

Federal Tax Reform

November 2017

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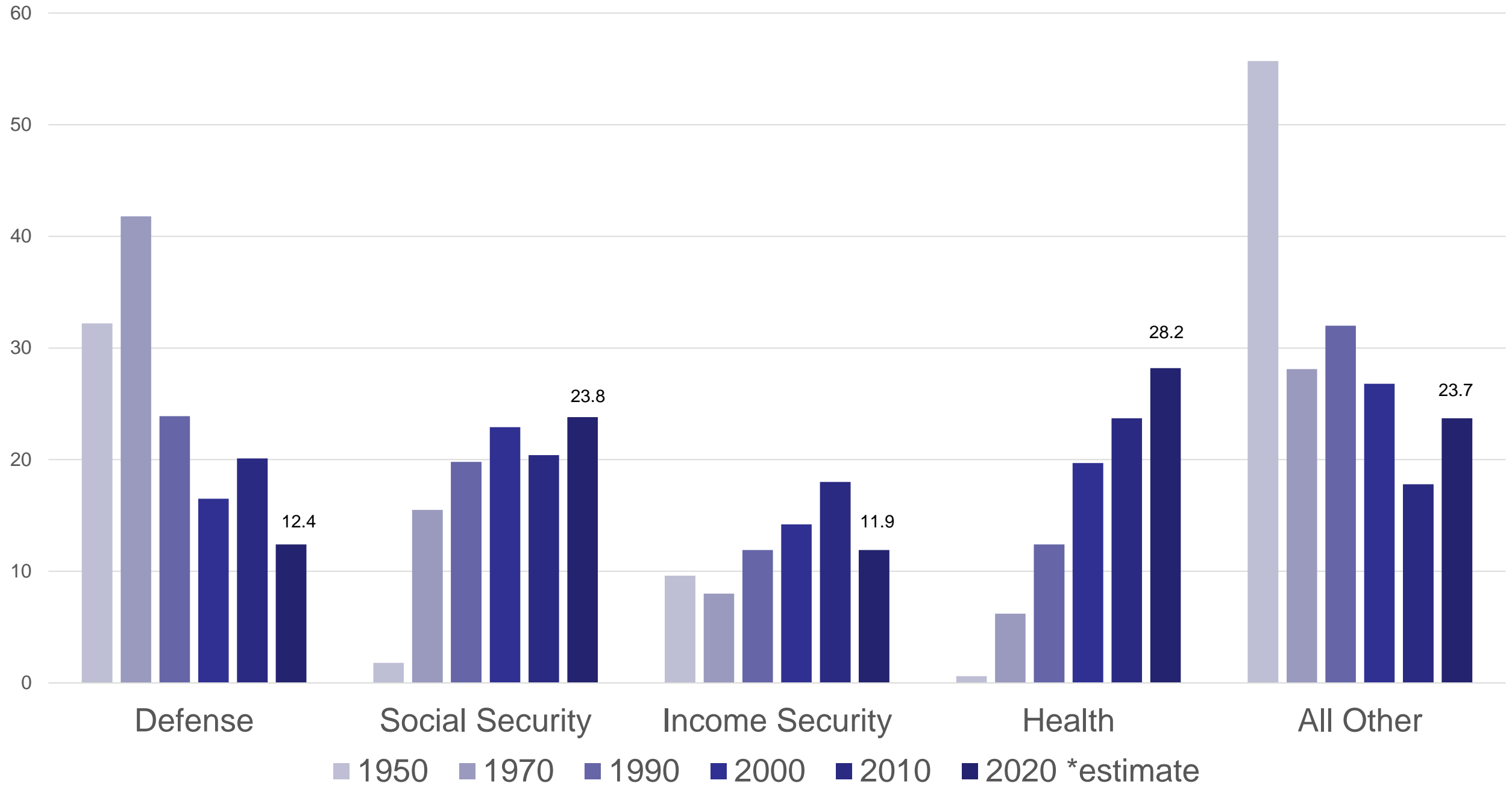
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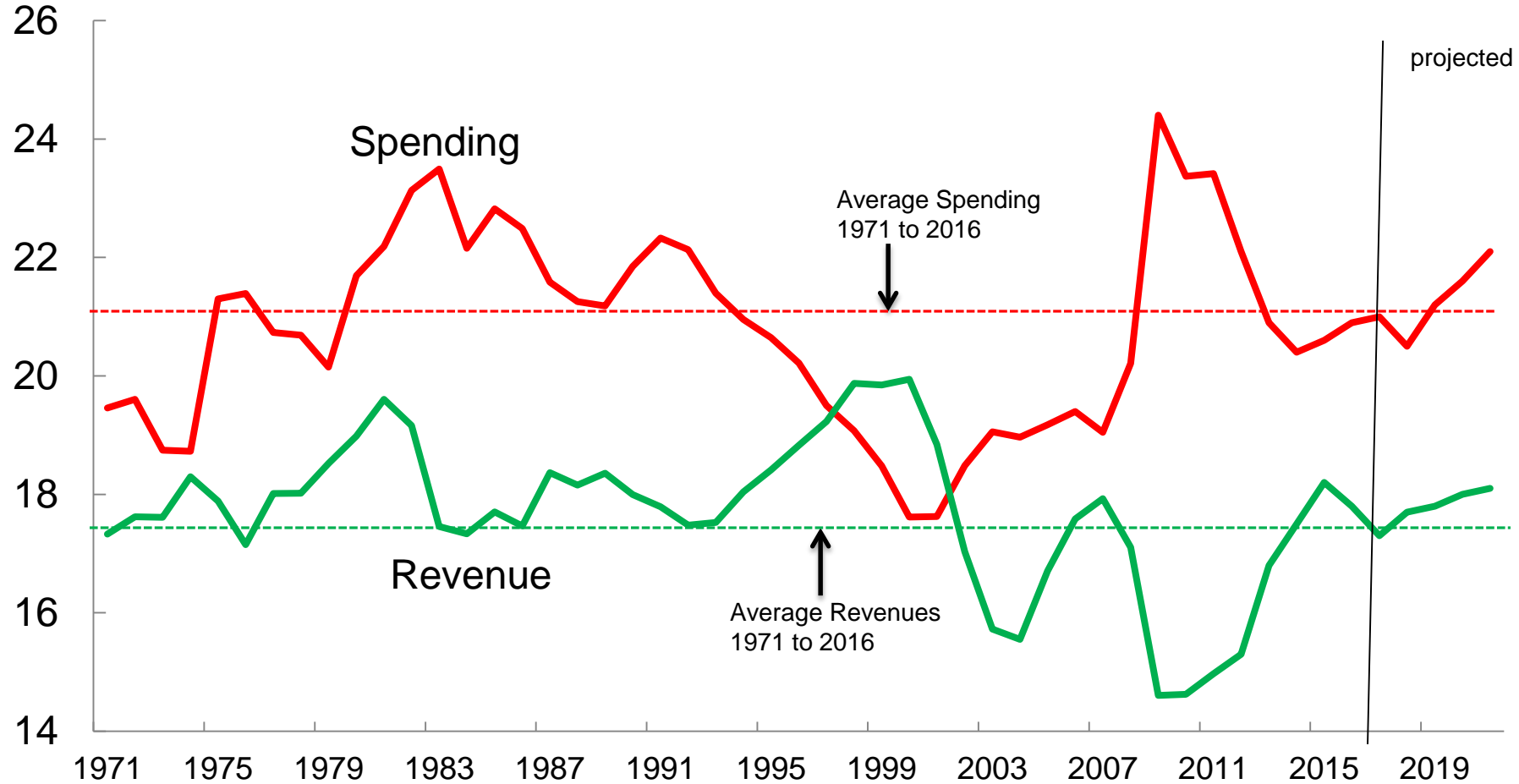
US Taxation Facts

