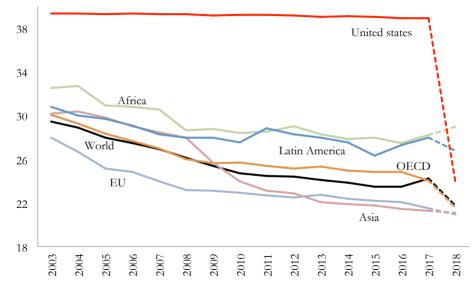
#### Global corporate tax rates (%)



# APPLICATION: Executive Compensation and the Agency Problem

Many recent compensation packages seem wildly out of proportion to the executives' actual value.

- In 2012, Amgen CEO Kevin Sharer earned \$21.1 million, plus a jet and other perks, while shareholders lost 3%.
- In 2008, the Abercrombie and Fitch CEO received \$71.8 million in compensation, including \$6 million retention bonus. In 2007, A&F's stock dropped more than 70%.
- In 2011, Hewlett-Packard's CEO was fired after a disastrous term, but got a \$13 million firing benefit.

# APPLICATION: Executive Compensation and the Agency Problem

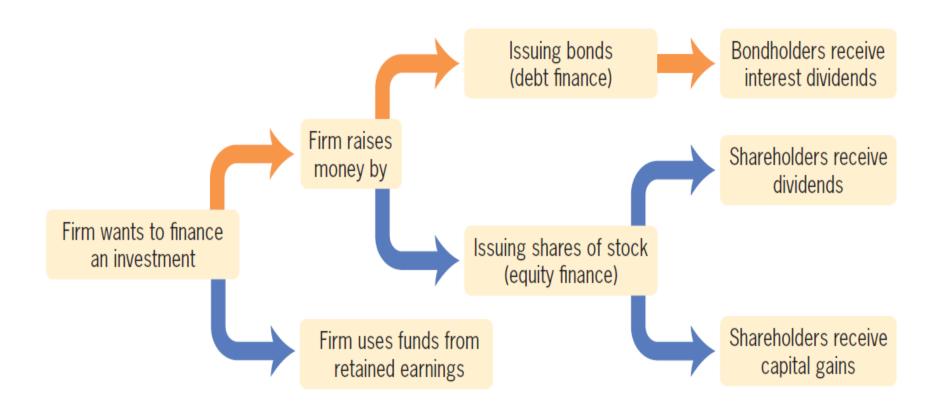
How can poor executives receive such high compensation?

- Owners cannot fully track manager's compensation, so managers compensate themselves well.
- Owners try to control executives through the use of a board of directors.
  - Board of directors: A set of individuals who meet periodically to review decisions made by a firm's management and report back to the broader set of owners on management's performance.

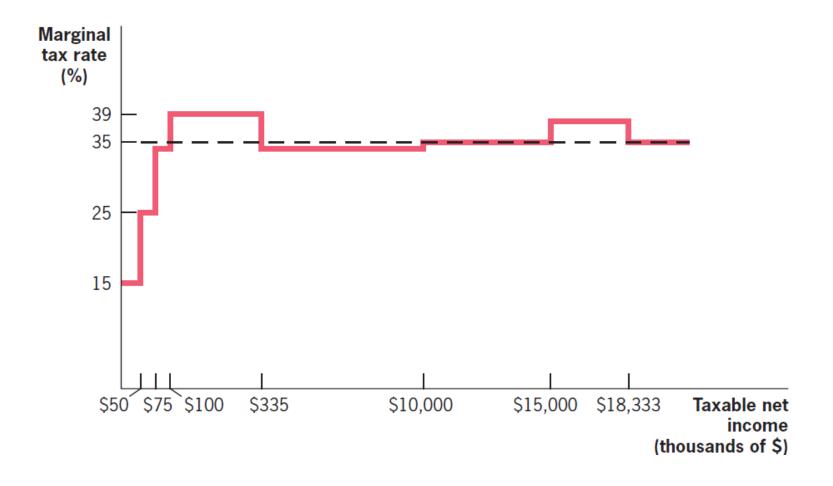
# APPLICATION: Executive Compensation and the Agency Problem

- The issue of executive compensation came to a head in 2008–2009.
- Thousands of traders and bankers received huge bonuses as the financial crisis battered shareholders.
- Following public outrage, Congress voted to limit compensation of firms accepting bailout funds.
- But compensation remains uncapped at the vast majority of financial and other firms in the United States.

