

U.S. Inequality and Recent Tax Changes

Greg Leiserson
Society of Government Economists
February 20, 2018

- What effects will TCJA have on economic inequality?
- Two versions of the question for this presentation:
 - What effects will TCJA have on the distribution of economic well-being (welfare)?
 - Central question for economic analysis of policy changes: what impact does the policy change have on economic well-being
 - What effects will TCJA have on the distribution of income?
 - Closely related but distinct question, can be misleading about welfare impacts of supply-side effects of policy changes

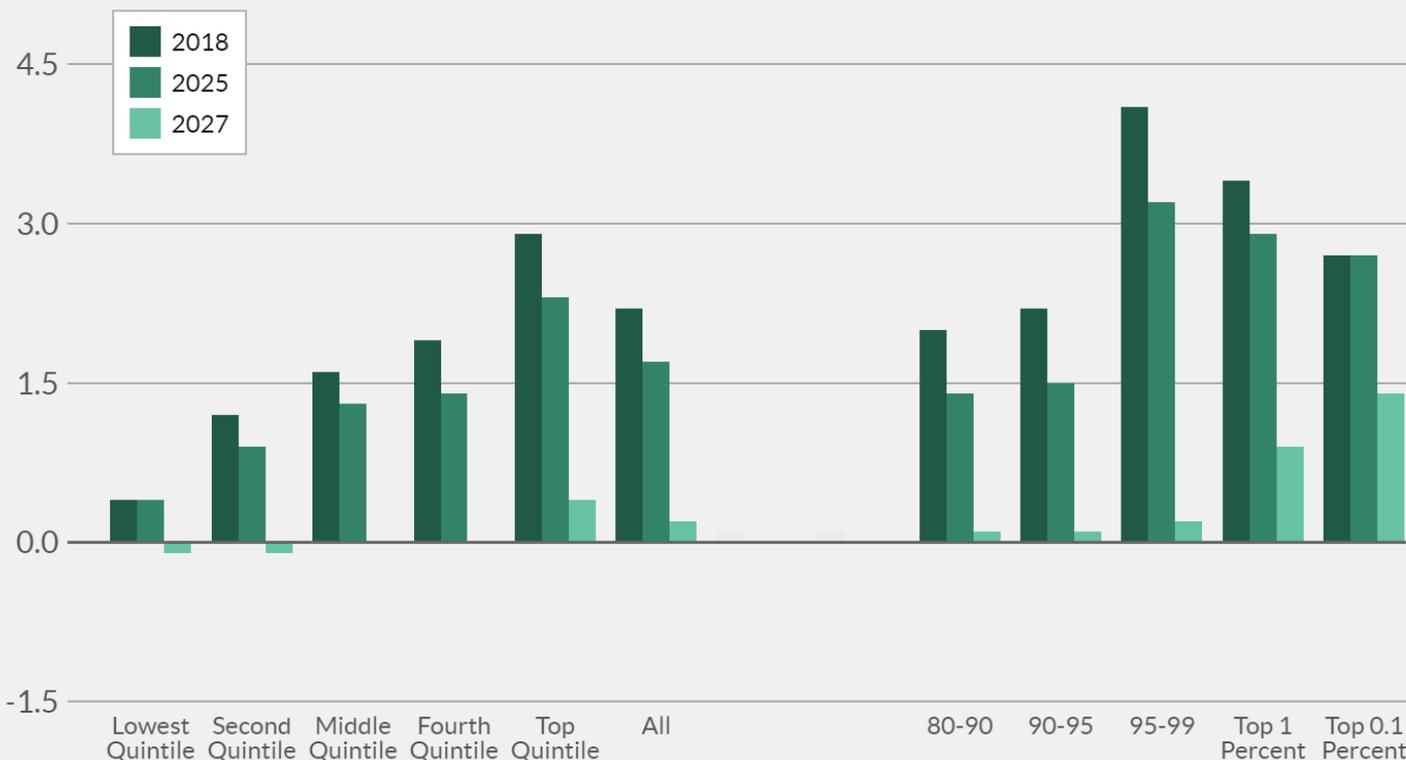
- Difference between the welfare impact and the impact on observed incomes
 - Consider an expansion of the Earned Income Tax Credit
 - Direct reduction in after-tax income inequality from larger credit
 - Indirect reduction in after-tax income inequality from increase in labor force participation
 - But the increase in labor force participation comes at a cost to the worker (e.g. child care costs, commuting costs, etc.)
 - Preview of results
 - TCJA will likely increase disparities in economic well-being, after-tax income, and pre-tax income – even without assuming fiscal offsets
 - Only suggestive results for market income in this presentation, but expect inequality in market incomes would increase as well
-

- Distribution tables provide a first-order approximation to the change in welfare
- Change in welfare determined primarily by changes outside the agent's control: mechanical change in tax and changes in relative prices
 - Behavioral changes have no first-order impact on the well-being of the person changing behavior (envelope theorem)
 - Recipe for constructing distribution tables that are informative about welfare:
 - compute change in tax liabilities and relative price effects (i.e. incidence assumptions)
 - exclude behavioral changes reflecting unconstrained, rational choice
 - include other behavioral changes (easier said than done, esp. when there are quantitatively important market failures)
- Converting dollar change in after-tax income into utility requires an assumption about the marginal utility of income (e.g. $1/\text{after-tax income}$)
 - Conceptual difference between individual or family's marginal utility and social welfare weights used to evaluate redistributive policies
- Policymakers' desire for distribution tables may not reflect an ex ante desire for information about welfare impacts, but plausible that the desire for tables excluding behavioral changes/sample families is an implicit recognition that those changes are different