- Government spending has shifted towards health care
- 3.6 percent of GDP annual deficit on average
- US tax system is very progressive
- US corporate income tax is high relative to other countries
- Pass-through businesses account for an important fraction of corporate income

Percent of Total US Federal Spending

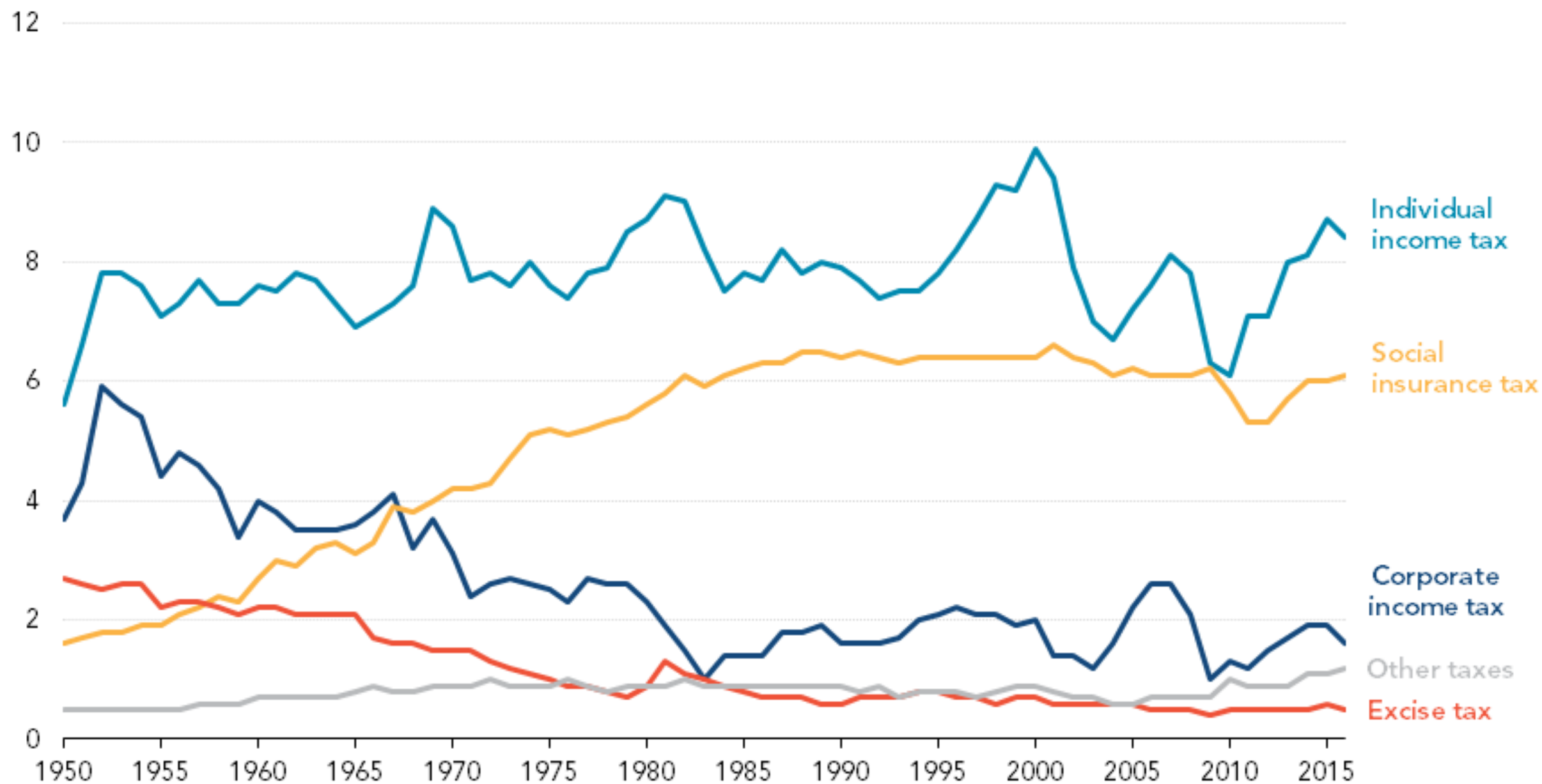


Federal Revenue and Expenditure as % of GDP



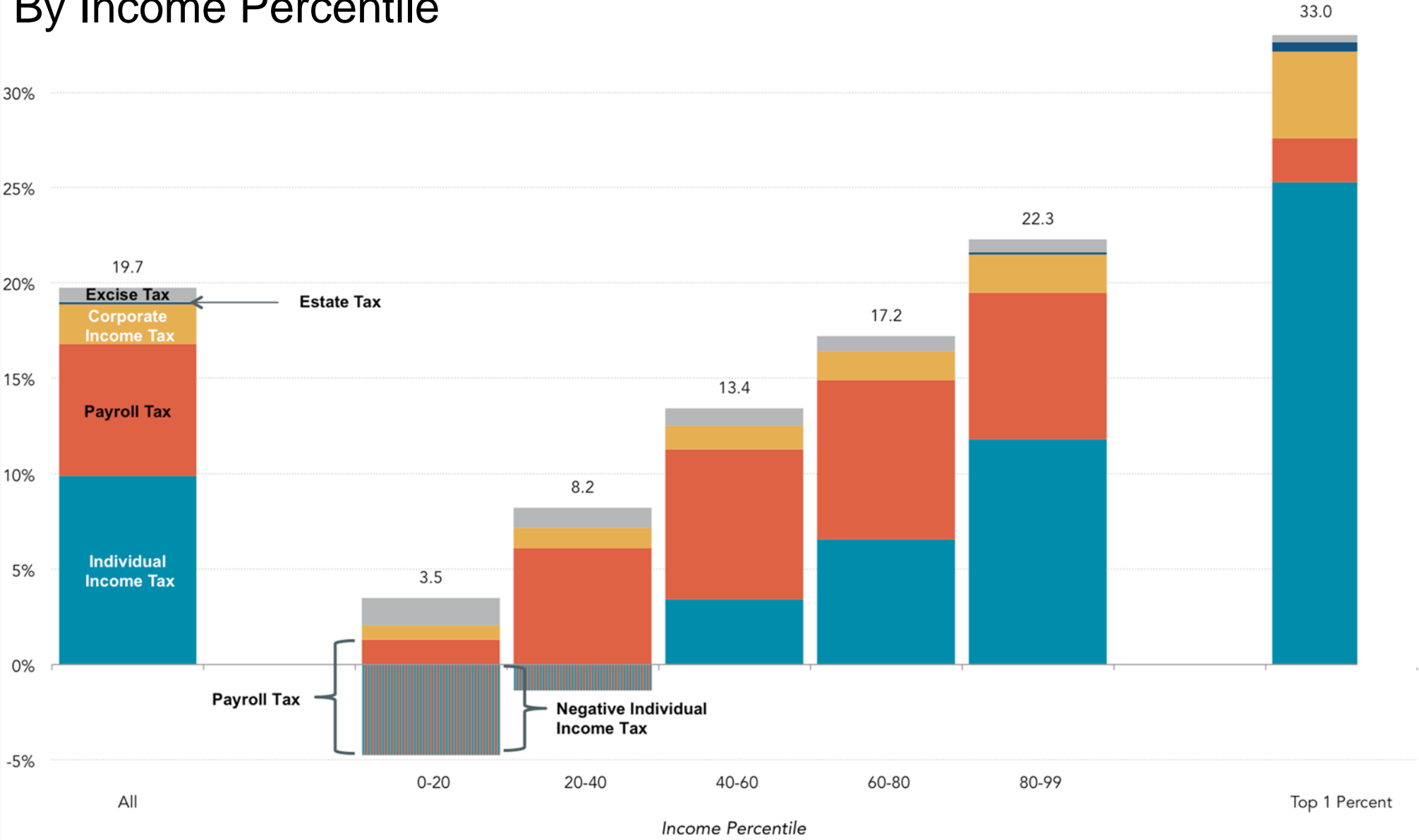
Source: US Congressional Budget Office (historical budget data) and (projections under current law)

