

The Economics of Taxation

Washington Center
for Equitable Growth
Evidence for a stronger economy



THE ECONOMICS OF TAXATION

- 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

- Tax legislation:
 - changes the amount of revenues the government collects
 - changes the tax burden on each family (who pays what)
- Tracking those two set of changes is the key to understanding the economic effects of tax legislation

- The tools of tax analysis
 - Revenue estimate: change in deficit/surplus
 - Distribution analysis: change in tax burden on each family

- Outline
 - Revenue Estimation
 - Distribution Analysis
 - Understanding Growth
 - Tradeoffs in Tax Policy

Revenue Estimation

- Revenue estimates
 - Estimate the impact of legislation on the deficit/surplus relative to current law
 - Produced by JCT, Treasury, various private organizations
 - Rely on an array of economic assumptions about behavioral responses to the legislation

- Two types of revenue estimates
 - Conventional:
 - Assumes gross national product (GNP) does not change
 - In principle, includes all other forms of behavior
 - Provision-by-provision detail provided
 - Dynamic:
 - Allows gross national product (GNP) to change
 - Typically estimated for the legislation as a whole
- Caution: dynamic scores are themselves often incomplete and open the door to timing games

**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

Provision	Effective	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2018-22	2018-27
2. Repeal of fair market value method of interest expense apportionment.....	tyba 12/31/17	[5]	0.1	0.1	0.1	[5]	[5]	[5]	[5]	[5]	[5]	0.3	0.6
Total of International Tax Reform		68.9	42.6	26.0	28.0	22.9	22.5	36.7	48.7	29.1	-0.8	188.2	324.4
NET TOTAL		-135.7	-280.0	-258.8	-220.8	-178.3	-137.9	-120.1	-114.6	-40.6	32.9	-1,074.0	-1,456.0

Joint Committee on Taxation

NOTE: Details may not add to totals due to rounding. The date of enactment is generally assumed to be December 22, 2017.

Legend for "Effective" column:

apa = amounts paid after
 apisasd = and placed in service after such date
 apoaa = amounts paid or accrued after
 apoia = amounts paid or incurred after
 apoi = amounts paid or incurred in
 apoio/a = amounts paid or incurred on or after
 ar = advance refunding
 bia = bonds issued after
 cmi = contributions made in
 da = distributions after
 Da = dispositions after
 dda = decedents dying after

DOE = date of enactment
 doia = discharges of indebtedness after
 dosaeia = divorce or separation agreements entered into after
 eca = exchanges completed after
 fc = for charitable
 feoqb = for expansion of qualifying beneficiaries
 gma = gifts made after
 lai = losses accrued in
 mba = months beginning after
 paa = property acquired after
 ppisa = property placed in service after
 ptyba = partnership taxable years beginning after
 sa = sales after

seada = sales exchanges and dispositions after
 seado/a = sales, exchanges and dispositions on or after
 spo/a = service provided on or after
 sppoga = specified plants planted or grafted after
 ta = transactions after
 Ta = transfers after
 teia = transactions entered into after
 ti = transfers in
 topia = transfers of partnership interests after
 tyba = taxable years beginning after

- TABLE 1 -
**ESTIMATED BUDGET EFFECTS OF THE
CONFERENCE AGREEMENT FOR H.R.1**
Fiscal Years 2018 - 2027

[Billions of Dollars]

Provision	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2018-22	2018-27
Conventional estimate.....	-135.7	-280.0	-258.8	-220.8	-178.3	-137.9	-120.1	-114.6	-40.6	32.9	-1074.0	-1,456.0
Additional Effects Resulting from Macroeconomic Analysis	32.2	34.4	36.6	38.5	37.0	40.5	46.5	47.8	35.5	35.5	178.8	384.6
NET TOTAL	-103.5	-245.6	-222.2	-182.3	-141.3	-97.4	-73.6	-66.8	-5.1	68.4	-895.2	-1071.4

Joint Committee on Taxation

NOTE: Details may not add to totals due to rounding

Distribution Analysis

- Distribution analysis estimates changes in the tax burden
 - Who pays for a tax increase?
 - Who gets a tax cut?

