EFFECTS OF THE TAX CUTS AND JOBS ACT: A PRELIMINARY ANALYSIS

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ABSTRACT

This paper examines the Tax Cuts and Jobs Act (TCJA) of 2017, the largest tax overhaul since 1986. The new tax law makes substantial changes to the rates and bases of both the individual and corporate income taxes, cutting the corporate income tax rate to 21 percent, redesigning international tax rules, and providing a deduction for pass-through income. TCJA will stimulate the economy in the near term. Most models indicate that the long-term impact on GDP will be small. The impact will be smaller on GNP than on GDP because the law will generate net capital inflows from abroad that have to be repaid in the future. The new law will reduce federal revenues by significant amounts, even after allowing for the modest impact on economic growth. It will make the distribution of after-tax income more unequal, raise federal debt, and impose burdens on future generations. When it is ultimately financed with spending cuts or other tax increases, as it must be in the long run, TCJA will, under the most plausible scenarios, end up making most households worse off than if TCJA had not been enacted. The new law simplifies taxes in some ways but creates new complexity and compliance issues in others. It will raise health care premiums and reduce health insurance coverage and will have adverse effects on charitable contributions and some state and local governments. Looking forward, the ultimate effects of TCJA will depend on the currently uncertain responses of other countries, the Federal Reserve Board, and future Congresses, among others.

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CONTENTS

CONTENTS

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I. INTRODUCTION

On December 22, 2017, Donald Trump signed into law the biggest tax overhaul since the Tax Reform Act of 1986. This paper summarizes the provisions of the bill—commonly referred to as the Tax Cuts and Jobs Act (TCJA)—and provides a preliminary analysis of its effects.[1]

The new tax law makes substantial changes to the rates and bases of both the individual and corporate income taxes, most prominently cutting the maximum corporate income tax rate to 21 percent, redesigning international tax rules, and providing a deduction for pass-through income. Other major changes include expensing of equipment investment; elimination of personal and dependent exemptions, the tax on people who do not obtain adequate health insurance coverage, and the corporate alternative minimum tax; and increases in the standard deduction, the estate tax exemption, and the individual alternative minimum tax exemption. Almost all the individual income tax and estate tax provisions expire after 2025, while most of the corporate provisions are permanent.

TCJA will stimulate the economy in the near term. But, most models indicate that the long-term impact on gross domestic product (GDP) will be small. The impact will be smaller on gross national product (GNP) than on GDP because the law will generate net capital inflows from abroad that have to be repaid in the future.[2] The new law will reduce federal revenues by significant amounts, even after allowing for the impact on economic growth. It will make the distribution of after-tax income more unequal. If it is not financed with concurrent spending cuts or other tax increases, TCJA will raise federal debt and impose burdens on future generations. If it is financed with spending cuts or other tax increases, TCJA will, under the most plausible scenarios, end up making most households worse off than if it had not been enacted. The new law simplifies taxes in some ways but creates new complexity and compliance issues in others. It will raise health care premiums and reduce health insurance coverage. It will affect activities in many sectors, including state and local public spending, charitable organizations, and housing.

II. TCJA PROVISIONS

Table 1 summarizes the most significant changes made in TCJA and compares them to previous law.

INDIVIDUAL INCOME TAX AND ESTATE TAX

TCJA makes significant revisions to the individual income tax and the estate tax. Unless otherwise noted, these provisions expire at or before the end of 2025. There are, however, several notable permanent provisions in this category, including the zeroing out of the Affordable Care Act (ACA) individual mandate penalty, the change in inflation indexing, and changes in the tax base for measuring business income (other than the pass-through deduction, see below) which apply to both corporations and pass-through entities.

Tax Rates

TCJA reduces marginal statutory tax rates at almost all levels of taxable income and shifts the thresholds for several income tax brackets (figure 1). The top marginal rate falls from 39.6 to 37 percent. The remaining rates are 10, 12, 22, 24, 32 and 35 percent.

Family Benefits (Exemptions, Child Credit)

TCJA repeals personal and dependent exemptions, which would have been worth $4,150 for each taxpayer, spouse, and eligible dependent in 2018, and indexed for changes in the price level afterward. In place of personal exemptions, the TCJA increases the child tax credit and creates a new $500 tax credit for dependents not eligible for the child tax credit.

TCJA expands the child credit in several ways. Under prior law, the credit was $1,000 per child under 17 years old, not indexed for inflation; an amount equal to 15 percent of earnings over $3,000 was refundable, up to the full $1,000 per child value of the credit. The child tax credit phased out starting at income of $110,000 (for married filing joint returns and $75,000 for singles).[3] The credit value and the income phaseout range were not indexed for inflation. Under TCJA, the maximum credit amount doubles to $2,000 per child under 17 years old in 2018. The refundable portion was also increased to 15 percent of household earnings above $2,500, up to $1,400 per child in 2018. The credit phaseout range was increased substantially and does not begin until income reaches $400,000 for married filing jointly returns and $200,000 for singles. The $1,400 maximum refundable amount limit is indexed for inflation, but the maximum total credit amount and the income phaseout range are not. Unlike prior law, TCJA limits eligibility for the credit to children who have a Social Security number.

The TCJA creates a new nonrefundable $500 credit for any other dependents the taxpayer can claim, including children who are too old to be eligible for the child tax credit, full-time college students, or any other adult member of the household for whom the taxpayer provides significant financial support. The $500 amount is also not indexed for inflation. Taxpayers do not need a valid Social Security number for these dependents to be eligible for the new credit.

Standard and Itemized Deductions

TCJA almost doubles the standard deduction, from $13,000 to $24,000 for married couples filing jointly, $6,500 to $12,000 for single filers, and $9,500 to $18,000 for heads of households. These amounts are indexed for inflation. The larger standard deductions will substantially reduce the number of taxpayers choosing to itemize their deductions.

TCJA also changes the structure of several major itemized deductions. Under prior law, itemizers could claim deductions for all their state and local property taxes and the larger of either income or sales taxes (subject to overall limits on itemized deductions). TCJA limits the itemized deduction for all state and local taxes to $10,000 annually, for both single and joint filers, and does not index that limit for inflation.

Under prior law, taxpayers could deduct interest on mortgage payments associated with the first $1 million of principal paid on debt incurred to purchase (or substantially renovate) a primary and secondary residence plus the first $100,000 in home equity debt. For taxpayers taking new mortgages, TCJA limits the deductibility to the interest on the first $750,000 of loan principal on primary residences only for new loans after the effective date and eliminates the deductibility of interest for home equity debt.[4]

Previously, out-of-pocket medical expenses (including costs for health insurance) above 10 percent of adjusted gross income (AGI) were deductible. For 2017 and 2018, TCJA allows deductions for out-of-pocket medical expenses above 7.5 percent of AGI. After 2018, the prior law 10 percent threshold applies.

TCJA repeals the phase-down of the amount of allowable itemized deductions (Pease provision). This limitation took effect at incomes above $320,000 for taxpayers filing joint returns ($266,700 for single filers).

Affordable Care Act (ACA) Penalty Tax

Starting in 2019, TCJA sets the Affordable Care Act's individual mandate penalty tax to zero.[5] Previously, households without qualifying health insurance were required to pay a penalty equal to the lesser of 2.5 percent of household income or $695 per adult and $347.50 per child, up to $2,085. Under the new law, individuals who do not enroll in adequate health coverage plans will not face a penalty starting in 2019. This will reduce the federal budget deficit because fewer people will obtain free or subsidized coverage, and the reduced costs of the ACA premium tax credit and other subsidies and Medicaid benefits will far exceed the lost revenue from setting the penalty tax rate to zero. This provision does not sunset.

Capital Gains and Alternative Minimum Tax

TCJA retains the 0, 15, and 20 percent preferential tax rates on long-term capital gains and qualified dividends and the 3.8 percent net investment income tax (NIIT). The 15 percent rate now applies to those with taxable incomes between $77,200 and $479,000, and the 20 percent rate applies to those with taxable income over

$479,000. Under prior law, capital gains for those in the 25 through 35 percent tax brackets were taxed at a 15 percent rate, and capital gains for those in the 39.6 percent bracket were taxed at a 20 percent rate. The TCJA separates the tax rate thresholds for capital gains and dividend income from the tax brackets for ordinary income for taxpayers with higher incomes. The NIIT applies to interest, dividends, short- and long-term capital gains, rents and royalties, and passive business income.

TCJA retains the individual alternative minimum tax (AMT) but raises the exemption levels to $109,400 for taxpayers filing joint returns ($70,300 for singles) and raises the phaseout threshold to $1,000,000 for joint filers ($500,000 for singles). Under prior law, the exemption was $86,200 for taxpayers filing joint returns ($55,400 for singles), and it began to phase out at income above $164,100 for joint filers ($123,100 for singles). The exemption amounts and phaseout thresholds are indexed for inflation.

Inflation Indexing

TCJA changes the measure used for inflation indexing, from the CPI-U to the chained CPI-U. The chained CPI-U more accurately measures changes in consumer welfare resulting from price changes because it accounts for the fact that people substitute for goods whose prices increase faster than others. It thus generally increases at a slower rate than the traditional CPI-U, implying that individuals will end up in higher tax brackets and that indexed tax credits (like the EITC) will increase at slower rates than they would have under the old indexing system. The change in indexing is permanent.

Pass-Through Deduction

TCJA introduces a new complex deduction for income from pass-through business entities (sole proprietorships, partnerships, limited liability companies, and S corporations). The deductible percentages vary based on taxpayers' income, business type, and the wages paid and property owned by the business. Joint filers with taxable income below $315,000 ($157,500 for singles) are eligible to receive a 20 percent deduction of their qualified business income (QBI), regardless of business type.

At higher income levels, business type, wages paid, and investment property affect the deductions. If taxable income is between $315,000 and $415,000 (Married Filing Jointly), the unlimited deduction for QBI phases out, with the deduction formulas depending on business type.[6] If taxable income is above $415,000 (joint filers), there is no deduction for income from a "specified service trade or business."[7] For other businesses, the deduction cannot exceed the applicable share of the greater of (a) 50 percent of W-2 wages paid by the business or (b) 25 percent of wages plus 2.5 percent of qualified property for the business.

Changes in Tax Base for Pass-Through Businesses

In general, pass-through businesses, like corporate income taxpayers, will be subject to TCJA's changes to business income and deduction items (changes in the tax base). The new law extends 100 percent bonus depreciation (more commonly known as expensing) for all business taxpayers until 2022 and then phases it out in 20 percentage-point increments through 2027. TCJA also includes simplified accounting rules for smaller firms and increases the annual Section 179 expensing limit up to $1 million for qualified property (sometimes called "small business expensing"). But the law limits the amount of net interest (interest paid less interest received) that large pass-through businesses can deduct to 30 percent of adjusted taxable income, similar to that for corporations (firms with less than $25 million in gross receipts are exempt).[8] Under prior law, interest was generally deductible without limits.

TCJA also changes the law regarding net operating losses for businesses. First, TCJA limits the size of the net operating loss deduction to 80 percent of the business's net income in a given year. Losses can be carried forward indefinitely, but not backward (except for farm businesses, in certain cases). Under prior law, losses could be carried back for up to two years and carried forward for up to 20 years. Second, TCJA eliminates the ability for a taxpayer to use a net operating loss in one business to offset income from other sources. All pass-through investment rules (in contrast to the deduction described in the previous section) are permanent except for expensing of equipment investment.

Estate Tax

TCJA doubles the estate tax exemption to $11.2 million for single filers and $22.4 million for couples and continues to index the exemption levels for inflation. The top estate tax rate remains at 40 percent.

