

**WRITTEN STATEMENT
BEFORE THE UNITED STATES CONGRESS JOINT ECONOMIC COMMITTEE
HEARING ON “THE POSITIVE ECONOMIC GROWTH EFFECTS OF THE TAX
CUTS AND JOBS ACT”**

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I'd like to start this testimony by thanking Chairman Paulsen, Ranking Member Heinrich, and all members of the Joint Economic Committee for inviting me to testify at this important hearing on the topic of taxes and economic growth. It is an honor to receive this invitation.

In addressing the projected economic effects of the Tax Cut and Jobs Act of 2017 (TCJA), my testimony focuses on three main points:

- (1) The TCJA is poorly designed to spur new investment in a cost-effective way, providing massive windfall gains to investors and driving down certain types of investment;
- (2) The TCJA exacerbates a deteriorating fiscal outlook which will in all likelihood eventually hurt the wellbeing of middle-class families; and
- (3) The TCJA is poorly designed to raise wages and benefit workers.

After summarizing the tax cut and reviewing independent estimates of the legislation, I elaborate on these points while also raising several other concerns.¹

I. Summary of the TCJA

The TCJA is an exceptionally broad and complex piece of legislation, implementing major changes in the corporate, individual, and estate tax codes. While the TCJA makes dozens of changes to various aspects of business taxation, the major elements can be summarized in four

¹ Much of this testimony is drawn from a co-authored paper with Adam Looney (Harris and Looney 2018) titled “The Tax Cut and Jobs Act: A Missed Opportunity to Establish a Sustainable Tax Code”; the paper is available here: https://www.brookings.edu/wp-content/uploads/2018/05/es_20180524_harris-looney_taxreform.pdf. The views expressed are my own and should not be attributed to Kellogg School of Management or Northwestern University.

key changes. One, steep and permanent cuts in the top corporate tax rate from 35 percent to 21 percent. Two, a temporary expansion of expensing provisions, allowing for temporary accelerated write-offs for machinery and equipment, offset by scaling back of some business tax benefits. Three, substantial changes to the system of taxing multinational corporate activity abroad, including elimination of the tax on repatriated dividends, a new minimum tax on intangible profits in low-tax countries, an anti-base erosion tax, and a one-time transition tax on pre-existing foreign earnings. Four, a new and complicated tax deduction on profits for the owners of pass-through businesses, such as partnerships, S corporations, and limited liability corporations.

The individual side includes five major elements. One, temporarily lower statutory tax rates through 2025 and, due to changes to the indexing formula, higher tax burdens thereafter. Two, temporary elimination of personal exemptions in return for a larger standard deduction and a more generous Child Tax Credit with expanded eligibility. Three, temporary limits on certain kinds of itemized deductions, including a lower limit on the size of a mortgage that generates deductible interest, a \$10,000 annual limit on deductible state and local taxes, and the elimination of the deduction for miscellaneous itemized deductions. Four, a temporarily higher Alternative Minimum Tax exemption. Five, permanent elimination of the penalty for not obtaining health insurance. All of the temporary provisions expire after 2025.

The bill also shrinks the estate tax by approximately doubling the estate tax exemption to roughly \$20 million per couple, with conforming changes to the gift tax. This provision also expires after 2025.

II. Economic analysis of the TCJA

A collection of independent entities have evaluated and projected the economic impact of the bill. Overall, these entities typically project TCJA to boost economic activity initially, but slow the growth rate of the economy in later years. In the first few years, lower corporate and business taxes, temporary expensing of investment, and lower rates on individuals increase investment and labor supply. Over time, however, rising interest rates due to growing deficits and the expiration of temporary tax cuts drags down economic growth. In addition, the legislation drives up borrowing from abroad, giving foreign investors a larger claim on domestic income—leaving national income earned by Americans little changed by 2028. For example, the Congressional Budget Office (CBO) projects that the TCJA will grow Americans' inflation-adjusted income by just 0.1 percent after 10 years, while leaving our nation in a markedly worse fiscal position.

All told, the bill sharply cuts tax rates on capital. Accounting for the various impacts, CBO estimates the business reforms lower the marginal tax rate on capital by 1.5–3.4 percentage points in the budget window (CBO 2018b)—with the most pronounced impacts coming in 2020 and 2021, leveling off around 1.5 percentage points in 2027 and 2028. As discussed below, these changes in marginal tax rates on capital, coupled with other changing incentives, produce

markedly different impacts on various types of investment, with equipment and non-residential structures generally benefitting and intellectual property and residential structures suffering.