- Taxes are not necessarily paid by the person or entity legally obligated to pay
 - Statutory incidence: who is legally obligated to pay
 - Economic incidence: who actually pays
- Distribution analysis incorporates incidence assumptions about who actually bears the burden of taxation
 - All taxes assigned to people
 - Not just who is legally obligated to pay tax

- Example: increase the employer-side payroll tax
 - Assumption: wage falls such that total compensation paid by the employer is unchanged
 - Implication: reduction in the wage shifts the burden from the employer to the worker

- Economic analysis yields the dollar change in tax burden
- Presented in a variety of ways
 - percent change in tax
 - change in share of tax
 - change in average tax rate
 - percent change in after-tax income

- Look to the percent change in after-tax income as your default
 - Approximate impact of the legislation on well-being
 - Legislation that delivers equal percent change in after-tax income leaves relative distribution of income unchanged
 - JCT does not estimate!
- Avoid percent change in tax and change in share of tax
 - If you pay little tax, large percent change does nothing for you

**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)	
	Millions	Percent	Billions	Percent	Billions	Percent	Present Law	Proposal
							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

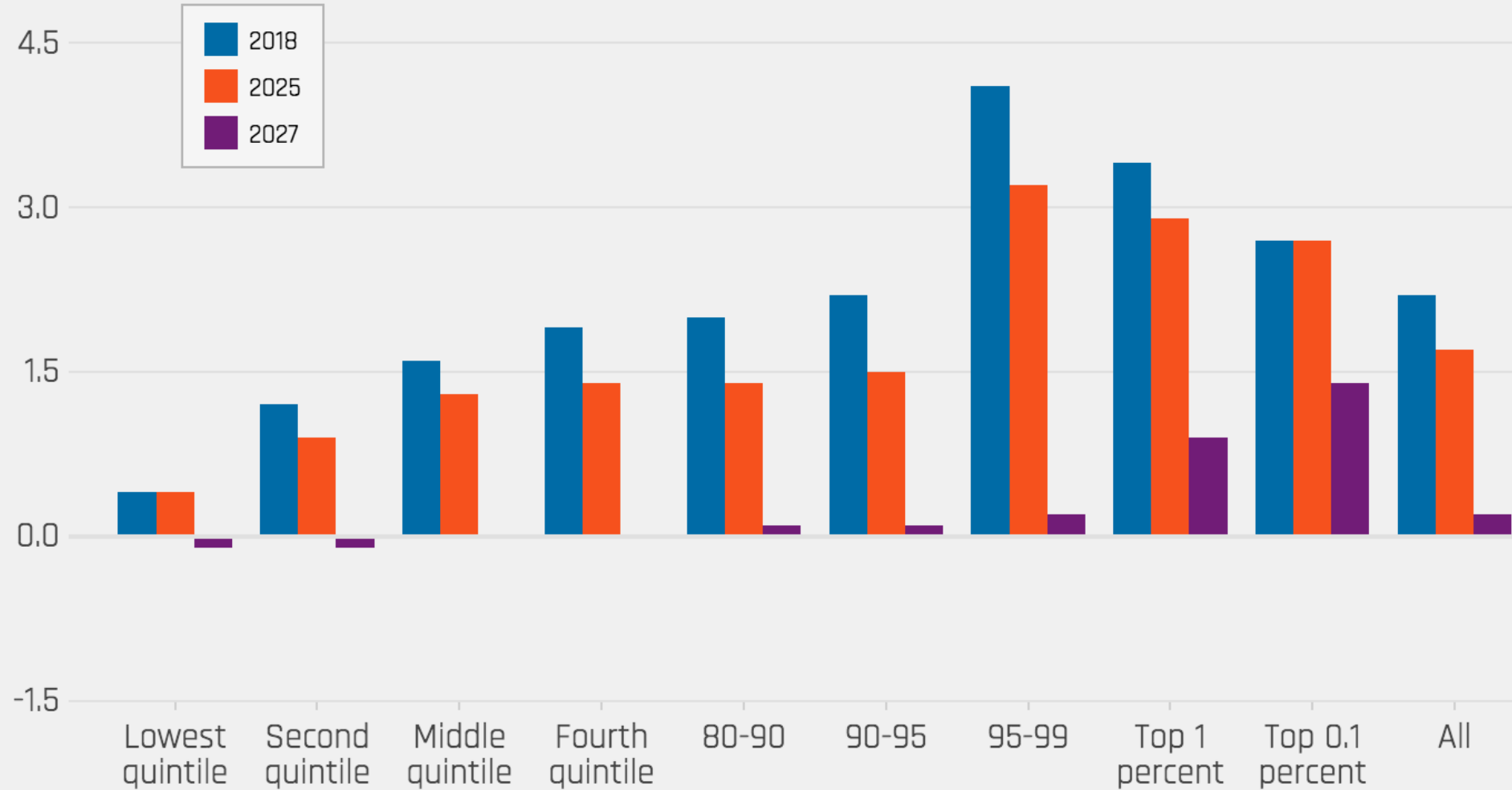


Expanded cash income percentile ^b	Percent change in after-tax income ^c	Share of total federal tax change (%)	Average federal tax change (dollars)	Average federal tax rate ^d	
				Change (% points)	Under the proposal (%)
Lowest quintile	0.4	1.0	-60	-0.4	3.7
Second quintile	1.2	5.2	-380	-1.1	7.6
Middle 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)

Distribution analysis shows the TCJA reduced tax burdens

Percent change in after-tax income by calendar year



Source: Tax Policy Center (2017).

- Impacts on revenue and burden are the economic effects of tax legislation