Percent of GDP

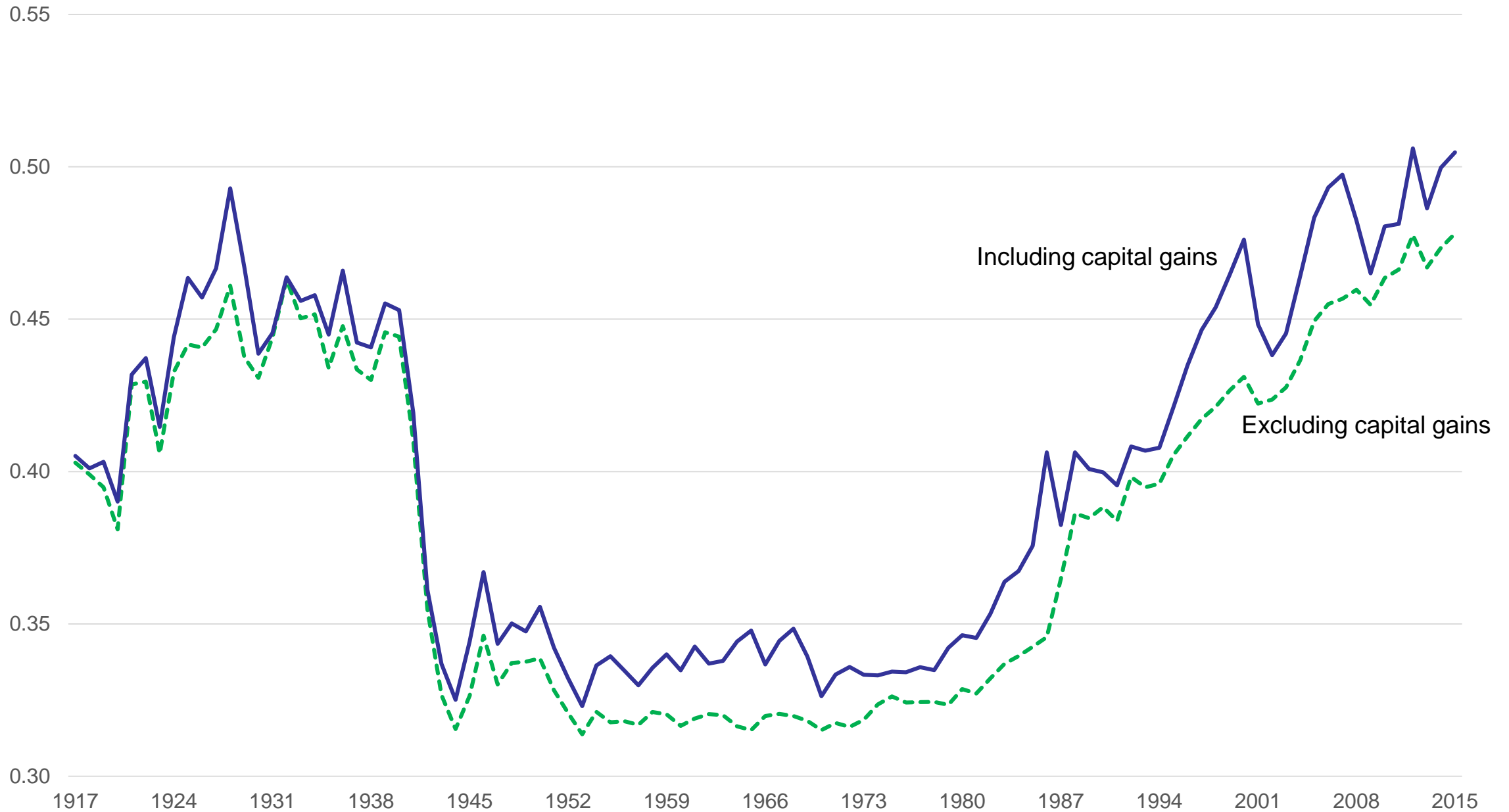


Effective Federal Tax Rates, 2016

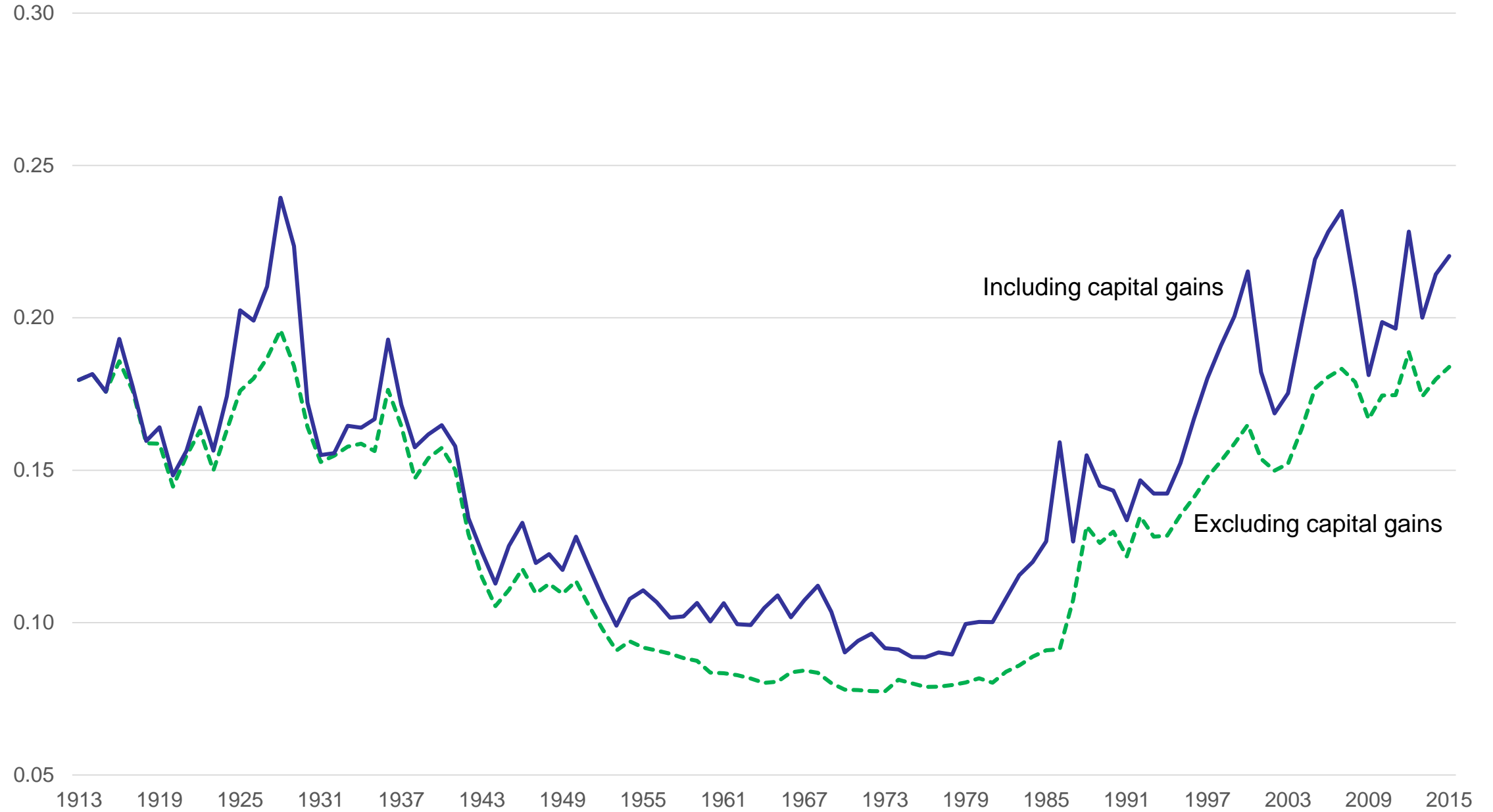
