

# Policy Evaluation

## 8. Corporate income taxation

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## MOTIVATION

To its detractors, the corporate tax is a drag on the productivity of the corporate sector, and the reduction in the tax burden on corporations has been a boon to the economy that has led firms to increase their investment in productive assets.

To its supporters, the corporate tax is a major safeguard of the overall progressivity of our tax system. By allowing the corporate tax system to erode over time and "not pay their fair share", supporters of corporate taxation argue, we have enriched capitalists at the expense of other taxpayers.

## 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)

**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 and hence earn pure profits. Taxing pure profits does not distort behavior because firms maximize profits anyway

## Corporate tax revenue and progressivity

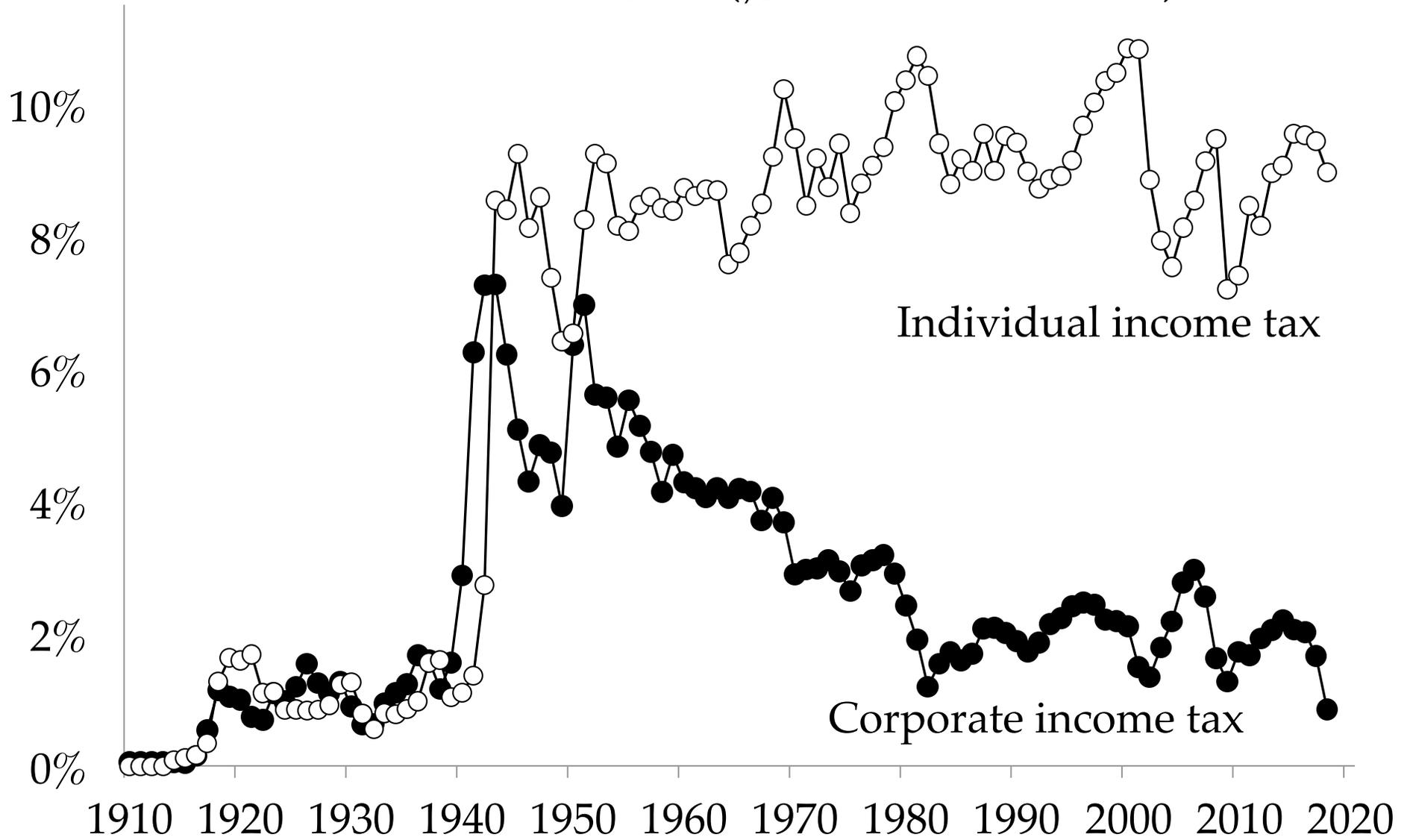
**1) Revenue:** Aggregate corporate tax revenue has fallen sharply since 1950s in the US (and many developed economies: in 2018, Fed corporate tax revenue less than 1% of national income (was 5%+ in the 1950s)