As with capital, the TCJA's impact on labor income varies over time. Over the first eight years of the budget window, the temporary tax cuts on individual income boost labor supply, while their expiration and permanent changes in price indexing more than reverse the initial boost. The impacts of tax rate cuts are also balanced against idiosyncratic changes that offset the benefit of the individual cuts, including the limits on deductions for mortgage interest and state and local taxes, higher taxes imposed on compensation over \$1 million paid to certain employees, and the repeal of deductions for unreimbursed employee business expenses. With the expiration of the individual income tax cuts in 2025, the positive impacts of the bill on labor supply dissipate. All told, marginal tax rates on labor are a few percentage points lower in the initial years, but are then slightly higher in the years following the expiration of the cuts.

The plan does little to permanently broaden the tax base. On the individual side, the increases in the Child Tax Credit and expanded standard deduction offset the repeal of personal exemptions. The plan makes judicious changes to the mortgage interest deduction and places limits on state and local tax deductions. On the business side, the tax base is narrowed both by the new pass-through business deduction, new deductions for intangible income and the shift to a territorial tax system, and the extension of expensing and expansion of favorable accounting treatment to businesses. These changes are partially offset by limitations on interest expense and NOL deductions, and the new minimum tax on global intangible income.

The economic efficiency of these changes in business tax expenditures is uncertain; while the new tax breaks encourage certain types of new investment, the limitations on interest deductibility and NOLs raise taxes elsewhere and discourage risk taking and entrepreneurial activities. Many of the largest tax expenditures are left untouched, including the exclusion of employer-provided health insurance, deferred taxes on retirement contributions, and preferential rates on investment income.

Lower rates and the little-changed tax bases means the bill sharply increases deficits and the cumulative public debt. CBO estimates that the deficit as a share of GDP will rise to 5.4 percent in 2022, compared to a 50-year average of 2.9 percent. As a consequence, public debt as a share of GDP is projected to rise an additional 6 percentage points by 2028 (CBO 2018a). These new additions to near-term deficits exacerbate an already precarious long-term debt trajectory. For example, Auerbach, Gale, and Krupkin (2018) show that stabilizing the debt-to-GDP ratio at its current level requires shrinking the deficit by 4 percent of GDP—equal to an immediate (and permanent) increase in revenues of 24 percent (or shrinking spending by 21 percent).

Higher deficits and rising debt will push up interest rates, crowd-out private investment, and increase borrowing from abroad. Claims that the revenue lost from the bill would be replaced by economic growth are greatly exaggerated, with CBO (2018b) estimating that the bill would generate just \$461 billion in deficit reduction through economic growth. Put differently,

just 20 percent of the \$2.3 trillion revenue cost would be offset.² Because private capital investment is more productive than public consumption, higher deficits crowding out private capital investment lowers long-term growth. Thus, the effects of crowd-out peak in 2022, when the impact of rising federal deficits reaches its high point. CBO (2018b) puts the reduction in private investment from crowd-out at approximately \$60 billion.

As a result of these shortcomings, most independent analyses find the bill will have only modest effects on economic growth. Macroeconomic analysis from CBO found that the average change in key macroeconomic variables—the capital stock, employment, and most importantly, output—would all rise by less than 1 percent throughout the budget window.³ The moderate declines in statutory tax rates, in part because of the corresponding limits on itemized deductions and the impact of bracket creep due to indexing for inflation using the chained CPI, ultimately only reduce marginal tax rates on wages by less than 2 percentage points—with changes effectively falling to zero after the expiration of the cuts in 2025 (CBO 2018b). Between tepid effects on growth and the increase in borrowing from abroad, gross national product—income earned by Americans—is little changed in 2028.

Analysis by academic economists have reached similar conclusions. A recent paper by Barro and Furman (2018) utilizes a standard neoclassical to model the macroeconomic impacts of the TCJA. Under their analysis, the tax cut primarily impacts the economy through reductions in the user cost of capital, which will lead to changes in the aggregate stock of capital in the economy. Barro and Furman find that the impacts of the tax cut are positive, but generally modest at best. Barro and Furman estimate that the tax law boosts GDP by 0.4 percent over a decade if higher interest rates don't crowd-out investment and by just 0.2 percent if it does.⁴ Under a scenario where the provisions of the tax cut are made permanent, the 10-year GDP impact is 1.2 percent assuming no crowd-out effects and 1.0 percent incorporating crowd-out. These growth levels imply 10-year average annual growth impacts of between 0.02 percent and 0.13 percent.