Sunsets

A notable feature of the individual tax and the estate tax provisions is that all of them expire after 2025 except the reduction of the ACA penalty tax, the change in inflation indexing, and the changes in the business tax base that apply to both pass-through businesses and C corporations. Some provisions expire sooner (for example the increased deductibility of medical expenses applies only to tax years 2017 and 2018). In contrast, many of the corporate tax provisions discussed below do not sunset, although some of the rates for corporate tax components will change. These choices were made to limit the revenue cost of the TCJA to a level consistent with the overall constraint on the 10-year revenue loss in the Congressional Budget Resolution and to comply with Senate budget rules that require no increase in the federal budget deficit after the 10th year.

CORPORATE INCOME TAX

Tax Rate and Alternative Minimum Tax

TCJA reduces the top corporate income tax rate from 35 percent to 21 percent, bringing the US rate to below the average for most other OECD countries and eliminates the graduated corporate rate schedule. TCJA also repeals the corporate alternative minimum tax.

Corporate Tax Base

The tax overhaul allows for 100 percent bonus depreciation (full expensing) for qualified property for five years. Bonus depreciation then phases down in 20 percentage-point increments beginning in 2023 (80 percent in 2023, 60 percent in 2024, 40 percent in 2025, 20 percent in 2026, and 0 in 2027). Under prior law, bonus depreciation was allowed for 50 percent of adjusted basis in 2017, decreasing in subsequent years and fully eliminated after 2020. The small business (section 179) expensing limit was doubled to $1,000,000 (with a $2,500,000 phaseout threshold) for qualified property.[9]

The TCJA places a limit on the amount of net business interest (interest paid less interest received) that can be deducted, with the limit set at 30 percent of business income before interest, depreciation, and amortization. Starting in 2022, the adjustment for amortization and depreciation would be removed from the limitation. Businesses with gross receipts below $25 million are exempt from the limitation.[10] Previously, interest paid was generally fully deductible in computing taxable income for all businesses.

TCJA limited the deduction for net operating losses to 80 percent of taxable income. It also repealed carrybacks of losses, except for certain businesses, but allowed losses to be carried forward indefinitely. Under prior law, net operating losses could offset 100 percent of taxable income and could be carried back two years and forward 20 years.

The bill also eliminated the domestic production activities deduction (section 199) and modified other smaller provisions such as the orphan drug credit and the deduction for Federal Deposit Insurance Corporation premiums and the computations for life insurance reserves. In addition, starting in 2022, expenditures for research and experimentation would be amortized over five years instead of being immediately deductible (the amortization period is 15 years for offshore research and experimentation).

International Issues

TCJA made sweeping changes to the treatment of foreign source income and international financial flows. Under prior law, the US taxed the income of multinational firms on a worldwide basis, meaning that all a firm's income was taxed, regardless of where it was earned, less a credit for foreign taxes paid. The tax due on active foreign-source income accrued within foreign subsidiaries of US-resident multinationals, however, was deferred until the income was made available to the US parent company.

The TCJA created a modified territorial tax system. US corporations continue to owe US taxes on the profits they earn in the US. But TCJA exempts from taxation the dividends that domestic corporations receive from foreign corporations in which they own at least a 10 percent stake. Under a pure territorial system, firms would have a strong incentive to shift real investment and reported income to low-tax jurisdictions overseas and to shift deductions into the US. Several provisions were created as guardrails to reduce the extent to which companies take those actions.

The minimum tax on Global Intangible Low-Taxed Income (GILTI) imposes a 10.5 percent minimum tax without deferral on profits earned abroad that exceed a firm's "normal" return (defined in the law as 10 percent on the adjusted basis in tangible property held abroad). Companies can use 80 percent of their foreign tax credits, calculated on a worldwide basis, to offset this minimum tax. Under standard circumstances, the combination of the 10.5 percent minimum tax and the credit for 80 percent of foreign taxes means that the US minimum tax would not apply to foreign profits (in excess of a normal return) that pay a foreign income tax rate of 13.125 percent or higher.[11] However, in some situations—having to do with expense allocation, foreign tax credits, and interactions between GILTI and BEAT (see below)— the tax rate on GILTI income can be significantly higher. The statutory GILTI tax rate increases to 13.125 percent for tax years 2026 and later.

Whereas GILTI acts as a "stick" to prevent companies from investing in intangible assets overseas, a deduction for foreign-derived intangible income (FDII) acts as a "carrot" to provide an incentive for firms to hold intangible assets in their US affiliates. FDII is income received from exporting products whose intangible assets are held in the US. For example, a pharmaceutical company will be able to deduct some income from overseas drug sales if the patent on the drug is held in its US parent company. With the deduction, FDII would be taxed at a rate of 13.125 percent through 2025 and 16.406 percent thereafter instead of the statutory corporate income tax rate of 21 percent.

TCJA also creates a new base erosion and anti-abuse tax (BEAT), which—not surprisingly, given the acronym—is another "stick." BEAT imposes a minimum tax on otherwise deductible payments between a US corporation and a related foreign subsidiary. Specifically, BEAT taxes at a 10.5 percent rate the sum of the corporation's taxable income plus all deductible payments (other than costs of goods sold) made to foreign affiliates. A firm will pay the larger of its burden under BEAT or the regular corporate tax.[12]

To transition to the new system, TCJA created a new deemed repatriation tax for previously accumulated and untaxed earnings of foreign subsidiaries of US firms equal to 15.5 percent for cash and 8 percent for illiquid assets. In 2015, it was estimated that US companies held more than $2.6 trillion in untaxed income in their foreign affiliates (JCT 2016). Companies have eight years to pay the tax, with a back-loaded minimum payment schedule specified in the law.

EXCISE TAX CHANGES

The TCJA cuts taxes for most alcohol producers by reducing the excise tax from $7.00 to $3.50 on the first 60,000 barrels of beer produced by a seller, from $13.50 to $2.70 on the first 100,000 proof gallons of distilled spirits, and from $0.17 to $0.07 on the first 30,000 gallons of most wine. These tax reductions are temporary and expire after 2019.

III. FISCAL EFFECTS

TCJA is commonly referred to as costing $1.5 trillion because at the time the legislation was considered, the Joint Committee on Taxation and the Congressional Budget Office estimated it would reduce federal revenues by about $1.5 trillion through 2027, excluding any macroeconomic feedback effects (CBO 2018c; JCT 2017a).

More recently, with the shift of the 10-year budget window, CBO estimated that TCJA will increase the primary deficit by $1.8 trillion through 2028 and raise deficits (including net interest payments) by $2.3 trillion.[13] These estimates take into account many behavioral responses, but they hold macroeconomic aggregates fixed (CBO 2018b). CBO's dynamic revenue estimates, including macroeconomic feedback, predict that the law will raise primary deficits by $1.3 trillion through 2028 and unified deficits (including interest payments) by $1.9 trillion (table 2). Including the macro feedback effects, the debt-GDP ratio would rise by 6.2 percentage points by 2028 relative to a pre-TCJA baseline.

If lawmakers extended all the temporary provisions in the legislation, CBO estimates that primary deficits would rise by $2.6 trillion through 2028 and unified deficits would rise by $3.1 trillion (table 2). In 2028, the last year of the most recent budget projection, the debt/GDP ratio would be higher by 10.6 percentage points relative to a pre-TCJA baseline (excluding macroeconomic feedback). The primary deficit would be higher by 1 percent of GDP (CBO 2018b).

Federal revenues averaged 17.4 percent of GDP from 1962 to 2016 and equaled 18.1 percent of GDP in 2016 (OMB 2018b). In the wake of the TCJA, CBO projects that federal revenues will fall to 16.5 percent of GDP by 2019, the lowest share since 1965 except for 2003–04 and 2009–10. In both the latter periods, the economy experienced significant slack. In contrast, the economy is slated to run at or above full employment the next few years.

Revenues are then slated to rise to 18.5 percent of GDP by 2028 under current law. If instead, the individual tax provisions in TCJA that expire after 2025 and expensing rules for equipment are extended, CBO projects receipts will be 17.5 percent of GDP in 2028 (CBO 2018b). Many observers believe these revenue levels are too low, perhaps far too low, in light of the long-term budget shortfalls facing the country.

IV. ECONOMIC EFFECTS

BACKGROUND

In the short run, tax cuts can raise GDP by increasing aggregate demand. This raises the size of the economy relative to potential output but does not expand potential output.[14] With the economy currently close to full employment, the impact on output of increased demand is much smaller than when there is a lot of slack in the economy. As the economy reaches its capacity, increased demand will lead to increased inflation, or the Federal Reserve will suppress demand by raising interest rates.

In the long run, tax cuts can raise potential GDP by increasing incentives to work, save, and invest, thereby raising the productive capacity of the economy. These supply-side effects could lead to faster economic growth in the short and medium term and a permanently higher level of output in the long run.

Increased labor supply, either through higher labor force participation rates or increased hours per worker, translates directly into increases in total output per capita. The lower marginal income tax rates in TCJA raise the reward for extra hours of work and for investing to improve skills but other provisions—such as restrictions on state and local income tax deductions—will raise marginal tax rates for some taxpayers.[15] The Act reduces average income tax rates, which raises after-tax income for any level of work effort and thereby reduces the need to work as much to attain a given living standard. The net effect of lowering both average and marginal tax rates is, in theory, ambiguous. In practice, TPC (2017a) and CBO (2018b) estimated that the effect on labor supply from TCJA will be positive.

Increases in investment raise output gradually as they increase the size of the capital stock and capital per worker and thus raise productivity and wages. Some provisions of TCJA—such as reductions in tax rates on corporate and pass-through income and expensing of equipment investment—will raise after-tax investment returns. Other provisions—such as limits on uses of business losses, interest deductions, and the amortization of research and development expenses—can reduce after-tax returns. On balance, the new provisions are expected to reduce the cost of capital—the pretax return companies must earn to make an investment profitable—and thus raise investment (CBO 2018b; TPC 2017b). But the effects may differ dramatically across assets and industries, given the complexity and potential interactions of some of the new provisions.

Increases in investment can be financed with increased saving by government or the private sector, or with higher net capital inflows from abroad. TCJA will reduce public saving; that is, increase the federal budget deficit. Domestic saving is relatively unresponsive to changes in its after-tax rate of return and TCJA does not provide new incentives to save.[16] As a result, most of the increase in investment will be financed by increased capital inflows from abroad. CBO estimates that by 2028, after the individual income tax cuts—and their associated positive effect on labor supply—expire and incremental output occurs almost entirely from a higher capital stock, about 71 percent of the increased income from higher US GDP will flow to foreign residents (CBO 2018b, 2018d).

This introduces a critical distinction between GDP, the output of the US economy, and GNP, the income of Americans. GNP is equal to GDP plus the income that Americans earn from overseas investments less the income that foreigners earn from investment in the United States. GNP is therefore a better measure than GDP of the resources available to Americans. When domestic output is produced by capital owned by foreign investors, the capital income that accrues to investors is part of GDP but not part of GNP. As shown below, TCJA's medium-term effect on GNP is considerably less than its impact on GDP.

Three other factors will dampen the expansionary effects of TCJA. First, TCJA will reduce federal revenue, requiring increased federal borrowing. Because the US is a large economy with significant effects on global capital markets, increased federal borrowing will raise interest rates, increasing the cost of capital and offsetting some of the benefit from the lower taxes on business investment.

Second, foreign governments are likely to respond to the cut in the US corporate tax rate by lowering their tax rates and taking other actions, as they did after the US cut the top corporate tax rate in 1986. These changes, if they occur, will offset some of the benefit in attracting foreign capital from the lower US rate. TPC and others who estimate the macroeconomic effects of tax cuts, however, assume foreign government tax policies will be unchanged.

Third, lower corporate tax rates mainly subsidize the return to previously made investments. These gains benefit existing shareholders, including foreigner shareholders, but do little to raise incentives to invest. This is particularly true when investments can be expensed—the treatment given to equipment purchases under TCJA. With expensing, the effective tax rate is zero for marginal investments that are all-equity financed and negative for partially debt-financed investments. In fact, with expensing, a lower corporate tax rate raises the cost of debt-financed investments because it reduces the value of interest deductions.