**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).

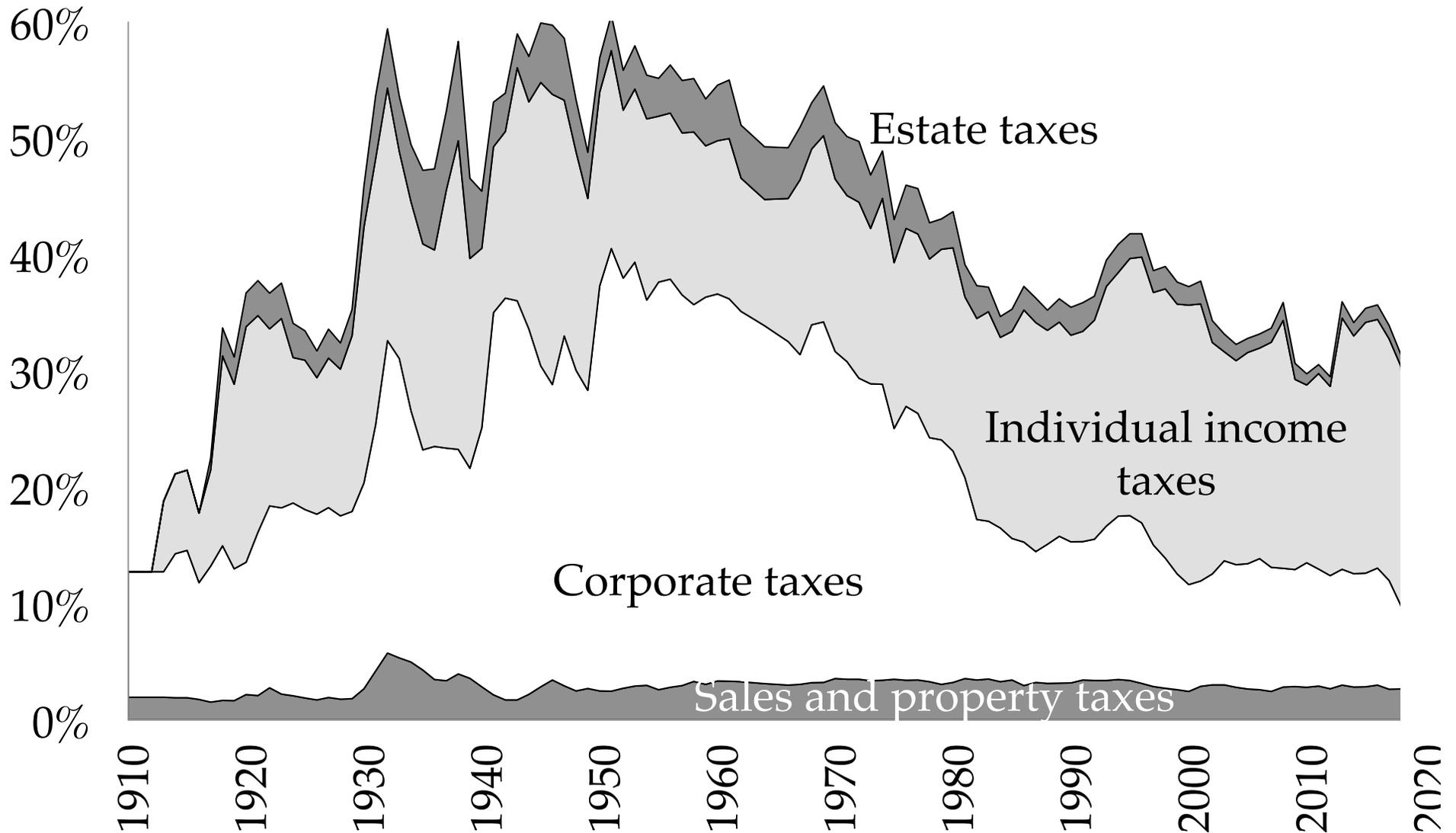
Among billionaires, wealth is primarily in the form of corporate stock (Amazon for Bezos, Tesla for Musk, etc.)

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

# Federal tax revenue (% of national income)



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



# THE INCIDENCE OF THE CORPORATE TAX

Remittance vs. incidence

- Firms remit large amount of taxes (CIT, SSCs, VAT) but
- Economic incidence is about change in individual welfare!