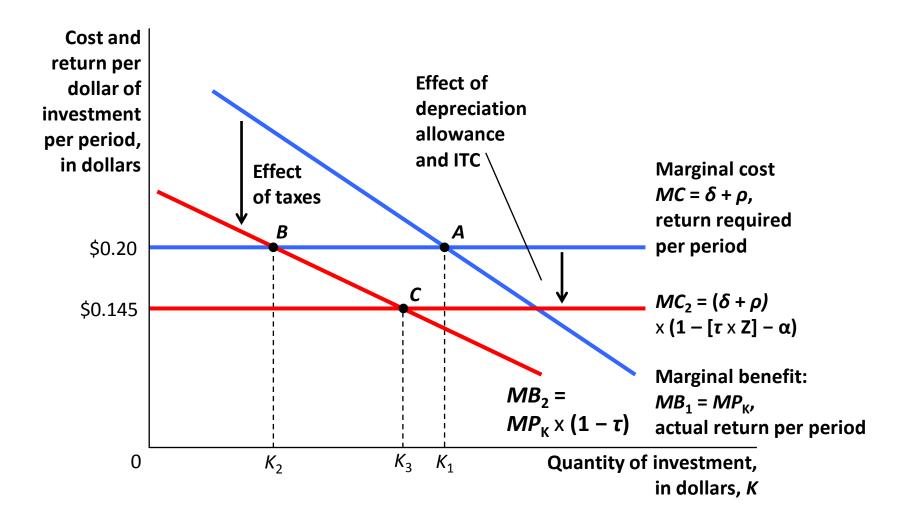
### Firm Financing



#### Corporate Tax Rate



# The Consequences of the Corporate Tax for Investment: Theory



### APPLICATION: The Impact of the 1981 and 1986 Tax Reforms on Investment Incentives

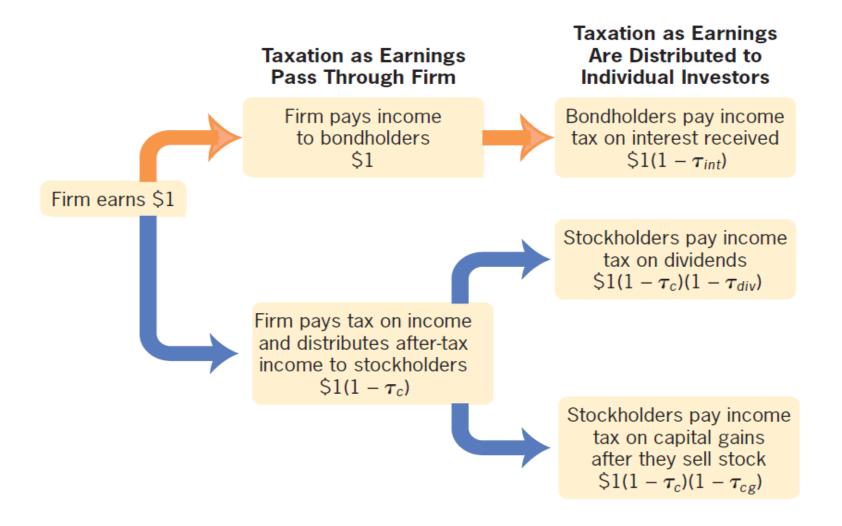
TRA 1981 created new incentives to spur investment by corporate America.

- Depreciation schedules were made much more rapid and an investment tax credit was introduced.
- ETR on equipment averaged −18.2%.
- Contributing to the low effective tax rates in the early 1980s were active tax avoidance and/or evasion strategies by corporations.

### APPLICATION: The Impact of the 1981 and 1986 Tax Reforms on Investment Incentives

- The Tax Reform Act of 1986 made three significant changes to the corporate tax code:
  - Lowered the top corporate tax rate from 46% to 34%.
  - Slowed depreciation schedules significantly and ended the ITC.
  - Significantly strengthened the corporate version of the Alternative Minimum Tax (AMT).
- Corporate use of legal loopholes in the tax codes rebounded in the late 1990s and continues today.

