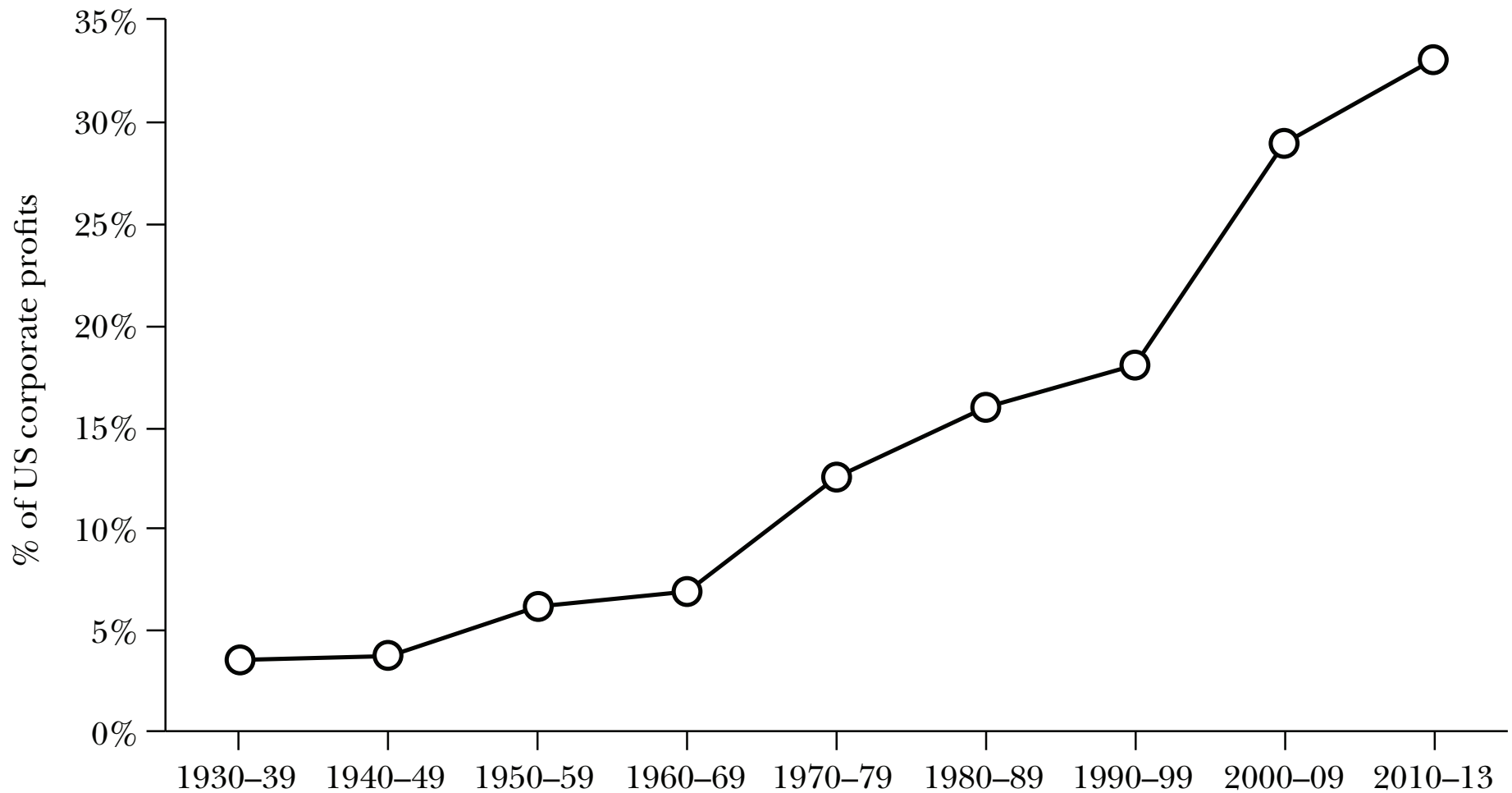
Multinational companies are particularly savvy to avoid corporate income tax by reporting most of their profits in low tax countries using **transfer pricing**: one subsidiary buys/sells to another at manipulated prices to transfer profits