- Both revenue and distribution analysis require numerous economic assumptions
- These assumptions are always subject to debate – if you disagree with them you disagree with the results
- Different organizations make different assumptions

Understanding Growth

- The economics of taxation is about tracking the transfers: changes in revenues and changes in burden for different people
- Economic commentary on taxation frequently invokes growth, which often leads to confusion and double-counting

- What is growth?
 - Usual technical meaning: an increase in the value of goods and services produced in the United States (GDP)
 - Not a claim about jobs, wages, or living standards!

- Broken window fallacy:
 - Suppose I walk around breaking everybody's windows
 - Good for window makers, window installers
 - Might increase total income/output
 - Bad for people
- Always important to examine well-being directly, not proxies

- Popular view
 - Growth delivers additional benefits to the public on top of a tax cut
 - The benefits of growth are distributed broadly throughout the population
- Reality
 - No or few gains on top of those shown in the distribution analysis – the benefit of a tax cut is the tax cut

- Growth comes at a cost
 - Longer work weeks
 - Increased child care expenses
 - Reduced consumption
 - More payouts to foreign investors
- Distribution analysis nets out these costs
 - Bonus: distribution analysis also tells you who wins/loses

- Implication: total tax change in distribution table does not necessarily equal the revenue estimate
 - Revenue estimate includes behavior that is excluded from the distribution analysis
 - Example: tax avoidance usually reflected in revenue estimate, not distribution analysis (exception: JCT)
- This conceptual difference between revenue estimates and distribution analysis is what gives rise to the possibility of positive-sum tax reform through careful design of legislation
- There are often additional practical reasons for differences between revenue estimates and distribution analyses