## The Consequences of the Corporate Tax for Financing



### Why Not All Debt?

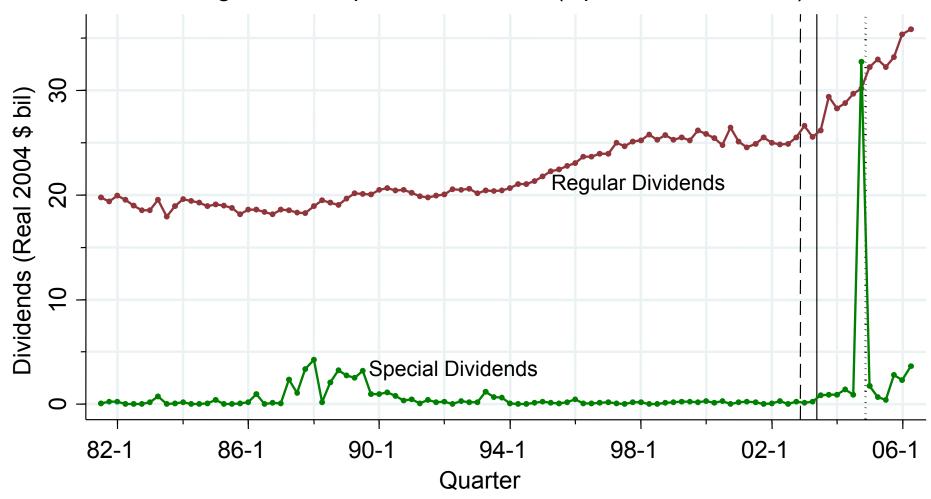
	Share of Financing	Possible Gain	Possible Loss	Expected Return
Equity holders	\$1m	\$3m	\$2m	\$0.5m
Debt holders	\$5m	0	\$10m	-\$5m
Equity holders	\$5m	\$3m	\$10m	-\$3.5m
Debt holders	\$1m	0	\$2m	-\$1m

- Bankruptcy creates an agency problem between debt and equity holders.
- High debt-equity ratios exacerbate this problem.

#### APPLICATION: The 2003 Dividend Tax Cut

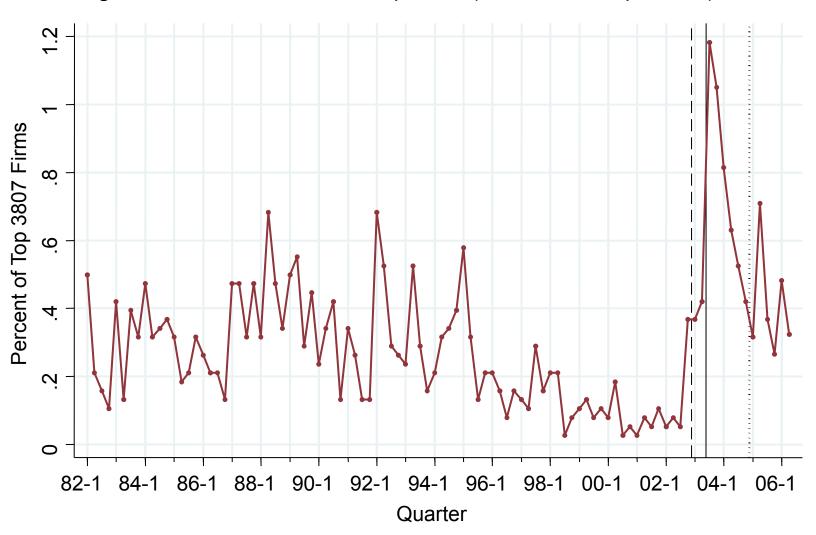
- The 2003 tax reform reduced the dividend and capital gains rates to 15%, making dividends more attractive.
- Proponents hoped the cut would stimulate the economy, and end double taxing of corporate income.
- Opponents argued that the tax cut would worsen the fiscal balance and make the tax burden less progressive.
- Research shows that the 2003 reform increased dividend payments, but whether this tax cut actually raised investment remains unanswered.