- Key observations for thinking about welfare impacts of taxation in policy context
 - Changes in macroeconomic aggregates (aka growth) have no first-order impacts on welfare in basic models
 - Potential efficiency gains primarily manifest in relaxation of the government budget constraint – impact on the public depends on legislated use
 - Excess burden is largely irrelevant as a practical matter in assessing the welfare impact (distribution tables do not impose a balanced budget constraint)
 - Distribution tables for deficit-increasing tax reform overstate the sustainable welfare gains
- Numerous difficult practical and conceptual questions when extending beyond basic models
 - Interaction of market failures and tax incidence
 - Timing of incidence for tax changes affecting investment incentives
 - Substance and timing of economics effects of higher deficits
 - Role and importance of gimmicks and sunsets
 - Political economy of future policy changes

TCJA Increases Welfare the Most for High-Income Families

Percent change in after-tax income (static), 2018, 2025, 2027



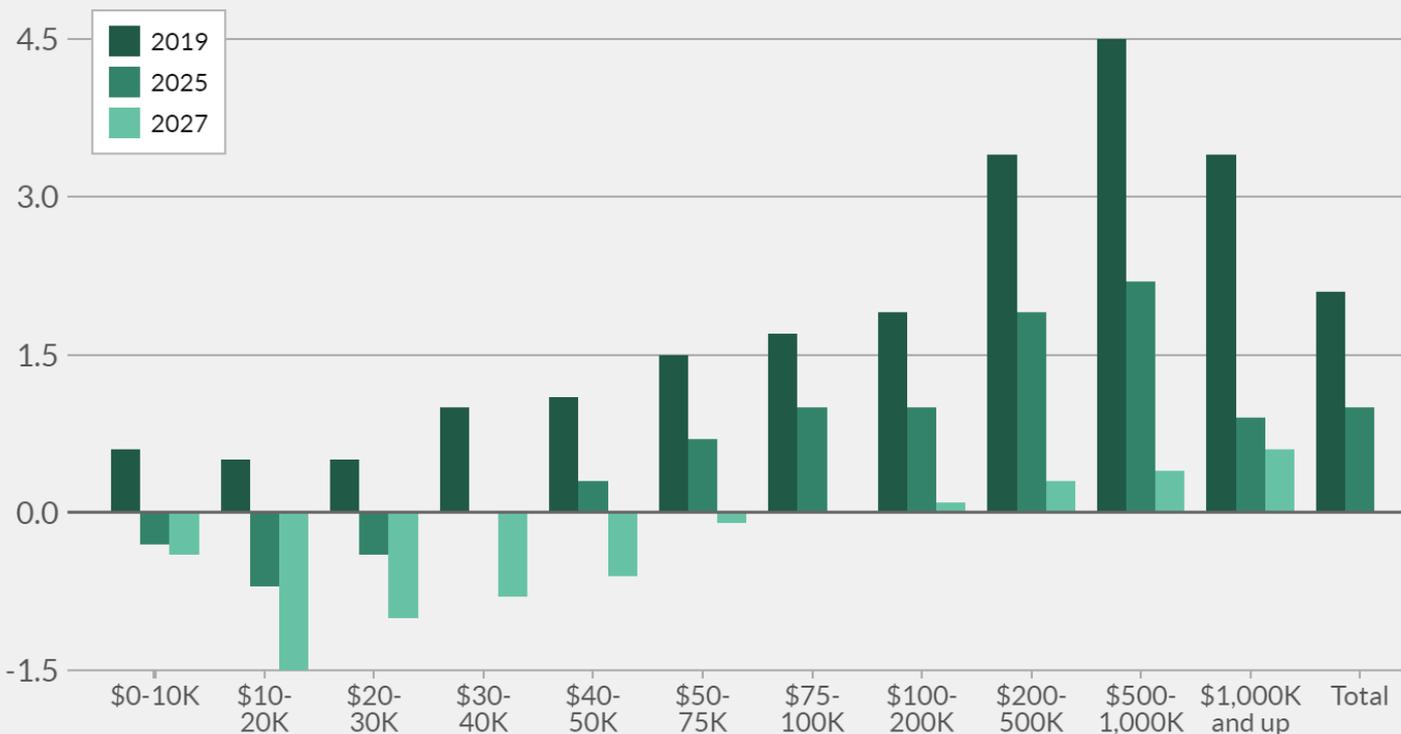
Source: Tax Policy Center.

Note: Excludes effects of repealing the individual mandate.

