

# Analyzing the Effects of U.S. Federal Tax Policy

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Or, Taxes Matter, But Probably Not For The Reasons You Think

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# Areas of Focus

- About me
- About Tax Foundation
- National accounting and a model of the economy
- How taxes affect the economy
- Some illustrations
- Questions

# About me

- B.S. in Business Administration/Economics from Sterling College
- M.A. in Economics from Wichita State
- Research director and senior economist at Tax Foundation
  - Started as an intern
  - And we are hiring for summer interns!

# Principles of Sound Tax Policy

## Simplicity

- Tax codes should be easy for taxpayers to comply with and for governments to administer and enforce.

## Neutrality

- Taxes should neither encourage nor discourage personal or business decisions. The purpose of taxes is to raise needed revenue, not to favor or punish specific industries, activities, and products.

## Transparency

- Tax policies should clearly and plainly define what taxpayers must pay and when they must pay it. Hiding tax burdens in complex structures should be avoided.

## Stability

- Taxpayers deserve consistency and predictability in the tax code. Governments should avoid enacting temporary tax laws, including tax holidays, amnesties, and retroactive changes, and strive to establish stable revenue sources.

# Basics of National Accounting

- Gross Domestic Product—total market value of all the final goods and services produced in a country in a given year
  - Personal Consumption
  - Gross Investment
  - Government Consumption Expenditures
  - Net Exports (total value of all goods and services exported minus the total value of all goods and services imported)
- $Y = C + I + G + NX$
- Gross Domestic Income—total value of all income earned by the factors of production in the United States in a given year
  - Compensation of Employees
  - Gross Operating Surplus
  - Taxes on Production and Imports (minus subsidies)
- $GDI = Wages + \text{Gross Profits} + \text{Taxes} - \text{Subsidies}$
- Equal in principle: Income = Expenditures!

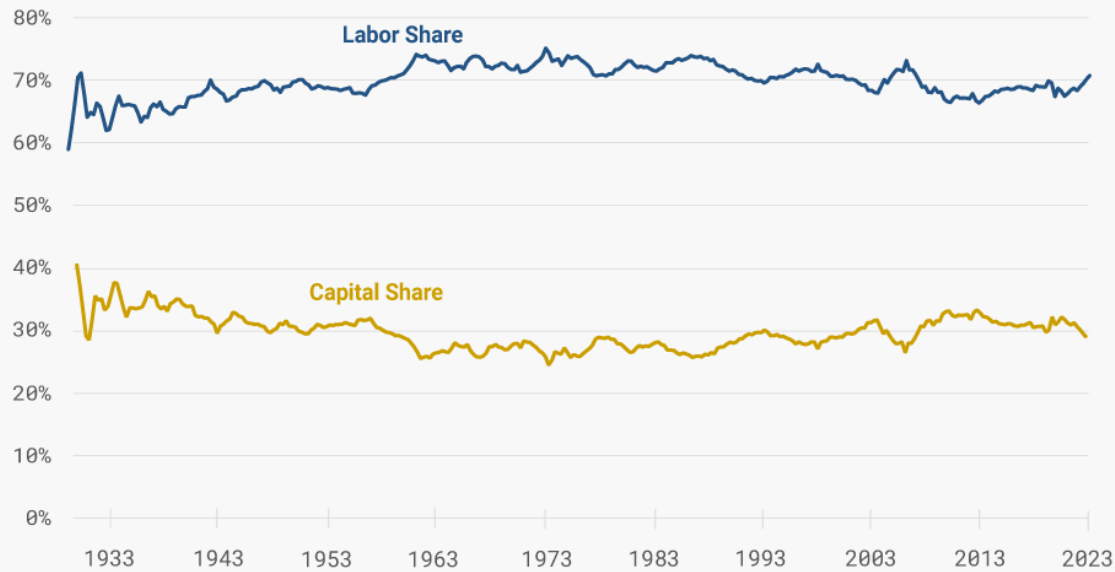
# A Basic Model of the Economy

- National Accounts tells us what, but doesn't tell us why.
- We need a model to explain why GDP is a certain level at any points
- Most models of GDP start with what is called the “Cobb-Douglas Production Function.”
- Total GDP is a function of the amount of labor (workers) and capital (productive stuff).
- $Y \text{ (GDP)} = AL^bK^{(1-b)}$