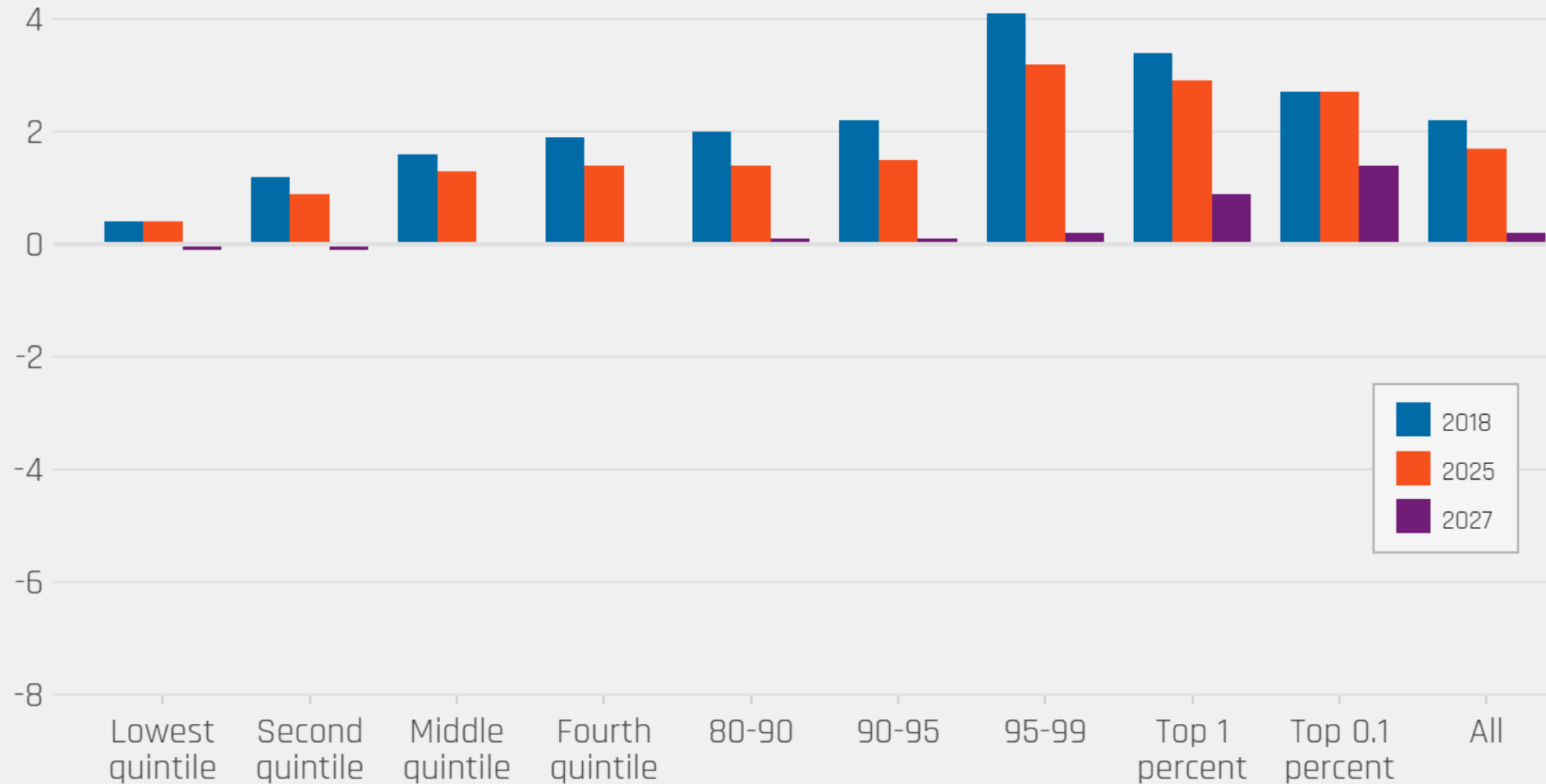
Tradeoffs in Tax Policy

- Tradeoffs in taxation are between
 - taxes and spending
 - taxes and other taxes (tax reform)
- Tax legislation is often enacted without offsets, meaning it either increases or decreases the deficit
 - How will future Congresses change taxes or spending?
 - What else could have been done with the money?

- A distribution analysis with financing shows the impact of proposed legislation combined with hypothetical offsets
 - Illustrates the tradeoffs involved in tax policy
 - Obviously, you don't know what the offsets will be