Figure 1
Total Regular and Special Dividends (Updated to 2006Q2)



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

Figure 2
Regular Dividend Initiation in Top 3807 (Constant Sample Size) Firms



Source: Chetty and Saez (2005)

Figure 3
Dividend Payers in Top 3807 Firms

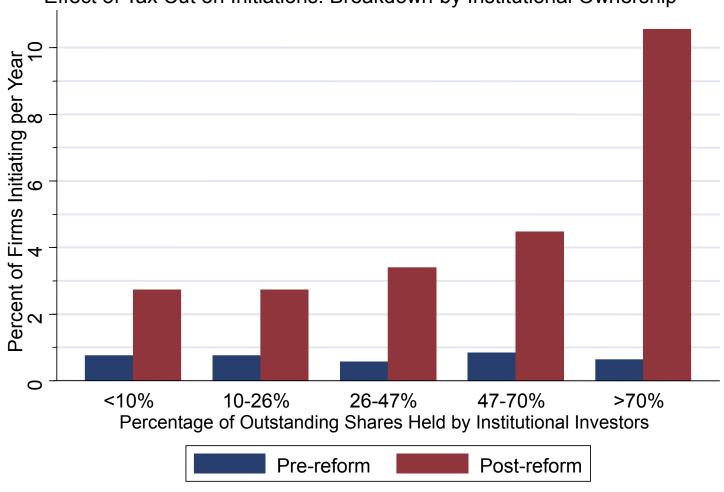


Source: Chetty and Saez (2005)

Figure 4 Effect of Tax Cut on Initiations: Breakdown by Executive Ownership 10 Percent of Firms Initiating per Year 2 4 6 8 0 <0.21% 0.21-0.73% 0.73-2.4% 2.4-9.3% >9.3% Percentage of Outstanding Shares Held by Top Executives Pre-reform Post-reform

Source: Chetty and Saez (2005)

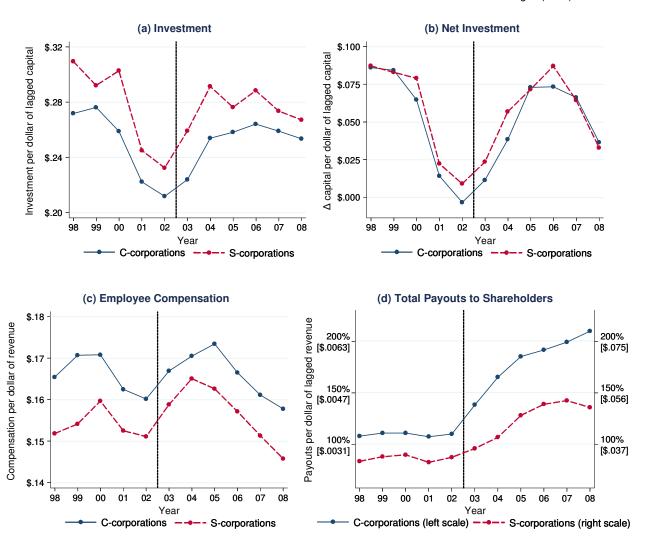
Figure 6
Effect of Tax Cut on Initiations: Breakdown by Institutional Ownership



Source: Chetty and Saez (2005)

FIGURE 2
Effects of the 2003 Dividend Tax Cut

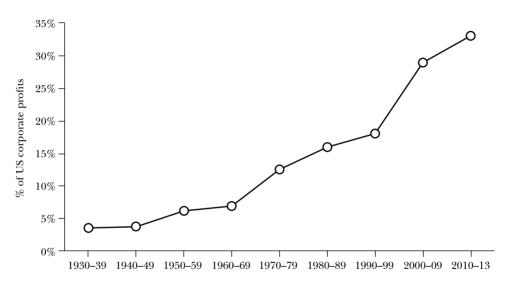
Source: Yagan (2015)



### APPLICATION: A Tax Holiday for Foreign Profits

- The American Jobs Creation Act of 2004 cut the tax rate on repatriated profits from 35% to 5.25% for one year.
- Repatriated profits had to be spent on job creation.
- Critics worried about the difficulty in controlling how companies would spend the money.
- Others were skeptical of the bill's ostensible intention of stimulating the economy.
- No evidence that it stimulated the economy, and it cost the government at least \$3.3 billion.

Figure 1 The Share of Profits Made Abroad in US Corporate Profits

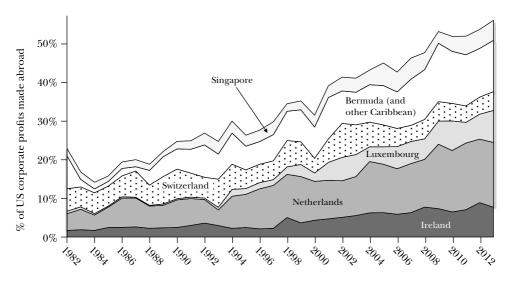


Source: Author's computations using National Income and Product Accounts data.