# A Basic Model of the Economy

## Labor and Capital Shares of Net Income Are Consistent Over Time

Labor and Capital Shares of GDI Less Depreciation and Production Taxes

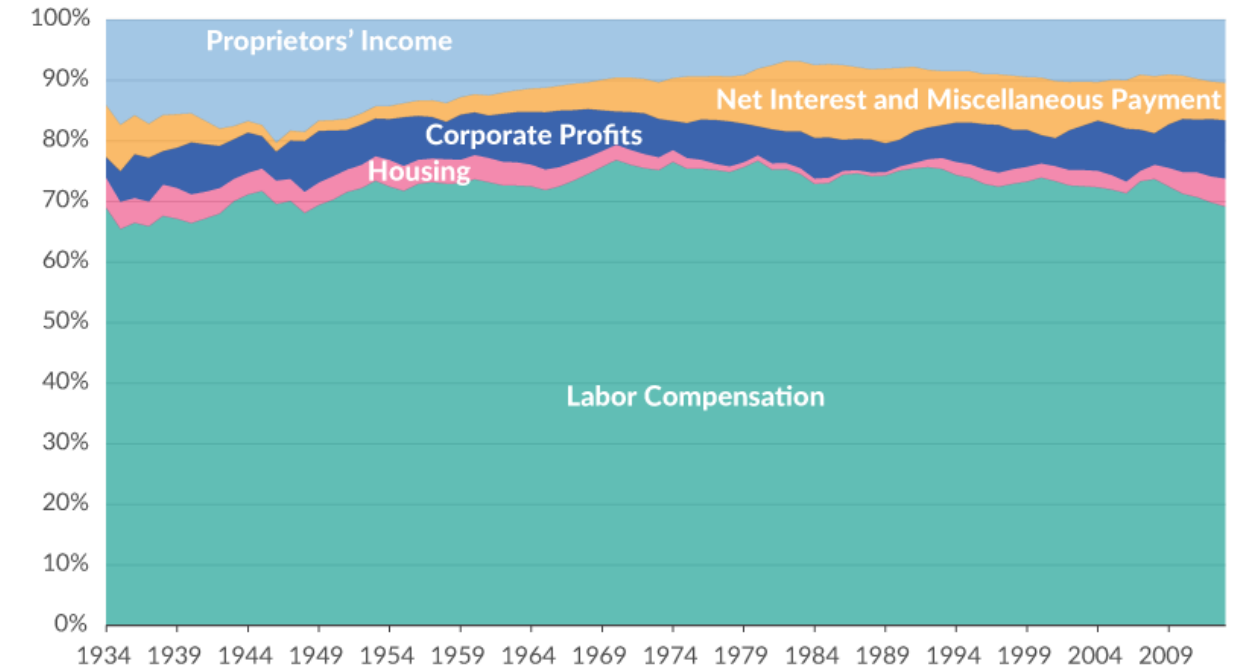


Note: Net labor share is calculated as compensation of employees divided by gross domestic income less consumption of fixed capital and taxes on production and imports less subsidies. Net capital share is calculated as gross domestic income less consumption of fixed capital, taxes on production and imports less subsidies, and compensation of employees divided by gross domestic income less consumption of fixed capital and taxes on production and imports less subsidies. Capital share includes proprietor income even though a portion of it represents labor income.

Source: BEA Table 1.10. Gross Domestic Income by Type of Income

## Labor Compensation Is Historically about 70 Percent of Net Income

Shares of Private Enterprise Net Income, 1934-2013



Source: BEA Table 1.10. Gross Domestic Income by Type of Income.

# How do taxes impact the economy?

- Important to distinguish between legal incidence and economic incidence—or, who pays and who really pays
- The total cost of a tax is the revenue raised by the government **plus** the economic damage (“deadweight loss”)
- **Measuring the economic cost** helps guide policymakers to design a better tax system that minimizes damage to economic growth, improves competitiveness, and raises living standards



# How do taxes impact the economy?

## Impact on incentives

- The impact on incentives is through marginal tax rates
  - How does a tax impact an individual's incentive to do one more unit of some activity?
  - It has little to do with how high taxes are
- Labor: the benefit of an additional hour of work, or whether to work at all
- Saving: the benefit of an additional dollar of saving
- Investment: the return to an additional unit of capital
- Each behavior responds differently to taxation!

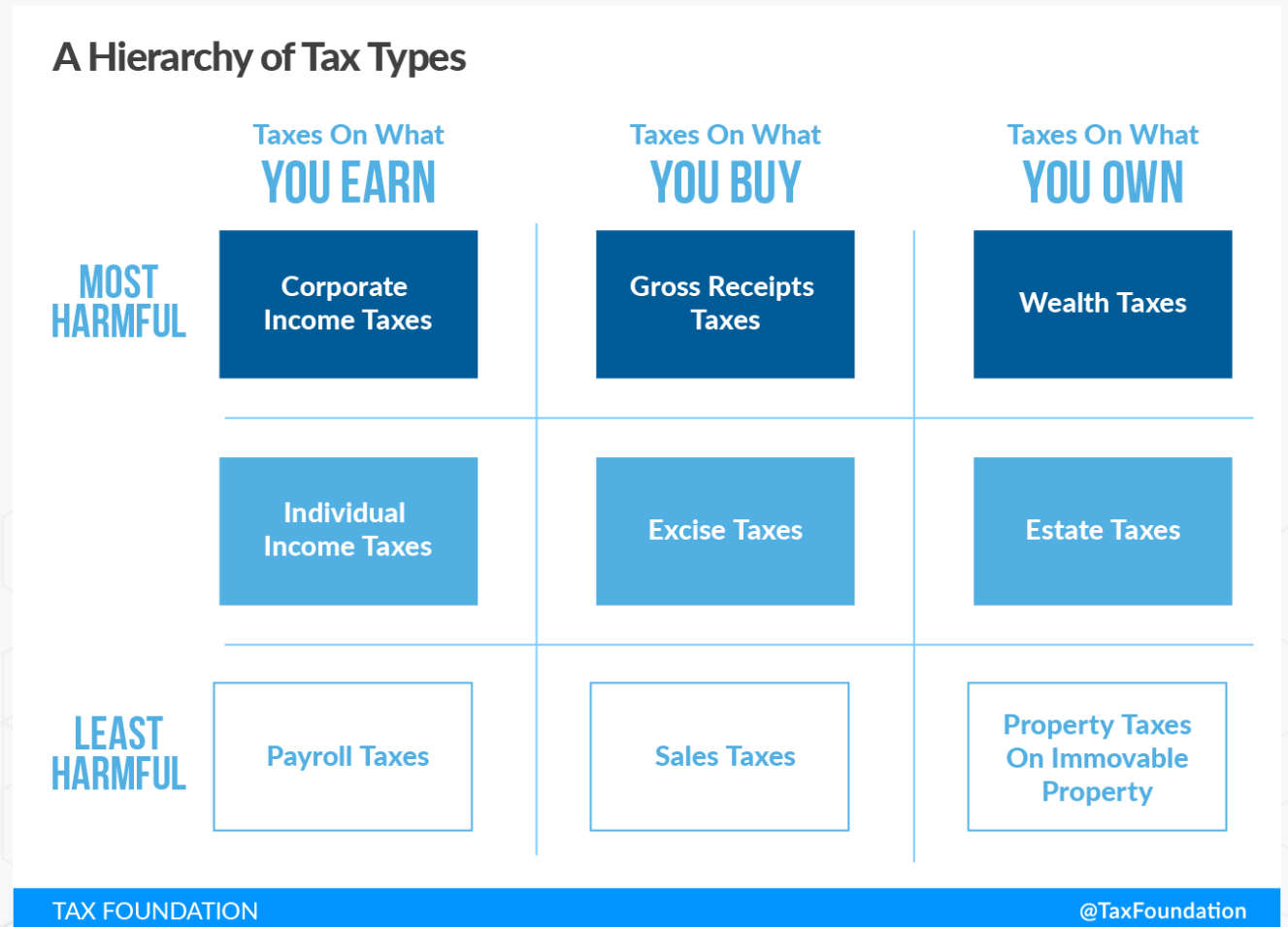
# Taxes Matter, But Maybe Not for the Reasons You Think

## Comparing Two Approaches to the Economics of Tax Reform

	Folk Theory of Taxes and the Economy	Neoclassical Theory of Taxes and the Economy
<b>Retroactive tax cuts</b>	Leads to economic growth by putting money in the pockets of households and businesses	Does not lead to long-run growth, because taxpayers cannot change past decisions about work and investment
<b>Temporary tax cuts</b>	Leads to economic growth by putting money in the pockets of households and businesses	Does not lead to long-run growth, because decisions about investment are made on long time horizons
<b>Revenue-neutral tax reform</b>	Does not lead to economic growth, because it simply increases taxes on some taxpayers and decreases taxes on others, without lowering the overall level of taxes	Can lead to economic growth by removing or lessening structural biases in the federal tax code, and by lowering marginal tax rates on work and investment