By Income Percentile



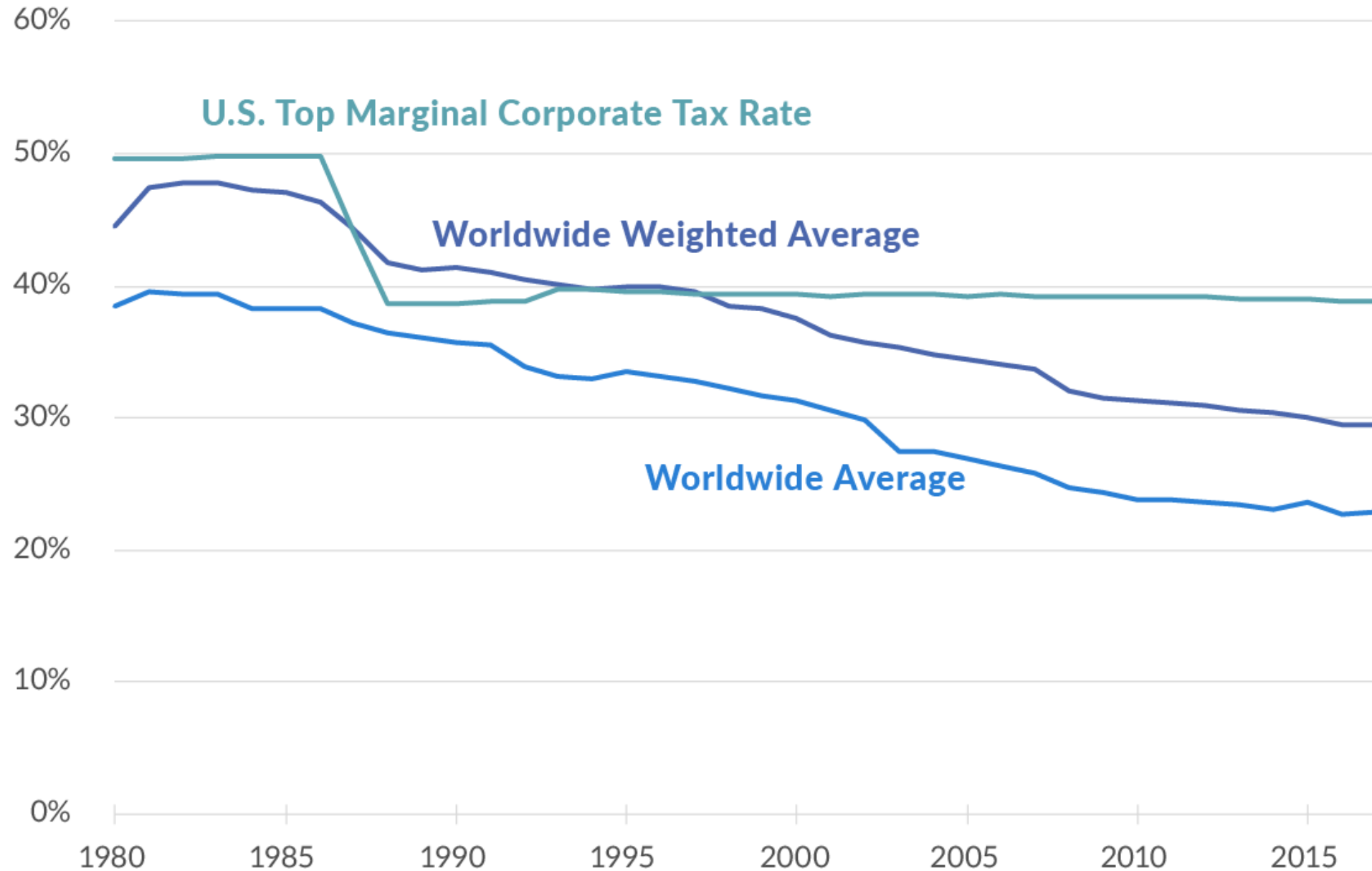
Share of Income to the Top 10 Percent in