*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

Figure 2
The Share of Tax Havens in US Corporate Profits Made Abroad

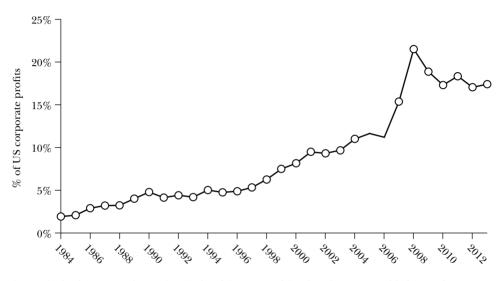


Source: Author's computations using balance of payments data. See online Appendix.

*Notes*: This figure charts the share of income on US direct investment abroad made in the main tax havens. In 2013, total income on US direct investment abroad was about \$500 billion. Seventeen percent came from the Netherlands, 8 percent from Luxembourg, etc.

Source: Zucman JEP 2014

Figure 3
The Share of Tax Havens in US Corporate Profits

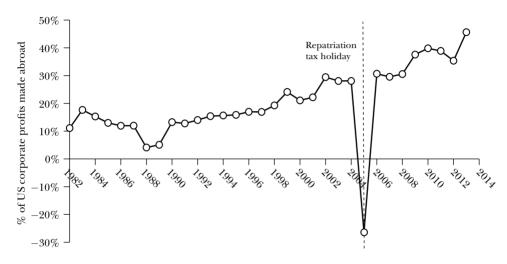


Source: Author's computations using National Income and Product Accounts and balance of payments data. See online Appendix.

*Note:* This figure charts the ratio of profits made in the main tax havens (Netherlands, Ireland, Switzerland, Singapore, Luxembourg, Bermuda, and other Caribbean havens) to total US corporate profits (domestic plus foreign).

Source: Zucman JEP 2014

Figure 4
US Corporate Profits Retained in Tax Havens

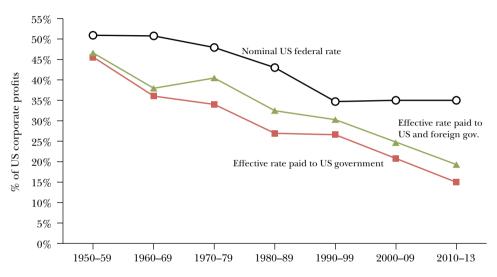


Source: Author's computations using balance of payments data. See online Appendix.

Notes: This figure charts the ratio of US direct investment income reinvested in the main tax havens (Netherlands, Ireland, Switzerland, Singapore, Luxembourg, Bermuda, and other Caribbean havens) to total US direct investment income abroad. The negative amount of reinvested earnings in 2005 means that, out of 2005 production, US firms repatriated more than 100 percent of the 2005 profits of their foreign affiliates (that is, the 2005 data point excludes repatriations from profits made prior to 2005).