# Not All Taxes are Created Equal

- Taxes have differing impacts
- Factors of production have different responses
- Some taxes are more distortionary, and thus have a larger economic cost, than others

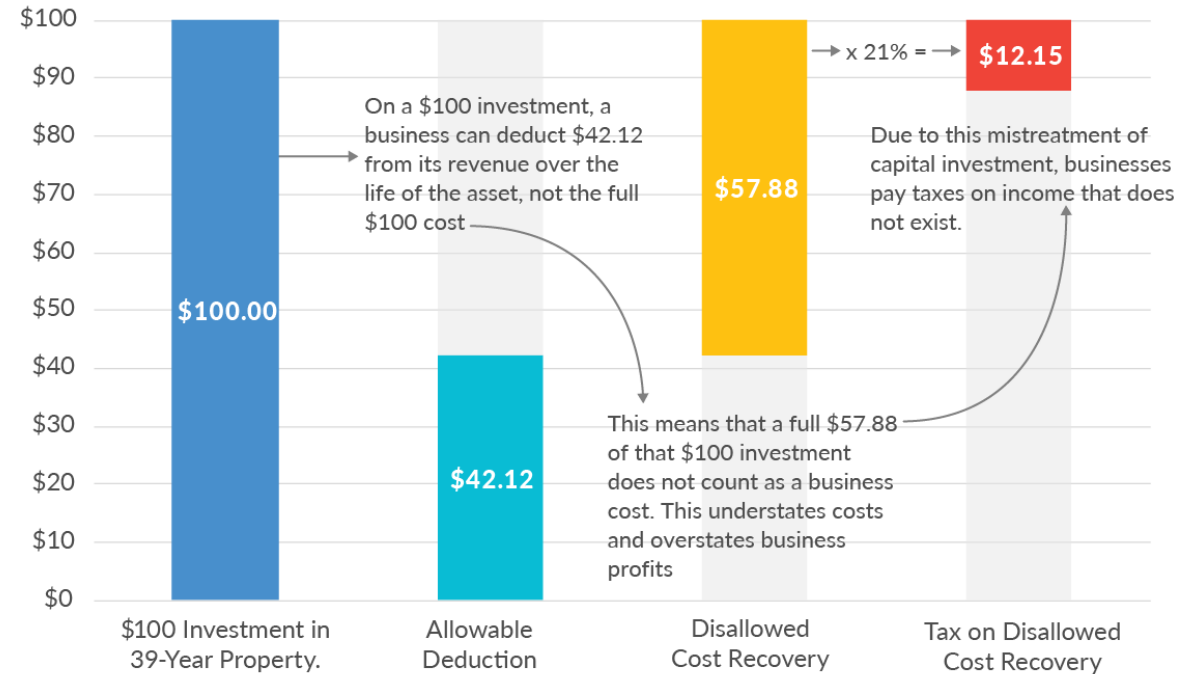


# Examples – Corporate Tax Base

- Profits = revenue minus expenses, except for capital investments
  - Capital investments must be depreciated over time
  - Depreciation artificially increases taxable income and the cost of capital

## Depreciation Requires Businesses to Pay Tax on Income That Doesn't Exist

Assumes half-year convention, 3.5% real discount rate, 2% inflation rate, and 21% corporate tax rate.



Source: Author's calculations.

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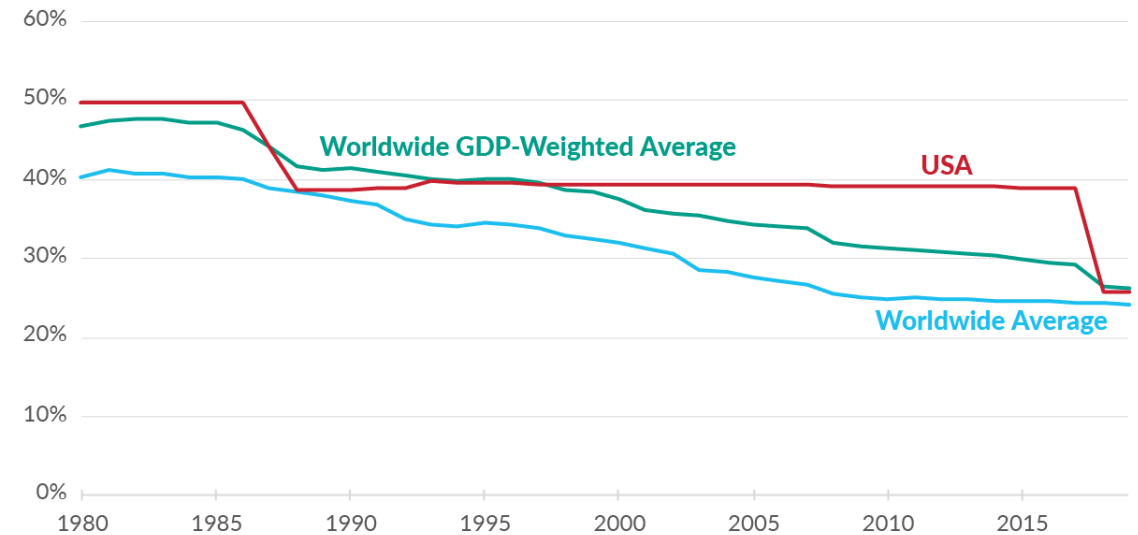
Provision	Change in GDP	Change in GNP	Change in Capital Stock	Change in Wages	Change in Full-time Equivalent Jobs
Allow full expensing for short-lived assets	0.4%	0.3%	0.7%	0.3%	73,000

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# Examples – Corporate Tax Rate

- Current combined statutory tax rate is 25.8%, near worldwide average
- Prior to the 2017 tax reform, it was 38.9%, an international outlier
- Applying the tax rate to the tax base results in a corporation's tax liability

Statutory Weighted and Unweighted Corporate Income Tax Rates from 1980 to 2019



Note: The number of countries included in the averages varies by year as some historic corporate tax rates were not available. The unweighted average represents the simple average worldwide corporate tax rate, while the weighted average represents the average worldwide corporate tax rate weighted by GDP.

Source: Statutory corporate income tax rates were compiled from various sources. GDP calculations are from the U.S. Department of Agriculture, "International Macroeconomics Data Set."