- TPC analysis excludes the impact of repeal of the individual mandate – should it?
 - General points:
 - Include effects of price changes
 - Include effects of behavioral changes if not solely a result of rational, unconstrained choice
 - These effects will not necessarily equal the change in tax liability or outlays received – implementation can be complicated
 - Luxury of tax analysis that many impacts are already measured in dollars
 - Takeaways for TCJA:
 - Should be including some value for welfare change of mandate repeal
 - Show CBO and JCT analyses as illustrative, but is only a proxy for a direct measure of welfare impact (what should be included)

TCJA Likely Reduces Welfare for Low-Income Families

Percent change in after-tax income (conventional ex. Medicaid/CSRs), 2019, 2025, 2027

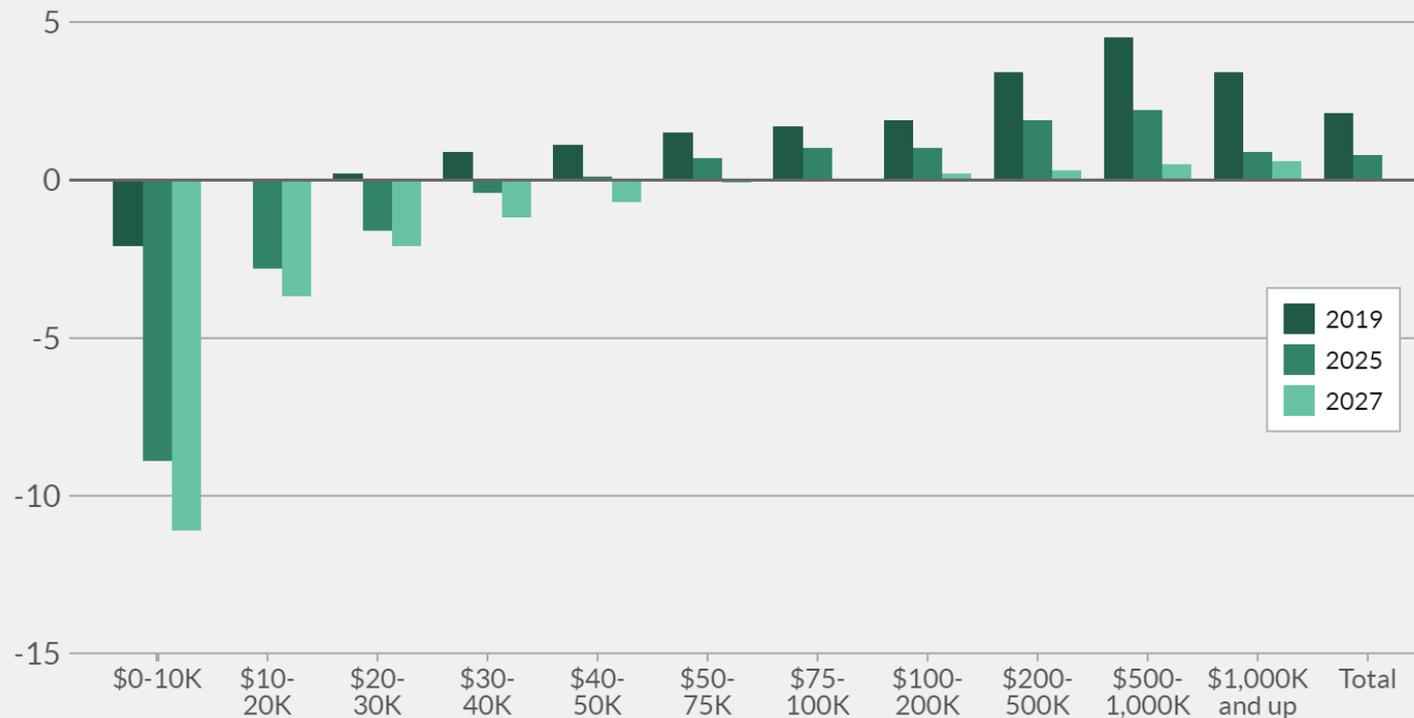


Source: Joint Committee on Taxation.

Note: Excludes changes in the estate tax and Medicaid/CSR effects of repealing the individual mandate.

TCJA Likely Reduces Welfare for Low-Income Families

Percent change in after-tax income (conventional), 2019, 2025, 2027



Source: Joint Committee on Taxation and Congressional Budget Office.

Note: Excludes changes in the estate tax.

- Key sources of uncertainty
 - Assumptions about static tax incidence, particularly relative price effects
 - Shifting of business tax changes to labor
 - Shifting of labor tax changes to business/capital
 - Timing of incidence effects
 - Assumptions about foreign investors in U.S. businesses
 - Assumptions about the economics of the individual mandate
 - Implicit assumptions (among many)
 - Ignore market clearing, implicit role for international trade
 - Fixed final prices for all goods and services
-

