

The Economics of Taxation

Washington Center
for Equitable Growth
Evidence for a stronger economy



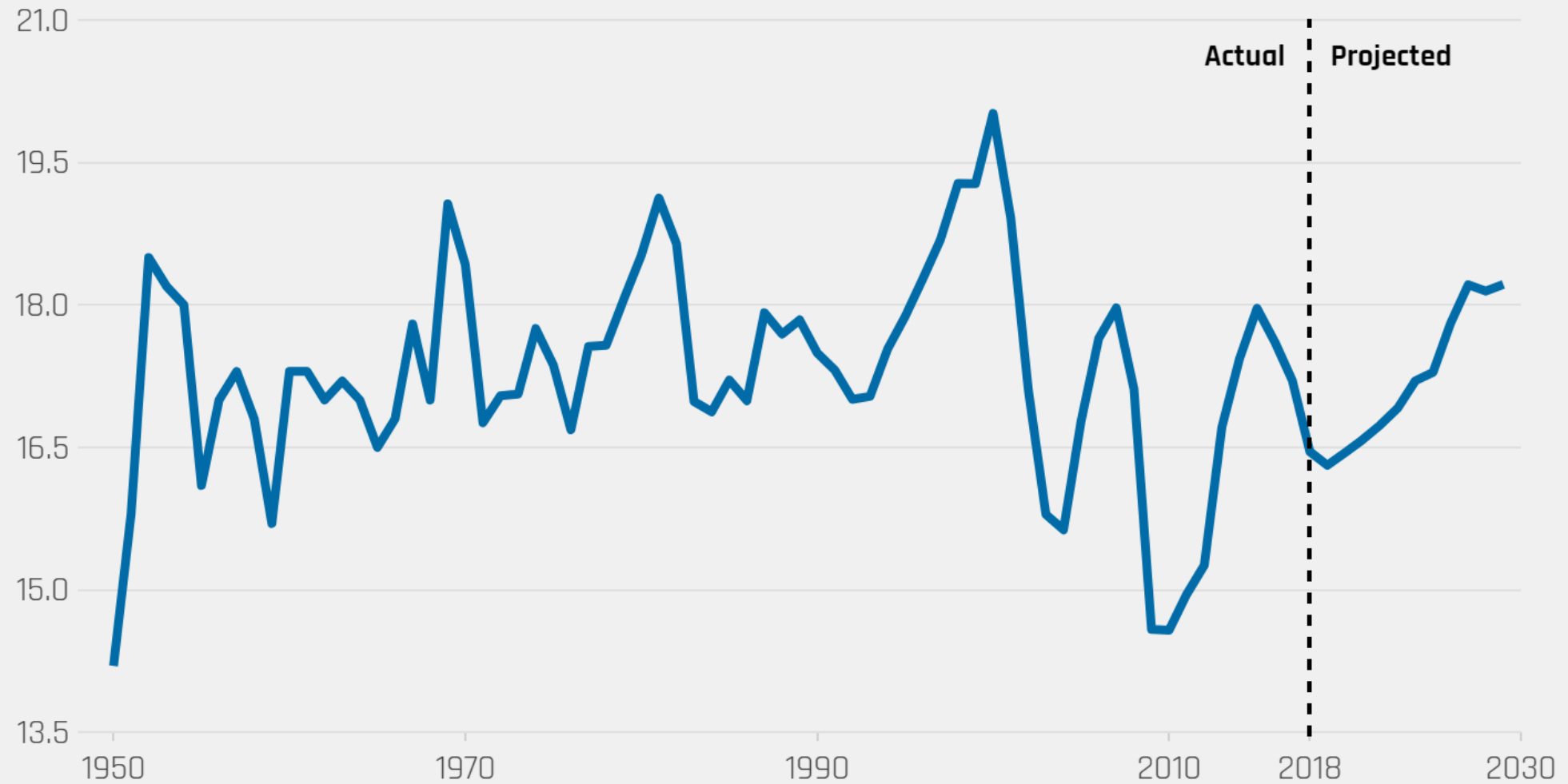
- A course on understanding and evaluating tax proposals
 - Friday December 6: Tax Basics
 - Friday December 13: Taxes and Consequences
- Aim is to provide you with the ability to effectively analyze how proposed tax changes will affect families' economic well-being

- Today's Session:
 - Basic Tax Facts
 - Overview of Major Federal Taxes
 - Issues in Tax Policy
 - Tools of Tax Analysis