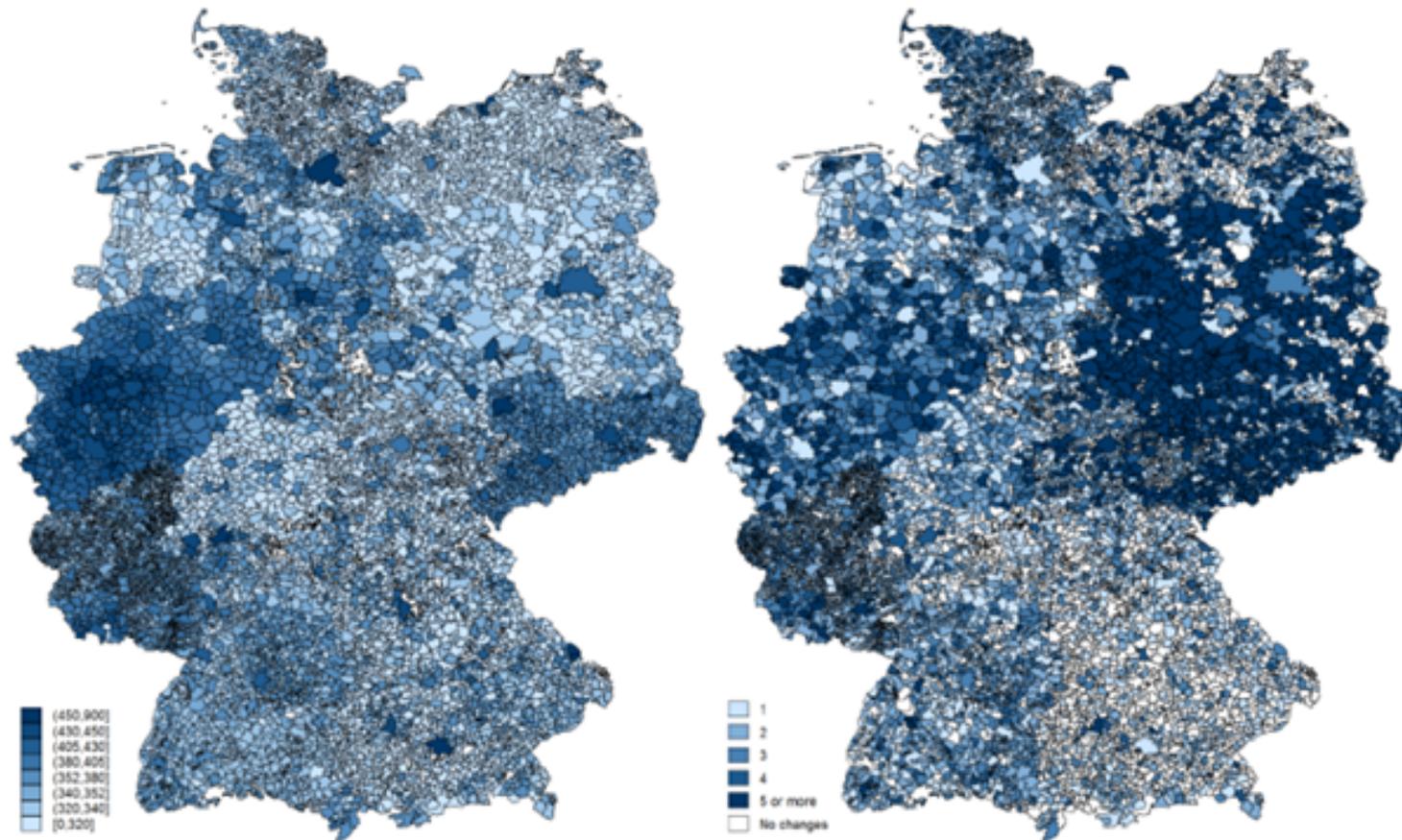
Individuals potentially “paying” CIT

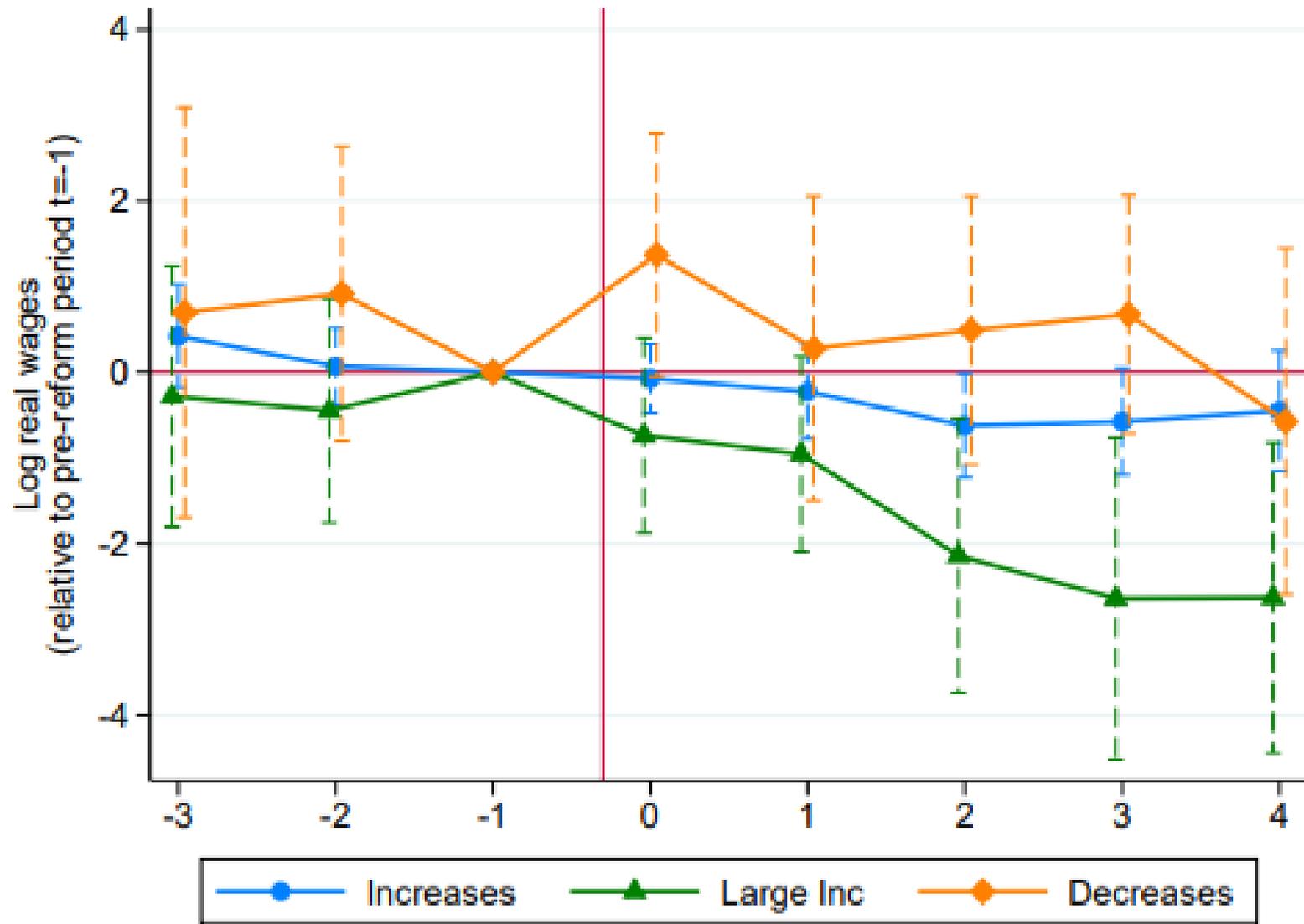
- 1) Capital owners (through lower profits)
- 2) Workers (through lower wage)
- 3) Consumers (through higher prices)

Fuest, Peichl, and Siegloch (2018, AER) use German local business tax changes to estimate incidence of CIT on wages in DD setting (each year, 8% of the 11,441 municipalities change the tax rate multiplier)

- Administrative linked employer-employee panel data
- Administrative municipal data (tax rate, revenue, spending)

Cross-sectional and time variation in local tax rates: local tax rates (2008) and number of changes in tax rates (1993-2012)





## **Fuest, Peichl, and Siegloch (2018, AER)**

### Take-aways

- CIT partially incident on wages: estimates of 51% shifted to workers
- It implies lower redistributivity of most tax systems (compared to shareholder incidence)

### Further results

- Wage effects close to zero for very large firms, foreign-owned firms (firms with profit-shifting capabilities)
- Low-skilled, young and female workers bear a larger share of the CIT burden

## **The Consequences of the Corporate Tax for Financing**

Financing investment with debt instead of equity is fiscally advantageous in most developed countries

However, financing everything with debt is risky: if investment does not pay off, firm will be unable to pay back debt

**The Dividend Paradox** – Two different views:

1) An agency theory: investors are willing to live with the tax inefficiency of dividends to get the money out of the hands of managers who suffer from the agency problem

2) A signaling theory: investors have imperfect information about how well a company is doing, so the managers of the firm pay dividends to signal to investors that the company is doing well.

**How Should Dividends Be Taxed?** is an important ongoing debate

## Dividend Tax Effects: Empirical Analysis

Chetty and Saez (2005, QJE) use large dividend tax cut (for the individual income tax) from 35% to 15% in 2003.