As enacted, the TCJA reduced tax burdens in the near term

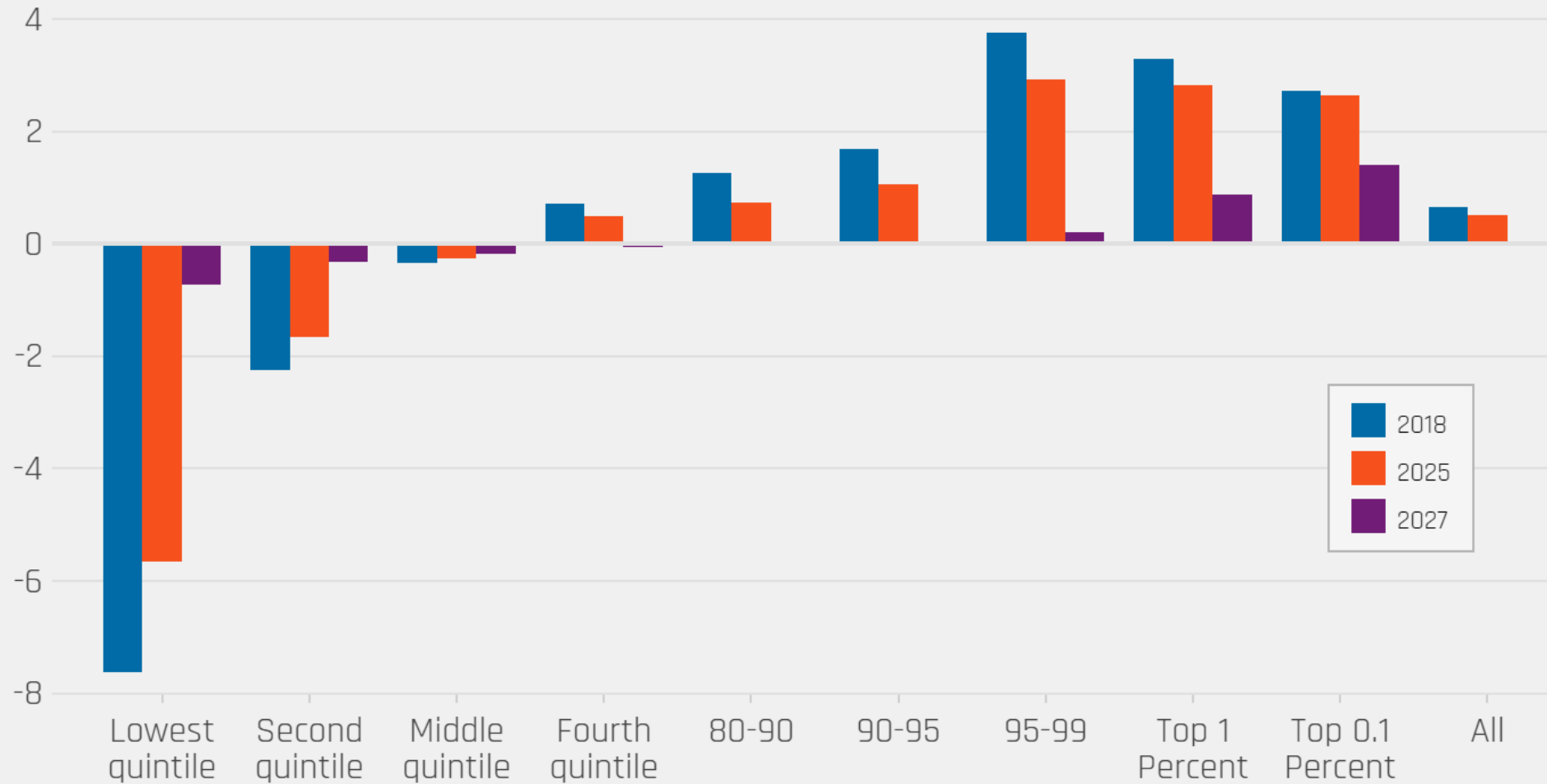
Percent change in after-tax income by calendar year



Note: Excludes impact of repealing the individual mandate.
Source: Tax Policy Center (2017).