Table 1. 10-Year Growth Estimates of Tax Cuts and Jobs Act

		<u>Legislation as Enacted</u>	<u>Provisions Become Permanent</u>
10-year change in GDP	without crowd-out	0.4%	1.2%
	with crowd-out	0.2%	1.0%
10-year change in GDP, annualized	without crowd-out	0.04 percentage points	0.13 percentage points
	with crowd-out	0.02 percentage points	0.10 percentage points

Source: Barro and Furman (2018).

² The \$571 billion in additional revenue is offset by a \$110 billion increase in the cost of servicing the increase in debt.

³ Specifically, private non-residential fixed investment, employment, and overall output would be 0.3, 0.6, and 0.7 percent higher through the 10-year budget window (CBO 2018b).

⁴ Barro and Furman model interest rate changes based on Laubach (2009) which assumes that a 1 percentage point increase in the unified deficit (as a share of GDP) raises interest rates by 25 basis points.

Analysis of the TCJA by other research institutions also find small growth effects in the 10-year budget window. Comparing various organization’s projected growth impacts shows a remarkably similar pattern (CBO 2018b, see Table 2 below). Virtually all of the projections find the 10-year impact on the level of GDP to be less than 1 percent—with the lone exception being the conservative Tax Foundation estimates. (The International Monetary Fund found that the tax cut would slightly shrink the economy after ten years, all others found positive impacts.) Almost all organizations find a moderate uptick in the level of GDP in the initial years, following by negative or subdued growth between 2020 and 2022.

Table 2. Assorted Estimates of the Effects of the 2017 Tax Act on the Level of Real GDP

	First Five Years					Tenth Year	Average		
	2018	2019	2020	2021	2022	2027	2018–2022	2023–2027	2018–2027
Moody's Analytics	0.4	0.6	0.2	0.1	0	0.4	0.3	0.3	0.3
Macroeconomic Advisers	0.1	0.3	0.5	0.6	0.6	0.2	0.4	0.5	0.5
Tax Policy Center ^a	0.8	0.7	0.5	0.5	0.5	*	0.6	0.3	0.5
International Monetary Fund	0.3	0.9	1.2	1.2	1	-0.1	0.9	0.3	0.6
Joint Committee on Taxation	–	–	–	–		0.1 to 0.2	0.9	0.6	0.7
Congressional Budget Office	0.3	0.6	0.8	0.9	1	0.6	0.7	0.8	0.7
Goldman Sachs	0.3	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.7
Tax Foundation	0.4	0.9	1.3	1.8	2.2	2.9	1.3	2.9	2.1
Penn Wharton Budget Model	–	–	–	–	–	0.6 to 1.1		–	–
Barclays	0.5	–	–	–	–	–	–	–	–

^a Values are for fiscal years.

GDP = gross domestic product; – = notavailable; * = between -0.05 percent and zero.

Source: CBO (2018b).

Moreover, focusing on GDP overstates the boost to American’s incomes from the TCJA because much of the new activity will benefit foreign investors. As Gale and Page (2018) explain, lower taxes on corporations and capital investments will encourage additional capital investment, but most of that new capital will be financed by foreigners. As a result, payments to foreign owners—interest, dividends, or corporate profits—will rise. They note that while CBO’s projection of production within U.S. borders will increase by 0.5 percent by 2028, the projected income accruing to Americans will barely rise. After accounting for the depreciated capital owned by Americans, the net change in real income for Americans is projected to be effectively zero after ten years.

Beyond its aggregate effects, the bill has uneven effects across sectors. Increases in marginal tax rates in high-tax states (because of the limit on the deductibility of state and local taxes) and implicit reduction in the exclusion for municipal bond interest may shift the level and composition of subnational government spending and financing. The elimination of the penalty for not carrying health insurance will cause fewer healthy people to carry insurance and may increase cost of insurance for some groups. Changes to the use of itemized deductions will raise the after-tax cost of charitable giving and will shift incentives for homeownership (Gale *et al.* 2018).