Method is a simple diff : before/after in time series

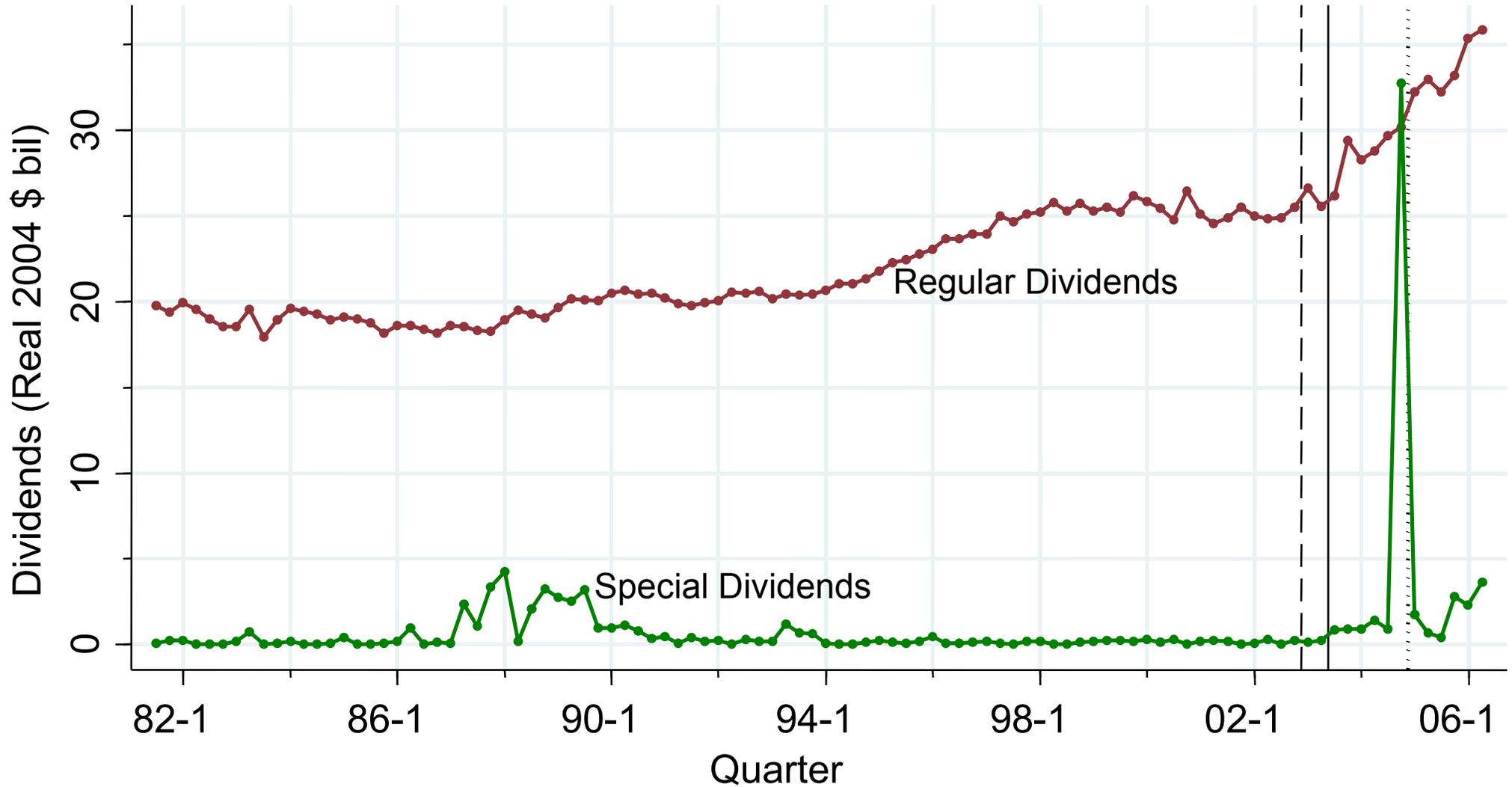
Key results:

- 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)