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

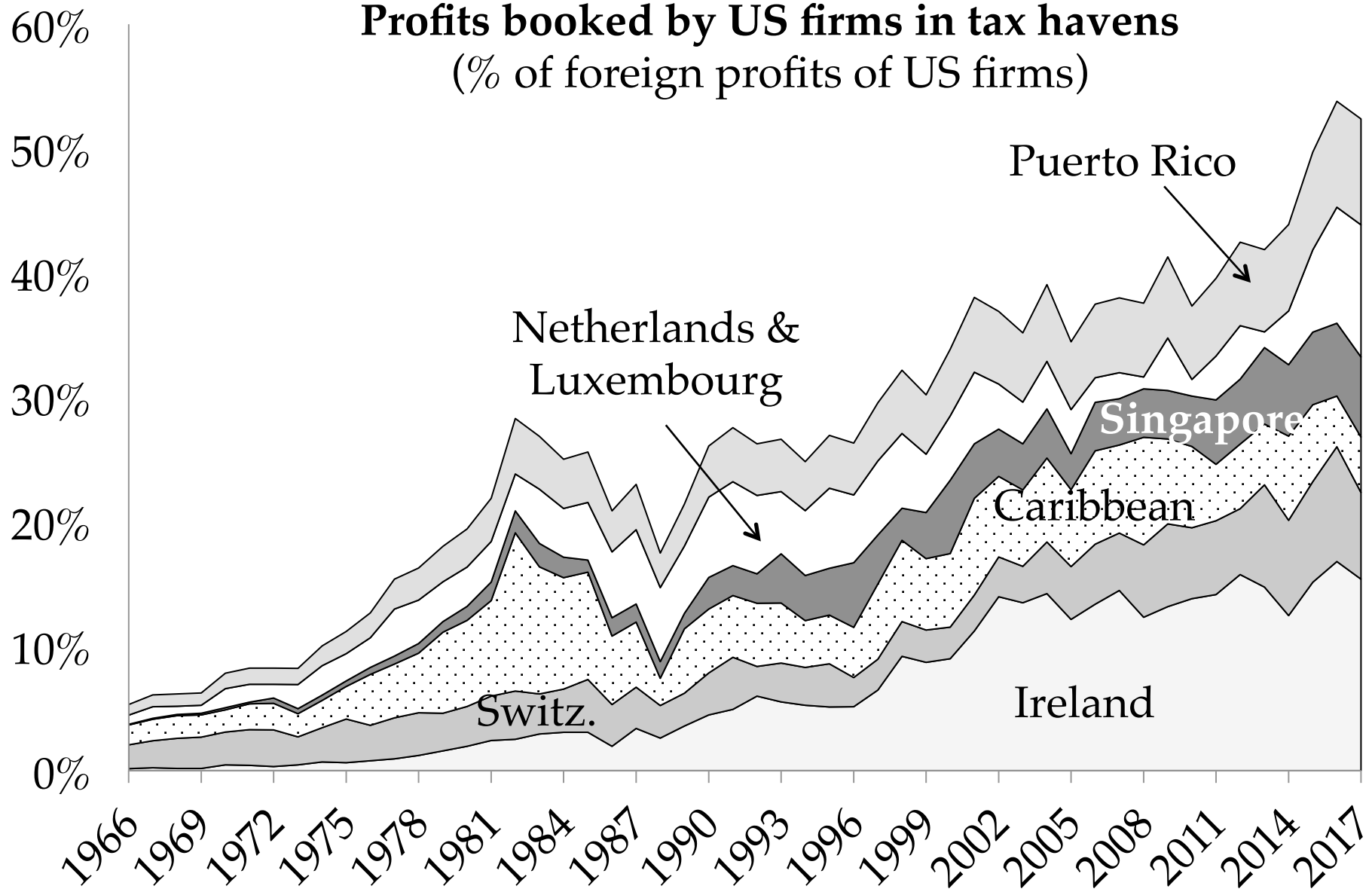


Source: Author's computations using National Income and Product Accounts data.