The international provisions deserve special mention, both for their novelty and the complicated incentives they create. The BEAT imposes taxes on inputs, rather than profits, and it will disrupt global supply chains. By denying deductions for imports of services, it imposes a kind of "poor man's border adjustment," but one where exchange rate adjustments cannot offset the impact. The BEAT is a crude way to address earnings stripping from the US to a foreign affiliate in a lower-tax country. If the concern over earnings stripping were solely a transfer-pricing problem, then Congress could have adopted a narrower fix. By taxing foreign returns in excess of 10 percent of foreign physical assets on a current basis, GILTI may well create a system that more closely approximates a worldwide tax system than a pure territorial system. It also creates incentives, in certain cases, for firms to move tangible assets offshore. More generally, the international provisions will interact in complicated ways (Desai 2018; Sullivan 2018a, 2018b).

Finally, the deemed repatriation provisions—which allow firms to "bring back" funds previously accrued in foreign operations without incurring any additional tax liability—are likely to only have small effects on growth. Repatriation refers to the need to recognize the funds for US tax purposes before making the resources available to the parent firm for domestic capital investment or to pay dividends or finance share repurchases. The cash that firms "repatriate" will probably not do much to spur growth or create jobs because a large share of the previously accumulated foreign profits was in fact already held in banks that could lend to participants in the U.S. economy or in domestic securities before TCJA.[17] In the 2004 temporary repatriation tax holiday, firms that repatriated funds and paid shareholders did not, on average, boost their domestic investment or increase jobs, even though they were required to use the repatriated funds for those purposes (Dharmapala, Foley, and Forbes 2011).

ESTIMATED EFFECTS

There are several ways to measure the impact of TCJA on the aggregate economy. In the short term, many studies find that TCJA will raise GDP, with most of the estimates ranging between 0.3 and 0.9 percent on average over the first three years (table 3).

In the next several years, the general pattern is that GDP will be larger than it would have been otherwise, with the effect declining in the later years as the individual income tax cuts and estate tax cuts expire and business tax increases take effect. Most estimates suggest that the economy will be larger by between 0.3 and 0.7 percent over the decade. For example, TPC projects that GDP will be 0.5 percent higher than without the TCJA over the course of the decade, but the effect declines from 0.8 percent in 2018 to 0.5 percent in 2020, and to a negligible amount by 2027 (Page et al. 2017). The higher output in the early years mostly reflects the effects of increased consumer and business spending. As the economy approaches full employment, the benefits of increased demand dissipate. There is then some positive effect on output from increases in labor supply and investment, but these gains are partially offset by the crowding out of investment caused by higher interest rates.

By 2027, the central tendency indicates that the effect on the size of GDP ranges between 0.1 and 1.1 percent. Notably, CBO projects that, while GDP will be 0.6 and 0.5 percent higher in 2027 and 2028, than it otherwise would have been, GNP will only be 0.2 and 0.1 percent higher, respectively (CBO 2018b, table B-2). This difference reflects the important role of capital inflows and the resulting payments to foreign investors, discussed above. Additionally, GDP will increase more than GNP because some income currently reported as offshore earnings will now be reported as domestic profits due to the changed tax incentives for allocating profits from intangible assets.[18]

The most optimistic economic growth estimates come from the Tax Foundation (TF). TF estimates that TCJA will raise GDP by 2.86 percent in 2027 compared to what it would have been without the TCJA. This result in part reflects their assumption that the US is effectively a small open economy that can borrow additional capital without any effect on the levels of worldwide interest rates (Tax Foundation Staff 2017).[19]

All the estimates above examine the tax cut as it was legislated. If the temporary provisions are extended, and the scheduled increases in some corporate provisions are not allowed to take effect, Barro and Furman (2018) estimate that the economy would be 1.0 percent larger in 2027 than it would have been relative to a baseline that assumes pre-TCJA law holds (including crowd out effects of government debt). That baseline seems most appropriate for the estimates that examine TCJA as written. However, for an estimate that assumes the temporary TCJA provisions are made permanent—presumably because policy makers routinely extend temporary provisions—the more appropriate baseline would be to consider pre-TCJA law with the temporary provisions that existed then also extended. An estimate in Barro and Furman (2018, table 11) suggests that under this baseline, GDP in the 10th year would be about 0.3 percent larger than under a baseline using pre-TCJA law without the temporary provisions extended. Thus, controlling for policymakers' tendencies to extend temporary provisions under pre-TCJA law and under TCJA, Barro and Furman's estimates imply that TCJA would raise 2027 GDP by 0.7 percent (1.0 - 0.3).

DYNAMIC REVENUE FEEDBACK

The increases in GDP offset to some degree the revenue losses of TCJA under conventional scoring, but do not come close to making the tax cuts self-financing (table 3). For example, CBO estimates the dynamic effects reduce the primary deficit effect by 31 percent.[20] TPC and the Penn-Wharton model find offsets between 7 and 19 percent due to dynamic feedback effects. As with the overall estimates, the Tax Foundation is an outlier, projecting an offset of almost 70 percent (CBO 2018b; Page et al. 2017; Tax Foundation Staff 2017; University of Pennsylvania 2017).

V. DISTRIBUTION

DISTRIBUTIONAL EFFECTS WITHOUT FINANCING

TPC estimates that TCJA will reduce taxes on average by $1,610 in 2018—a 2.2 percent increase in after-tax income (table 4).[21] After-tax income will increase by a greater percentage for high-income than for low-income households. The boost in after-tax income is 0.4 percent for households in the lowest quintile, compared with 2.9 percent for those in the top quintile, more than 4 percent for those in the 95th–99th percentile, and 3.4 percent for taxpayers in the top 1 percent.[22]

Overall, 80 percent of taxpayers will receive a tax cut averaging about $2,100 in 2018 due to the major provisions in the TCJA, while about 5 percent will face an average tax increase of about $2,800 (table 5). The remaining 15 percent will experience no significant tax change (TPC Staff 2017, table 3). In the bottom income quintile, 54 percent will receive a tax cut, while 1 percent will face a tax increase. In the middle quintile, 91 percent will receive a tax cut and 7 percent will face a tax increase. In the top 1 percent, 91 percent will receive a tax cut and 9 percent will face a tax increase.[23]

The distributional effects of the individual income tax provisions in 2018 are similar to those of the TCJA as a whole. Income tax payments will fall by $1,260 in 2018 on average—representing a 1.7 percent increase in after-tax income. After-tax income will rise by a greater percentage for high-income households compared to low-income households (Tax Policy Center 2018c). The individual income tax provisions alone will raise after-tax income by 0.3 percent for households in the lowest quintile, 2.2 percent for those in the top quintile, 3.4 percent for those in the 95th–99th percentile, and 2.2 percent for taxpayers in the top 1 percent.

Diving deeper, the distribution of the pass-through provisions in the TCJA are even more regressive. According to JCT (2018), 44 percent of the benefit of the pass-through provision in 2018 will accrue to households earning more than $1,000,000 per year. Only 2 percent of the benefit will accrue to households making $50,000 or less.[24]

The distributional effects in 2025 are similar to those in 2018.[25] By 2027, however, the distributional effects change substantially because of the expiration of almost all of the individual income tax and the estate tax provisions by the end of 2025. On average, taxes in 2027 will be little changed for taxpayers in the bottom 95 percent of the income distribution compared to pre-TCJA law (table 6). Taxpayers in the top 5 percent will receive virtually all the tax cuts at that point. The top 1 percent will receive 83 percent of the total benefit, with an average tax cut of 0.9 percent of after-tax income. Taxpayers in the 95th to 99th percentiles will receive 16 percent of the benefit (TPC Staff 2017, table 3).

In 2027, 25 percent of taxpayers will experience a tax cut from the major provisions in the TCJA, averaging about $1,500, and 53 percent will experience an average tax increase of $180 (table 7). In the bottom income quintile, 11 percent will receive a tax cut and 33 percent will experience a tax increase, with the rest experiencing no significant tax change. In the middle-income quintile, 24 percent will receive a tax cut and 70 percent will experience a tax increase. In the top 1 percent of the income distribution, 76 percent will receive a tax cut and 24 percent will experience a tax increase (TPC Staff 2017, table 6).

DISTRIBUTIONAL EFFECTS WITH FINANCING

The standard distributional analyses shown above ignore the fact that tax cuts eventually have to be financed with higher taxes or lower spending. In this section, we explore the distributional effects of TCJA using 2018 tax parameters and assuming that one of three methods finances the tax cut: equal-dollar burden on each tax unit (per capita financing, or lump sum taxes), equal-share-of- income burden on each tax unit (proportional-to-income financing), and equal share of pre-credit income tax liability burden on each tax unit (proportional-to-income-tax financing). The most regressive of the three options, per capita financing, is the method assumed in major macroeconomic analyses of the legislation.[26] Arguably, it closely resembles recent Administration and Congressional budget proposals to cut entitlement spending.[27] Proportional-to-income-taxes financing is the most progressive of the three options.

Table 8 shows that if the legislation were financed by tax hikes or spending cuts that were equal in dollar amounts per tax unit, the combined effect of financing and the major provisions of the tax overhaul would raise taxes or fees for 74 percent of households (compared to less than 5 percent without financing), including 100 percent of households in the bottom quintile. Almost 80 percent of households in the middle quintile would face tax increases. Conversely, only 18 percent of the top quintile and 11 percent of the top 1 percent of households would experience tax increases under this financing approach. Average after-tax income in 2018 would drop by 11.1 percent in the bottom quintile (compared to an increase of 1.2 percent without financing) and 1.2 percent in the middle quintile. Average after-tax income would increase by 2.3 percent for households in the top quintile and 3.3 percent for those in the top 1 percent.

If the TCJA were financed by tax or spending changes that were proportional to each household's expanded cash income, the combined effect of financing and the major provisions of the TCJA would raise taxes for 68 percent of households, including 91 percent of households in the bottom quintile (table 8). While this option is less regressive than per-capita financing, more than half of households in the middle quintile would still face tax increases. Slightly less than half of households in the top quintile and 40 percent of the top 1 percent would experience tax increases. Average after-tax income in 2018 would drop by 1.4 percent in the bottom quintile and 0.4 percent in the middle quintile.[28] It would increase by 0.6 percent for households in the top quintile and 0.8 percent for those in the top 1 percent.

If the TCJA were financed by fees that were proportional to each household's pre-credit income tax liability, the results would be much more progressive (table 8). The combined effect of financing and the major provisions of the tax overhaul would raise taxes for 17 percent of households. Only 3 percent of households in the bottom quintile would face a tax increase. About 17 percent of households in the middle quintile would face tax increases, as would 45 percent of households in the top quintile and 72 percent of those in the top 1 percent. Average after-tax income in 2018 would increase by 0.3 percent in the bottom quintile and 0.6 percent in the middle quintile, but it would fall by 0.5 percent for households in the top quintile and 2.6 percent for those in the top 1 percent. In summary, as shown in Tables 4-7, the direct effects of TCJA are regressive. They generally provide benefits to each income group but give larger tax cuts—measured as a percentage change in after-tax income, and even more so, of course, in dollar terms—to the highest income groups. When the notion that the tax cuts must be paid for is taken into account, many households are made worse off (table 8). Under the per-capita or the proportional-to-income financing scenarios, the vast majority of low- and middle-income households would be worse off than under pre-TCJA law. Under proportional-to-income-tax financing, the results would be more progressive, and a significant share of households would still be worse off compared to a scenario without the tax cuts (albeit a smaller share than the other financing scenarios).

DISTRIBUTION WITH FINANCING AND GROWTH

Incorporating plausible estimates for faster economic growth does not change the distributional results very much. To illustrate this, in table 8 we examine the share of households whose net tax burden in 2018 after the tax cuts and financing would increase by more than 1 percent of pre-TCJA baseline after-tax income. This approximates the share of tax units whose after-tax income would drop even after accounting for an economy that would be 1 percent larger due to TCJA.[29]

Under equal per-capita financing, 63 percent of households would experience a net tax increase greater than 1 percent of pre-TCJA baseline after-tax income, including every household in the bottom quintile and 54 percent of households in the middle quintile.