the United States



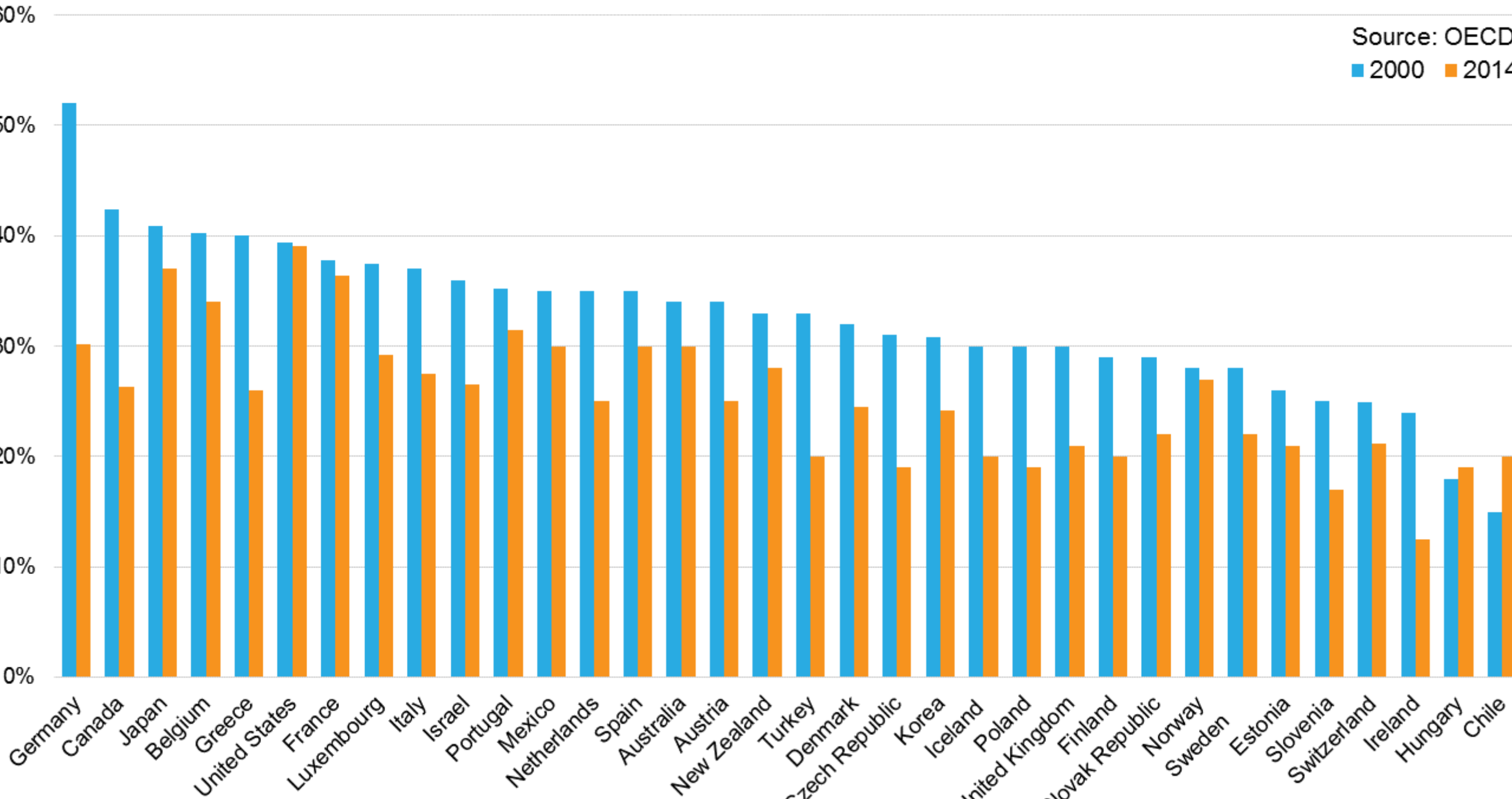
Share of Income to the Top 1 Percent in the United States