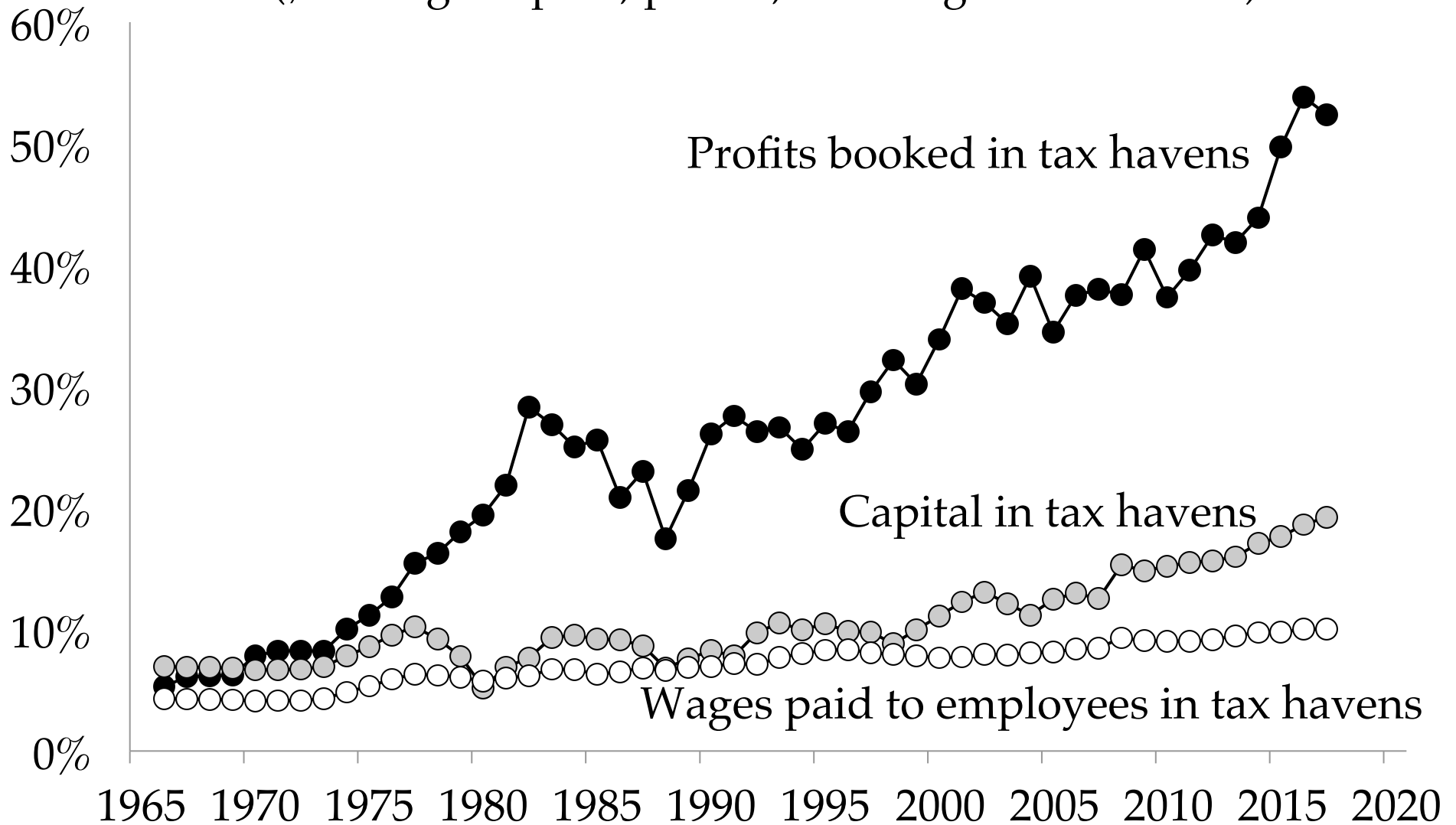
Notes: The figure reports decennial averages (that is, 1970-79 is the average for years 1970, 1971, through 1979). Foreign profits include dividends on foreign portfolio equities and income on US direct investment abroad (distributed and retained). Profits are net of interest payments, gross of US but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