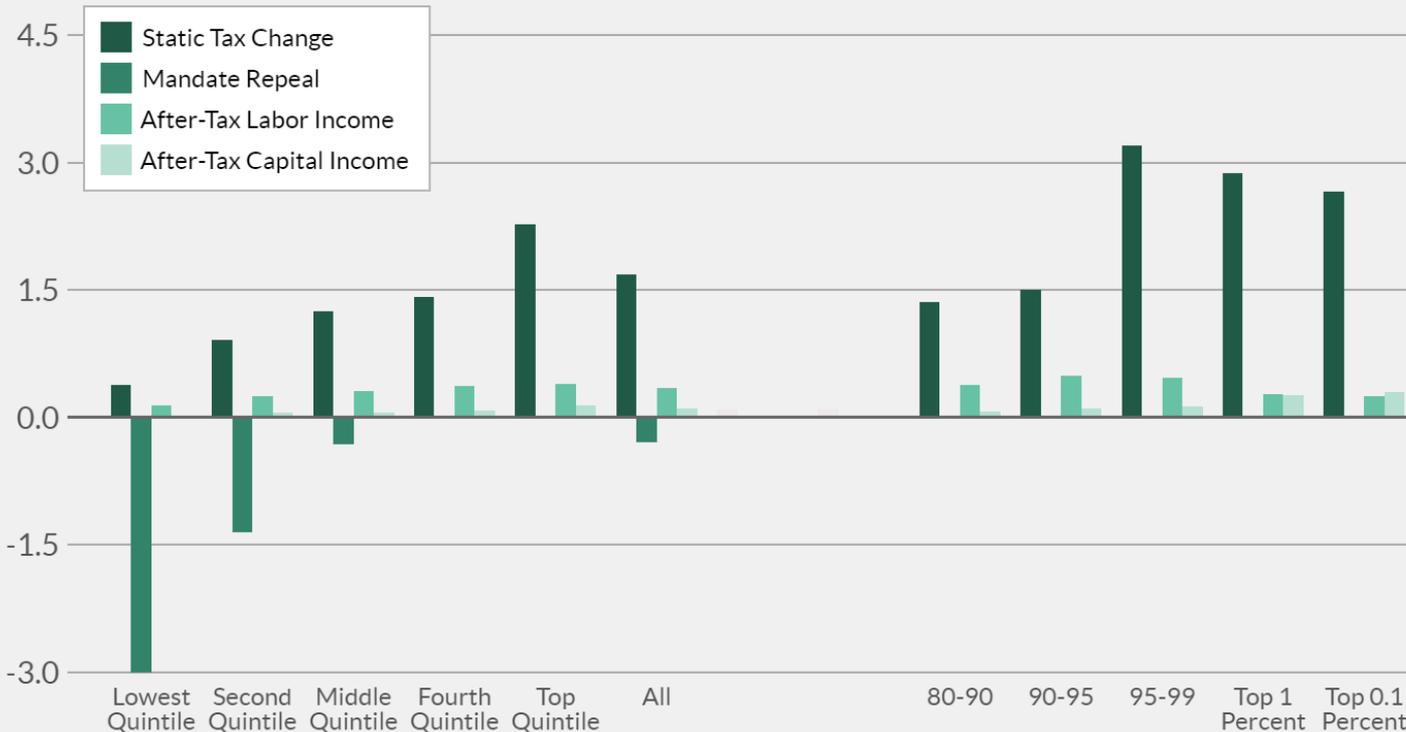
- Welfare impacts of TCJA
 - Increases welfare by more for higher income families than it does for lower income families
 - Reduces welfare for low-income families in the long run (i.e. after individual and estate provisions expire)
 - Likely reduces welfare for low-income families in the short run but quantification is difficult and depends on valuation of Medicaid and other sources of insurance coverage
 - General observations
 - Progressivity often defined in terms of the percent change in after-tax income, but note that it requires providing larger tax cuts to high-income families because they receive little value from each additional dollar
 - This measure requires careful interpretation in the context of deficit-increasing and deficit-reducing tax changes – specific instance of general challenge of analyzing deficit-increasing and deficit-reducing policies
-

- Observed Inequality Impacts
 - Distribution tables provide an approximation to the welfare impact of a proposal by excluding certain behavioral responses, but the observed income distribution includes these behavioral responses
 - Impact of a proposal on the observed income distribution is thus a conceptually distinct question
 - Construct estimates of a proposal's impact on the income distribution by combining static distribution estimates and estimates of the behavioral responses
 - Add both the microeconomic response included in conventional revenue estimates and macroeconomic responses excluded from conventional estimates
 - NB: most/all distribution estimates include some microeconomic response (e.g. changes in itemization behavior), some include more types of response
 - In this presentation assume microeconomic behavior other than behavior associated with mandate repeal has no impact on distribution

- A macroeconomic model generally will imply an estimate of the impact of a proposal on the income distribution, but a macroeconomic model is not necessarily the best approach to evaluating these questions
 - Macroeconomic model priority: marginal incentives and equilibrium quantities
 - Distribution model priority: computing tax liabilities and relative prices
 - Tradeoffs may suggest using different models
- In this presentation: ignore any inconsistencies between macroeconomic analysis and distribution analysis (other work in progress on that topic)
- In this presentation, results for 2025 based on Tax Policy Center estimates
 - 2018 includes initial transitory effects on revenues
 - 2027 is after individual tax cuts expire
 - Likely shows legislation in a more favorable light as judged by effects on inequality