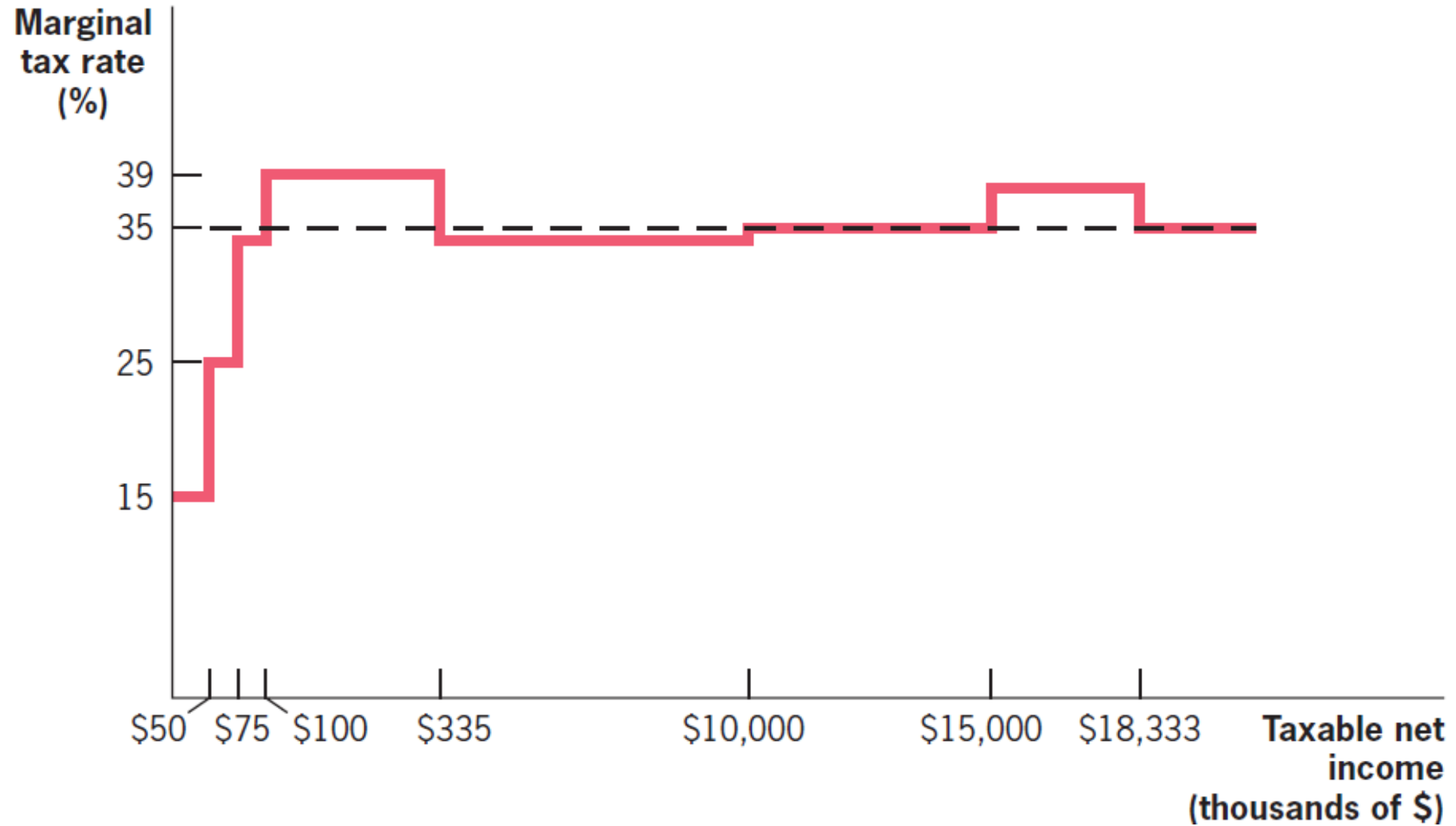
Top Marginal Corporate Tax Rates Have Declined Since 1980



Countries are Reducing their Corporate Tax Rates



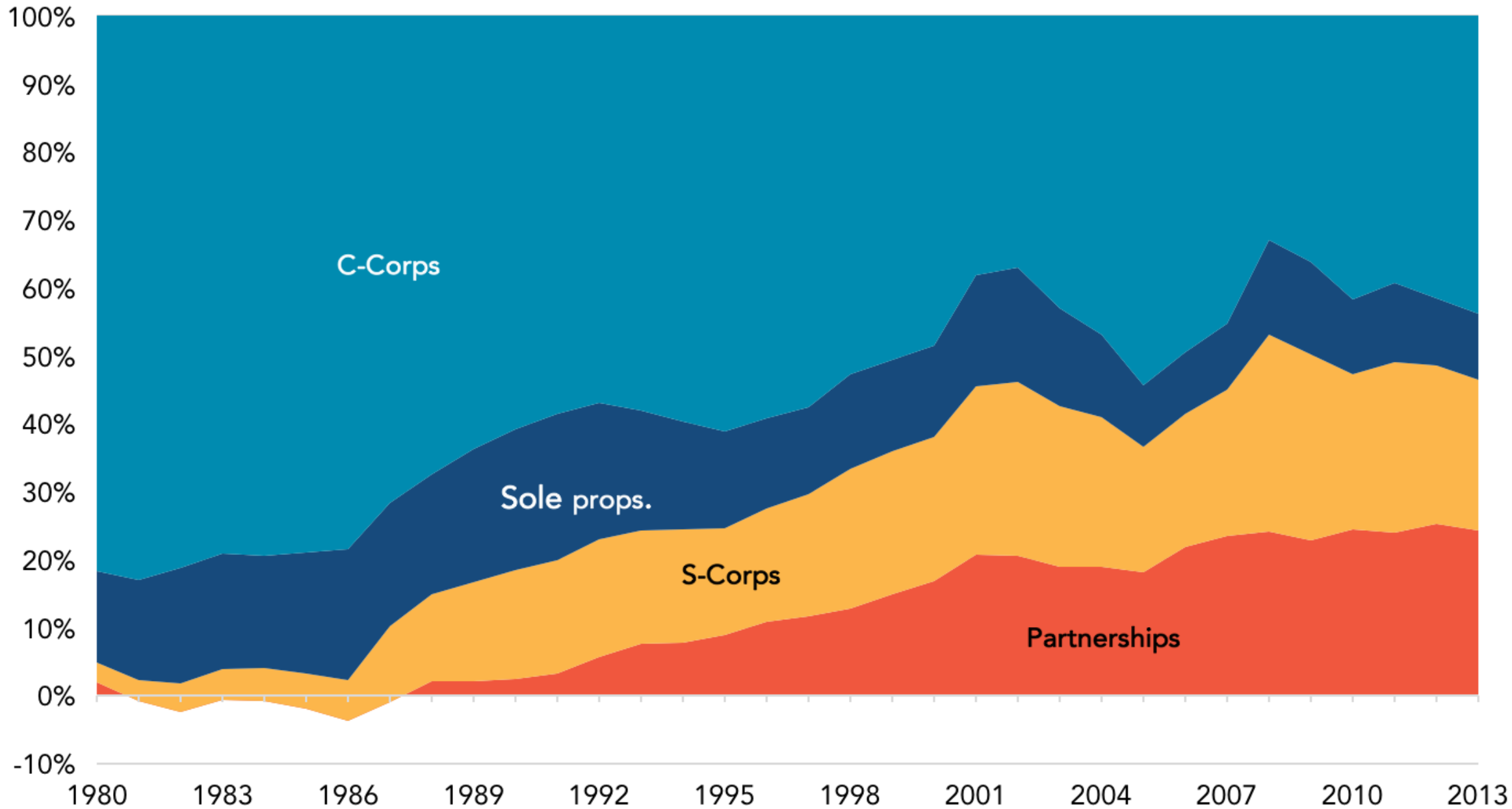
Corporate Income Tax Marginal Rates, 2017