Basic Tax Facts

Federal revenues are below the post-war average

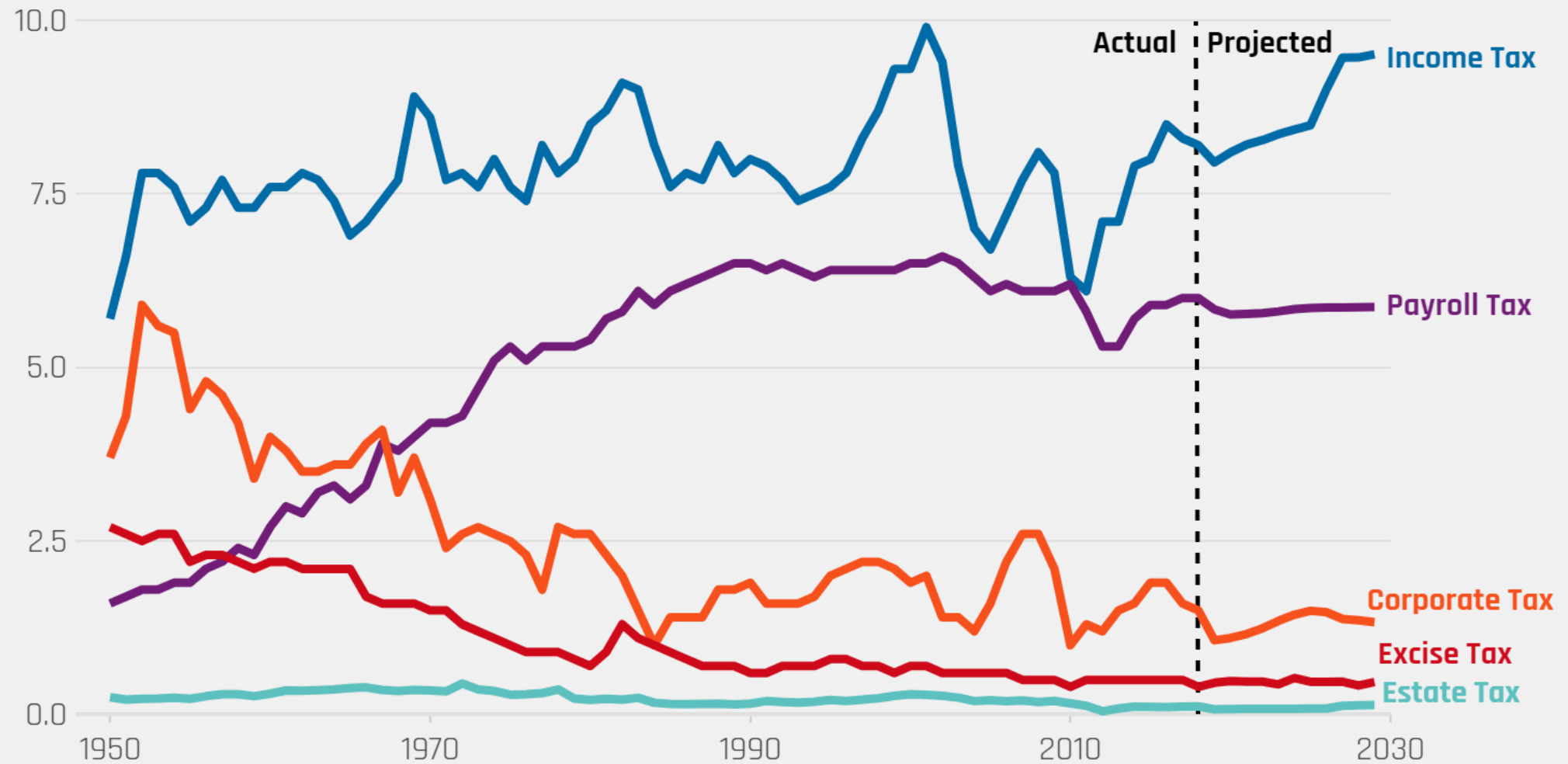
Federal revenues as a share of GDP, 1950-2029



Source: Congressional Budget Office

Individual income and payroll taxes account for most federal revenues

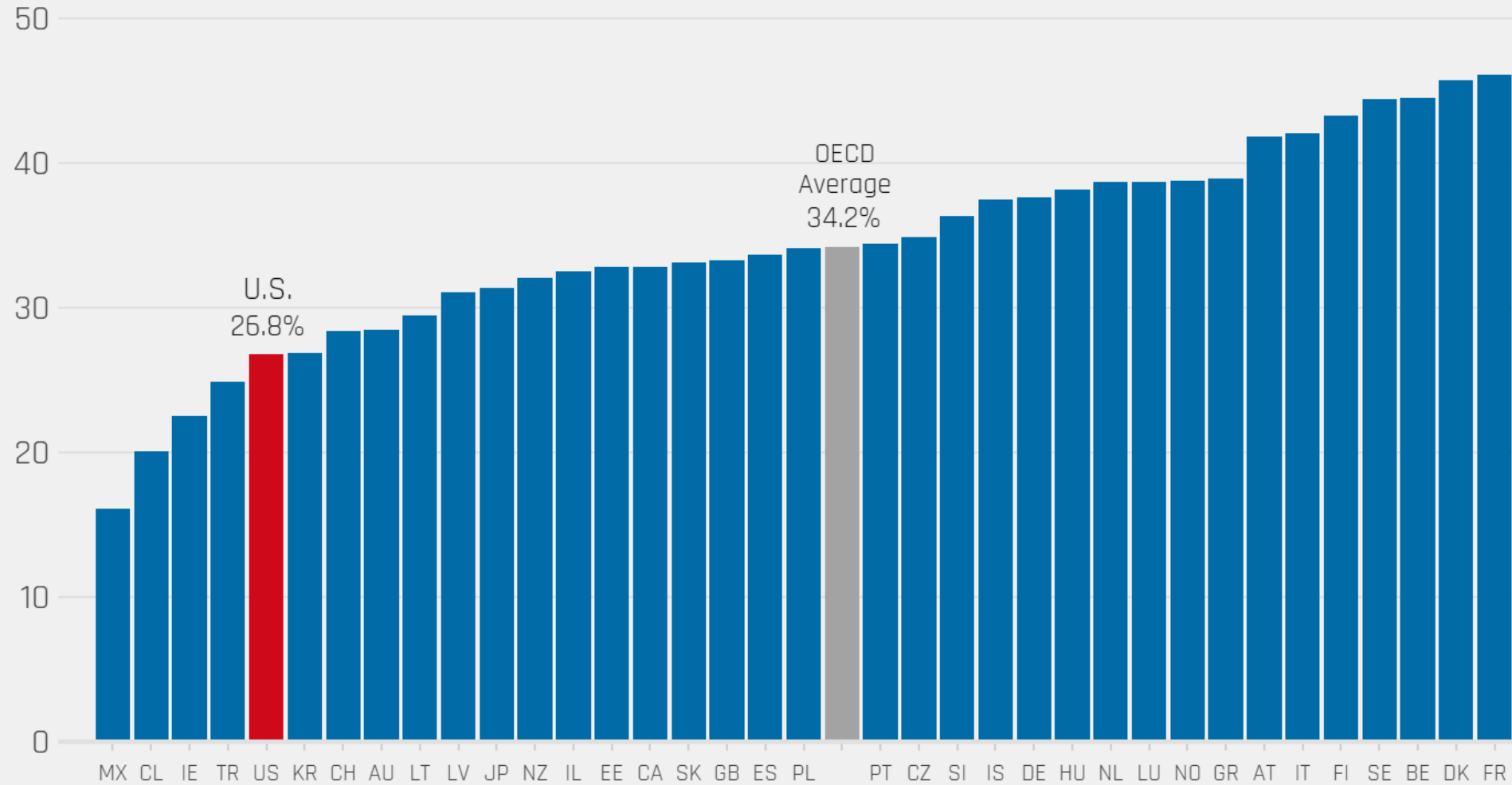
Federal revenues by tax as a share of GDP, 1950-2029



Source: White House Office of Management and Budget Historical Table 1.2 and 2.3, Congressional Budget Office 10-Year Budget Projections