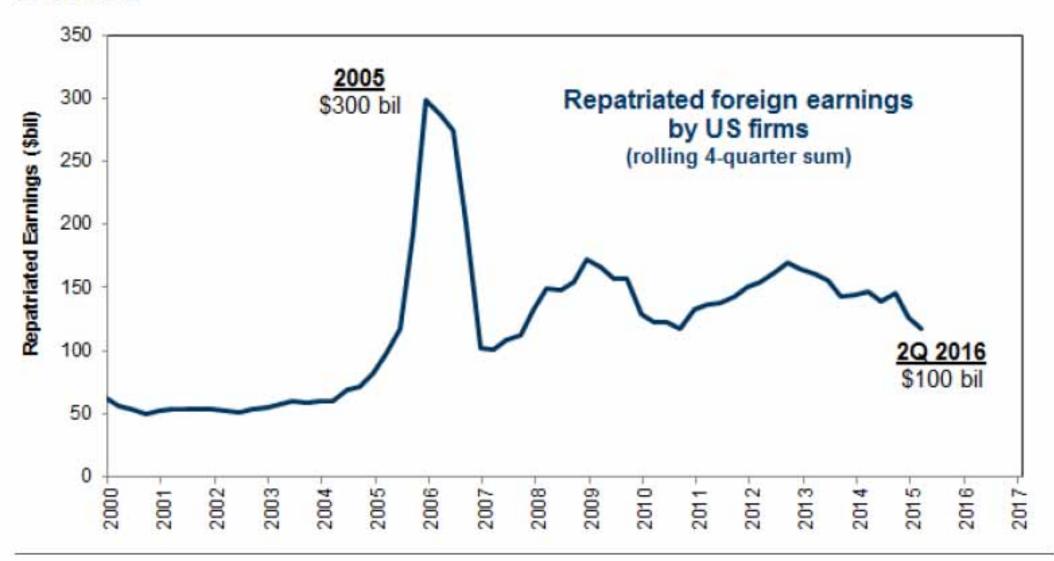
Source: Zucman JEP 2014

Figure 5
Nominal and Effective Corporate Tax Rates on US Corporate Profits



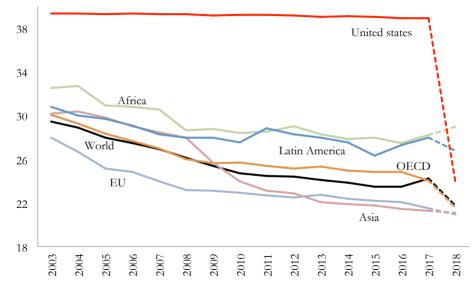
Source: Author's computations using National Income and Product Accounts data. See online Appendix. Notes: The figure reports decennial averages (for example, 1970–79 is the average for years 1970, 1971 through 1979.) In 2013, over \$100 of corporate profits earned by US residents, on average \$16 is paid in corporate taxes to the US government (federal and states) an & True for the International Efficiency of th