With lump-sum financing, most income groups would be worse off

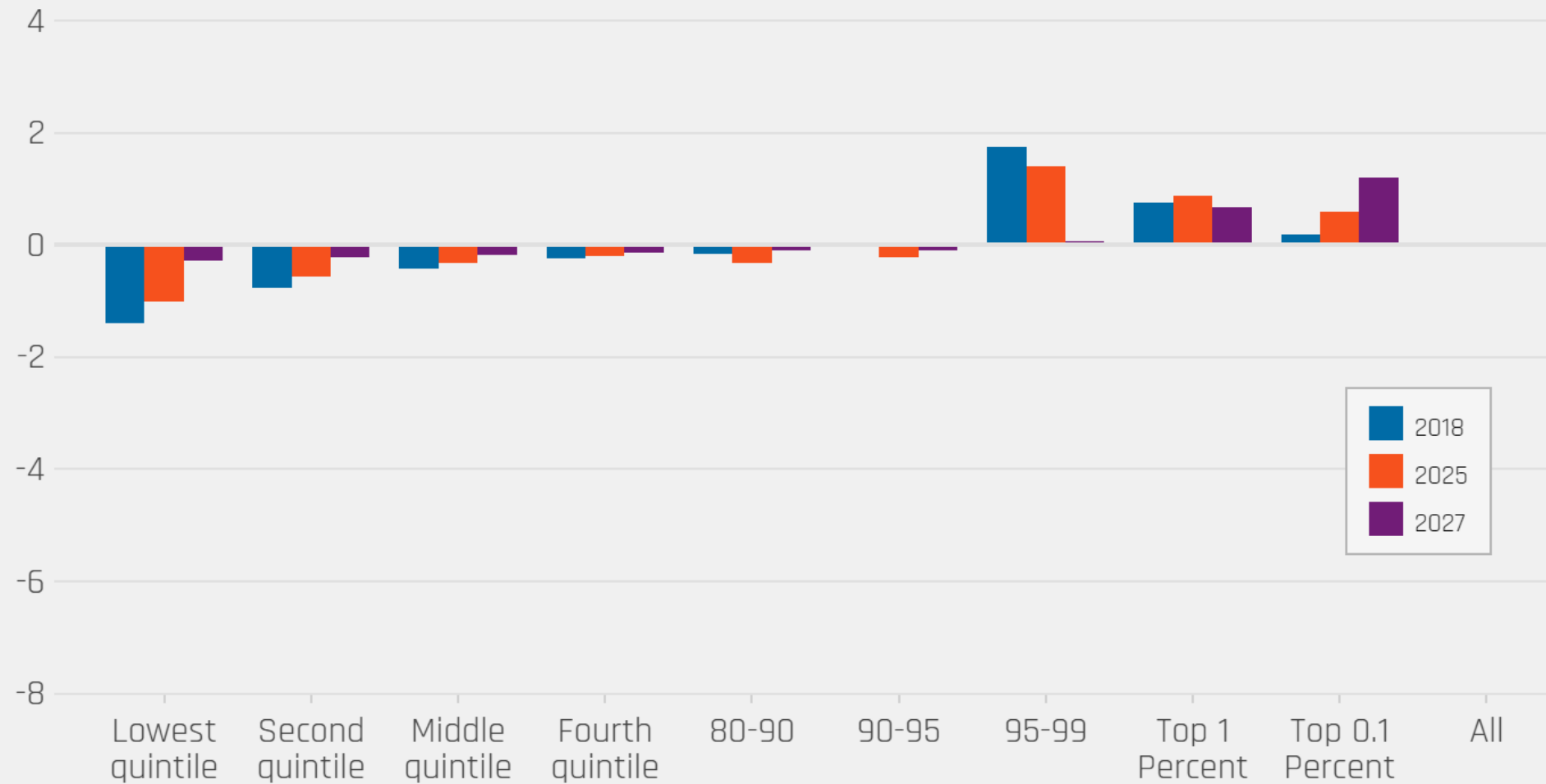
Percent change in after-tax income by calendar year



Note: Excludes impact of repealing the individual mandate; financing set to 70% of aggregate tax cut.
Source: Authors' calculations using estimates from the Tax Policy Center and Congressional Budget Office.

With proportional financing, most income groups would be worse off

Percent change in after-tax income by calendar year



Note: Excludes impact of repealing the individual mandate; financing equal to aggregate tax cut.
Source: Authors' calculations using estimates from the Tax Policy Center and Congressional Budget Office.

Concluding Remarks

- Tax legislation:
 - changes the amount of revenues the government collects
 - changes the tax burden on each family (who pays what)
- Tracking those two set of changes is the key to understanding the economic effects of tax legislation
- Revenue and distribution analysis show the economic costs and benefits of tax changes

Useful References

- JCT, “Revenue Estimating Process February 2019,”
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- TPC, “Measuring the Distribution of Tax Changes,”
<https://www.taxpolicycenter.org/resources/measuring-distribution-tax-changes>
- Greg Leiserson, “If U.S. tax reform delivers equitable growth, a distribution table will show it,”
<https://equitablegrowth.org/if-u-s-tax-reform-delivers-equitable-growth-a-distribution-table-will-show-it/>
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- The Tax Policy Center’s Glossary of Tax Terms: <https://www.taxpolicycenter.org/briefing-book/glossary>