TCJA Increases Disparities in Observed After-Tax Incomes

Percent change in observed after-tax income by channel, 2025

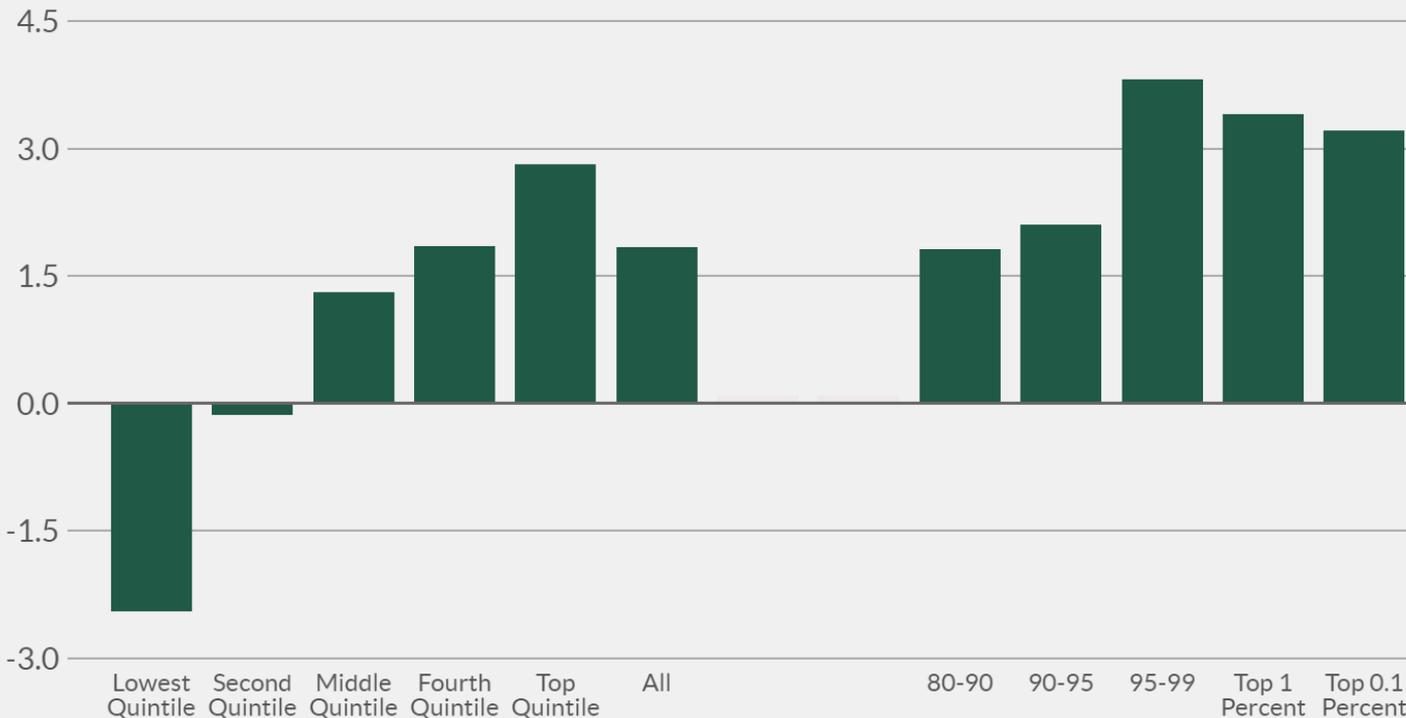


Source: Tax Policy Center, Joint Committee on Taxation, Congressional Budget Office, author's calculations.

- Static tax change (primary driver of total change): regressive
 - Impact of repealing individual mandate (major driver for low incomes): regressive
 - No longer motivated by a welfare concept, concerned about distribution of observed incomes. Conventional effect of repealing individual mandate should be included.
 - Change in labor incomes: regressive
 - Relatively less labor income in upper and lower tails
 - Percent change in net-of-tax rate increases with income
 - Change in capital incomes: regressive
 - Capital income concentrated in the upper tails
 - Will discuss the (many) sources of uncertainty in a few slides
-

TCJA Increases Disparities in Observed After-Tax Income

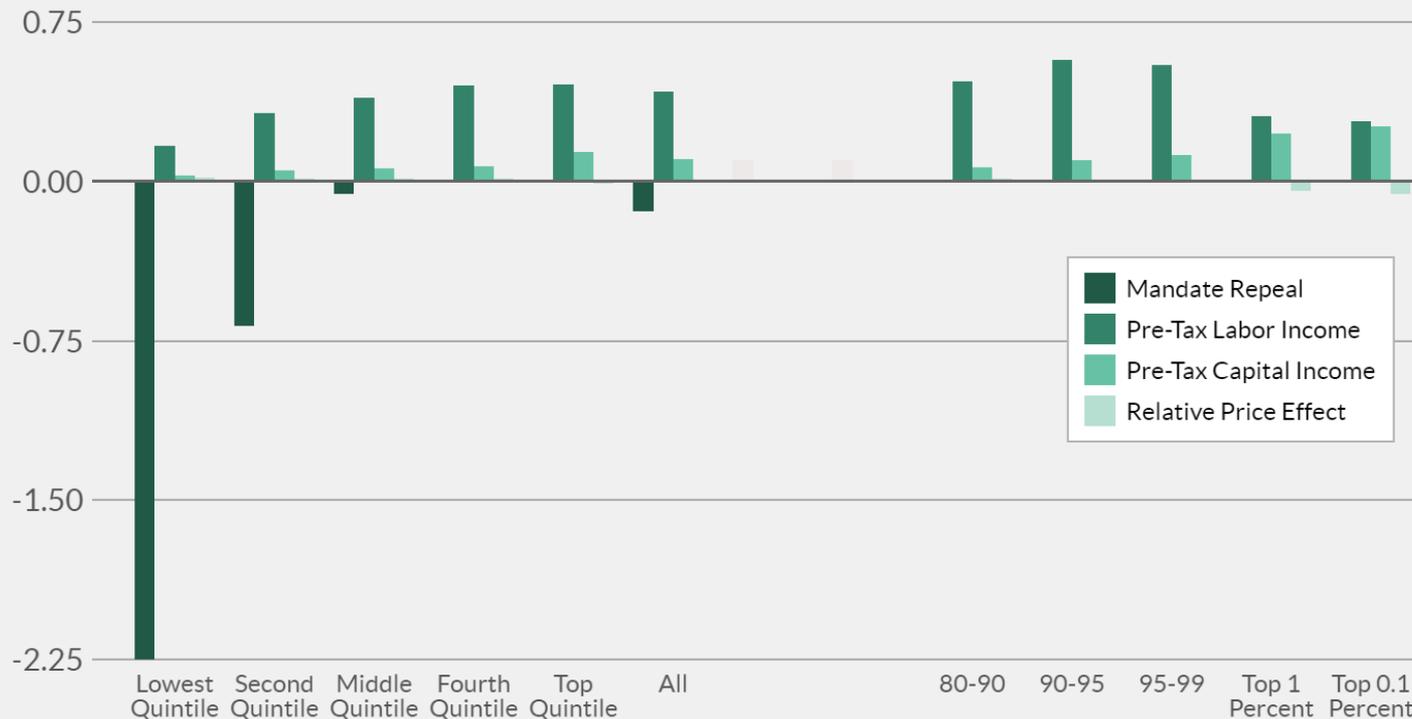
Percent change in observed after-tax income, 2025