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

# Figure 1

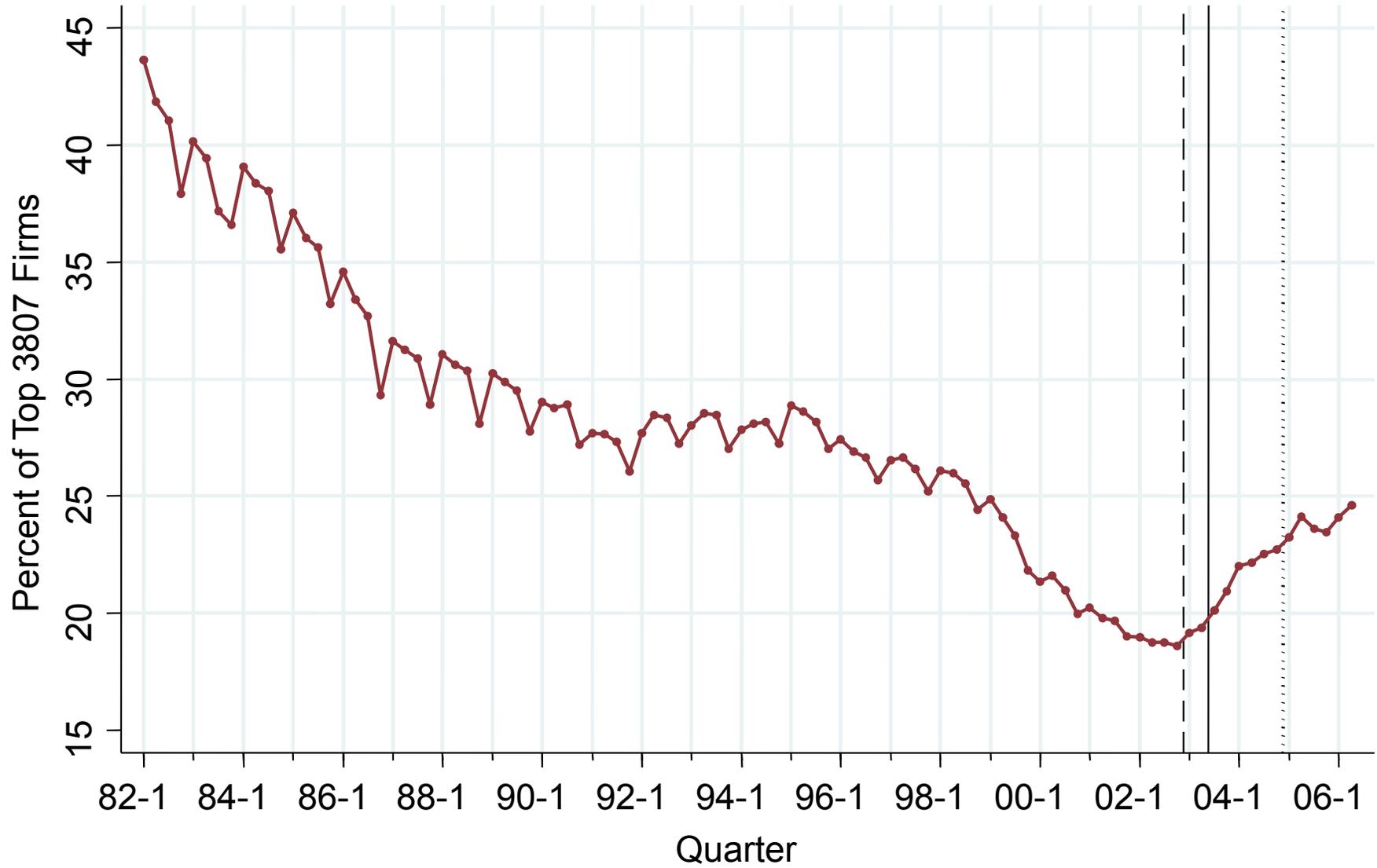
## Total Regular and Special Dividends (Updated to 2006Q2)



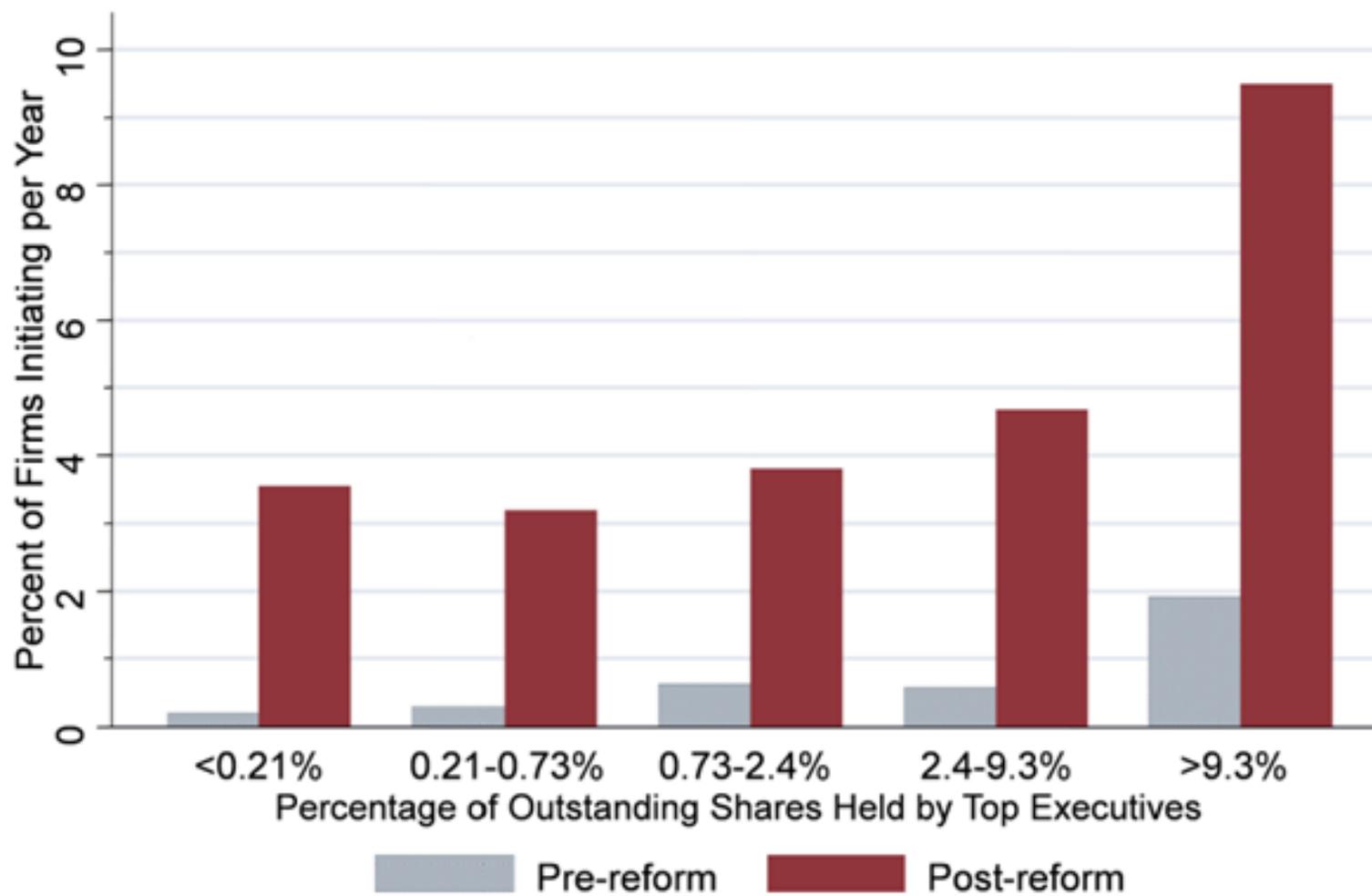
Source: Chetty and Saez (2005), using data through 2006Q2.