# Tariff Example

- 2018-2019 trade war
- Tariffs could reduce U.S. output through a few channels
  - Higher costs of production
  - Higher prices for consumers
  - USD appreciates

## Tracking the Economic Impact of U.S. Tariffs and Retaliatory Actions

July 7, 2023 • 12 min read

By: [Erica York](#)

IMPOSED TARIFFS			
10-Year Revenue (Billions) <b>\$73.9</b>	Long-run GDP <b>-0.21%</b>	Long-Run Wages <b>-0.14%</b>	Long-Run FTE Jobs <b>-166,000</b>

RETALIATORY TARIFFS			
10-Year Revenue (Billions) <b>\$0</b>	Long-run GDP <b>-0.04%</b>	Long-Run Wages <b>-0.02%</b>	Long-Run FTE Jobs <b>-29,000</b>

Source: Tax Foundation Taxes and Growth Model, March 2018



# Questions?

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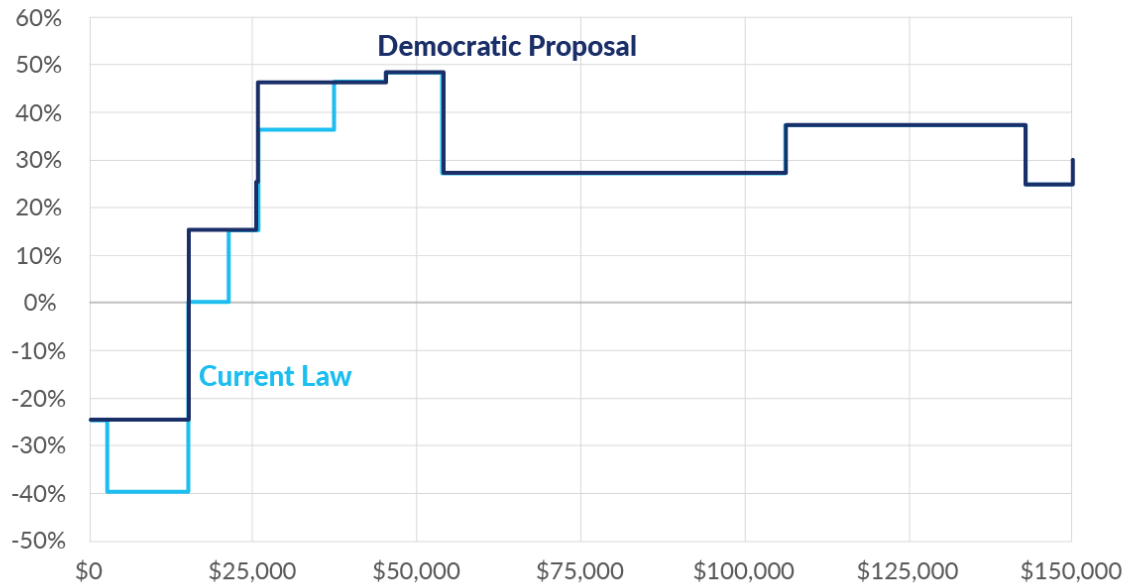
**Extra slides if needed for Q&A**



# Individual Tax Example

## Democratic House W&M Proposal Would Increase Marginal Tax Rates for some Married Filers, Increase Child-Related Tax Benefits

*Marginal Tax Rates Under 2021 Law and Democratic Proposal for Joint Filers with Two Children Under Six*



Note: Assumes one earner for calculating the Social Security payroll tax wage cap. Includes income tax, payroll tax, EITC, and CTC parameters.

Source: Congressional Budget Office, Tax Foundation calculations

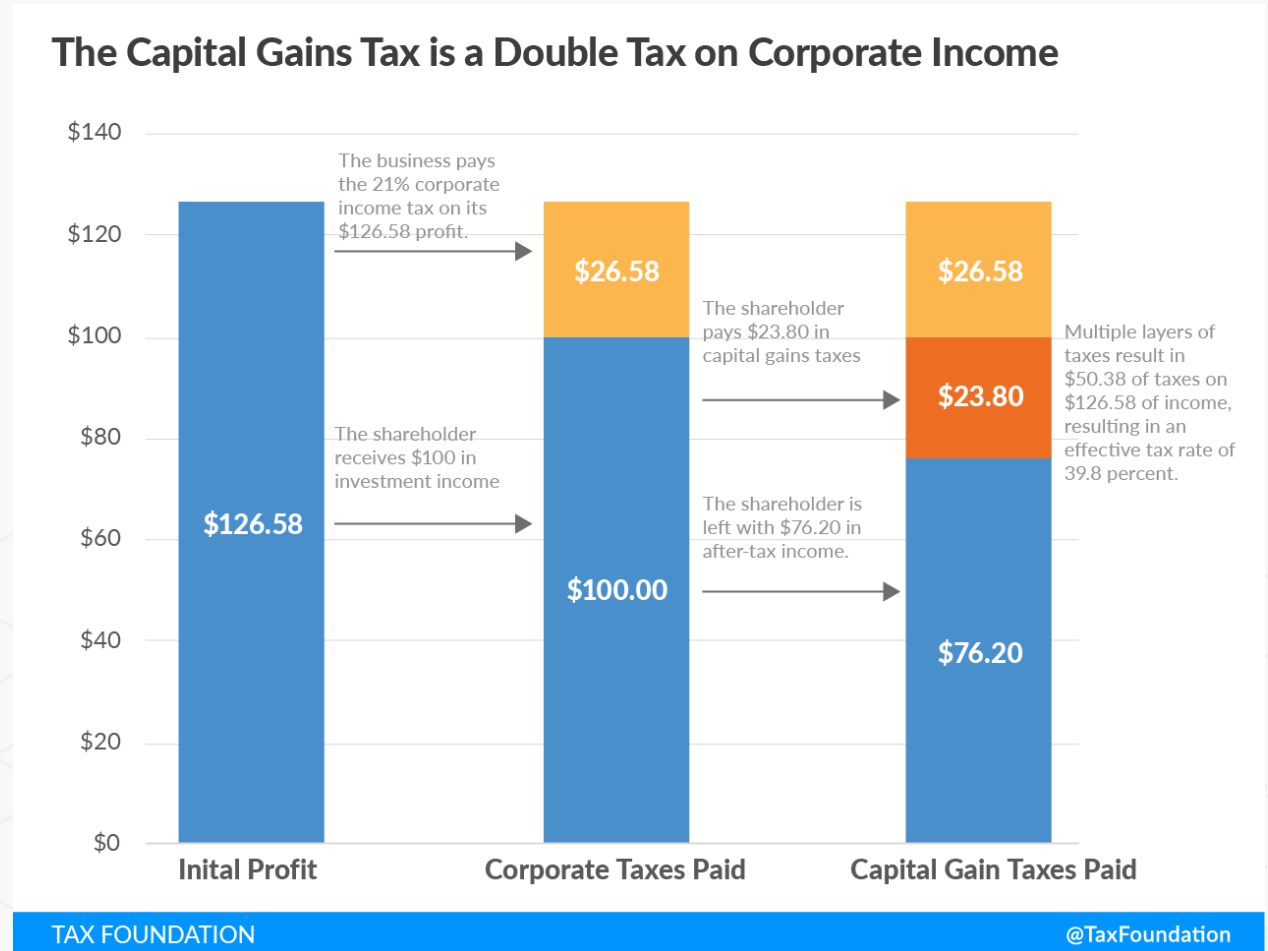
- Background on child tax credit
- Substitution effects and income effects
- Change in marginal tax rates versus average tax rates