The United States is a low-tax country

Revenues as a share of GDP in OECD countries, 2017



Source: OECD [2018], Revenue Statistics 1965–2017

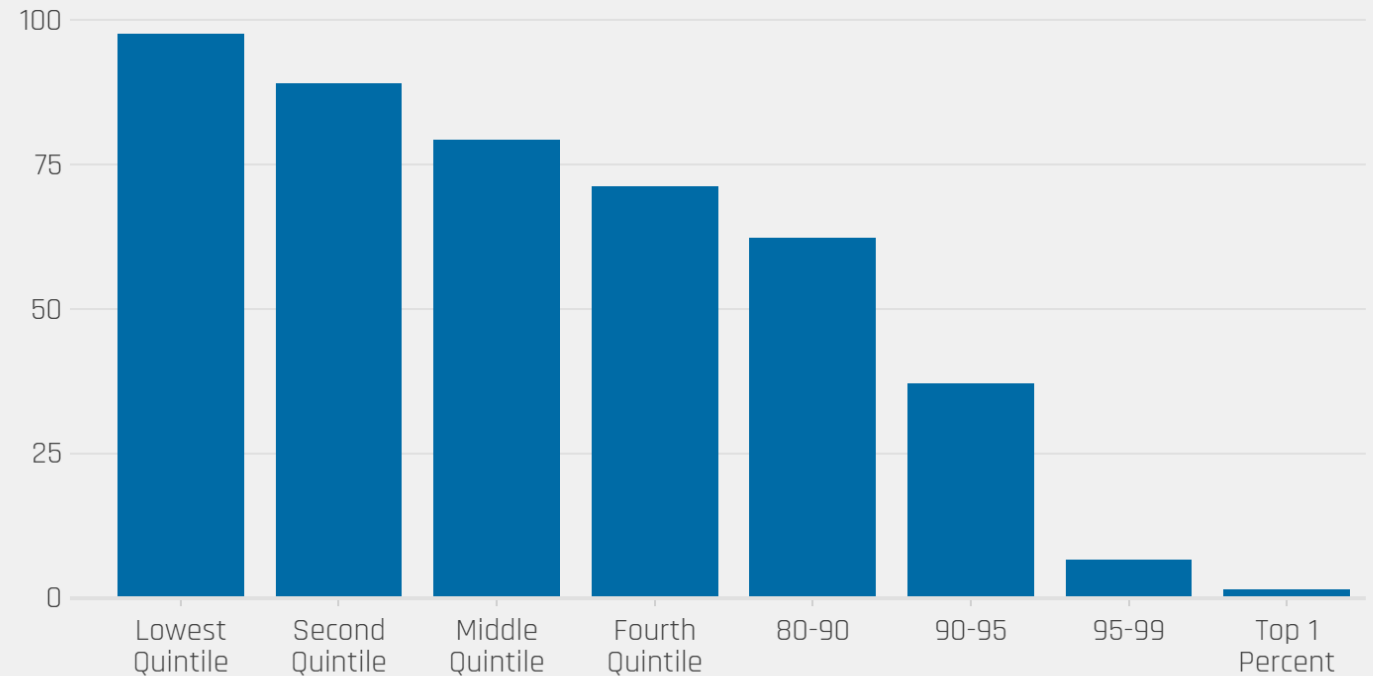
Overview of Major Federal Taxes

The Payroll Tax

- 7.65% paid by employer and 7.65% paid by employee (both remitted by employer)
- 6.2% for Social Security, 1.45% for Medicare
- Social Security portion applies only to earnings up to \$132,900 in 2019
- Payroll tax is greater than income tax for 77% of families who pay either tax
- There is no 1040 equivalent as employers handle computation and payment
- Self-employed pay an approximately equivalent tax on their 1040

Payroll taxes exceed income taxes for most families

Share of families with payroll tax greater than income tax among families paying either tax, 2019



Source: Tax Policy Center

Attach Form(s)
W-2. Also attach
Form(s) W-2G and
1099-R if tax was
withheld.

**Standard
Deduction for—**

- Single or married
filing separately,
\$12,000
- Married filing
jointly or Qualifying
widow(er),
\$24,000
- Head of
household,
\$18,000
- If you checked
any box under
Standard
deduction,
see instructions.

Refund

Direct deposit?
See instructions.

Amount You Owe

1	Wages, salaries, tips, etc. Attach Form(s) W-2	1		
2a	Tax-exempt interest	2a		
3a	Qualified dividends	3a		
4a	IRAs, pensions, and annuities	4a		
5a	Social security benefits	5a		
6	Total income. Add lines 1 through 5. Add any amount from Schedule 1, line 22	6		
7	Adjusted gross income. If you have no adjustments to income, enter the amount from line 6; otherwise, subtract Schedule 1, line 36, from line 6	7		
8	Standard deduction or itemized deductions (from Schedule A)	8		
9	Qualified business income deduction (see instructions)	9		
10	Taxable income. Subtract lines 8 and 9 from line 7. If zero or less, enter -0-	10		
11	a Tax (see inst.) (check if any from: 1 <input type="checkbox"/> Form(s) 8814 2 <input type="checkbox"/> Form 4972 3 <input type="checkbox"/>) b Add any amount from Schedule 2 and check here <input type="checkbox"/>	11		
12	a Child tax credit/credit for other dependents b Add any amount from Schedule 3 and check here <input type="checkbox"/>	12		
13	Subtract line 12 from line 11. If zero or less, enter -0-	13		
14	Other taxes. Attach Schedule 4	14		
15	Total tax. Add lines 13 and 14	15		
16	Federal income tax withheld from Forms W-2 and 1099	16		
17	Refundable credits: a EIC (see inst.) b Sch. 8812 c Form 8863 Add any amount from Schedule 5	17		
18	Add lines 16 and 17. These are your total payments	18		
19	If line 18 is more than line 15, subtract line 15 from line 18. This is the amount you overpaid	19		
20a	Amount of line 19 you want refunded to you . If Form 8888 is attached, check here <input type="checkbox"/>	20a		
b	Routing number c Type: <input type="checkbox"/> Checking <input type="checkbox"/> Savings			
d	Account number			
21	Amount of line 19 you want applied to your 2019 estimated tax 21			
22	Amount you owe . Subtract line 18 from line 15. For details on how to pay, see instructions <input type="checkbox"/>	22		
23	Estimated tax penalty (see instructions) 23			