Exhibit 5: Earnings repatriated by all US firms as of 20 2016

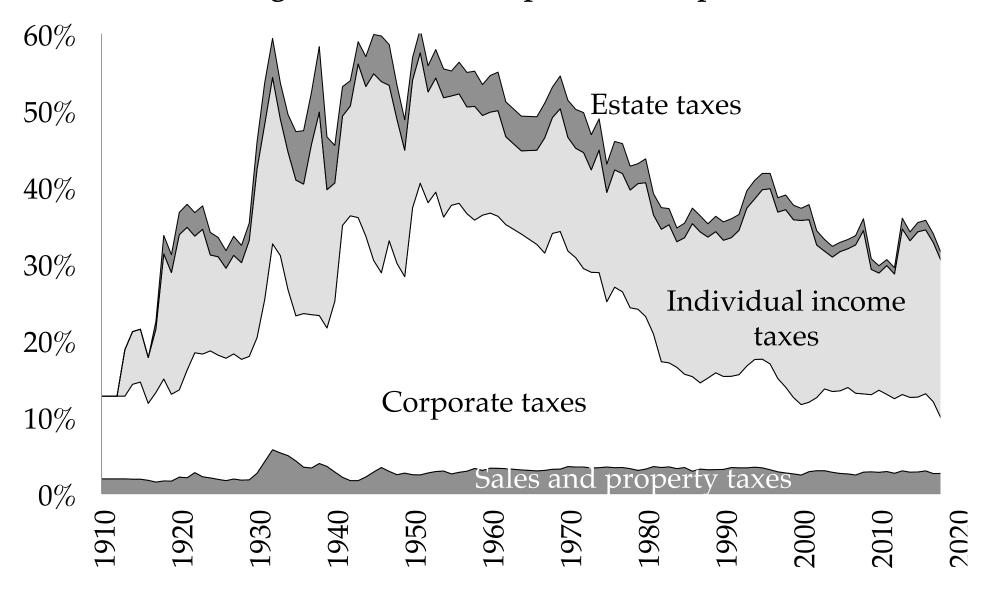


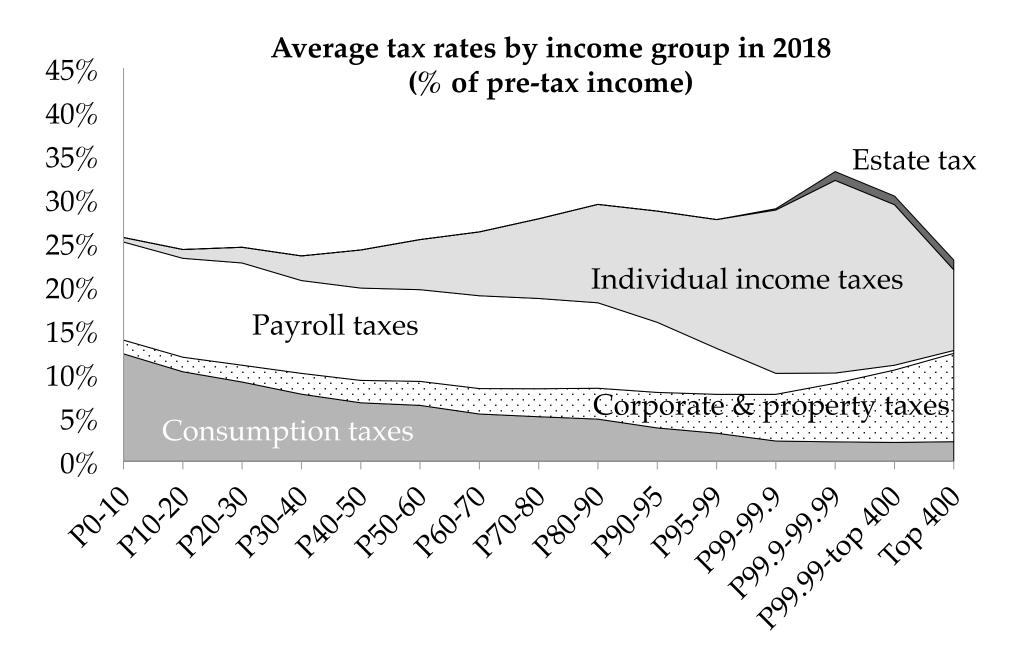
Source: Bureau of Economic Analysis, Goldman Sachs Global Investment Research

#### Global corporate tax rates (%)

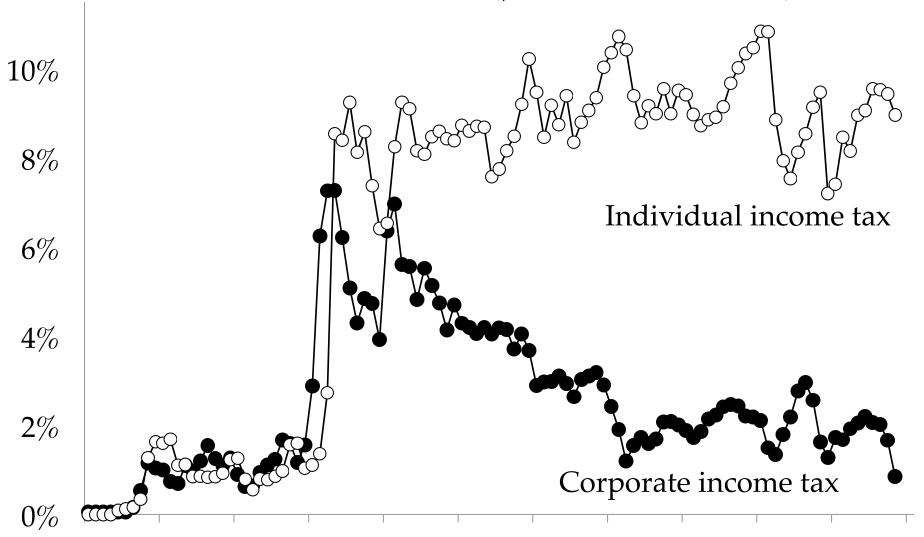


#### Average tax rate of the top 0.1% (% of pre-tax income)





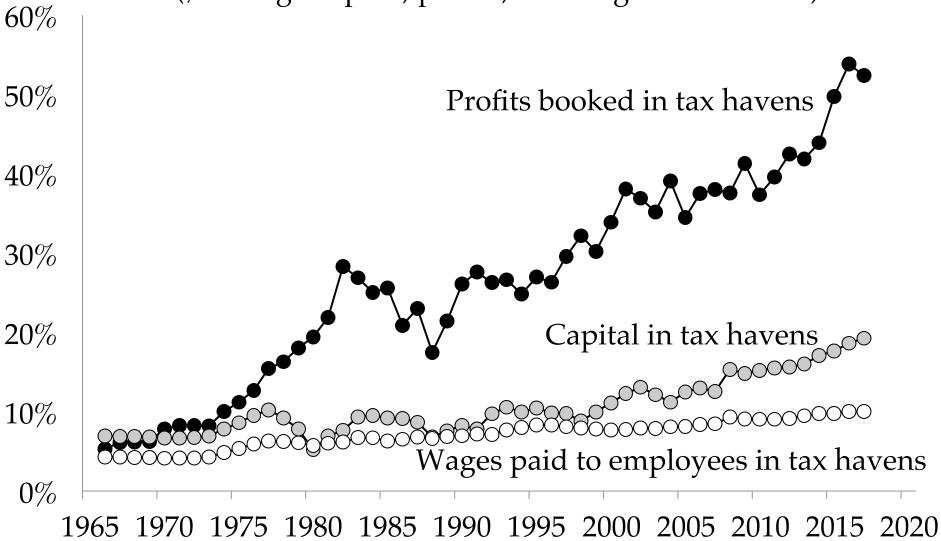
#### Federal tax revenue (% of national income)