# Do Corporations Pay \$0 in Federal Taxes?

- Taxable profits and losses are determined by tax laws
- Book profits and losses are determined by accounting standards
- Real, legitimate reasons explain why tax laws differ from accounting standards

# Corporate Income Taxes – Shareholder Level

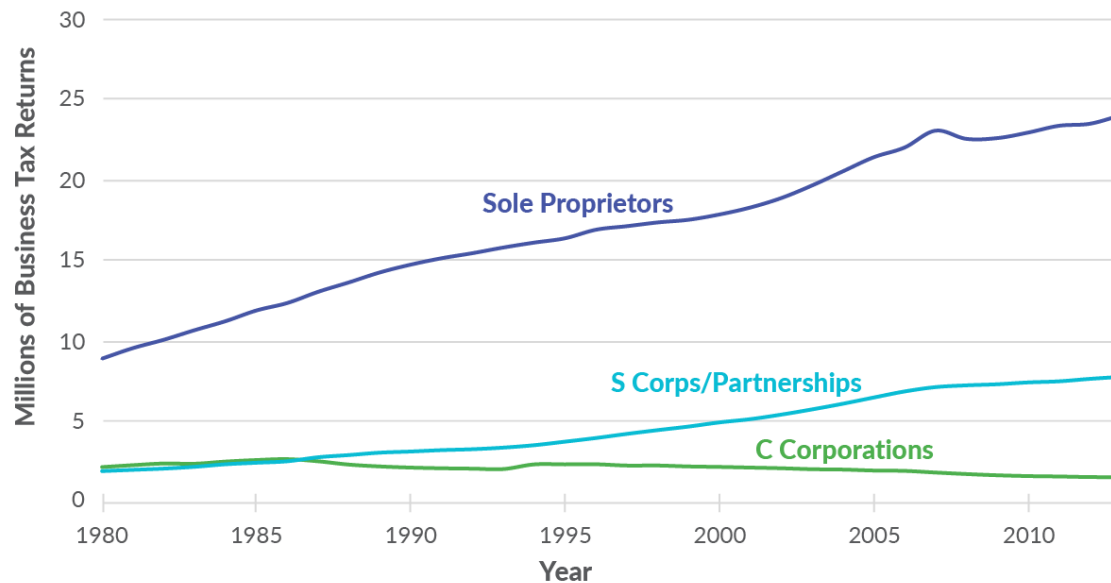
- Corporate profits are **taxed at the entity level** – that’s the tax we just reviewed
- And corporate profits are **taxed at the shareholder level** when distributed as dividends or realized as capital gains
- Remember the two layers of tax whenever you hear about corporate taxes or capital gains taxes, together they make up the **integrated rate on corporate income**



# Noncorporate Income Taxes

## The U.S. Now Has Fewer Corporations and More Individually Owned Businesses

Business Tax Returns by Business Type



Source: Internal Revenue Service, SOI Tax Stats- Integrated Business Data, "Table 1: Selected financial data on businesses," by Form of Business, Tax Year, 1980-2013, <https://www.irs.gov/statistics/soi-tax-stats-integrated-business-data>.

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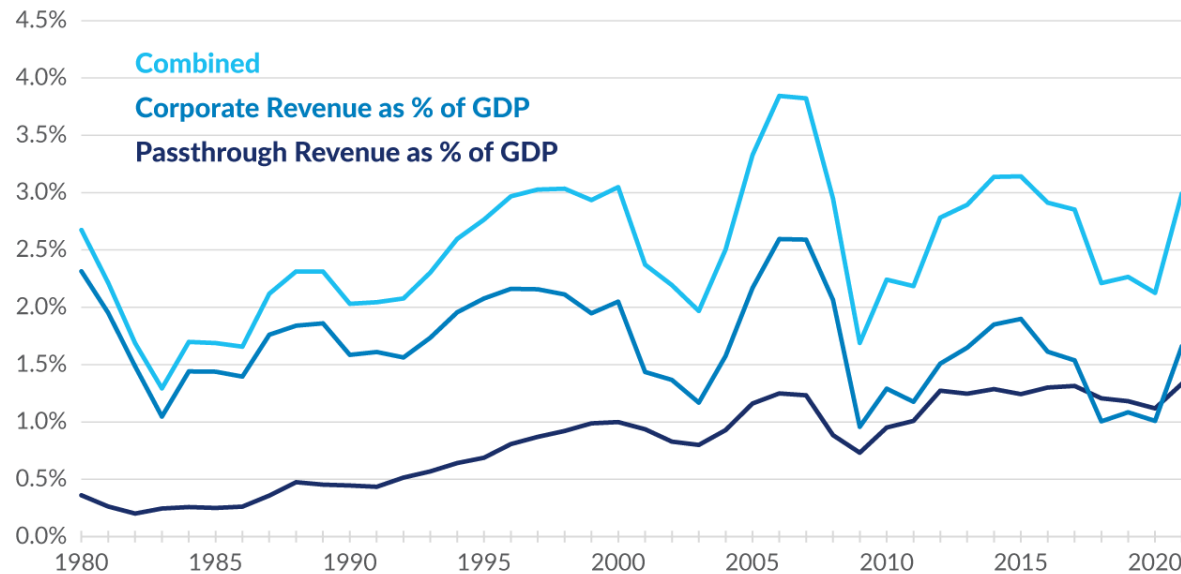
- Pass-through entities pass profits (or losses) directly to individual owners, no double taxation
- Taxed at personal tax rates
- Owners take deductions, such as Section 199A and Section 179
- Vast majority of U.S. companies are pass-throughs

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# Business Tax Revenue

## Combined Business Tax Collections Remain Close to Historical Norm

Business Tax Collections as a Portion of GDP, 1980 to 2021



Note: Estimates for tax years 2019 through 2021 are tentative based on data from OMB and the BEA on corporate profits and individual income tax revenue.