Lastly, aggregate growth and sectoral impacts aside, the package also represents a shift in tax burden away from capital and towards labor. At 21 percent (plus shareholder-level taxes), the corporate burden is now below the combined payroll plus income tax rates applied to wage earners; for qualifying pass-through business owners, the rate can be much lower. In addition, with new limitations on the deductibility of executive compensation and a corresponding tax on tax-exempt entities, the top marginal rate on those wages exceeds 50 percent; unreimbursed business expenses are no longer deductible for employees; and state and local taxes remain deductible for corporate businesses, but are limited for wage earners. Hence, the bill encourages more of national income to accrue to businesses and less in the form of wages.

All told, the combined evidence on the growth impacts of the tax act suggest it will slightly grow the economy in the near-term, reduce growth over the longer term, and net out close to zero for income earned by Americans. While that conclusion varies slightly depending on modeling assumptions, all estimates suggest a small long-run impact. My view is that the TCJA provides too little boost to economic growth to offset the eventual pain that will come later with higher public debt. This is a missed opportunity to reform the individual and corporate tax codes. In an era of slowing economic growth, a more thoughtful reform could have provided a welcome lift to the trajectory of U.S. growth.

III. The primary economic shortcomings of the TCJA

My testimony below raises serious concerns with the legislation's ability to substantially raise economic growth over the medium- to long-term. From the outset, it is worth noting that economic growth is not the only consideration when evaluating the merits of a tax reform. In particular, a reform's impact on the progressivity of the tax code is also an important—and often well-studied—factor.

Independent analysis of the TCJA's relative impact on taxpayers of different income levels suggests that the cut will substantially weaken the progressivity of the tax code over time. For example, the independent and non-partisan Tax Policy Center (2017) found that by 2027, the TCJA will modestly lower after-tax income for middle-income households (with a tax increase of roughly \$50), while raising income for the top 1 percent by 0.9 percent (with a tax cut of \$20,660). The merits of such a shift depend on one's value judgement regarding the appropriate progressivity of the tax code and, more broadly, the level of income inequality in the economy. With that caveat, my testimony below will mostly ignore progressivity considerations and instead focus on the economic impact of the legislation.

- (1) The TCJA is poorly designed to spur new investment in a cost-effective way, providing massive windfall gains to investors and driving down certain types of investment.**

One of the most significant shortcomings of the TCJA is the large windfall gain provided to owners of already committed capital. In this context, windfall gains refer to tax cuts awarded to individuals and businesses for something they have already done. The corporate tax cut, which reduced revenues by \$1.35 trillion over the budget window, is a classic example of a windfall gain. (Part of the corporate tax cut that reduces future taxes on new investment would not be classified as a windfall.) By reducing future tax rates, the TCJA increased the profitability of investments that have already been made—without requiring that corporations make any new investment. Since the aggregate economic growth owing to a tax cut is largely determined by its ability to raise investment or increase labor supply, windfall gains represent a wasted opportunity to boost the economy for the long-run. This shortcoming is one of the primary reasons why so many independent estimates project the Act to have a near-zero impact on growth.

To better understand why the TCJA has such limited growth impacts, it may be useful to compare the design of TCJA—a reform motivated by its purported economic effects—with idealized reforms studied in the economics literature. Economists have long-studied the economic impacts of major tax reforms that would fundamentally alter incentives for various factors of production and have profound impacts on capital and labor markets. A critical observation is that the pro-growth effects of fundamental tax reform are not about the level of tax revenues, but rather about the structure of the tax system. In particular, the benefits of fundamental reform, such as moving from an income tax to a consumption tax, reflect one fundamental element: using a tax on old capital to finance lower rates on wages and new investment.⁵ Such reforms improve the prospects for both workers and active investors because they increase new investment, but without shifting the tax burden to workers. The losers in this scenario are the owners of already committed capital or investments earning economic rents who see their after-tax return decline.