Source: Tax Policy Center, Joint Committee on Taxation, Congressional Budget Office, author's calculations.

TCJA Increases Disparities in Pre-Tax Incomes

Percent change in observed pre-tax income by channel

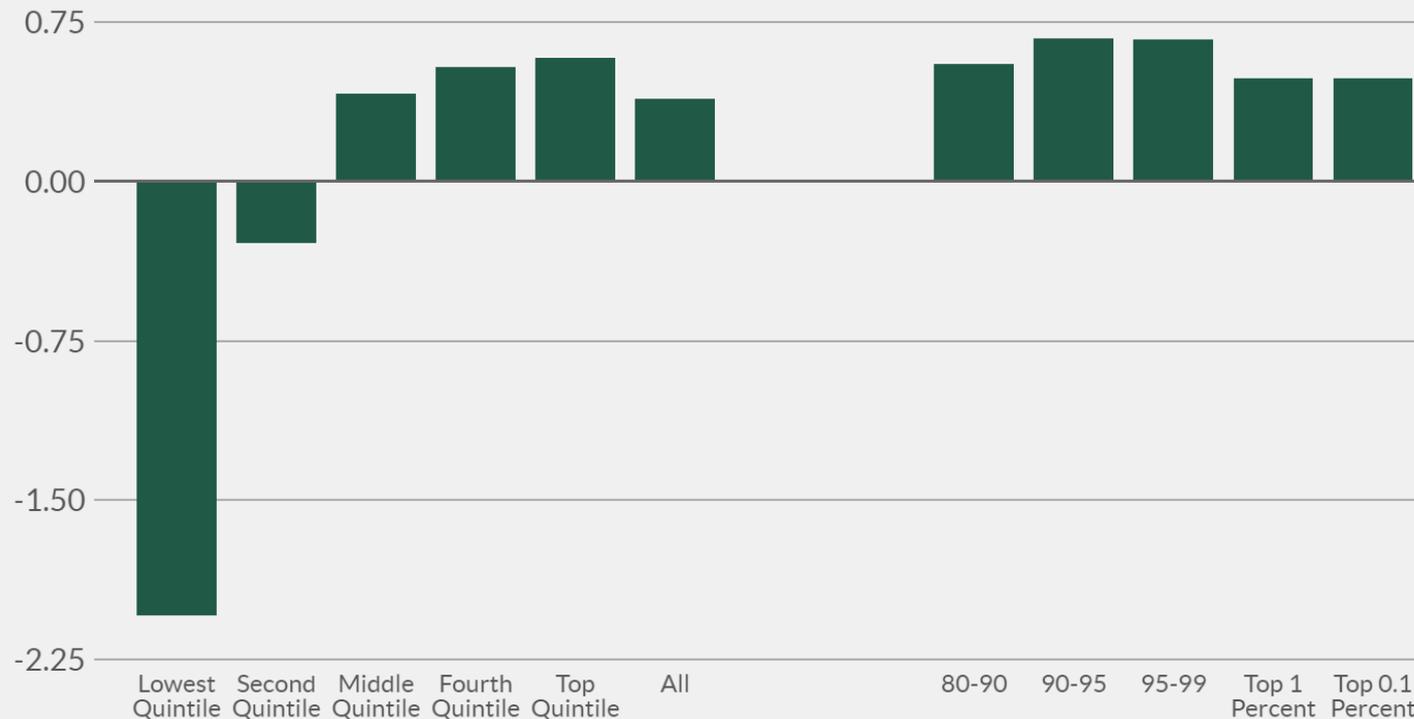


Source: Tax Policy Center, Joint Committee on Taxation, Congressional Budget Office, author's calculations.