Source: Internal Revenue Service Statistics of Income, "Integrated Business Data," "Partnership Returns Line Item Estimates (Publication 5035)," "S Corporation Statistics," "Nonfarm Sole Proprietorship Statistics," "Individual Income Tax Returns (Publication 1304)," Congressional Budget Office, Office of Budget and Management, Bureau of Economic Analysis, Tax Foundation calculations.

- Decline in number of corporations has led to a decline in corporate tax revenue as share of GDP
- FY2023 corporate tax revenues totaled \$420 billion out of \$4.4 trillion in total taxes
- Combining corporate and noncorporate tax revenues, total business tax revenue in the U.S. is near historical norms

# Impact of Corporate Taxes on Investment

- Three rates to pay attention to
- **Statutory tax rates** affect location of profits; at the margin, a higher statutory tax rate encourages profit shifting to jurisdictions with lower statutory tax rates (impact location of profits)
- **Marginal effective tax rates** are an indicator of marginal investment incentives within a jurisdiction (impact the level of investment)
- **Average effective tax rates** are an indicator of asset-location incentives (impact location of investment)

	METR	AETR
United States, maintain TCJA biz policies	11.2%	21.5%
United States, current law	18.3%	23.4%
OECD average	15.5%	22.9%

Note: Estimates do not account for R&D tax credits.

Source: Kyle Pomerleau, "The tax burden on corporations: A comparison of Organisation for Economic Co-operation and Development countries and proposals to reform the US tax system," American Enterprise Institute, Oct. 13, 2021, <https://www.aei.org/research-products/report/the-tax-burden-on-corporations-a-comparison-of-organisation-for-economic-co-operation-and-development-countries-and-proposals-to-reform-the-us-tax-system/>.

# Impact of Corporate Taxes on Workers

- Legal incidence says, “Corporations pay the taxes!”
- Economic incidence asks, “But who bears the burden?”
  - JCT: 75% of the burden falls on capital, 25% of the burden falls on labor
  - Tax Foundation: 50% on capital and 50% on labor
  - Range in literature suggests in some cases, labor bears 70% to 100%
- Fuest et al find corporate taxes reduce wages more for young workers, the low-skilled, and women
- Most economists, including at the OECD, find the corporate income tax is the most harmful and least efficient way to fund priorities

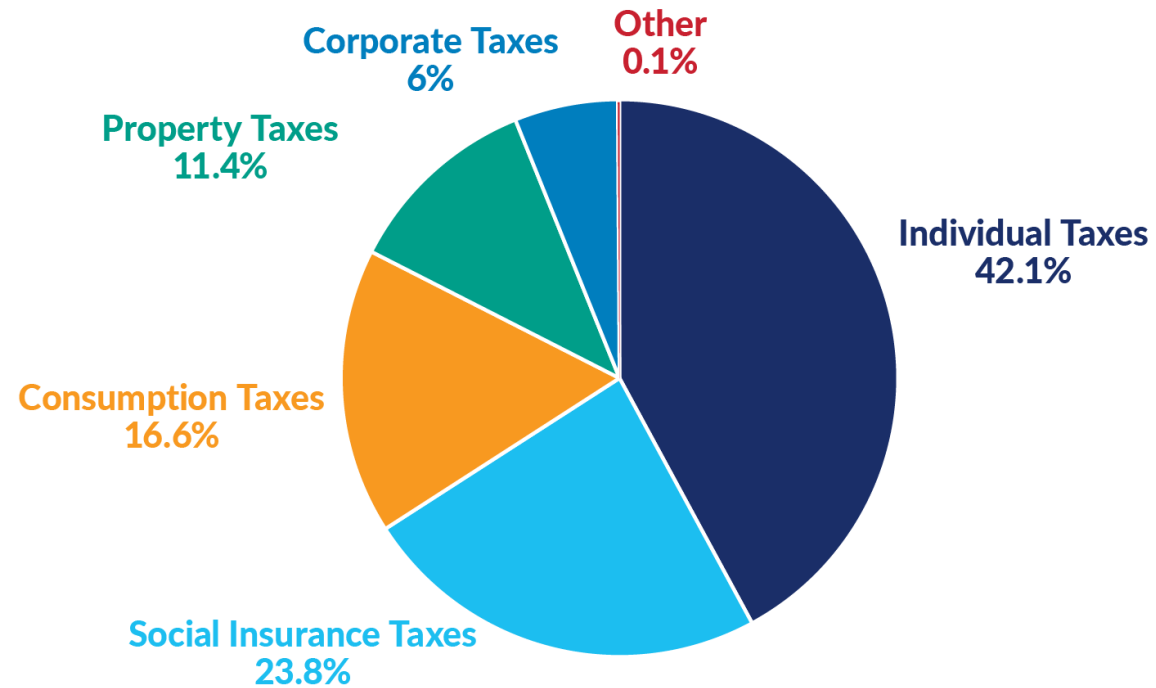
# Do Corporations Pay \$0 in Federal Taxes?

- Misunderstanding the differences between book income and taxable income leads to bad policy
- Corporate Alternative Minimum Tax enacted in IRA, not as simple as it sounds
- Applies to AFSI for corporations with profits over \$1 billion, effective for tax years beginning after December 31, 2022
  - Adjustments include using tax depreciation instead of book depreciation, allowing tax credits, adjustments for ambiguities between book and tax rules, etc.
- But... CAMT payments have been deferred until 2024 as the IRS needed more time to finalize guidance and regulations