The importance of the tax on old capital is widely recognized in the academic literature studying and simulating tax reform.⁶ This literature examines an assortment of tax reforms using a wide variety of models, but the clear winners are those reforms that use the levy on existing capital to reduce rates on more productive activities. For instance, several papers attempt to model the effects of alternative tax reforms on economic growth, wages, and the wellbeing of workers (Altig *et al.* 2001; Fullerton and Rogers 1995; Elmendorf and Reifschneider 2002). Altig *et al.* (2001), for example, model a variety of reforms and offer the clearest hierarchy for ranking fundamental tax reforms. In their ranking, the *only* reform that is both pro-growth and net positive for middle-class wage earners is the X-Tax—a progressive consumption tax. In effect, the X-Tax uses the tax on old capital implicit in the business cash flow tax to provide expensing for new investment and lower the tax rate on wages. Taxpayers get the triple benefit

⁵ While taxing old capital is sometimes viewed as applying a second (consumption) tax to income that has been previously subject to income or payroll tax, the reality is that a sizable share of income either avoids income tax or benefits from preferential rates.

⁶ In testimony before Congress, Hassett (2012) reviews the economic literature on optimal taxation at length, observing that the strongest effects on economic growth derive from expensing of business investments, rather than reducing corporate taxes or taxes on capital gains.

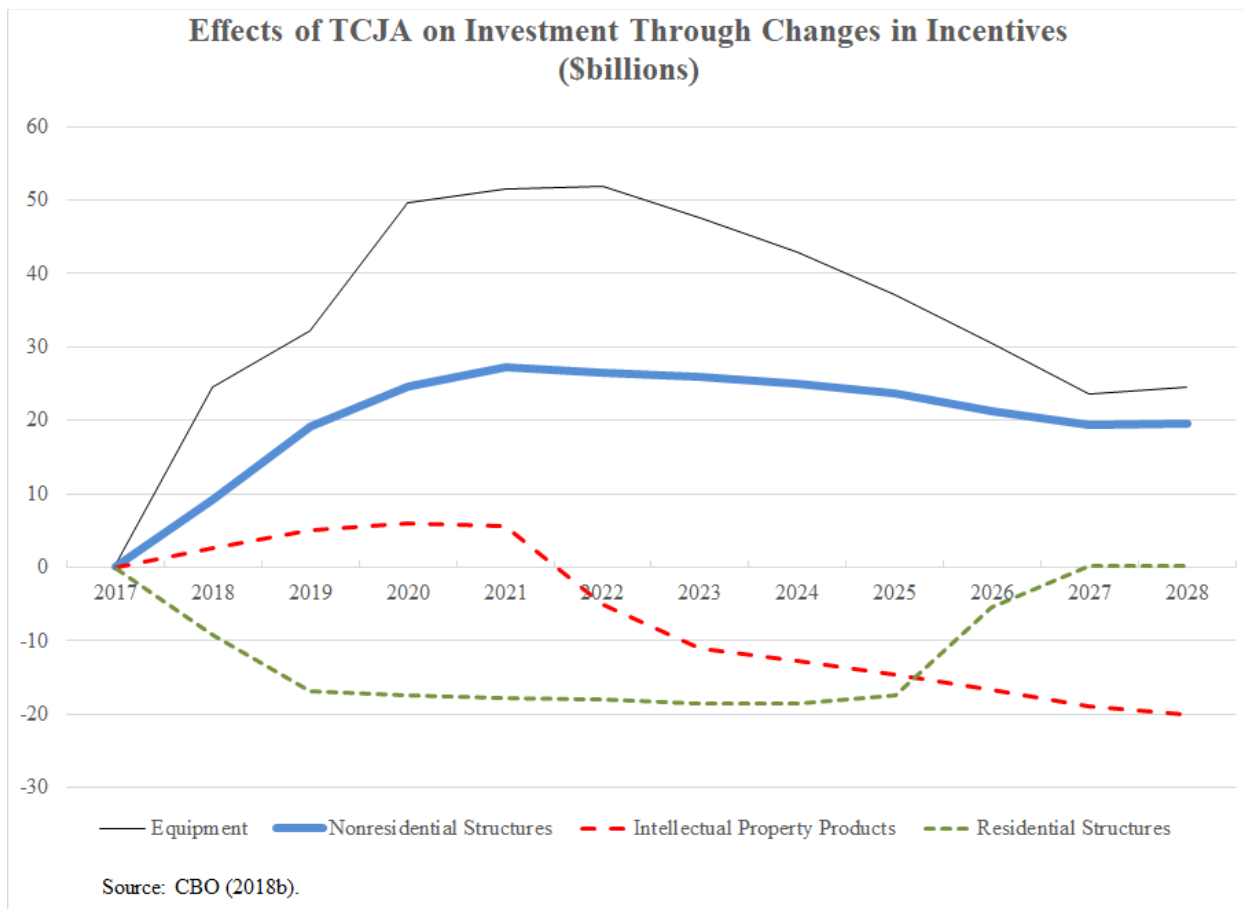
of low tax rates, increased productivity, and progressive incidence—the primary cost of such reform is that investors on already-committed capital pay higher taxes (and receive lower profits) than initially anticipated.