2017 Corporate Tax Rates

Top Statutory Corporate Tax Rate		Average Effective Corporate Tax Rate		Marginal Effective Corporate Tax Rate	
United States	39.1%	Argentina	37.3%	Argentina	22.6%
Japan	37.0%	Indonesia	36.4%	Japan	21.7%
Argentina	35.0%	United States	29.0%	United Kingdom	18.7%
South Africa	34.6%	Japan	27.9%	United States	18.6%
France	34.4%	Italy	26.8%	Brazil	17.0%
Brazil	34.0%	India	25.6%	Germany	15.5%
India	32.5%	South Africa	23.5%	India	13.6%
Italy	31.4%	Brazil	22.3%	Mexico	11.9%
Germany	30.2%	Russia	21.3%	Indonesia	11.8%
Australia	30.0%	South Korea	20.4%	France	11.2%
Mexico	30.0%	Mexico	20.3%	Australia	10.4%
Canada	26.1%	France	20.0%	China	10.0%
China	25.0%	Turkey	19.5%	South Africa	9.0%
Indonesia	25.0%	China	19.1%	Canada	8.5%
South Korea	24.2%	Australia	17.0%	Saudi Arabia	8.4%
United Kingdom	24.0%	Canada	16.2%	Turkey	6.1%
Russia	20.0%	Germany	14.5%	Russia	4.4%
Saudi Arabia	20.0%	United Kingdom	10.1%	South Korea	4.1%

Share of Total Business Net Income



Current Tax Reform Proposals

Senate Bill

- Corporate tax rate 20%
- Pass-through business rate reduction and additional deduction
- Full expensing
- Limit business net interest deduction
- Switch to territorial tax system
- State and local tax deduction eliminated
- Higher standard deduction (\$24,000)
- No personal exemption, CTC increase
- Estate tax exemption doubled (\$11.2 m)

House Bill

- Corporate tax rate 20%
- Pass-through business rate reduction, anti-abuse rules
- Full expensing
- Limit business net interest deduction
- Switch to territorial tax system
- State and local tax deduction eliminated
- Mortgage interest deduction cap \$500k
- CTC increase
- Eliminates the AMT and estate tax

Model of a Firm with Capital Fixed

- Imagine that capital is held fixed, the firm can only select the amount of labor and inputs. Output price is held constant.
- Optimal choice of labor and inputs maximizes profits.
- Now consider adding a corporate income tax:

$$\textit{Taxes} = (\textit{Revenues} - \textit{Expenses}) \times \tau - \textit{Tax Credits}$$

- The optimal level labor and inputs when $\tau = .35$ is also the optimal level when $\tau = .20$
- The government is acting like a silent partner

Model of a Firm with Investment

- Now, assume that the firm can choose to invest in new capital.
- The firm increases its capital stock to the point that the return equals the user cost (marginal benefit = marginal cost)