- Income tax is a more complex tax than payroll tax
 - Complexity allows for greater personalization
 - More accurate assessment of ability to pay
 - Highly progressive
 - Complexity reflects pursuit of wide range of policy goals
 - Anti-poverty policy (e.g. Earned Income Tax Credit)
 - Retirement policy (e.g. 401(k)s)
 - Health policy (e.g. Premium Tax Credit)

Determining Individual Income Tax Liability

WHAT:

Total
Income

Adjusted
Gross
Income

Taxable
Income

Tax Liability
Before
Credits

Regular Tax
Liability

Refund or
Amount
Owed

HOW:

Add Up All
Sources of
Income

Subtract
“Above-the-
Line”
Deductions

Subtract
Standard OR
Itemized
Deductions

Apply Tax
Rates

Subtract Tax
Credits

Subtract
Withholding

Already
excluded:
health
insurance,
unrealized
capital gains,
imputed rent,
gifts, and
inheritances

Includes wages,
self-employment,
interest,
dividends, capital
gains, pensions,
rents, and Social
Security

Includes
educator
expenses, IRA
contributions,
HSA
contributions,
and student loan
interest

Includes
charitable
contributions,
medical
expenses, state
and local taxes,
and mortgage
interest

Ordinary rates:
10, 12, 22, 24,
32, 35, and 37%

Capital
gains/dividend
rates: 10, 15, and
20%

Includes earned
income tax
credit, child tax
credit, education
credits, and
saver’s credit

Amounts
withheld from
your paycheck
and estimated
tax payments

- Ordinary income vs. capital gains and dividends
 - Ordinary income: wages, self-employment, interest, Social Security
 - Capital gain: increase in the price of an asset
 - Dividend: payment from corporate stock
- Preferential tax rates for capital gains and dividends
 - Top rate on ordinary income 37%
 - Top rate on capital gains and dividends 20%
- Capital gains taxes paid on realization
 - Realization = when you sell the asset
 - Means you can choose when to pay tax!
 - If you hold until death, wiped out for income tax purposes

Credits vs Deductions

Deductions

- Reduce tax to zero but not below zero
- Value increases with your marginal tax rate
- Worth more to higher-income families

Credits

- Nonrefundable – reduce tax to zero but not below zero
- Refundable – reduce tax below zero
- Value is specified directly in law
- Worth more to lower-income families, esp. if refundable

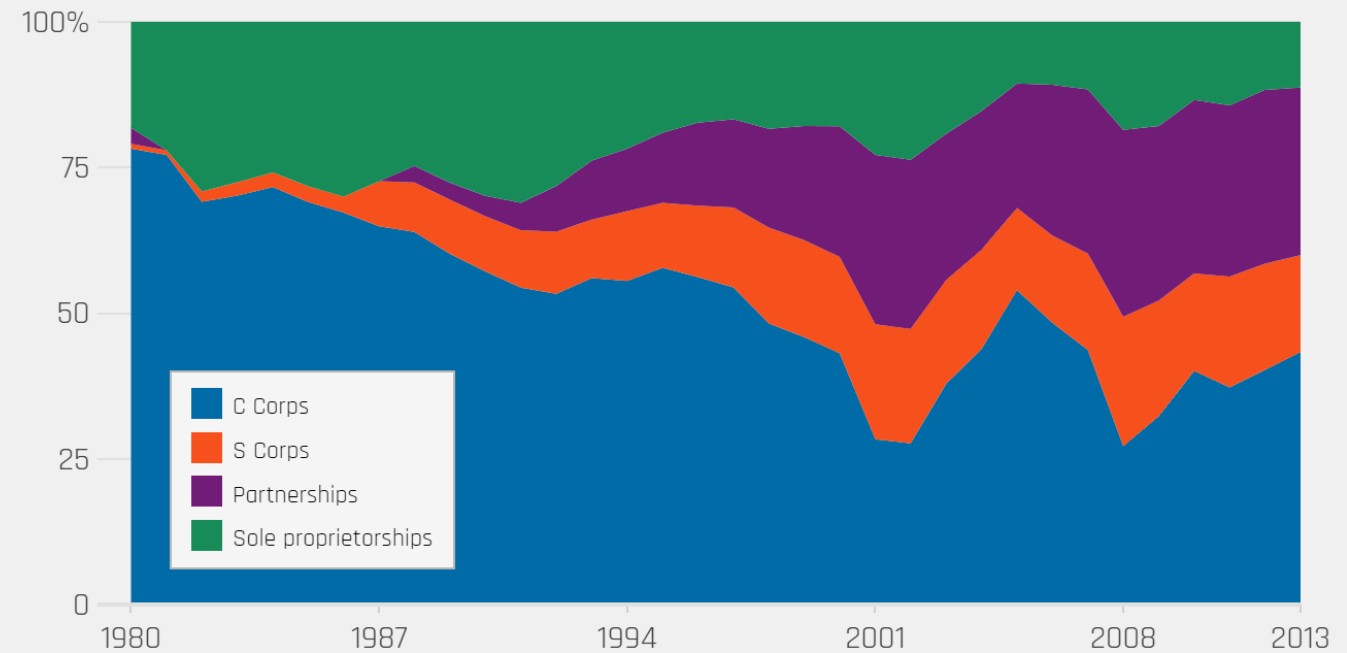
Use credits to pursue specific policy aims, deductions to measure income

Taxation of Business Income

- Two major types of businesses in the United States for tax purposes
 - C corporations
 - Pay the corporate income tax
 - Pass-throughs (sole proprietorships, partnerships, and S corporations):
 - Owners pay tax on profits on their income tax return
- Very largest companies tend to be C corporations, but either type can be any size
 - Pass-throughs ≠ small businesses

Pass-throughs have grown dramatically since 1980

Share of net income by entity type, 1980-2013



Source: U.S. Internal Revenue Service

- Same base used for corporate tax and taxation of pass-through income
- Key difference from individual income tax: businesses deduct most spending as an ordinary and necessary business expense
- Individual tax base plus business tax base equals national income, but
 - Areas of overlap (potential for double taxation)
 - Areas missing from both (potential for non-taxation)

Determining the Business Tax Base

WHAT:

Gross
Receipts or
Sales

Gross
Profit

Total
Income

Taxable
Income

HOW:

Add Up
Receipts or
Sales from
Business
Operations

Subtract Cost
of Goods
Sold

Add
Investment
Income

Subtract
Operating
Costs

Subtract
Interest

Subtract
Depreciation

Cost of purchases
for resale and
costs of
production of
goods for sale

Includes interest,
dividends, rents,
royalties, capital
gains, and other
income

Includes
employee
compensation,
rents, repairs,
and taxes

Includes interest
paid on
mortgages, lines
of credit, and
corporate bonds

The assumed
decline in value
of capital such as
structures,
industrial
machinery, and
cars and trucks

Taxing International Activities

- Individual income taxes apply to the worldwide income of U.S. citizens and resident aliens
- Corporate taxes apply to U.S.-resident corporations and U.S. activities of foreign corporations, but the rules are much more complex
 - Minimum taxes apply to some foreign income of U.S. corporations to discourage avoidance (subpart F, GILTI) and to certain other payments (BEAT)

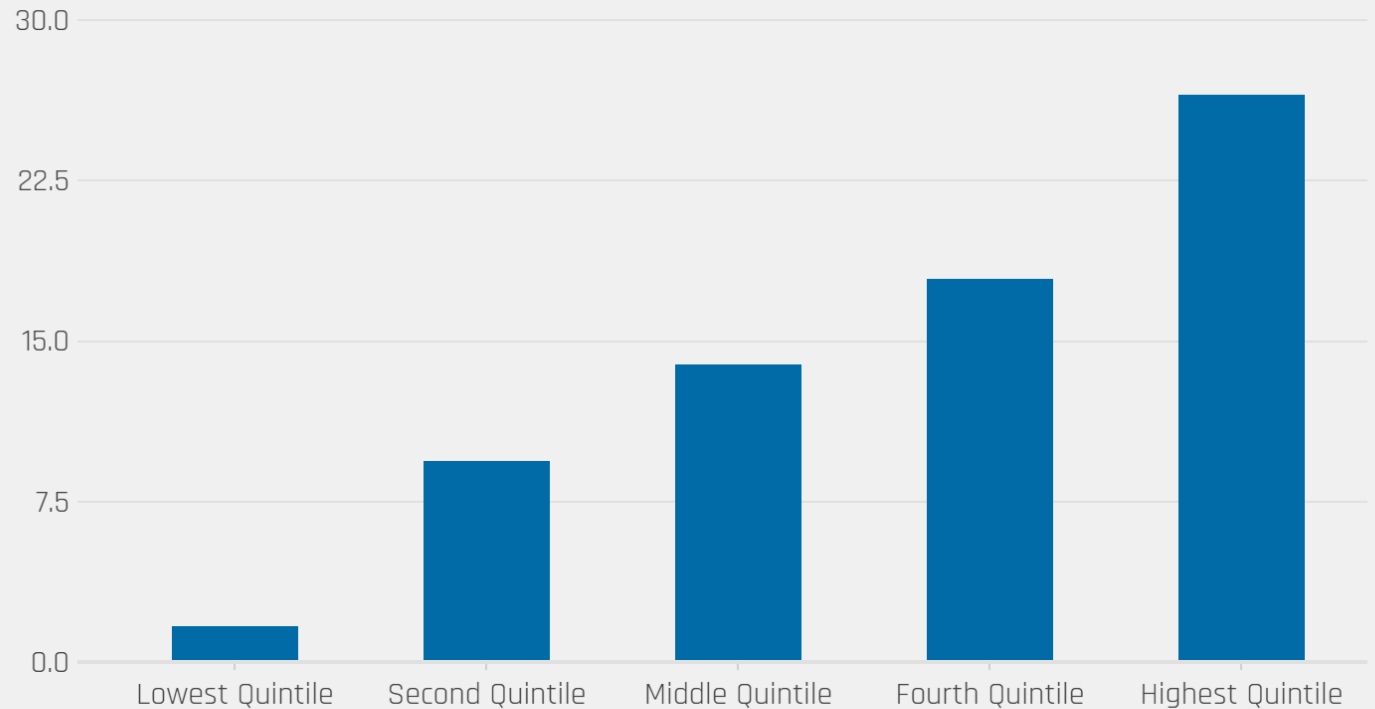
Issues in Tax Policy

Who Pays Federal Taxes?

- Statutory incidence: who has legal responsibility to pay
- Economic incidence: who bears the economic burden
- Analyses aim to report economic burden
- Taxes are always assigned to people or groups of people, such as workers, shareholders, and consumers
- We will talk more about this next time