Source: Zucman JEP 2014

Profits booked by US firms in tax havens (% of foreign profits of US firms)



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)

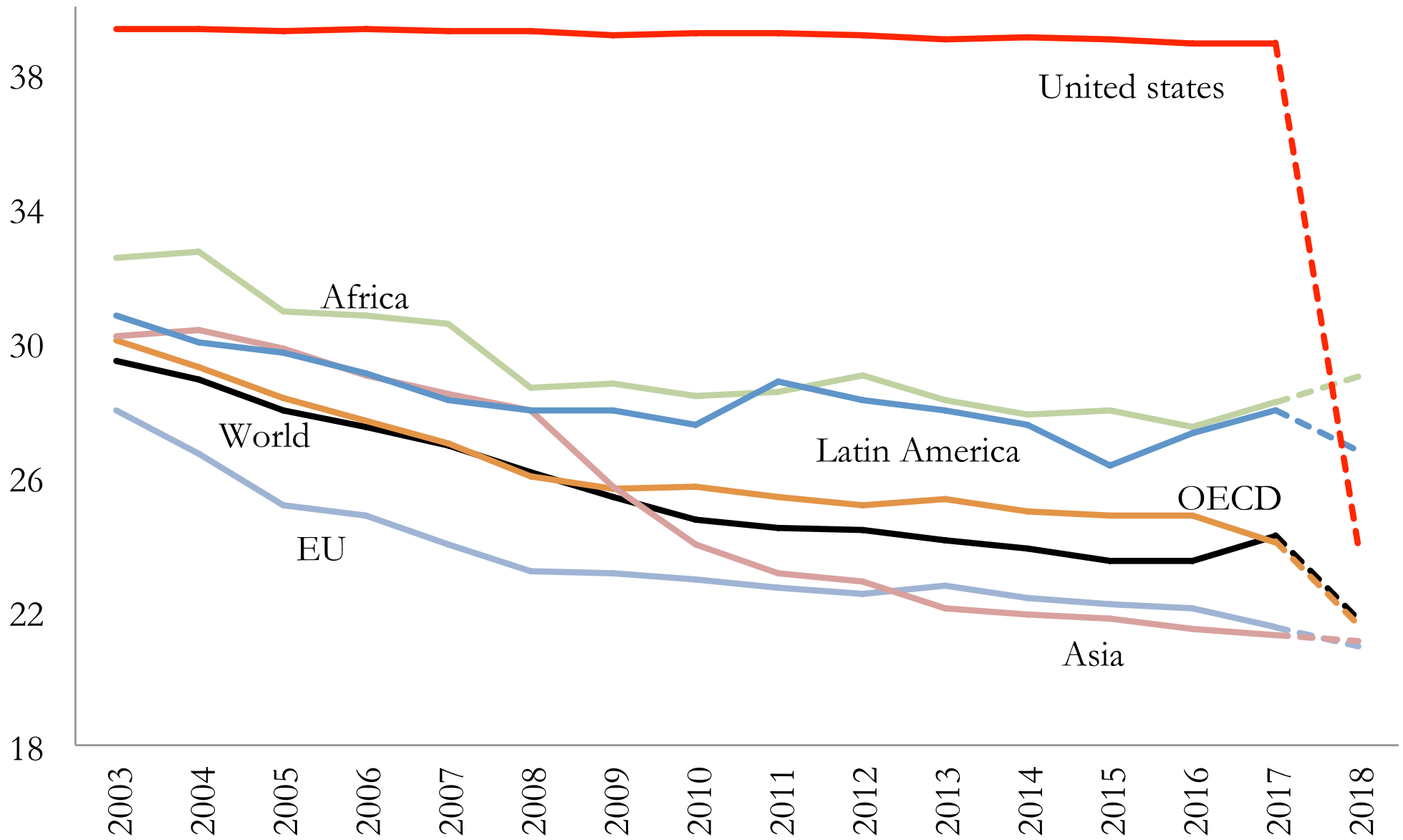
⇒ This can undermine the progressive individual income tax

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 due to 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 (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]

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