- Static tax change is “gone” (but see below)
 - Includes only the Medicaid/CSR effects of repealing the individual mandate
 - After-tax labor income is now pre-tax labor income (slightly more regressive)
 - After-tax capital income is now pre-tax capital income (slightly more regressive)
 - Relative price effect – the portion of the static tax change other than the mechanical change in tax liability (progressive)
-

TCJA Increases Disparities in Pre-Tax Incomes

Percent change in observed pre-tax income, 2025

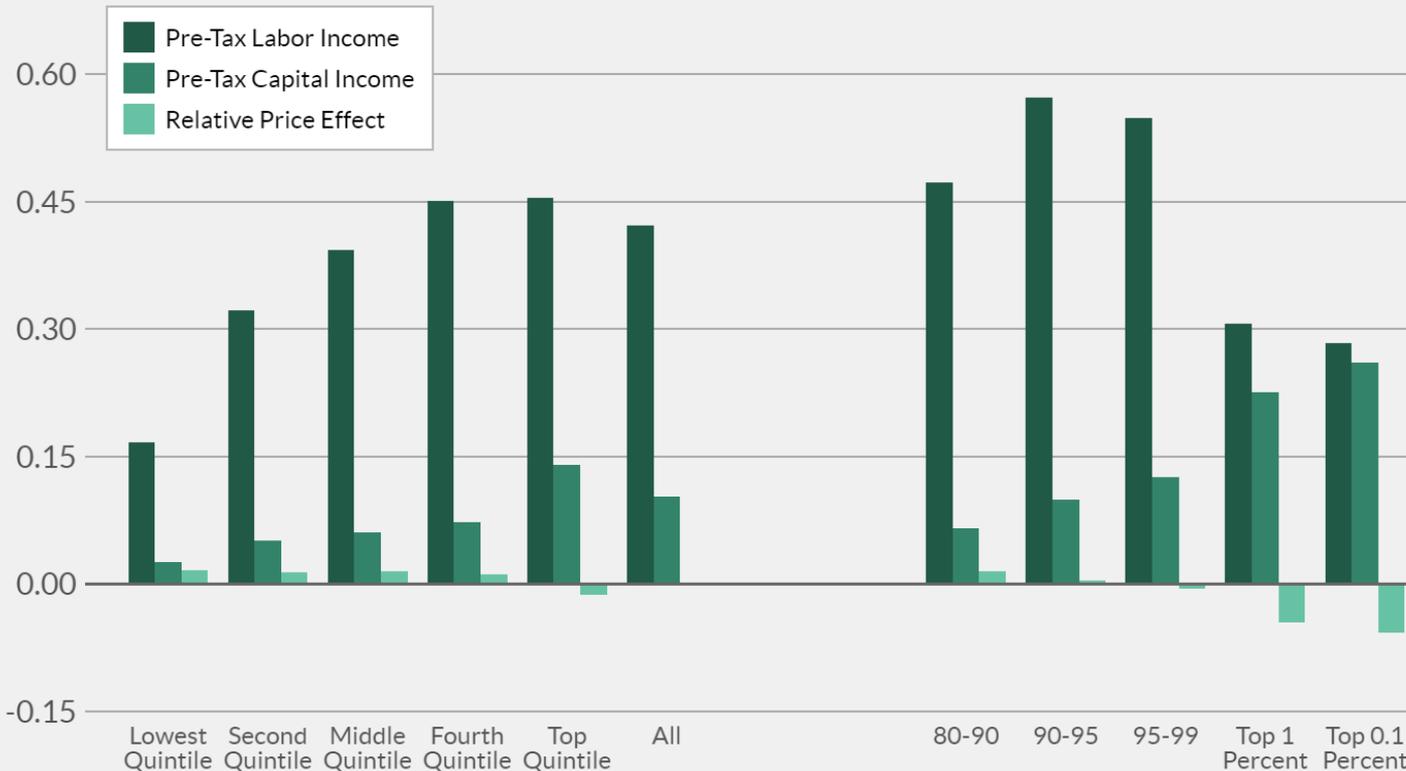


Source: Tax Policy Center, Joint Committee on Taxation, Congressional Budget Office, author's calculations.

- Mandate repeal's Medicaid and CSR effects drive the result (regressive)
- Changes in labor income are second largest driver of result (regressive)
 - Labor share of aggregate income is larger than (net) capital share
- Overall impact of TCJA is regressive, though as before there is some tailing off in the upper tail
- Factor income shares would differ from pre-tax shares, particularly at the bottom, where transfer income is a substantial portion of total income
- Assumptions are strong to convert from TPC's expanded cash income to factor so no results in this presentation (but see next slide for one suggestive result)