# Individual Taxes Are the Most Important Tax Revenue Source for the United States

Sources of Tax Revenue in the United States, 2021

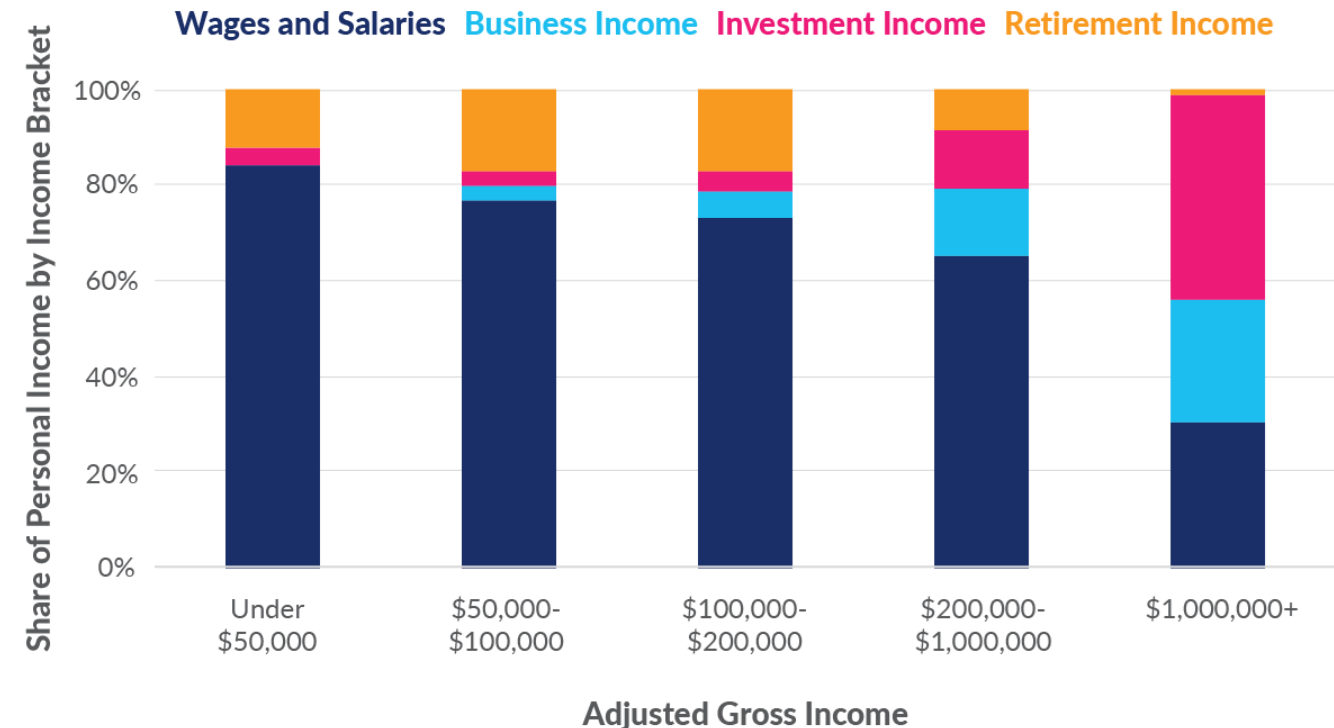


Source: OECD, Revenue Statistics- OECD Countries: Comparative Tables."

- The income tax raised \$2.6 trillion of \$4.9 trillion of revenue in 2022
- Income on 2019 tax returns
  - a. 68% was wages and salaries
  - b. 12% was retirement income
  - c. 10% was investment income
  - d. 9% was business income
- Approximately 158 million tax filers in 2020

## Composition of Income Varies with Income Level

Sources of Personal Income by Income Bracket, 2019



Source: IRS SOI Table 1.4.

# The double taxation of saving

## Reducing the Four Layers of Tax on \$1 of Income

Current Law with Biden Proposals Compared to Tax Foundation's Growth and Opportunity Reform

Current Law with Biden Proposals	Growth and Opportunity Reform
<b>1. Individual income tax on wages:</b>	
Top rate of 37% under current law plus Medicare taxes of 3.8%. Biden proposals: 39.6% top rate plus 5% Medicare tax	Individual income tax on wages of 20% plus Medicare taxes of 3.8%
<b>2. Corporate taxes on wages saved and invested in corporate equities:</b>	
Corporate income tax of 21%, book minimum tax of 15%. Biden proposals: 28% corporate rate	No annual corporate income tax
<b>3. Taxes on corporate earnings distributed to shareholders:</b>	
Long-term capital gains and dividend taxes at a top rate of 20%, plus 3.8% NIIT and 1% stock buyback tax. Biden proposals: 39.6% top tax rate on capital gains and dividends, 4% stock buyback tax, 5% NIIT, and 25% minimum tax on income including unrealized capital gains for high-net-worth individuals	Dividends, buybacks, and capital gains taxed at 20%
<b>4. Taxes at death on accumulated savings:</b>	
Estate tax with top rate of 40% under current law	Death is not a taxable event, full value of assets taxable to the heir upon sale at 20% income tax rate

# The double taxation of saving

## Income Elements

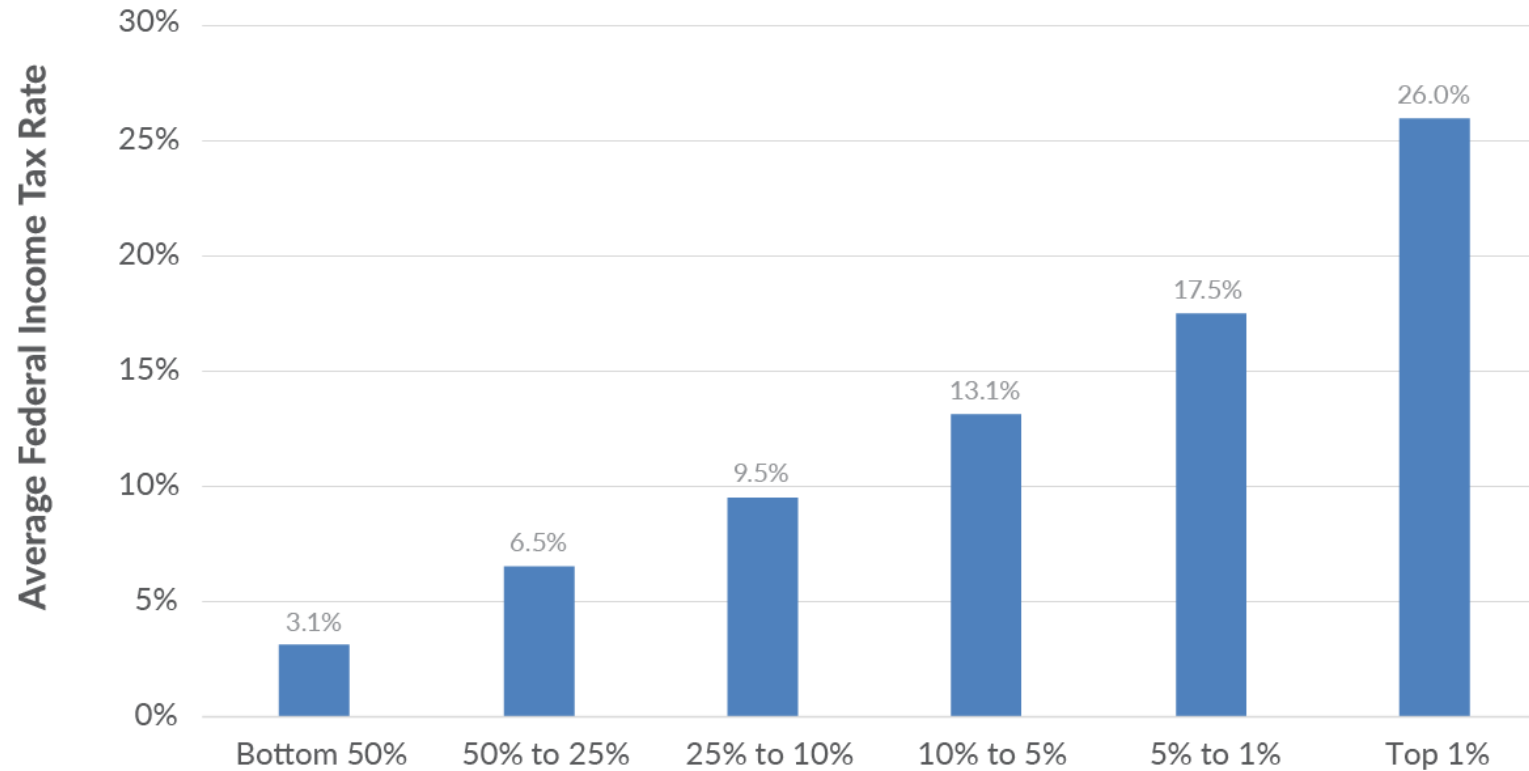
- Ordinary taxation of saving: taxing both the amounts saved and returns on saving
- Depreciation and amortization in accordance with “economic depreciation”