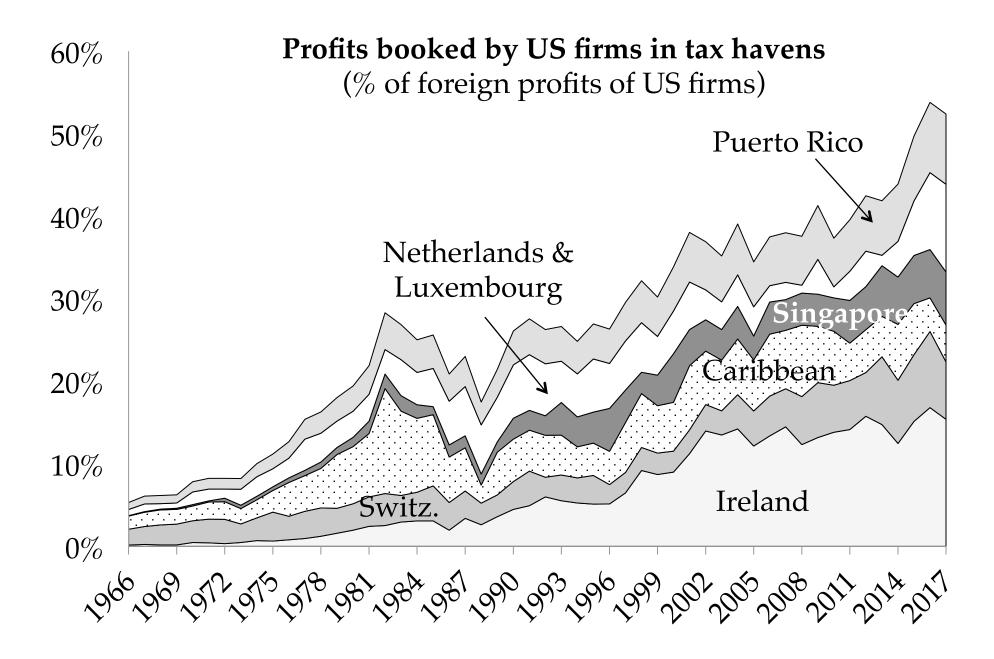


1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020

### Capital, profits & wages of US firms in tax havens

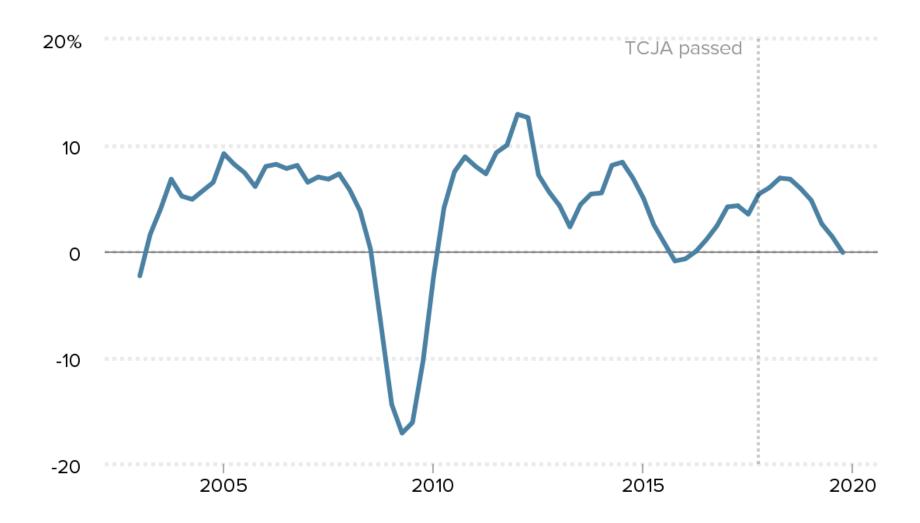
(% foreign capital, profits, and wages of US firms)





#### 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).