TCJA Likely Increases Inequality in Factor Incomes

Percent change in observed pre-tax income by channel



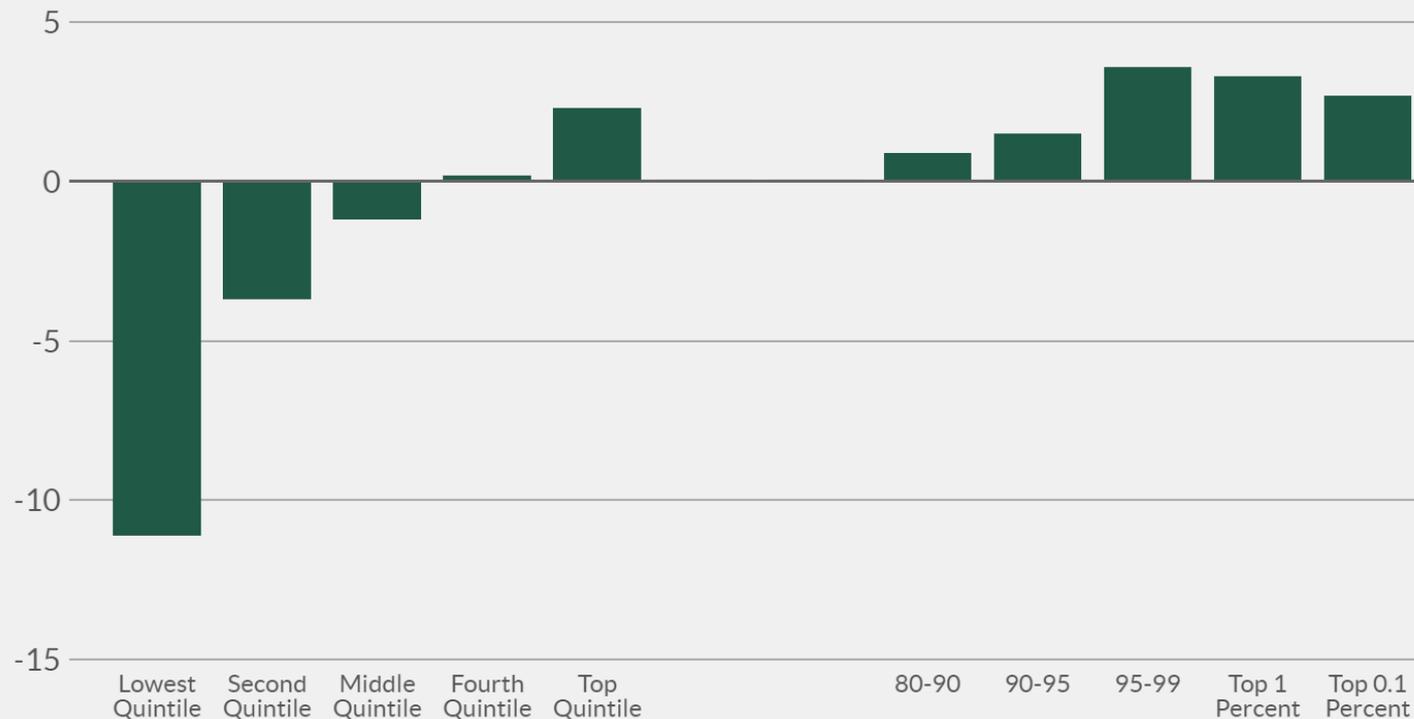
Source: Tax Policy Center, Joint Committee on Taxation, Congressional Budget Office, author's calculations.

- Key sources of uncertainty
 - The sources of uncertainty in the welfare results
 - Assumptions about microeconomic behavioral responses on the distribution of income (here: zero except for health-related)
 - Assumptions about macroeconomic behavioral responses on output and income
 - Assumptions about macroeconomic behavioral responses on the distribution of income (here: proportional to current incomes adjusted for changes in tax rates)
 - Key role of reduction in pre-tax capital incomes
 - Is this reduction proportional to capital incomes in the baseline? Is the capital income of the very wealthy the same?
 - Assumptions about foreign investors
 - Assumptions about difference between NIPA income concepts and realization-based income concepts (here: half of net capital income change appears in ECI)
 - TPC estimates are ranked by pre-tax incomes (distribution of after-tax incomes ranked by after-tax incomes would differ)

- Recognizing a Role for Deficits
 - Estimates above ignore the deficits created by TCJA
 - Sufficiently large permanent deficits require offsetting fiscal adjustments in the future
 - Fiscal adjustments will also affect welfare and inequality
 - Size of adjustment is where growth/revenue feedback/excess burden matter
 - Assuming lump-sum offsets means you can assume a smaller fiscal adjustment for a deficit-financed tax cut

Lump-sum Financing Would Make TCJA Even More Regressive

Percent change in (static) after-tax income with lump-sum financing, 2018



Source: Tax Policy Center.

- Financing with proportional spending cuts would make TCJA even more regressive and make bottom 60% of the population worse off on average, even in the short run
 - Progressive raisers required to undo TCJA's effects on inequality, e.g.
 - Higher statutory corporate rate
 - Tighter limits on interest deductibility (or deny deduction for net interest)
 - Strengthen minimum tax provisions
 - Reform investor-level taxation, e.g. mark-to-market, wealth taxation/taxation of imputed returns, deferral charges
 - Progressive increases in individual tax rates
-

- Concluding Thoughts
 - TCJA likely to increase disparities in economic well-being and incomes
 - Distribution tables provide a first-order approximation to the change in welfare
 - Growth does not have a first-order impact on welfare (already ignoring deficits)
 - Incorporating deficits directly (and thus incorporating benefits of growth) reduces the apparent benefits of a deficit-increasing proposal
 - Increases in total factor productivity are very different from increases in the use of inputs
 - Growth and other behavioral changes do have a first-order impact on the distribution of observed incomes – distinct question from welfare impact of proposals
 - Possible to design proposals that combine static tax cut and zero deficit impact: growth does not affect welfare, but it can *finance* policy changes that deliver a welfare gain
 - Gains will tend to be smaller than the apparent gains offered by deficit-increasing proposals
 - Proposals require tax offsets that are more efficient than the taxes that are cut
 - Policies intended to generate progressive increases in welfare and shared growth would look quite different from TCJA