## Consumption Elements

- Tax-deferred or Roth-style pensions and retirement plans
- Tax-exempt bonds
- Treatment of owner-occupied housing
- Accelerated depreciation or expensing provisions

# High-Income Taxpayers Paid the Highest Average Income Tax Rates

Average Federal Income Tax Rate by Income Group, 2020



Source: IRS, Statistics of Income, Individual Income Rates and Tax Shares.

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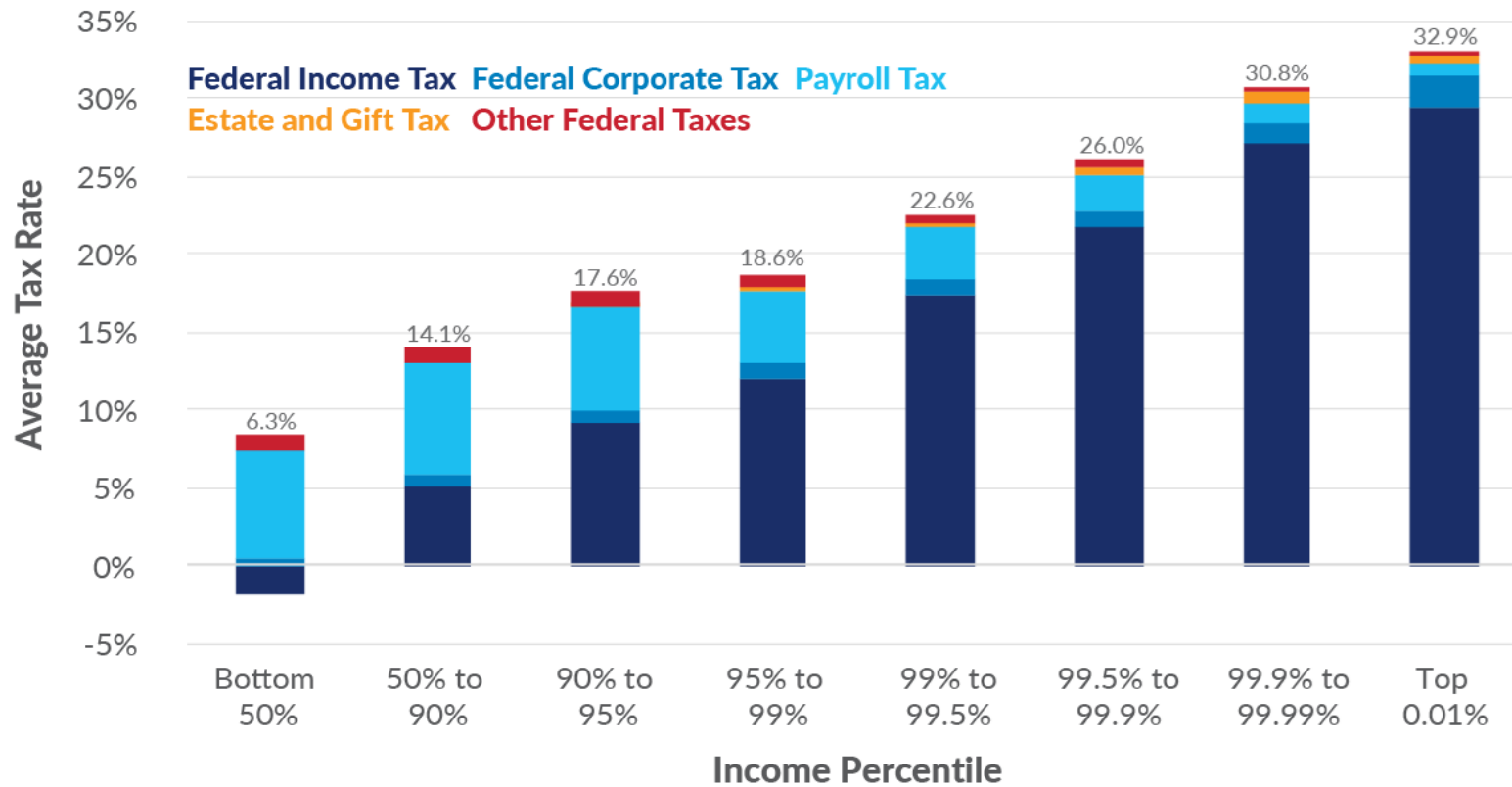
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# Progressivity

## The Federal Tax System is Progressive Overall

Average Tax Rates for Federal Tax Types by Income Group, 2018



Source: "Present Law and Background on the Taxation of High Income and High Wealth Taxpayers," Joint Committee on Taxation, Table 4.

# Tax Rates and Brackets

## The Capital Gains Tax is a Double Tax on Corporate Income