Federal taxes are progressive

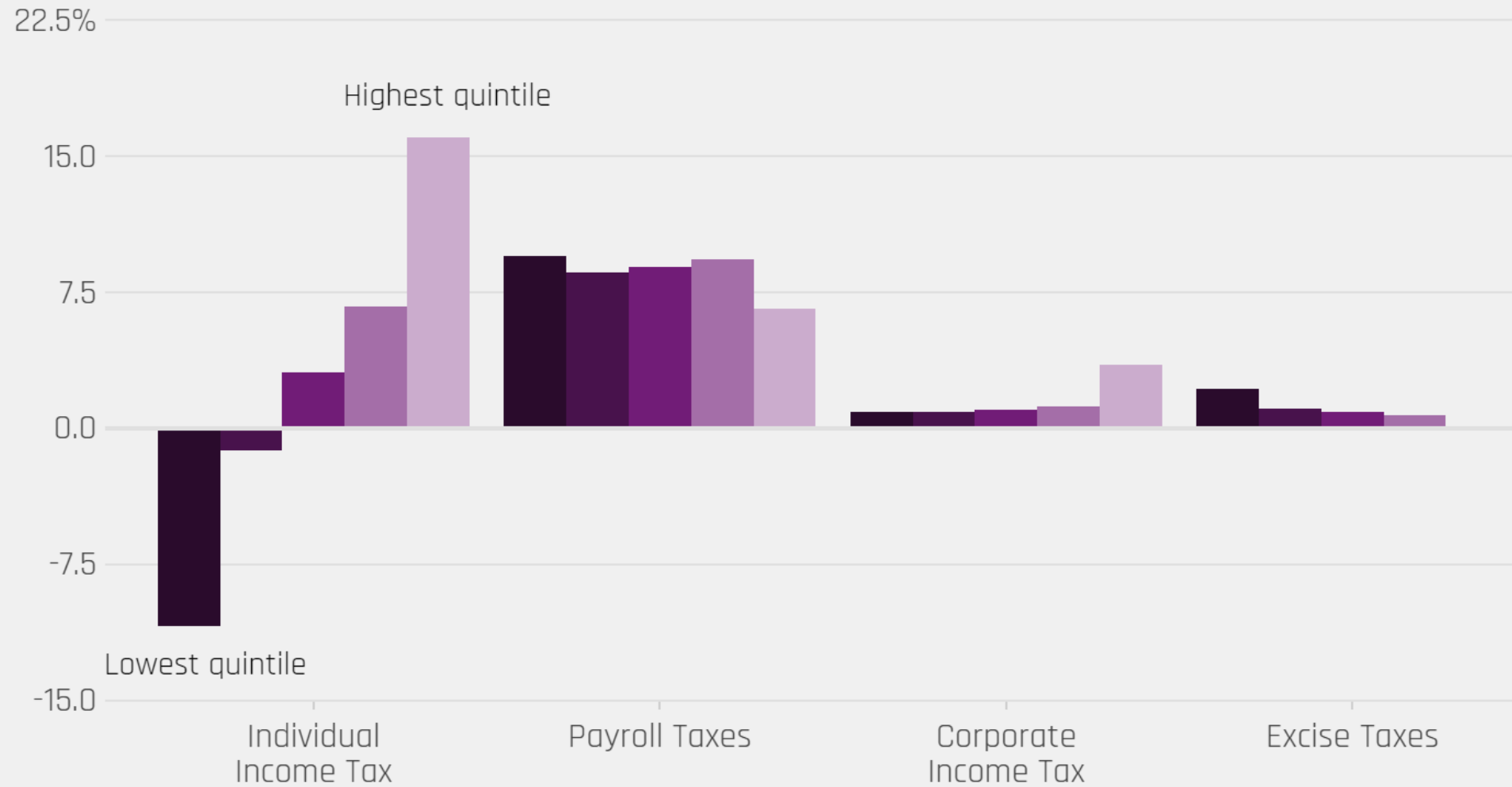
Average federal tax rates by income, 2016



Source: Congressional Budget Office

Progressivity varies dramatically by tax

Average tax rates by income by tax, 2016



Source: Congressional Budget Office

- Distinction between taxes and spending is ambiguous
 - Tax expenditure: spending through the tax code
 - Tax credit for higher education vs. Pell grants
 - JCT and Treasury estimate annually for income tax only
 - Tax expenditures are often inferior to better-designed spending proposals that would achieve the same end

Top Ten Income Tax Expenditures (billions of dollars)

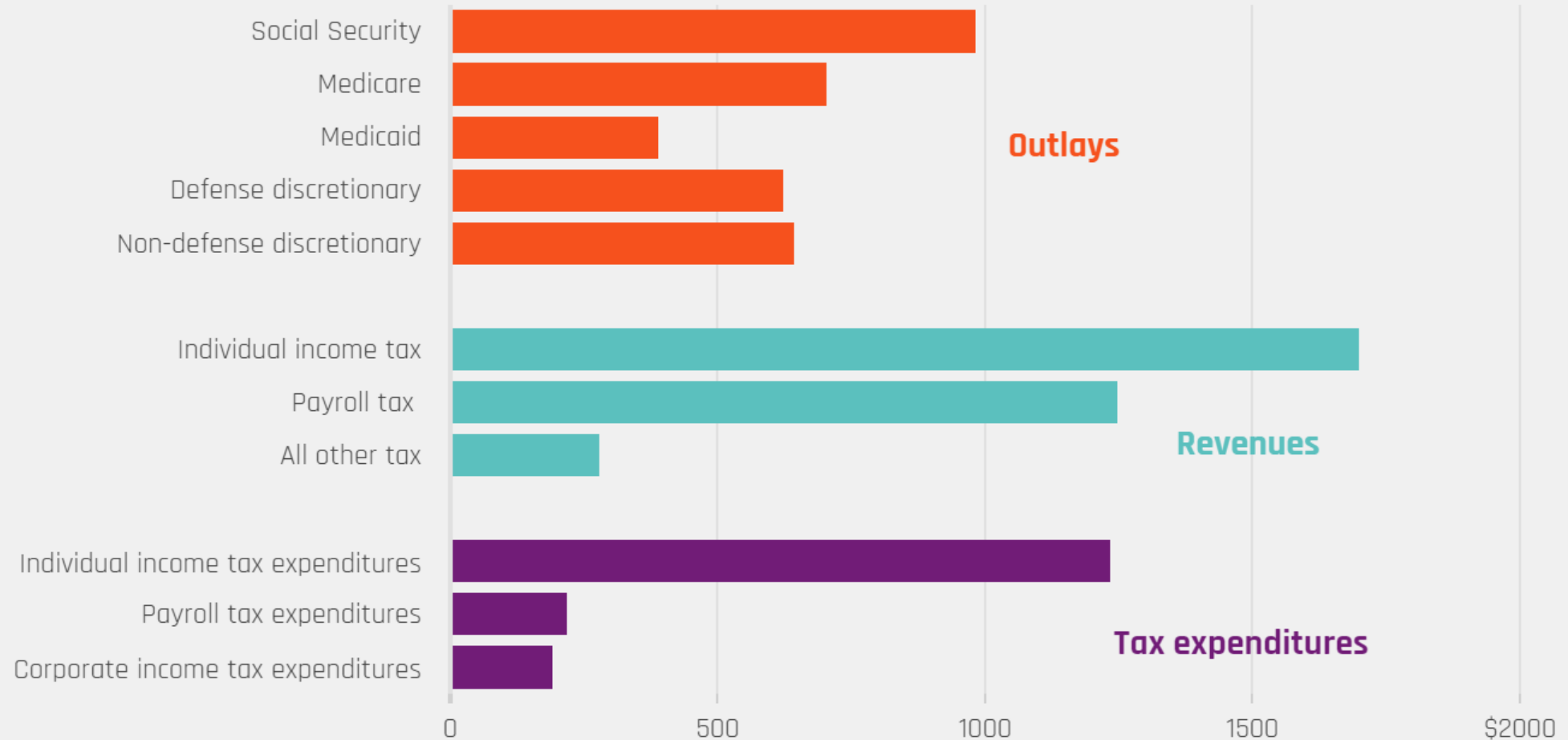
Provision	2020	2020-29
Exclusion of employer health insurance premiums	214	3,104
Exclusion of net imputed rental income	126	1,635
Defined contribution plans	84	1,297
Preferential rates on capital gains	105	1,227
Defined benefit plans	74	809
Step-up basis at death	52	659
Deductibility of mortgage interest	27	645
Deductibility of charitable contributions*	40	612
Capital gains exclusion on home sales	46	594
Child credit	76	582

Source: U.S. Treasury

* Excludes charitable contributions for education and health, which are counted separately.