Under proportional-to-income financing, 45 percent of households would experience a net tax increase greater than 1 percent of pre-TCJA baseline after-tax income, including 80 percent of households in the bottom quintile and 29 percent of households in the middle quintile.

Under proportional-to-income-tax financing, only 8 percent of households would experience a net tax increase greater than 1 percent of pre-TCJA baseline after-tax income, heavily concentrated among high-income households.

TAXATION OF LOW-INCOME HOUSEHOLDS

The taxation of low-income households is a particularly salient aspect of distributional issues. The amount of income that a taxpayer can earn without incurring any net (of credits) federal tax liability depends on source of income, filing status, number of children and the deductions a taxpayer can claim. Consider a tax filing unit with all income from wages and no itemized deductions. A single earner, with no children, would be eligible for the standard deduction and the earned income tax credit so would be able to earn $13,420 in income in 2018 before owing federal income tax (table 9). A single earner with one child (under the age of 17) would be eligible for the standard deduction, the child credit, and a larger earned income credit and would be able to earn $38,868 in income before incurring federal liability. For a couple with two children (under 17), the threshold is $60,510. Under prior law, the thresholds would have been somewhat lower in 2018—$12,670, $34,905, and $50,635, respectively.

Under TCJA, 80.6 million tax filing units (45.8 percent) will pay no federal income tax (or receive a net tax refund) in 2018. Under prior law, 76.4 million tax filing units (43.4 percent) would have paid no federal income tax (TPC 2017c).

HORIZONTAL EQUITY

Traditional tax policy principles call for the tax system to promote horizontal equity, that is to provide roughly similar tax treatment for taxpayers in similar circumstances. This is often interpreted as taxpayers with equal income facing equal tax liabilities. The TCJA largely dispenses with this notion by introducing new distinctions for various types of income-producing activities. For example, income for a wage earner is taxed differently than income for an owner of a pass-through business. And different types of pass-through businesses are taxed differently (accountants and lawyers are taxed differently than architects and engineers, for example). Business income from tangible assets (e.g., plant and equipment) is treated differently from business income from intangible assets (such as patents and trademarks). In all these ways, the TCJA makes distinctions that weaken horizontal equity (through there may be efficiency or other reasons for these distinctions).

VI. COMPLEXITY AND COMPLIANCE

Tax simplification is one of the eternal hopes of reform advocates. TCJA will simplify taxes in three areas. First, the number of people who itemize their deductions will decline significantly because of the increases in the standard deduction and the reduction or elimination of certain itemized deductions. TPC estimates that the number of people who itemize will fall by more than half in 2018, from 26.4 percent under prior law to about 11 percent under TCJA (TPC 2018a).

Second, TCJA will greatly reduce the number of people paying the individual alternative minimum tax by increasing the exemption amount, greatly increasing the income threshold at which the exemption begins to phase out, and eliminating or greatly curtailing the two main provisions that cause most taxpayers to be on the AMT: the state and local tax deduction and personal exemptions. The number of AMT payers will fall from 5.2 million in 2018 under prior law to roughly 200,000 under TCJA (TPC 2018b).

Third, the expansion of expensing will simplify record keeping for many individual taxpayers who report business income on their tax returns and for many businesses filing corporate tax returns and partnership tax returns. Simplified accounting methods for smaller businesses will also reduce compliance costs.

Despite those gains, TCJA is not going to reduce income tax returns to a postcard. In fact, it seems likely that TCJA will end up making taxes more complicated on net for many taxpayers. The main sources of additional complexity are the new distinctions that TCJA creates between (a) tax rates on earnings and business income of individual taxpayers and (b) between profits of C corporations and pass-through businesses.[30] This will lead to significant tax planning costs as taxpayers try to figure out how to organize their employment status and business affairs to qualify for the 20 percent pass-through deduction and businesses try to determine whether to change from pass-through to C corporation status.

The new 20 percent deduction for income from pass-through businesses will create complexities for taxpayers and the IRS. Some taxpayers may decide to become independent contractors instead of employees to qualify for the deduction, and active owners of S corporations will have increased incentives to declare a lower salary in order to substitute profits eligible for the deduction. The size of the deduction can vary depending on the nature of the business activity, the total income of its owner, how much the business pays its employees, and how much property it owns. Businesses that provide certain personal services, such as law firms, medical practices, consulting firms, and professional athletes (but interestingly, not architectural or engineering firms) generally, receive less favorable tax treatment than other pass-through businesses. While the distinction was intended to create guardrails against income sheltering of high-income service professionals and pass-through owners whose “reputation or skill” is a key factor in the business, the lines between industries are artificial and murky, at best. Moreover, it is unclear what constitutes sufficient “reputation or skill” to move a business into the less-favored category. Finally, it is not obvious why an architectural or engineering firm is fundamentally different from other service-based companies.[31] The provision can also provide an incentive for certain business owners to split their firms into two parts so they can reap greater benefits from the deduction. Doctors or lawyers, for example, might be able to split their operations into two distinct companies: one that provides the medical or legal services, and another that contracts with the service provider and is essentially a leasing firm that owns all of the property and equipment.[32]

The shift from reported wages to pass-through income from either a change to the use of independent contractors instead of employees or a shift in income reporting behavior will reduce voluntary compliance rates. Rates of noncompliance on pass-through income are much higher than on wage income largely because there is much less third-party reporting to the IRS for nonwage income. Almost two-thirds of income from sole proprietorships and 16 percent of income from partnerships and S-corps is not reported to the IRS, compared with only 1 percent of income from wages and salaries (IRS 2016, table 6).[33]

TCJA also may provide strong incentives for wealthy individuals without an immediate need for cash receipts to shelter their income in C Corporations since the corporate rate of 21 percent is much lower than the top individual rate (37 percent), even after the pass-through deduction is applied (Looney 2017a).[34] There are virtually no guardrails to prevent business taxpayers to switch from pass-through to C Corporation status—all taxpayers have to do is check a box on their tax form. However, the owner taking a distribution from the corporation is a taxable event, and the combination of the corporate rate and the top individual rate on capital gains and dividends (39.8 percent at the top dividend tax rate) is slightly higher than the top rate on pass-through income. So, this is not a simple tax-minimizing strategy for all to follow.

Another source of increased complexity comes from the new international taxation provisions. TCJA replaced the previous system of worldwide taxation with deferral with a modified territorial system that exempts dividends that US multinational corporations receive from their foreign affiliates, but also includes new provisions that limit the ability of US and foreign-based multinationals to shift reported profits from the United States to low-tax foreign countries. These new provisions for multinational firms, which go by the acronyms GILTI, BEAT, and FDII create new categories of income and expenses that will take years for corporations and the government to sort out. Efforts of firms to find ways around these provisions will add compliance costs and require more IRS enforcement resources. For example, FDII allows a special deduction to provide an incentive for US multinational companies to keep in the United States the intangible assets they use for exports. Firms may try to game the export condition on the deduction by selling products to foreign distributors who then resell products back into the US. BEAT imposes a new minimum tax that disallows the deduction for certain payments firm make to their foreign affiliates in order to limit their ability to shift US-source income to low-tax foreign countries. But firms may avoid this limitation by routing what would have been intra-firm transactions through third parties or by bundling other components into cost-of-goods-sold, which is not subject to BEAT. Another provision, GILTI, imposes a low-rate tax on foreign intangible profits to limit the gain from shifting profits to tax havens. Firms may engage in significant tax planning to avoid the impact of GILTI, in part by using excess foreign tax credits accrued on intangible profits in high-tax countries to offset the minimum tax on income in lower tax countries. There are also interactions between GILTI and BEAT that are too complicated to describe here.

The hasty manner in which the bill was enacted left a substantial number of glitches in the law that Treasury and IRS must address without additional guidance from Congress. For example, some argue that pass-through businesses that are S corporations may be able to avoid the stricter rules on carried interest due to a reference in the legislation that exempts corporations from the longer holding period. However, Treasury and the IRS insist that Congress intended the exemption to apply only to C corporations. In another case, two official documents present conflicting starting dates for when loss limitations are put in effect.[35]

Finally, there is the critical issue that almost all the individual income tax provisions and some of the corporate income tax provisions are scheduled to expire during the next decade. This will create complexity and uncertainty, as taxpayers aim to plan around the deadlines and assess the likelihood that the provisions will be extended.

All these complexity issues come about as IRS resources—both in financial and personnel terms—are increasingly strained. Adjusted for inflation, IRS funding in 2016 was the same in real dollars as in 1998 even though the economy and IRS responsibilities have grown (Koskinen 2015). As a result, IRS employment has fallen about almost a third—by 30,000 workers—since its peak in 1992. In the wake of the new tax law, the IRS announced in its 2017 annual report that it would need an additional $495 million in each of 2018 and 2019 to perform vital tasks such as updating computer systems, answering taxpayer inquiries, drafting new tax forms, training employees and writing new regulations (Internal Revenue Service 2017). In the recent budget bill, Congress responded with a budget increase for the IRS of approximately $200 million for FY 2018, but also indicated that the IRS should devote more than $300 million of their total budget for TCJA implementation. An appropriations bill for FY 2019 passed by a House subcommittee would increase IRS funding by almost $200 million relative to this year's level.

STATES AND INFRASTRUCTURE SPENDING

Several provisions of TCJA affect state government finances. First, the limit on state and local tax deductions will raise the net after-tax price that some higher-income residents pay to fund state and local government services. The restriction itself is quite progressive: 96 percent of the associated higher taxes will be paid by taxpayers in the top 20 percent of the income distribution, and 57 percent will be paid by taxpayers in the top 1 percent.[36] But the denial of a deduction for a portion of state and local taxes, together with state balanced budget requirements, may make it more difficult to sustain political support for current or increased levels of state spending. To the extent that the limit on deducting these taxes reduces state and local spending, the effects will be less progressive, as the majority of subnational government spending goes to items like education, health, and income support that mainly help low- and moderate-income households (Leachman and Lav 2017).

The impact of the change in federal deductibility on states' ability to finance programs, however, is unclear. As state and local spending becomes more expensive to some taxpayers, it would be natural to expect pressure to reduce such spending, and some evidence suggests that the change will reduce state spending and alter state financing (Feldstein and Metcalf 1987). But there have been significant changes in the effective tax price of state and local spending in the past, given the large changes in federal tax rates, and the effects on state spending levels are not clear.

Second, the tax overhaul will also increase the cost to states of issuing tax-exempt municipal bonds—and hence of financing infrastructure—because the reduction in corporate and individual tax rates under TCJA will increase the interest rates borrowers require on municipal bonds to keep their returns competitive with similar risk taxable bonds.[37]

Some high-tax states are considering ways to permit their residents to circumvent the $10,000 annual limit on the itemized deduction for state and local taxes. Two possible approaches are: (1) allowing certain charitable contributions to be credited against income taxes; or (2) converting income taxes to employer-paid payroll taxes. For example, Connecticut, Oregon, New Jersey, and New York recently allowed taxpayers to make charitable contributions in support of health care, education, and other public services, with nearly all of the funds creditable against their state liability. The states intend for the payments to be treated as deductible charitable contributions in the federal income tax. Other states are considering similar arrangements. New York has enacted a law that would replace (on an elective basis) income taxes with an employer-side payroll tax accompanied by a tax credit for individuals and that also includes a version of the charitable contribution approach (Loricchio 2018). States could also increase the taxes paid by pass-through businesses, which are still deductible under federal law (Avi-Yonah et al. 2017). It is not clear if any of these techniques are practical to implement or if they would stand up to legal challenge.