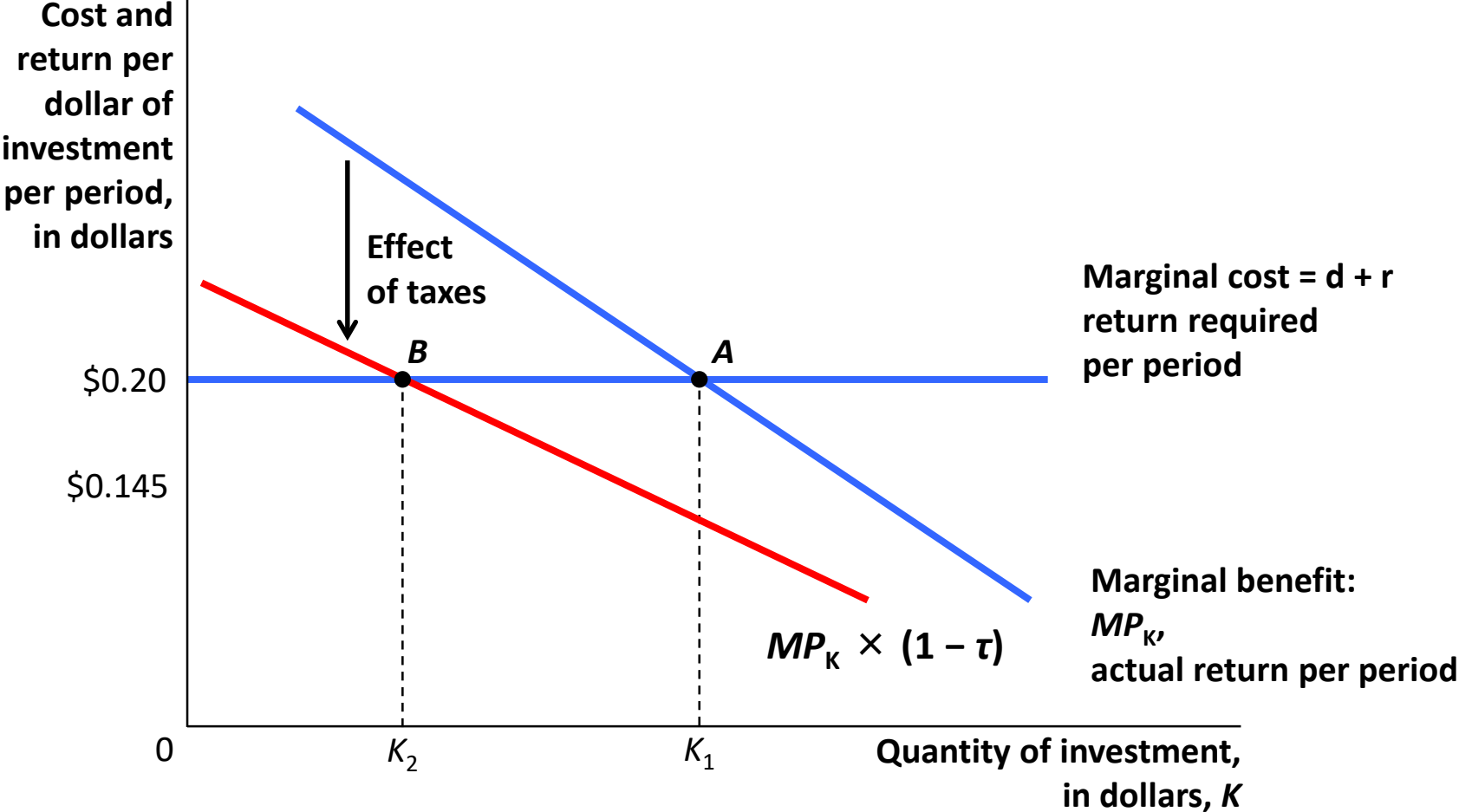
$$MPK = (r + d)P_K$$

- Now consider adding a corporate income tax. The firm now increases its capital stock so that the return equals the after-tax user cost:

$$MPK = \frac{1}{1 - \tau} (r + d)P_K$$

- The firm desires a lower level of capital and will invest less as τ increases

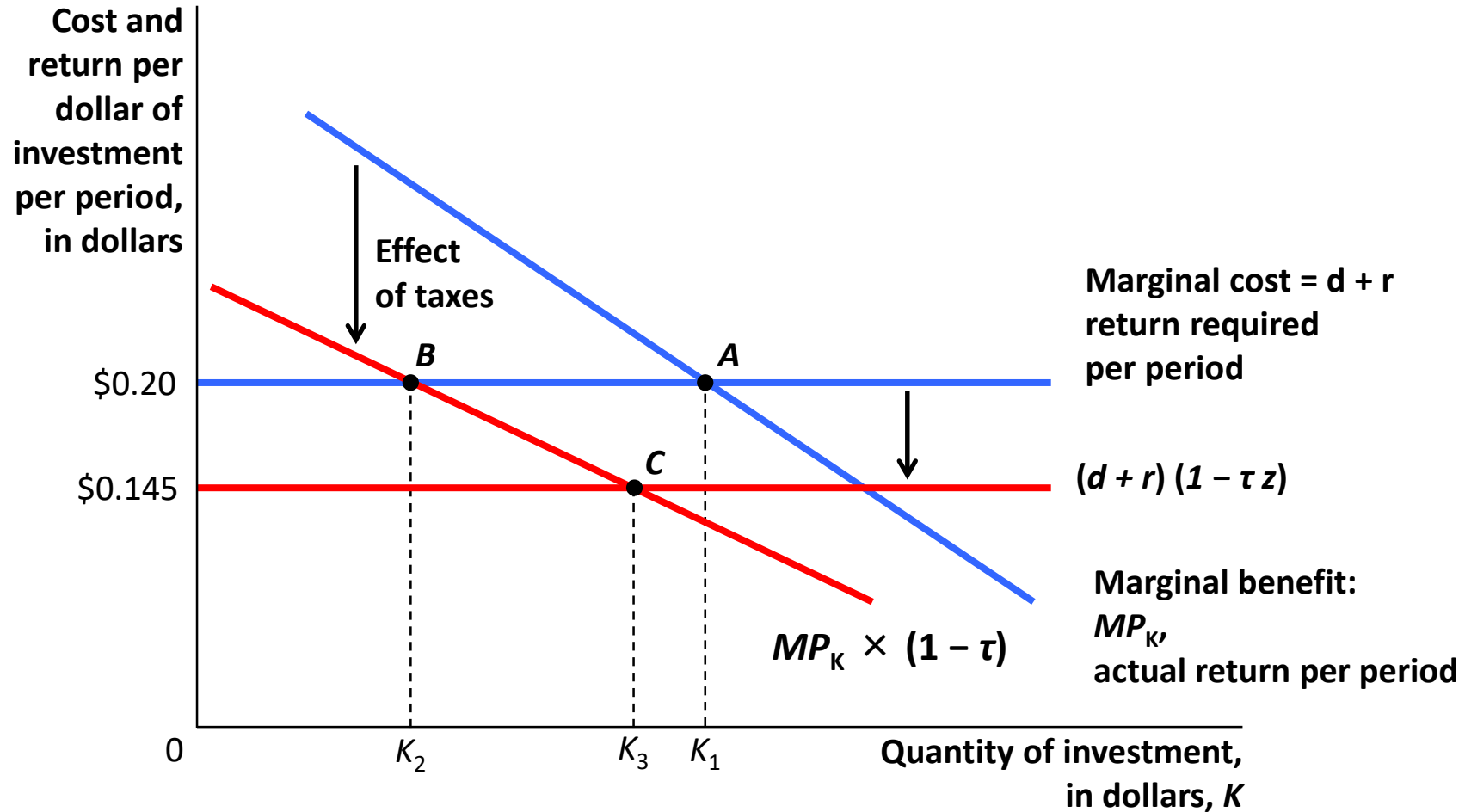
Corporate Income Tax Reduces Investment



Corporate Income Tax

- Lower corporate tax rate leads to higher investment
- Lower corporate tax rate raises less government revenue from the existing stock of capital
- Solution: allow for full expensing or provide investment tax credits

Expensing, Investment Tax Credit Increase Investment



Race to the Bottom

- Do we want to be in a race to the bottom with other countries when it comes to the taxation of capital income?
- International Trade Agreements could be designed to preserve our ability to tax capital

2004 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.

The proposed tax reforms would increase the national debt by \$1.5 - \$1.8 trillion over 10 years

Standard Macro Model

- higher deficit → lower investment and net exports
- Over the long run (30 years)
 - lower wages
 - higher return on capital (higher profits)
 - lower GDP growth rate
 - future higher tax rates

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Teaching:

- Labor Economics – PhD students
- Managerial Economics – Master's students
- Econometrics – Undergraduates & Master's students