Tax expenditures are large relative to revenues and spending

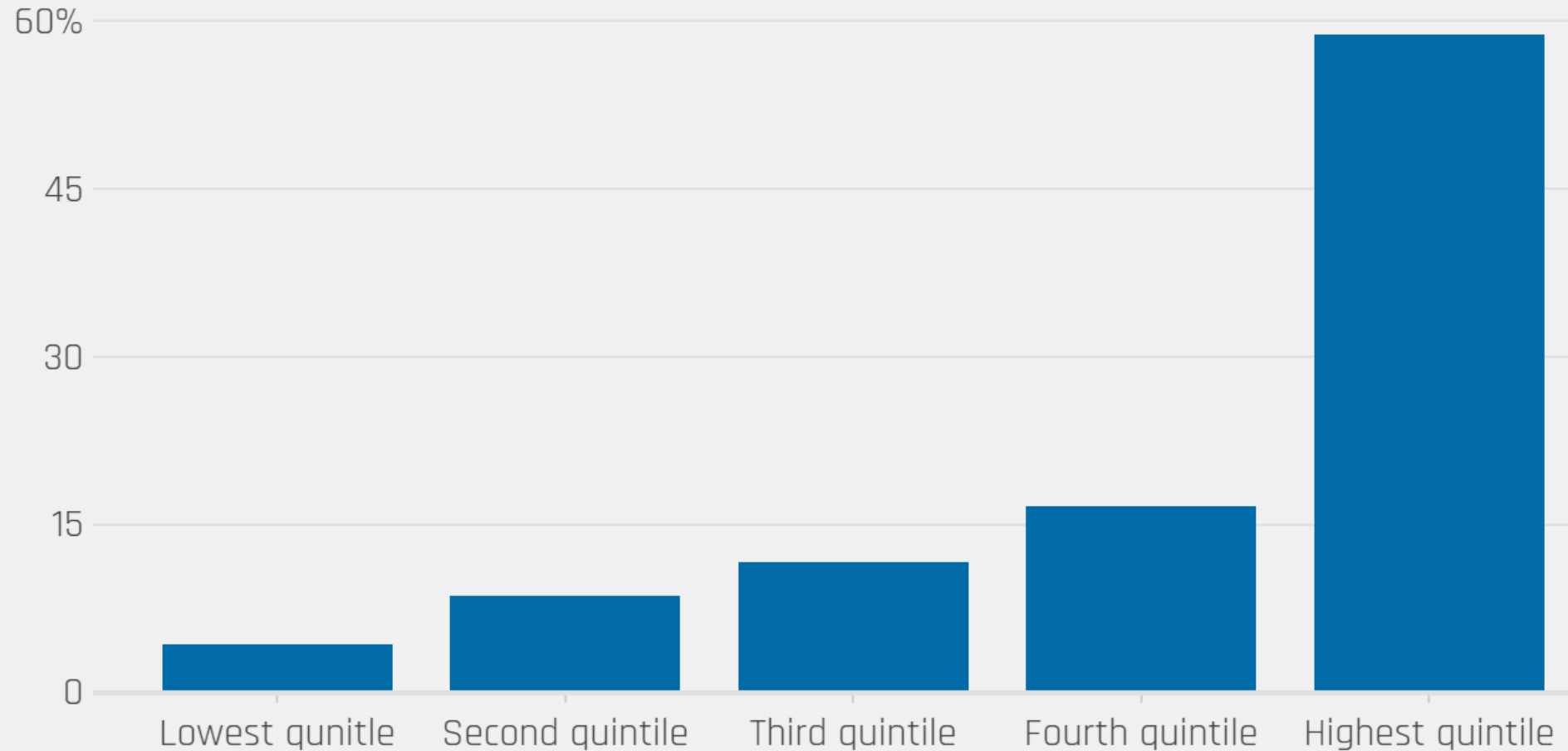
Components of revenues, tax expenditures, and spending in billions of dollars, 2019



Source: Congressional Budget Office

Benefits of tax expenditures skew to the top

Share of benefits received from federal income tax expenditures by income group, 2019



Source: Tax Policy Center

- Why do we have taxes?
 - Taxes fund government spending
 - Taxes influence the distribution of income
 - Taxes correct market failures
 - Taxes implement non-tax policies
- Most tax legislation is about the first two

Corrective taxes vs. revenue-raising taxes

- (At least some) people try to avoid taxes
 - A corrective tax is one where you are trying to cause the avoidance
 - You can avoid a carbon tax by using less carbon
 - A revenue-raising tax is one where you aren't
 - You can avoid a payroll tax by working less
- All taxes will both raise revenue and affect behavior and there isn't necessarily a clean distinction between the two

Tools of Tax Analysis

- The tools of tax analysis
 - Revenue estimate: change in deficit/surplus
 - Distribution analysis: change in tax burden on each family
- Tracking those two set of changes is the key to understanding the economic effects of tax legislation

**ESTIMATED BUDGET EFFECTS OF THE CONFERENCE AGREEMENT FOR H.R. 1,
THE "TAX CUTS AND JOBS ACT"**

Fiscal Years 2018 - 2027

[Billions of Dollars]