HEALTH CARE

TCJA undercuts the "individual mandate" in the ACA by eliminating the penalty for not having health insurance. In 2017, CBO estimated that repealing the penalty would result in 4 million fewer people with health insurance in 2019, with the number increasing to 13 million by 2027. CBO subsequently indicated that it will reduce this estimate by about one-third, but the full report is not yet published.[38] Repeal will cause some people to refrain from applying for Medicaid coverage. It will also lead some relatively healthy people to choose not to buy insurance. This will raise the average riskiness of the pool of insured people and raise premiums, which in turn will push some other people out of the insurance market. CBO predicts that this adverse selection will increase insurance premiums on the exchanges by about 10 percent. However, many consumers will be protected from the cost increase through the design of the ACA subsidies, which cover the cost of the premium above a fixed share of income for eligible beneficiaries, regardless of the premium level. Consumers will still be able to benefit from other provisions of the ACA that increased access to and quality of health insurance such as the Medicaid expansion and the prohibition of denial of coverage due to preexisting conditions.

TCJA also temporarily reduced excise taxes on alcoholic beverages. Sin taxes, such as the federal excise tax on alcohol, are designed to increase the cost to the individual of consuming harmful products, and thus in turn to reduce social harm associated with their consumption. The TCJA's decrease in the alcohol tax, if passed through to consumers, would likely increase alcohol consumption and therefore increase alcohol-related deaths and violence. One estimate suggests that the legislation could cause around 1,550 alcohol-related deaths per year, including between 280 and 660 additional motor vehicle deaths alone. Other harder-to-quantify social costs include increases in crime, domestic violence, alcohol related injuries, and indirect costs to law enforcement officials and health providers (Looney 2017b). To the extent that the temporary decrease in alcohol taxes is not passed along to consumers, the benefit would accrue to the producers of alcoholic beverages and the social costs listed above would not occur.

CHARITABLE SECTOR

The increase in the standard deduction and limits on itemized deductions will significantly decrease the number of taxpayers who itemize and thus reduce the number of people who can deduct the amount they give to charity (TPC 2018b). The reduction in individual marginal income tax rates and the increase in the estate tax exemption also diminish incentives for charitable giving. The number of households who claim a deduction for charitable contributions will fall from 37 million to 16 million in 2018, or from 21 percent of tax units to 9 percent (table 9).[39] Those who continue to itemize are likely to be those with the highest incomes, who are also likely to give the most to charities. Thus, charities may lose smaller but meaningful donations from millions of moderate-income households, but experience a less substantial change in aggregate donations. The Tax Policy Center estimates that TCJA will reduce charitable giving by about 5 percent.[40] The tax overhaul may also change the composition of donations since wealthier individuals tend to give large gifts to museums and universities, while smaller donations by middle-income individuals tend to be targeted more towards social service agencies and religious organizations.[41]

Additionally, since the estate tax directly reduces the price of charitable bequests compared to transfers to heirs, the temporary increase in the estate tax exemption in TCJA may also reduce charitable giving by upper-income households (Bakija and Gale 2003).

HOUSING

The increase in the standard deduction and the limits on the mortgage interest deduction will reduce the number of people who itemize and thus the number who could benefit from deductions related to homeownership. For those who do itemize, the scaled back deductions for interest on new mortgages and on property taxes may make monthly housing expenses more costly for homeowners.[42] The number of people who claim the mortgage interest deduction will fall from 36.9 million (21 percent of households) to 16 million (9.1 percent) under the new law (table 9). The changes may serve to slow the growth in home prices, with the biggest effects for higher-priced homes and in higher-income areas (Gale, Gruber, and Stephens-Davidowitz 2007; Gruber, Jensen and Kleven 2017; Zandi 2017). To the extent that the Federal Reserve Board raises interest rates to offset the effects of TCJA in a full-employment economy, those changes, by increasing mortgage rates, could hurt house prices, too. The changes are unlikely to have a significant effect on home-ownership rates, though.[43]

By reducing the tax subsidy for spending more on housing, TCJA could lead households to reallocate their wealth, investing less in housing and more in financial assets issued by private business and government. These changes will improve the allocation of investment by reducing the tax bias towards investing in owner-occupied housing.

TRADE DEFICITS

In a standard macroanalysis, TCJA will increase the US trade deficit. By increasing the federal budget deficit and encouraging US- and foreign-owned business to invest more in the United States, the Act will cause an inflow of funds to the United States. This in turn will cause the current account deficit to rise. As a mathematical identity, if more money is to flow into US capital markets from overseas, it will have to be balanced by increased US net purchases (imports minus exports) of current goods and services from overseas.

TCJA, however, may reduce one component of the measured trade deficit that makes the current trade deficit look bigger than it really is. When US firms hold their intangible assets (patents, trademarks etc.) in affiliates in low-tax foreign countries and pay royalties for their use in production, the royalty payments to the foreign affiliate are treated in the national accounts as imports—as if the US parent is purchasing services from the foreign affiliate. This mispricing of assets shifted between affiliates of a US multinational (incorrect "transfer prices") causes a distortion in the measurement of the trade deficit. To the extent that the GILTI and FDII provisions reduce the incentive for US multinationals to hold their intangible assets in low-tax foreign countries, it will reduce the measured trade deficit, even if there is no change in the location of where new products are developed, produced, or consumed.[44]

VIII. UNCERTAINTY

The future is always uncertain, but it seems particularly so with respect to many aspects of TCJA. As we assess the impact of the tax act, we highlight the following contingencies. One set of issues concerns the actual provisions of the new law:

- **The 21 percent corporate rate:** The last time the US had a top corporate rate this low was 1939. The impact of the low rate on capital inflows and investment and the extent to which the benefits are passed on to wages are crucial as-yet unanswered questions.
- **The pass-through rules:** At best, the new rules are inequitable and complex. At worst, the guardrails will fail and the rules will prove inadministrable, generating massive tax avoidance and large revenue losses.
- **The international provisions:** BEAT, GILTI, and FDII are novel and so will prove to be a challenge to enforce. In addition, the revenue consequences of these provisions are especially uncertain. Aggressive tax avoidance strategies may become widely used by multinational firms, significantly reducing future corporate income tax revenues.

Another set of uncertainties concerns how various sets of policymakers will respond.

- **The Federal Reserve Board:** The tax cut takes effect at a time when the economy is at full employment. The extent to which the Fed will offset the impact on the economy is unclear.
- **The states:** States will have to make decisions about the extent to which they will conform their income tax systems to include the federal changes. There may be windfall revenues to states who just adopt federal changes to the income tax bases without also reducing the tax rates in line with the federal changes. Moreover, as noted above, some states are pursuing strategies of uncertain legal status to offset the limitation on the state and local tax deduction, which could affect federal revenues.
- **Other countries:** Whether other nations will stand by and let the US become a "low- corporate tax" country relative to many of its competitors is an open question. They could reduce their own corporate tax rates, continuing a "race to the bottom." They could otherwise strengthen tax incentives to attract reported profits and production. They could also plausibly challenge some of the new provisions via the World Trade Organization (WTO). BEAT, for example, might be perceived as a selective import tariff and FDII as a selective export subsidy, in violation of WTO rules.
- **The federal government:** The response of the federal government could take several forms. First, a technical corrections bill, which cannot be enacted through reconciliation procedures and thus requires at least 60 votes in the Senate, will be needed to address drafting errors or other inadvertent mistakes or unintended consequences of the bill.[45] Second, the implementation of TCJA may reveal administrative and enforcement flaws—such as in the pass-through rules or international provisions—

that require structural reform. A similar episode occurred after the 1981 tax cut created enormous tax shelters and led to changes in 1982, 1984, and ultimately the Tax Reform Act of 1986. Third, Congress will face choices about extending the new temporary provisions in TCJA, starting as soon as 2019. As with the Bush tax cuts in 2001 and 2003, the plethora of temporary provisions in TCJA virtually guarantees that lawmakers will have to revisit tax policy in the near future. Fourth, TCJA will keep government revenues relatively low for the next several years. It is difficult to see how the US addresses its long-term fiscal shortfall with revenues at that level. As federal debt rises, policymakers will need to begin considering ways of raising revenue—including base-broadening, a value-added tax, or a carbon tax to make up the difference (as well as spending reform).

Finally, there is a question about how TCJA will change the politics of tax reform. As noted above, the share of taxpayers who itemize their deductions will fall from 26.4 percent to 10.9 percent under TCJA. This, in turn, could reduce political support for itemized deductions, which could lead to further restrictions on such items.[46]

IX. CONCLUSION

The TCJA's most fundamental changes relate to corporate and pass-through income. At a conceptual level, the idea of moving to a lower corporate income tax rate and a territorial system with safeguards against income shifting has been the source of a broad consensus in recent years. Whether the actual provisions that were enacted are the best ways to do that is a more debatable proposition. The pass-through provisions are quite complex and are not consistent with any obvious underlying set of principles. In its cut in revenues and untested structural reforms, both of which invite an imminent re-examination of tax provisions, the TCJA seems more like the Economic Recovery and Tax Act of 1981 than the Tax Reform Act of 1986.

In terms of its effects, the new tax law will raise deficits and make the distribution of after-tax income more unequal. It will increase GDP in the short term. The medium-term effects on GDP are smaller, and the long-run impact on GNP will be even smaller. The new tax law simplifies taxes for some people, but also adds complexities and exacerbates compliance issues in other areas.

The new law leaves many unanswered questions. It phases out many provisions over time, and it leaves US revenues significantly below what is needed to address long-term fiscal shortfalls. These aspects invite reconsideration of the tax policy choices made in the TCJA over the next several years.