# Figure 3

## Dividend Payers in Top 3807 Firms



Source: Chetty and Saez (2005)



SOURCE : Chetty and Saez (2005), Fig. 7, slides from Chetty 2012.

## Yagan (2015, AER)

What happened to investment, employment,...?

Methodology: DiD using C-corporations (treated) vs. S-corporations (comparison)

- C-corps: pay CIT, shareholders pay dividend taxes, capital gains taxes on qualified share buybacks
- S-corps: same legal structure but taxable income flows through shareholders individual tax returns (independent on whether it is retained or distributed)

Identification threat:

- C- and S-corps are different : C-corps are much larger
- For identification: only necessary that both firm types would have followed the same trend absent the reform



- Largest hardware chain
- C-corporation



- Third-largest hardware chain
- S-corporation

SOURCE : Yagan (2015).

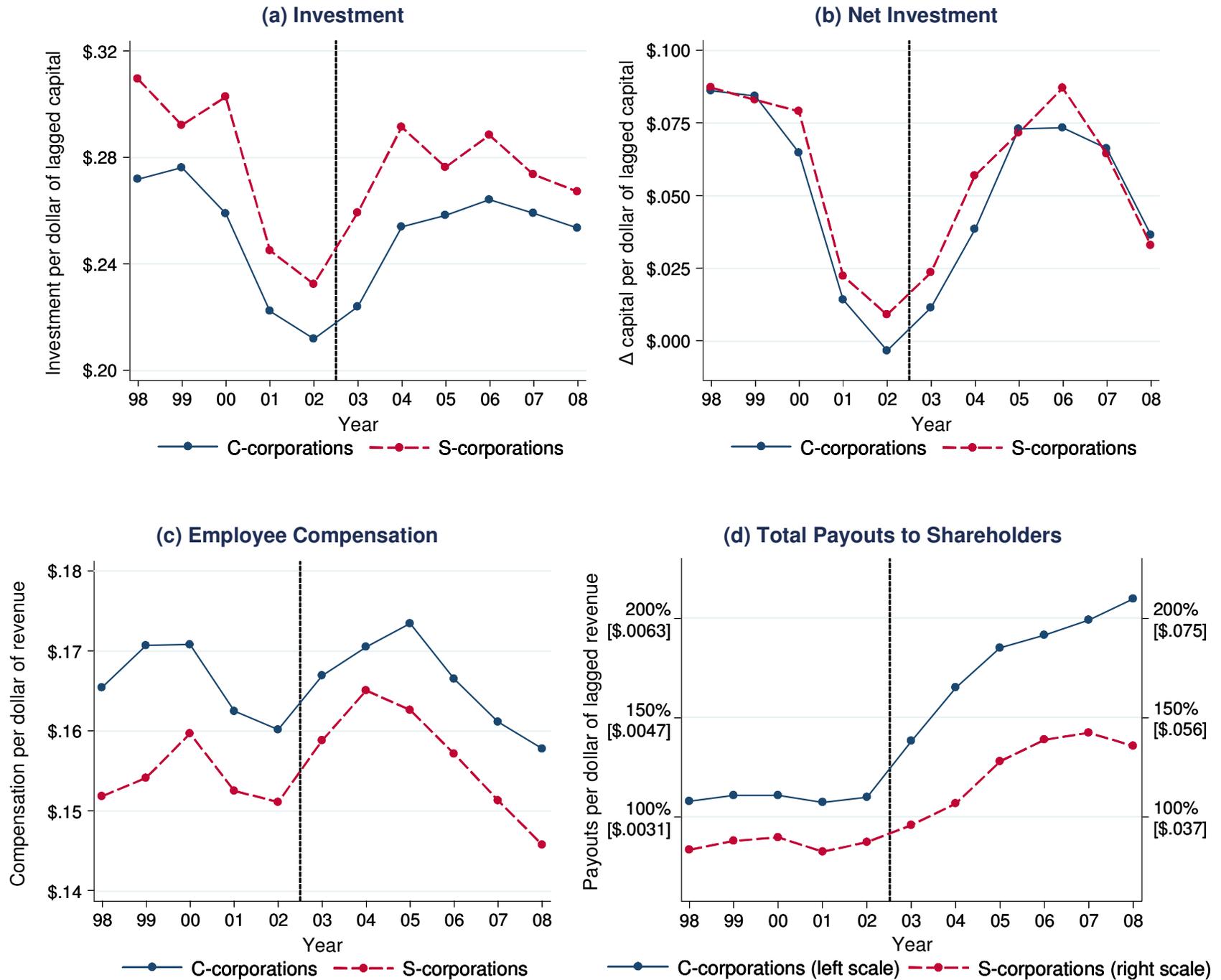


📍 Home Depot (C-corporation)

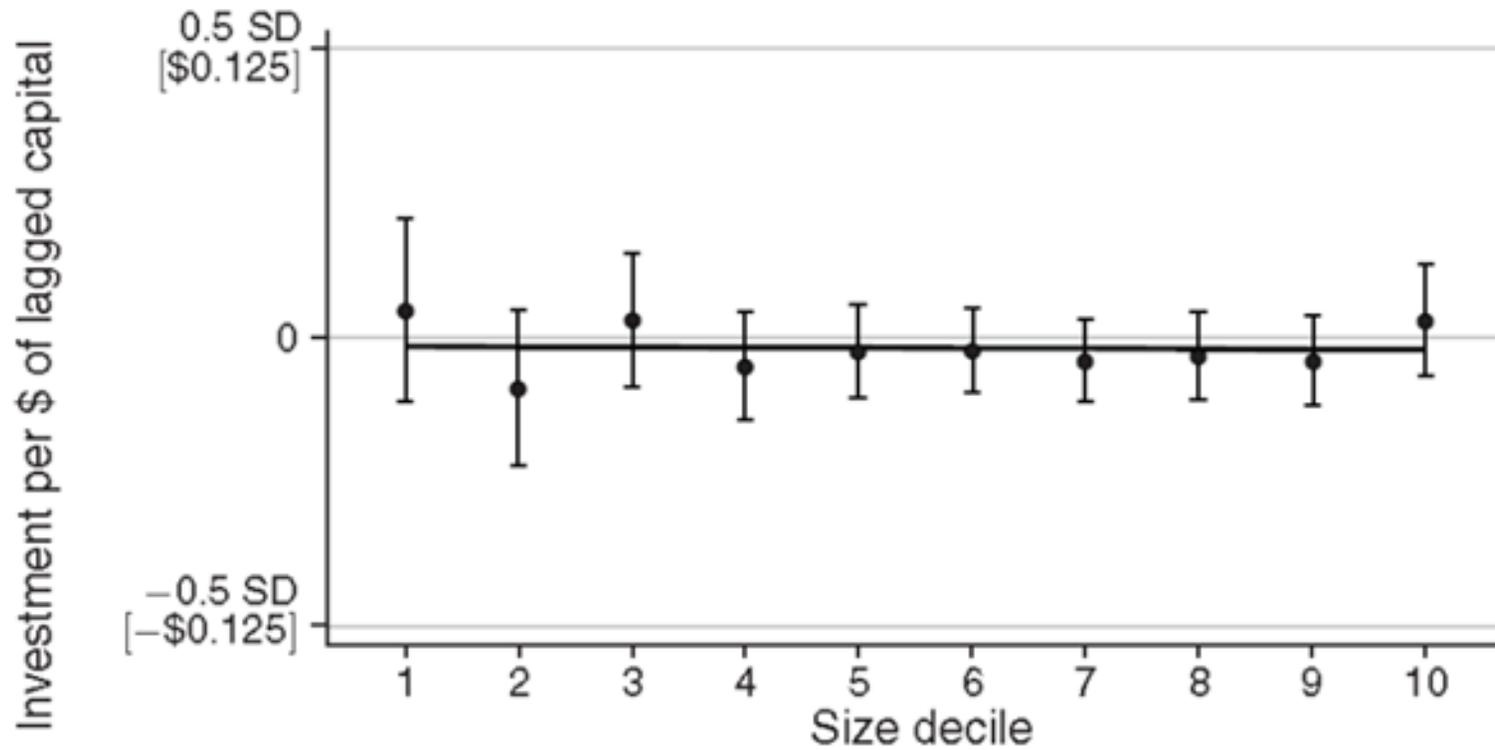
📍 Menard Inc. (S-corporation)

**FIGURE 2**  
Effects of the 2003 Dividend Tax Cut

Source: Yagan (2015)



Heterogeneity:



SOURCE : Yagan (2015), Fig. 3.A