Provision	Effective	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2018-22	2018-27
I. Individual Tax Reform													
A. Simplification and Reform of Rates, Standard Deductions, and Exemptions													
1. 10%, 12%, 22%, 24%, 32%, 35%, and 37% income tax rate brackets (sunset 12/31/25) [1][2].....	tyba 12/31/17	-94.1	-135.3	-140.9	-146.4	-152.0	-158.1	-164.3	-171.1	-52.0	[3]	-668.7	-1,214.2
2. Modify standard deduction (\$12,000 for singles, \$24,000 for married filing jointly, \$18,000 for HoH) (sunset 12/31/25) [2].....	tyba 12/31/17	-57.2	-82.6	-84.7	-87.5	-90.7	-92.9	-95.7	-99.1	-30.0	[3]	-402.6	-720.4
3. Repeal of deduction for personal exemptions (sunset 12/31/25) [2].....	generally tyba 12/31/17	93.3	137.1	141.6	146.4	151.8	157.6	163.3	169.2	51.3	---	670.1	1,211.5
4. Alternative inflation measure [2].....	tyba 12/31/17	0.8	2.1	5.5	8.2	10.4	12.8	16.6	20.0	25.6	31.5	27.0	133.5
B. Treatment of Business Income of Individuals, Trusts, and Estates													
1. Allow 20 percent deduction of qualified business income and certain dividends for individuals and for gross income of agricultural or horticultural cooperatives (sunset 12/31/25) [4].....	generally tyba 12/31/17	-27.7	-47.1	-49.9	-51.8	-52.8	-52.2	-53.6	-53.2	-24.2	-1.9	-229.5	-414.5
2. Disallow active passthrough losses in excess of \$500,000 for joint filers, \$250,000 for all others (sunset 12/31/25).....	tyba 12/31/17	9.5	16.2	17.2	18.0	18.8	19.6	20.4	19.4	9.3	1.3	79.7	149.7
C. Reform of the Child Tax Credit													
1. Modification of child tax credit: \$2,000 not indexed; refundable up to \$1,400 indexed down to nearest \$100 base year 2018; \$2,500 refundability threshold not indexed; \$500 other dependents not indexed; phase outs \$200K/\$400K not indexed (sunset 12/31/25) [2].....	tyba 12/31/17	-29.3	-67.7	-69.2	-70.4	-71.4	-73.8	-74.9	-76.0	-40.7	---	-308.1	-573.4
2. Require valid Social Security number of each child to claim refundable and non-refundable portions of child credit, non-child dependents and any child without a valid Social Security number still receives \$500 non-refundable credit (sunset 12/31/25) [2].....	tyba 12/31/17	---	3.9	3.8	3.8	3.7	3.8	3.7	3.7	3.0	0.5	15.2	29.8

**DISTRIBUTIONAL EFFECTS OF
THE CONFERENCE AGREEMENT FOR H.R.1,
THE "TAX CUTS AND JOBS ACT"**

Calendar Year 2019

INCOME CATEGORY (2)	CHANGE IN FEDERAL TAXES (3)		FEDERAL TAXES (3) UNDER PRESENT LAW		FEDERAL TAXES (3) UNDER PROPOSAL		Average Tax Rate (4)	
							Present Law	Proposal
	Millions	Percent	Billions	Percent	Billions	Percent	Percent	Percent
Less than \$10,000.....	-\$396	-5.6%	\$7.0	0.2%	\$6.6	0.2%	9.1%	8.6%
\$10,000 to \$20,000.....	-\$1,792	(5)	-\$2.4	-0.1%	-\$4.2	-0.1%	-0.7%	-1.2%
\$20,000 to \$30,000.....	-\$2,982	-13.5%	\$22.1	0.7%	\$19.1	0.6%	3.9%	3.4%
\$30,000 to \$40,000.....	-\$5,416	-11.5%	\$47.0	1.5%	\$41.5	1.4%	7.9%	7.0%
\$40,000 to \$50,000.....	-\$6,728	-10.0%	\$67.3	2.1%	\$60.6	2.0%	10.9%	9.9%
\$50,000 to \$75,000.....	-\$23,046	-8.7%	\$265.3	8.2%	\$242.3	8.2%	14.8%	13.5%
\$75,000 to \$100,000.....	-\$22,437	-8.0%	\$279.5	8.7%	\$257.1	8.7%	17.0%	15.6%
\$100,000 to \$200,000.....	-\$70,372	-7.5%	\$939.8	29.1%	\$869.4	29.3%	20.9%	19.4%
\$200,000 to \$500,000.....	-\$65,485	-9.0%	\$724.3	22.4%	\$658.8	22.2%	26.4%	23.9%
\$500,000 to \$1,000,000..	-\$23,947	-9.4%	\$254.7	7.9%	\$230.8	7.8%	30.9%	27.8%
\$1,000,000 and over.....	-\$36,853	-5.9%	\$624.1	19.3%	\$587.2	19.8%	32.5%	30.2%
Total, All Taxpayers.....	-\$259,454	-8.0%	\$3,228.7	100.0%	\$2,969.3	100.0%	20.7%	19.0%

Source: Joint Committee on Taxation

Detail may not add to total due to rounding.

TABLE 1

Distribution of Federal Tax Change of the Conference Agreement for the Tax Cuts and Jobs Act

By expanded cash income percentile, 2018^a



Expanded cash income percentile ^b	Percent change in after-tax income ^c	Share of total federal tax change (%)	Average federal tax change (dollars)	Average federal tax rate ^d	
				Change (% points)	Under the proposal (%)
Lowest quintile	0.4	1.0	-60	-0.4	3.7
Second quintile	1.2	5.2	-380	-1.1	7.6
Middle quintile	1.6	11.2	-930	-1.4	12.4
Fourth quintile	1.9	18.4	-1,810	-1.6	15.8
Top quintile	2.9	65.3	-7,640	-2.2	23.3
All	2.2	100.0	-1,610	-1.8	18.1
Addendum					
80-90	2.0	13.1	-2,970	-1.6	18.5
90-95	2.2	9.6	-4,550	-1.8	20.2
95-99	4.1	22.1	-13,480	-3.1	22.2
Top 1 percent	3.4	20.5	-51,140	-2.3	30.3
Top 0.1 percent	2.7	7.9	-193,380	-1.8	31.6

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1)

Useful References

- JCT, “Overview of the Federal Tax System As In Effect for 2019” <https://www.jct.gov/publications.html?func=startdown&id=5172>
- CBO, “The Distribution of Household Income, 2016” <https://www.cbo.gov/publication/55413>
- U.S. Treasury, “Tax Expenditures,” <https://home.treasury.gov/policy-issues/tax-policy/tax-expenditures>
- Daniel Berger and Eric Toder, “Distributional Effects of Individual Income Tax Expenditures after the 2017 Tax Cuts and Jobs Act,” <https://www.taxpolicycenter.org/publications/distributional-effects-individual-income-tax-expenditures-after-2017-tax-cuts-and-jobs>
- The Tax Policy Center’s Glossary of Tax Terms: <https://www.taxpolicycenter.org/briefing-book/glossary>