FIGURE 1
Marginal Tax Rate by Taxable Income

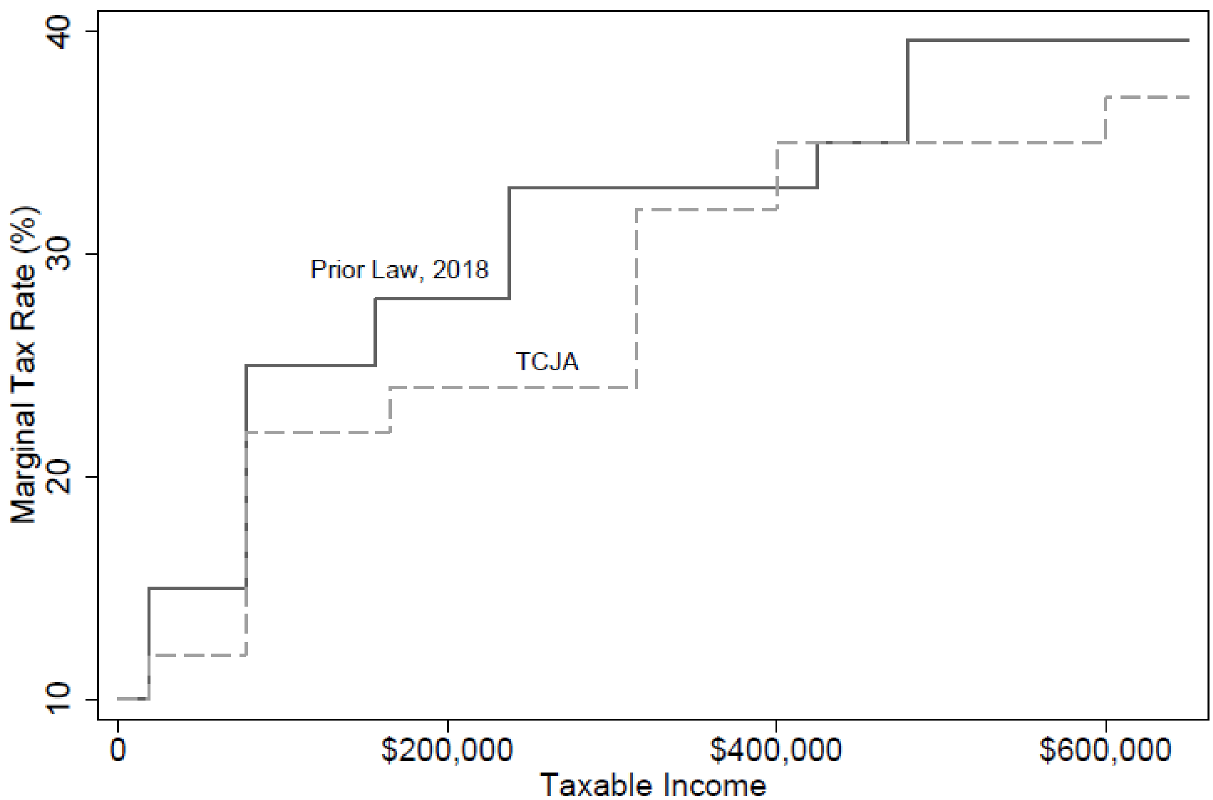

TABLE 1

Prior Law vs. TCJA Provisions, 2018

		Prior Law					Tax Cuts and Jobs Act				
		Taxable Income ($)				Tax Rate (%)	Taxable Income ($)[a]				Tax Rate (%)
		Single Filers		Married Couples Filing Jointly			Single Filers		Married Couples Filing Jointly		
		Over	But not over	Over	But not over		Over	But not over	Over	But not over	
Individual Provisions	Individual Income Tax Rates	0	9,525	0	19,050	10	0	9,525	0	19,050	10
		9,525	38,700	19,050	77,400	15	9,525	38,700	19,050	77,400	12
		38,700	93,700	77,400	156,150	25	38,700	82,500	77,400	165,000	22
		93,700	195,450	156,150	237,950	28	82,500	157,500	165,000	315,000	24
		195,450	424,950	237,950	424,950	33	157,500	200,000	315,000	400,000	32
		424,950	426,700	424,950	480,050	35	200,000	500,000	400,000	600,000	35
		426,700	and over	480,050	and over	39.6	500,000	and over	600,000	and over	37
	Individual Alternative Minimum Tax	AMT exemption equal to $55,400 (single), $86,200 (joint); Phases out above $123,100 (single), $164,100 (joint)					AMT exemption equal to $70,300 (single), $109,400 (joint); Phases out above $500,000 (single) $1,000,000 (joint); Sunsets after 2025				
	Standard Deduction	$6,500 (single), $13,000 (joint), $9,550 (head of household); Indexed for inflation					$12,000 (single); $24,000 (joint), $18,000 (head of household); Indexed for inflation; Sunsets after 2025				
	Personal and Dependent Exemptions	$4,150; Indexed for inflation					Repealed; Sunsets after 2025				
	Child Tax Credit	Credit equal to $1,000 per qualifying child under 17; Phases out above $75,000 (single); $110,000 (joint); Refundable portion equals 15% of earnings in excess of $3,000.					Credit equal to $2,000 per qualifying child under 17, $500 for other dependents; Phases out beginning at $400,000 for joint filers; Refundable portion equals 15% of earnings in excess of $2,500 up to $1,400 per qualifying child; Maximum refundable portion indexed for inflation; Requires Social Security Number to claim; Sunsets after 2025				
	Higher Education	American Opportunity Tax Credit; Lifetime Learning Credit; Tuition and Fees Deduction (expired after 2016); Student Loan Interest Deduction					No change				
	State and Local Tax Deduction	Real estate, personal property, and either income or sales taxes are deductible					Real estate, personal property and either income or sales taxes up to $10,000 (single and joint filers) are deductible; Sunsets after 2025				
	Mortgage Interest Deduction	Interest payments on up to $1.1 million of debt (including $100,000 of home equity debt) are deductible; Applicable to principle and one other residence					Interest payments on up to $750,000 of new acquisition debt are deductible; Applicable to principle and one other residence; Sunsets after 2025				

<table>
<tr><th rowspan="4" colspan="2"></th><th colspan="5">Prior Law</th><th colspan="5">Tax Cuts and Jobs Act</th></tr>
<tr><th colspan="4">Taxable Income ($)</th><th rowspan="2">Tax Rate (%)</th><th colspan="4">Taxable Income ($)[a]</th><th rowspan="2">Tax Rate (%)</th></tr>
<tr><th colspan="2">Single Filers</th><th colspan="2">Married Couples Filing Jointly</th><th colspan="2">Single Filers</th><th colspan="2">Married Couples Filing Jointly</th></tr>
<tr><th>Over</th><th>But not over</th><th>Over</th><th>But not over</th><th></th><th>Over</th><th>But not over</th><th>Over</th><th>But not over</th><th></th></tr>
<tr><td rowspan="6"></td><td>Medical Expense Deduction</td><td colspan="5">Out-of-pocket medical expenses in excess of 10% of AGI are deductible</td><td colspan="5">Out-of-pocket medical expenses in excess of 7.5 percent of AGI are deductible in 2017 and 2018; Reverts to current law in 2019</td></tr>
<tr><td>Overall Limit on Itemized Deductions</td><td colspan="5">Itemized deduction phases out starting at AGI of $266,700 (single), $320,000 (joint); amounts indexed for inflation</td><td colspan="5">Repealed; Sunsets after 2025</td></tr>
<tr><td>Top Capital Gains Rate</td><td colspan="5">23.8% (20% plus 3.8% Net Investment Income Tax)</td><td colspan="5">Rate unchanged, but based on income levels rather than brackets. Change in determination of applicable capital gains rate sunsets after 2025</td></tr>
<tr><td>Inflation index</td><td colspan="5">Consumer Price Index (CPI)</td><td colspan="5">Chain-weighted consumer price index (C-CPI)</td></tr>
<tr><td>Estate Tax</td><td colspan="5">Top rate of 40% on estates above $5.6 million; $11.2 million (couples);
Indexed for inflation</td><td colspan="5">Top rate of 40% on estates above $11.2 million; $22.4 million (couples); Indexed for inflation; Sunsets after 2025</td></tr>
<tr><td>ACA Individual Mandate Penalty</td><td colspan="5">Individuals without adequate health insurance coverage must pay a tax penalty or claim a coverage exemption</td><td colspan="5">Penalty set to zero</td></tr>
<tr><td rowspan="6">Business Provisions</td><td>Income from Pass-Through Business</td><td colspan="5">Taxed at ordinary income rates (maximum rate of 39.6%)</td><td colspan="5">Provides 20% deduction (maximum rate of 29.6%); Deduction limited above $157,500 (single), $315,000 (joint) for personal service income and based on compensation paid or investment property; Sunsets after 2025</td></tr>
<tr><td>Top Corporate Income Tax Rate</td><td colspan="5">35%</td><td colspan="5">21%</td></tr>
<tr><td>Corporate Alternative Minimum Tax</td><td colspan="5">Yes</td><td colspan="5">Repealed</td></tr>
<tr><td>New Investment Purchases</td><td colspan="5">2018: 40% bonus depreciation for qualified property;
2019: 30% bonus depreciation for qualified property;
2020: 20% bonus depreciation for qualified property;
Small business (Section 179) expensing up to $500,000</td><td colspan="5">100% bonus depreciation for qualified property; Phases down from 100% by 20% increments per year starting in 2023; Small business (Section 179) expensing up to $1,000,000</td></tr>
<tr><td>Business Interest Deduction</td><td colspan="5">Fully deductible (generally)</td><td colspan="5">Disallowed for net interest in excess of 30% of business income (excluding depreciation after 2022); Exemption for businesses with gross receipts of $25 million or less</td></tr>
<tr><td>Taxation of US Multinational Companies</td><td colspan="5">Worldwide system with deferral and foreign tax credit</td><td colspan="5">Modified territorial system with base erosion provisions; Anti-abuse tax on certain payments to foreign corporations; One-time tax on unrepatriated foreign earnings at 8% (15.5% for liquid assets)</td></tr>
</table>

Source: H. R. 1—a Bill to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018.
A Provisions revert to current law in 2026. Inflation-indexed tax parameters are computed using chain-weighted consumer price index.

TABLE 2
Cost of Tax Cuts and Jobs Act, 2019–28

	10-year change in primary deficit	10-year change in net interest	10-year change in total deficit	Percentage-point increase in debt/GDP ratio
		Billions of dollars		
TCJA as Written				
Without macro feedback	$1,843	$471	$2,314	7.76
With macro feedback	$1,272	$582	$1,854	6.22
TCJA Extended				
Without macro feedback	$2,614	$534	$3,148	10.56
		Percent of GDP		
TCJA as Written				
Without macro feedback	0.73	0.19	0.92	
With macro feedback	0.50	0.23	0.73	
TCJA Extended				
Without macro feedback	1.03	0.21	1.25	

Source: Congressional Budget Office (2018b).
Notes: Cost of extensions assumes that late-stage tax increases are not allowed to take effect.
A total dynamic fiscal effect with the cost of extensions cannot be calculated because the dynamic effects of extensions cannot be determined from available data.
Numbers may not total due to rounding.

TABLE 3
TCJA Growth Effects

	Effect on Size of GDP (%)[1]			Ten-year dynamic revenue feedback (%)
	2018–20	2018–27	2027	
TCJA as Written				
Barro and Furman (with crowd out)	--	--	0.2	16.7[2]
Congressional Budget Office	0.6	0.7	0.6	31.0[3]
International Monetary Fund	0.8	0.6	-0.1	--
Mertens	0.3-2.4	--	--	--
Moody's	0.4	0.3	0.4	--
Penn-Wharton Budget Model (low return)	--	--	0.6	7.7
Penn-Wharton Budget Model (high return)	--	--	1.1	19.1
Tax Foundation	0.9	2.1	2.9	69.5
Tax Policy Center	0.7	0.5	0.0	12.8
TCJA, Extended				
Barro and Furman (with crowd out)	--	--	1.0	20.5[2]

Sources: Barro and Furman (2018); Congressional Budget Office (2018b); International Monetary Fund (2018); Mertens (2018); Zandi (2017); University of Pennsylvania (2017); Tax Foundation Staff (2017); Page et al. (2017).
(1) All figures are approximations
(2) Dynamic revenue effects do not incorporate crowd-out.
(3) Primary deficit effect.

TABLE 4

Conference Agreement for H.R. 1, The Tax Cuts and Jobs Act

Baseline: Current Law

Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2018[1]

Summary Table

Expanded cash income percentile[2,3]	Tax Units		Percent change in after-tax income[4]	Share of total federal tax change	Average federal tax change ($)	Average Federal Tax Rate[5]	
	Number (thousands)	Percent of total				Change (% points)	Under the proposal
Lowest Quintile	48,780	27.7	0.4	1.0	-60	-0.4	3.7
Second Quintile	38,760	22.0	1.2	5.2	-380	-1.1	7.6
Middle Quintile	34,290	19.5	1.6	11.2	-930	-1.4	12.4
Fourth Quintile	28,870	16.4	1.9	18.4	-1,810	-1.6	15.8
Top Quintile	24,300	13.8	2.9	65.3	-7,640	-2.2	23.3
All	176,100	100.0	2.2	100.0	-1,610	-1.8	18.1
Addendum							
80–90	12,490	7.1	2.0	13.1	-2,970	-1.6	18.5
90–95	6,020	3.4	2.2	9.6	-4,550	-1.8	20.2
95–99	4,650	2.6	4.1	22.1	-13,480	-3.1	22.2
Top 1 Percent	1,140	0.7	3.4	20.5	-51,140	-2.3	30.3
Top 0.1 Percent	120	0.1	2.7	7.9	-193,380	-1.8	31.6

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1). * nonzero value rounded to zero; ** insufficient data

Number of AMT Taxpayers (millions). Baseline: 5.2; Proposal: 0.2

(1) Calendar year. Baseline is current law. Excludes effects of reduction in ACA Individual Shared Responsibility Payment to zero. http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm

(2) Includes both filing and nonfiling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $25,000; 40% $48,600; 60% $86,100; 80% $149,400; 90% $216,800; 95% $307,900; 99% $732,800; 99.9% $3,439,900.

(4) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

(5) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

TABLE 5

Major Provisions in the Conference Agreement for H.R. 1, The Tax Cuts and Jobs Act
Tax Units with a Tax Increase or Tax Cut, by Expanded Cash Income Percentile, 2018[1]

Baseline: Current Law

Expanded cash income percentile[2,3]	Tax Units		Tax Units with Tax Increase or Cut[4]				Average Tax Change (Dollars) for All Tax Units	
			With Tax Cut		With Tax Increase			
	Number (thousands)	Percent of total	Percent of tax units	Average tax cut	Percent of tax units	Average tax increase	All provisions	Major provisions included here
Lowest Quintile	48,780	27.7	53.9	-130	1.2	810	-60	-60
Second Quintile	38,760	22.0	86.8	-480	4.6	740	-380	-380
Middle Quintile	34,290	19.5	91.3	-1,090	7.3	910	-930	-930
Fourth Quintile	28,870	16.4	92.5	-2,070	7.3	1,360	-1,810	-1,810
Top Quintile	24,300	13.8	93.7	-8,510	6.2	8,800	-7,640	-7,430
All	176,100	100.0	80.4	-2,140	4.8	2,770	-1,610	-1,590
Addendum								
80–90	12,490	7.1	92.3	-3,370	7.6	1,800	-2,970	-2,970
90–95	6,020	3.4	94.4	-4,910	5.5	1,890	-4,550	-4,530
95–99	4,650	2.6	97.3	-13,890	2.7	8,260	-13,480	-13,280
Top 1 Percent	1,140	0.7	90.7	-61,940	9.3	93,910	-51,140	-47,550
Top 0.1 Percent	120	0.1	83.7	-285,490	16.2	387,610	-193,380	-176,070

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

* Nonzero value rounded to zero; ** Insufficient data

(1) Calendar year. Baseline is current law. Excludes reduction in ACA Individual Shared Responsibility Payment amount to zero. Due to data limitations, also excludes the following provisions: repeal of exclusion for employer-provided qualified moving expense reimbursements; repeal of deduction for moving expenses (other than members of the Armed Forces); retirement plan and casualty loss relief for certain disaster areas; repeal of deduction for alimony payments and corresponding inclusion in income; simplified accounting for small business; modify treatment of S corporation conversions into C corporations; limitation and repeal of deduction by employers of expenses for certain fringe benefits; modification of limitation on excessive employee remuneration; tax gain on the sale of a partnership interest on look-thru basis; craft beverage modernization and tax reform; and individual income tax portion of certain business provisions.
http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm

(2) Includes both filing and nonfiling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $25,000; 40% $48,600; 60% $86,100; 80% $149,400; 90% $216,800; 95% $307,900; 99% $732,800; 99.9% $3,439,900.

(4) Includes tax units with a change in federal tax burden of $10 or more in absolute value.

TABLE 6

Conference Agreement for H.R. 1, The Tax Cuts and Jobs Act
Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2027[1]
Summary Table

Expanded cash income percentile[2,3]	Tax Units		Percent change in after-tax income[4]	Share of total federal tax change	Average federal tax change ($)	Average Federal Tax Rate[5]	
	Number (thousands)	Percent of total				Change (% points)	Under the proposal
Lowest Quintile	50,190	26.9	-0.1	-4.6	30	0.1	4.4
Second Quintile	42,290	22.7	-0.1	-5.4	40	0.1	8.9
Middle Quintile	36,880	19.8	0.0	-2.1	20	0.0	13.8
Fourth Quintile	30,280	16.2	0.0	2.9	-30	0.0	16.9
Top Quintile	25,810	13.8	0.4	107.3	-1,260	-0.3	26.0
All	186,640	100.0	0.2	100.0	-160	-0.1	20.0
Addendum							
80-90	13,370	7.2	0.1	4.4	-100	0.0	19.7
90-95	6,290	3.4	0.1	3.9	-190	-0.1	21.8
95-99	4,930	2.6	0.2	16.4	-1,010	-0.2	25.4
Top 1 Percent	1,220	0.7	0.9	82.8	-20,660	-0.6	32.9
Top 0.1 Percent	120	0.1	1.4	59.8	-148,260	-0.9	32.9

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1). * nonzero value rounded to zero; ** insufficient data
Number of AMT Taxpayers (millions). Baseline: 5.6; Proposal: 6
(1) Calendar year. Baseline is current law. Excludes effects of reduction in ACA Individual Shared Responsibility Payment to zero. http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm
(2) Includes both filing and nonfiling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm
(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.
(4) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes
(5) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, the estate tax, and excise taxes) as a percentage of average expanded cash income.

TABLE 7

Major Provisions in the Conference Agreement for H.R. 1, The Tax Cuts and Jobs Act
Tax Units with a Tax Increase or Tax Cut, by Expanded Cash Income Percentile, 2027[1]
Baseline: Current Law

Expanded cash income percentile[2,3]	Tax Units		Tax Units with Tax Increase or Cut[4]				Average Tax Change (Dollars) for All Tax Units	
			With Tax Cut		With Tax Increase			
	Number (thousands)	Percent of total	Percent of tax units	Average tax cut	Percent of tax units	Average tax increase	All provisions	Major provisions included here
Lowest Quintile	50,190	26.9	11.1	-120	32.6	90	30	20
Second Quintile	42,290	22.7	23.3	-280	57.7	140	40	20
Middle Quintile	36,880	19.8	24.4	-520	69.7	150	20	-30
Fourth Quintile	30,280	16.2	33.2	-680	64.2	190	-30	-110
Top Quintile	25,810	13.8	46.7	-4,710	52.3	420	-1,260	-1,980
All	186,640	100.0	25.2	-1,540	53.4	180	-160	-290
Addendum								
80–90	13,370	7.2	38.1	-1,150	60.5	300	-100	-260
90–95	6,290	3.4	50.2	-1,320	48.7	450	-190	-450
95–99	4,930	2.6	58.0	-3,510	41.5	740	-1,010	-1,730
Top 1 Percent	1,220	0.7	75.9	-39,690	23.8	1,250	-20,660	-29,820
Top 0.1 Percent	120	0.1	91.9	-206,280	8.0	3,200	-148,260	-189,360

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0217-1).
* Nonzero value rounded to zero; ** Insufficient data
(1) Calendar year. Baseline is current law. Excludes reduction in ACA Individual Shared Responsibility Payment amount to zero. Due to data limitations, also excludes the following provisions: repeal of exclusion for employer-provided qualified moving expense reimbursements; repeal of deduction for moving expenses (other than members of the Armed Forces); retirement plan and casualty loss relief for certain disaster areas; repeal of deduction for alimony payments and corresponding inclusion in income; simplified accounting for small business; modify treatment of S corporation conversions into C corporations; limitation and repeal of deduction by employers of expenses for certain fringe benefits; modification of limitation on excessive employee remuneration; tax gain on the sale of a partnership interest on look-thru basis; craft beverage modernization and tax reform; and individual income tax portion of certain business provisions.
http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm
(2) Includes both filing and nonfiling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm
(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $28,100; 40% $54,700; 60% $93,200; 80% $154,900; 90% $225,400; 95% $304,600; 99% $912,100; 99.9% $5,088,900.
(4) Includes tax units with a change in federal tax burden of $10 or more in absolute value.

TABLE 8

Conference Agreement for H.R. 1, The Tax Cuts and Jobs Act
With and without Financing, Baseline: Current Law
Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2018[1]

Summary Table

Expanded cash income percentile[2,3]	Without Financing			Equal Per Capita Financing			Proportional-to-Income Financing			Proportional-to-Income-Taxes Financing		
	Percent of tax units with tax increase[4]	Percent of tax units with increase >1% of income	Percent change in after-tax income[5]	Percent of tax units with tax increase[4]	Percent of tax units with increase >1% of income	Percent change in after-tax income[5]	Percent of tax units with tax increase[4]	Percent of tax units with increase >1% of income	Percent change in after-tax income[5]	Percent of tax units with tax increase[4]	Percent of tax units with increase > 1% of income	Percent change in after-tax income[5]
Lowest Quintile	1.2	1.0	0.4	100.0	100.0	-11.1	90.8	79.7	-1.4	3.3	1.1	0.3
Second Quintile	4.6	2.7	1.2	98.3	95.2	-3.7	77.9	45.6	-0.8	7.8	3.8	0.7
Middle Quintile	7.3	3.4	1.6	79.8	54.1	-1.2	56.3	28.8	-0.4	16.8	8.0	0.6
Fourth Quintile	7.3	3.3	1.9	38.1	15.6	0.2	50.3	21.8	-0.2	29.6	12.5	0.4
Top Quintile	6.2	2.3	2.9	17.7	5.8	2.3	45.2	22.2	0.6	45.4	23.0	-0.5
All	4.8	2.4	2.2	74.2	63.1	0.0	68.1	44.6	0.0	17.0	7.9	0.0
Addendum												
80–90	7.6	2.9	2.0	23.1	8.2	0.9	50.2	24.3	-0.2	43.9	20.0	0.1
90–95	5.5	1.4	2.2	16.7	3.9	1.5	54.1	26.5	0.0	55.0	27.5	-0.1
95–99	2.7	1.3	4.1	6.0	1.8	3.6	21.3	10.4	1.8	30.3	15.3	0.9
Top 1 Percent	9.3	5.0	3.4	10.7	5.4	3.3	40.3	25.5	0.8	72.0	63.3	-2.6
Top 0.1 Percent	16.2	9.7	2.7	16.8	9.9	2.7	46.7	34.7	0.1	81.2	73.1	-3.5

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

Number of AMT Taxpayers (millions). Baseline: 5.2; Proposal: 0.2

(1) Calendar year. Baseline is current law. Excludes effects of reduction in ACA Individual Shared Responsibility Payment to zero. The Conference Agreement proposals' financing cost would be distributed equally per tax unit. http://www.taxpolicycenter.org/taxtopics/Baseline-Definitions.cfm

(2) Includes both filing and nonfiling units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see http://www.taxpolicycenter.org/TaxModel/income.cfm

(3) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are (in 2017 dollars): 20% $25,000; 40% $48,600; 60% $86,100; 80% $149,400; 90% $216,800; 95% $307,900; 99% $732,800; 99.9% $3,439,900.

(4) Includes tax units with a change in federal tax burden of $10 or more in absolute value. Due to data limitations, excludes the following provisions: repeal of exclusion for employer-provided qualified moving expense reimbursements; repeal of deduction for moving expenses (other than members of the Armed Forces); retirement plan and casualty loss relief for certain disaster areas; repeal of deduction for alimony payments and corresponding inclusion in income; simplified accounting for small business; modify treatment of S corporation conversions into C corporations; limitation and repeal of deduction by employers of expenses for certain fringe benefits; modification of limitation on excessive employee remuneration; tax gain on the sale of a partnership interest on look-thru basis; craft beverage modernization and tax reform; and individual income tax portion of certain business provisions.

(5) After-tax income is expanded cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); estate tax; and excise taxes.

TABLE 9
Major Tax Changes

	Prior Law, 2018			TCJA		
	Single earner	Single, one child	Married, two children	Single earner	Single, one child	Married, two children
A. Tax-Free Income						
Maximum Tax-Free Income	$12,670	34,905	$50,365	$13,420	$38,868	$60,510
Maximum EITC	$520	$3,468	$5,728	$520	$3,468	$5,728
Maximum CTC	$0	$1,000	$2,000	$0	$2,000	$4,000
# with Zero or Negative Income Tax		76.4 million (43.4%)			80.6 million (45.8%)	
B. Itemized Deductions and Higher Income Provisions						
Number who Itemize		46.5 million (26.4%)			19.3 million (10.9%)	
Tax Units with Mortgage Interest Deduction		36.9 million (21.0%)			16.0 million (9.1%)	
Tax Units with Charitable Contributions Deduction		37.1 million (21.0%)			16.0 million (9.1%)	
Tax Units with State and Local Tax Deduction		44.5 million (25.3%)			18.5 million (10.5)	
# Paying Estate Tax		5,500			1,700	
# with AMT		5.2 million			200,000	

Sources: Tax Policy Center (2017a, 2017b, 2018a, 2018b, 2018c); TPC Staff (2017).

NOTES

1 For related work, see Slemrod (forthcoming) and Harris and Looney (2018).

2 GDP is equal to the total value of all goods and services produced within the US in a given period. GNP is equal to GDP plus the income that Americans earn from overseas investments less the income that foreigners earn from investment in the United States.

3 Technically, the income measure is modified adjusted gross income, which for this purpose is adjusted gross income with certain minor adjustments for categories of foreign source income.

4 Regarding the definition of a new mortgage, according to the conference agreement, "a taxpayer who has entered into a binding written contract before December 15, 2017 to close on the purchase of a principal residence before January 1, 2018, and who purchases such residence before April 1, 2018, shall be considered to incurred acquisition indebtedness prior to December 15, 2017 under this provision" (H.R.1, "An Act to Provide for Reconciliation Pursuant to Title II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018," Pub. L. No. 115-97, 2017).

5 Because the bill was passed via reconciliation procedures, under which only provisions that directly change revenues or outlays are permitted, the bill could not repeal the mandate, but rather set the penalty tax rate to zero (Committee for a Responsible Federal Budget 2016).

6 For example, consider a taxpayer with joint taxable income of $400,000, business income of $75,000 from a specified service business (see footnote 6), business wages of $20,000, and no qualified property. Due to the phaseout, the taxpayer can only include 15 percent of QBI and wages since ($415,000 - $400,000)/$100,000 = .15. The deduction in this case would be $1,612.50, since the taxpayer must reduce their deduction by 85 percent of the difference between the deduction amount without a cap (.15 × .20 × $75,000 = $2,250) and the deduction amount if the cap applied in full (.15 × .5 × $20,000 = $1,500). For all other pass-through businesses, qualified business income does not phase out completely. Instead, the 20 percent deduction is partially limited over the $315,000 to $415,000 taxable income range by the greater of (a) 50 percent of W-2 wages for the business or (b) 25 percent of wages plus 2.5 percent of qualified property for the business. The limit is phased-in gradually over the income range. For example, if joint taxable income is $400,000, it is 85 percent of the way through the income range, and the taxpayer would reduce their gross deduction by 85 percent of the difference between the gross deduction and the cap. If taxable income is above $415,000, the deduction would equal the greater of (a) and (b), as described above, but no more than 20 percent of QBI. See Gale and Krupkin (2018) for more details.

7 A specified service trade or business is defined as "any trade or business involving the performance of services in the fields of health, law, consulting, athletics, financial services, brokerage services, or any trade or business where the principal asset of such trade or business is the reputation or skill of one or more of its employees or owners, or which involves the performance of services that consist of investing and investment management trading, or dealing in securities, partnership interests, or commodities."

8 For tax years through 2021, adjusted taxable income reflects earnings before interest, taxes, depreciation, and amortization (EBITDA). Afterward, the measure will reflect earnings before interest and taxes (EBIT).

9 Qualified property is defined as tangible personal property used in a trade or business. TCJA expands the definition to also include certain depreciable tangible personal property used predominately to furnish lodging or in connection with furnishing lodging as well as certain improvements to nonresidential real property (roofs, heating, ventilation, etc.).

10 Disallowed interest deductions may be carried forward indefinitely. However, upon the election of the taxpayer, several types of businesses, including certain real estate, farming and public utilities are exempt from the interest limitation.

11 If the foreign income tax rate is 13.125 percent, the US foreign tax credit would be 10.5 percent of applicable profits (0.80 x 13.125), exactly offsetting the US 10.5 percent tax.

12 The tax is only levied on corporations with average annual gross receipts of at least $500 million and those that have made related party deductible payments exceeding 3 percent of the corporation's total deductions for that year. For purposes here, regular corporate tax liability is post-foreign tax credit, but pre-R&D tax credit.

13 Benjamin R. Page, "CBO Thinks the TCJA Will Cost $433 Billion More than Last December's Estimate. What Happened?" *Tax Vox* (blog), Urban-Brookings Tax Policy Center, April 30, 2018.

14 Some economists argue that potential GDP depends on the path of actual GDP (DeLong and Summers 2012).

15 The Tax Policy Center (2017a) estimates that TCJA will reduce the average effective marginal tax rate on wages by 3.2 percentage points in 2018, with reductions in all income groups. These figures overestimate the true impact, though, because they omit consideration of the new limits on deductions for state and local income taxes. A rough estimate is that incorporating that limit would lower the estimated reduction to about 2.3 percentage points (Barro and Furman 2018).

16 In fact, the cut in the corporate tax rate is likely to reduce corporate pension contributions (Gaertner, Lynch, and Vernon 2018).

17 See Looney (2017c) and William Gale and Benjamin H. Harris, "Don't Fall for Corporate Repatriation," *Politico*, June 26, 2011.

18 Defining net national product (NNP) as GNP less depreciation of the capital stock and noting that TCJA will raise investment over the decade raises the possibility that the change in NNP may well be zero or negative relative to pre-TCJA law (Gale and Page 2018).

19 The large magnitude is also partly because the Tax Foundation Staff (2017) model does not fully account for the effects of the expiration of many provisions by 2027. In the long run, Tax Foundation Staff (2017) estimates an effect on GDP of 1.7 percent.

20 Congressional Budget Office (2018b, table B-3) shows the dynamic effect on deficits. That is, it incorporates changes in spending, as well as revenues, while the other estimates focus only on revenues. The CBO generally uses Joint Committee on Taxation estimates for tax items (for example, JCT 2017b).

21 See Tax Policy Center Staff (2017, table 1). To develop distributional impacts, TPC uses standard incidence assumptions—individuals bear the burden of individual income taxes; employees bear the burden of both the employee and employer share of payroll taxes; workers (20 percent), shareholders (60 percent), and all capital owners (20 percent) share the burden of the corporate tax; decedents bear the burden of estate and gift taxes. Our distributional analysis includes the effects of all major TCJA provisions except the expiration of the ACA mandate because the effects of that provision are largely on health coverage and not changes in tax receipts. Omitting this provision overstates the overall benefits to low-income households.

22 Taxpayers in the 95th–99th percentiles gain more as a share of their incomes than taxpayers in the top 1 percent because they benefit the most from the cutback in the individual alternative minimum tax, and because taxpayers in the top 1 percent are affected more by the changes in state and local income tax deductions and in loss limitation provisions, which increase tax liability.

23 TPC Staff (2017), table 4. Because of data limitations, this analysis excludes the following provisions: repeal of exclusion for employer-provided qualified moving expense reimbursements; repeal of deduction for moving expenses (other than members of the Armed Forces); retirement plan and casualty loss relief for certain disaster areas; repeal of deduction for alimony payments and corresponding inclusion in income; simplified accounting for small business; modify treatment of S corporation conversions into C corporations; limitation and repeal of deduction by employers of expenses for certain fringe benefits; modification of limitation on excessive employee remuneration; tax gain on the sale of a partnership interest on look-thru basis; craft beverage modernization and tax reform; and individual income tax portion of certain business provisions.

24 Joint Committee on Taxation estimates are not directly comparable to TPC estimates owing to differing measures of income used to group taxpayers.

25 The average tax cut declines to $1,570 in 2025 dollars, as opposed to the $1,610 cut in 2018 (TPC Staff 2017, table 2). The tax cut declines for three reasons: (1) TCJA substitutes the slower-growing chain-weighted consumer price index for the traditional CPI to adjust the standard deduction, tax bracket widths, and thresholds for certain tax credits, like the earned income tax credit; (2) TCJA substitutes an unindexed child credit for the personal exemption, which was indexed for inflation, and (3) TCJA phases out certain business tax cuts, and phases in certain business tax increases.

26 For example, see Barro and Furman (2018).

27 See OMB (2018a) and Jeff Stein, "Ryan Says Republicans to Target Welfare, Medicare, Medicaid Spending in 2018," *Washington Post*, December 6, 2017.

28 William G. Gale, "Who Will Pay for the Tax Cuts and Jobs Act?" *TaxVox* (blog), Urban-Brookings Tax Policy Center, January 2, 2018.

29 If anything, this growth assumption is generous since several studies estimate the growth effect to be less than 1 percent of GDP (table 3). Moreover, the resulting increase in national income would be smaller than the increase in GDP, since the tax cuts will induce capital inflows, which require repayment to foreigners, and because the tax cuts would induce higher investment and thus higher depreciation.

30 Eric Toder, "1986 RIP: Different Tax Rates for Different Income Sources," *TaxVox* (blog), Urban-Brookings Tax Policy Center, March 16, 2018.

31 Ruth Simon, "The Tax Break That Doctors and Plumbers Both Will Miss," *Wall Street Journal*, January 19, 2018.

32 There are many more ways enterprising taxpayers can use this provision to reduce their taxes. For details and examples, see Avi-Yonah et al. (2017).

33 This refers to the net misreporting percentage, which is the net misreported amount divided by the sum of the absolute values of the amounts that should have been reported, expressed as a percentage.

34 Certain rules related to personal holding companies and accumulated earnings limit the ability of wage earners simply to incorporate themselves to get the lower rate (Desai 2018).

35 Brian Faler, "This Is Not Normal: Glitches Mar New Tax Law," *Politico*, February 24, 2018.

36 Len Burman and Frank Sammartino, "State Responses to the TCJA's SALT Deduction Limit May be Costly and Favor High-Income Residents," *TaxVox* (blog), Urban-Brookings Tax Policy Center, January 30, 2018.

37 Daniel Bergstresser, "Tax Reform Threatens Infrastructure Investment," Econofact blog, December 26, 2017.

38 See Congressional Budget Office (2017, 2018a). Reducing the estimated loss in insurance coverage will also lower the provision's estimating budgetary saving.

39 Howard Gleckman, "21 Million Taxpayers Will Stop Taking the Charitable Deduction under the TCJA," *Tax Vox* (blog), Urban-Brookings Tax Policy Center, January 8, 2018; Tax Policy Center (2018b).

40 Gleckman, "21 Million Taxpayers Will Stop Taking the Charitable Deduction." See also Indiana University Lilly Family School of Philanthropy (2017), which predicts a 4.5 percent decline.

41 Todd Frankel, "Charities Fear Tax Bill Could Turn Philanthropy into a Pursuit Only for the Rich." *Washington Post*, December 23, 2017.

42 Conor Dougherty, "Homeowners Have Had It Good. Too Good, Says the Tax Bill," *New York Times*, December 16, 2017; Kathy Orton and Aaron Gregg, "New Tax Law Expected to Slow Rise of Home Values Creating Winners and Losers," *Washington Post,* December 29, 2017.

43 Research shows that Canada, the United Kingdom, and Australia have no subsidies for mortgage debt, yet their home ownership rates are slightly higher than those in the United States (Bruce Bartlett, "The Sacrosanct Mortgage Interest Deduction," *New York Times,* August 6, 2013). A large reduction in the value of the mortgage interest deduction in Denmark had virtually no impact on homeownership (Gruber, Jensen, and Kleven 2017). Additionally, many new US homeowners already did not itemize their deductions even under prior law (Michael Kolomatsky, "Who's Buying a First Home?" *New York Times*, April 21, 2017).

44 For example, suppose a firm holds the patents for a product in its Irish affiliate and manufactures the product in China for the US market. The product's price will include both the cost of production in China and the royalty to the Irish affiliate. The payment to the Chinese affiliate represents a genuine import cost because the product is manufactured in China. But the royalty payment to the Irish firm, while recorded as an import, may be mostly a reimbursement of the return on technology developed in the United States. If, after TCJA, the firm decides to locate the intellectual property associated with future technology in the United States, then the value of the future imports of their new products will include only the reimbursement for manufacturing costs and not the royalty payment.

[45] Faler, "This Is Not Normal."

[46] See Graetz (2011) and Timothy Taylor, "The Share of Itemizers and the Politics of Tax Reform," *Conversable Economist* (blog), April 16, 2018.

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