The key observation is that any new reform that provides windfall gains to already-committed capital must compensate for those gains in ways that will stunt growth. That makes it difficult for any reform that increases the reward for old capital to be growth enhancing. As a starting point, that suggests that reversing or recapturing the TCJA's windfalls should be a top priority.

For instance, there are good arguments that the reduction in the corporate rate to 21 percent went too far, and that instead raising the corporate rate to somewhere between this new low and the old rate of 35 percent has several advantages. First, the corporate tax system applies to a large share of income and produces substantial revenues, which cannot be replaced without imposing new taxes elsewhere in the economy. Second, it is progressive with almost 70 percent of its burden falling on high-income taxpayers (Cronin *et al.* 2013). Third, setting the total tax rate on corporate (or business) income at or above the top rate on wages is a substantial source of simplification because it encourages most labor income to be paid out as wages (rather than retained as profits). That treatment largely eliminates inefficient tax sheltering and tax avoidance behaviors, and reduces the need for complex and onerous rules differentiating each type of income. Raising the U.S. corporate rate to the range of 25 to 28 percent would remain comparable to peers in developed economies, but the effective tax rates on new investments would be far lower because domestic investments could benefit from R&E credits and expensing of investment.

Similarly, windfall gains to non-corporate capital owners could also be reversed by eliminating the newly-enacted pass-through deduction. From the perspective of simple, efficient, and fair tax policy, the single worst change in the entire legislation is the reduced rate on qualified pass-through business income because it reduces progressivity, picks winners among businesses, increases complexity, and exacerbates domestic distortions, all while cutting revenues.

A related concern with the TCJA is that, while it does boost aggregate investment (albeit in an exceptionally costly way), the tax act will actually *reduce* certain types of investment. In particular, the TCJA will lower total investment in both residential real estate and investment in intellectual property. The reduced investment in residential real estate—owing largely to reduced ability to deduct housing-related itemized deductions—is estimated by CBO to amount to nearly \$20 billion less in investment annually from 2019 through 2025. Similarly, changes in the treatment of depreciation for R&D and software development beginning in 2022 mean that investment in intellectual property will fall by nearly \$20 billion annually in 2022 through the end of the budget window.



(2) The TCJA exacerbates a deteriorating fiscal outlook which will in all likelihood eventually hurt the wellbeing of middle-class families.

As members of this committee are well-aware, our nation faces serious long-term fiscal challenges. The Congressional Budget Office recently projected that the public debt as a share of GDP would reach 152 percent in 2048. These projections, however dire, may actually understate the magnitude of our country’s long-run fiscal imbalance. For example, a study I published with co-authors Alan Auerbach and William Gale projected that the debt-to-GDP ratio would exceed 180 percent of GDP by 2040 if our country fails to adequately contain growth in health care costs (Auerbach, Gale, and Harris 2014). Lower-than-projected economic growth, additional unpaid-for tax cuts, higher levels of public spending, and weakened tax compliance could all lead to higher deficits over time.

The consensus among economists is that the TCJA starkly increased short-run deficits and public debt.⁷ Independent estimates of the cost of the TCJA, even when incorporating

⁷ In a University of Chicago survey of prominent economists regarding whether the tax plan would “substantially” increase the debt-to-GDP ratio after a decade, 45 percent of respondents strongly agreed, 43 percent agreed, and 2 percent were uncertain.

dynamic feedback, put the combined fiscal impact at around \$2 trillion over the budget window, when the interest costs of additional borrowing are added to the lost revenue owing to the tax cut.

Despite these soaring costs, CBO estimates may actually understate the magnitude of the legislation's impact on deficits and accumulated debt. This is because the TCJA's sweeping cuts to the individual income, corporate, and estate tax rates are partially financed by shrinking selected tax expenditures or eliminating certain deductions, but also by provisions that raise revenue in the budget window but actually worsen long-term deficits. In particular, the one-time repatriation on deferred foreign income and the zeroing of the Affordable Care Act shared responsibility tax each raise roughly \$300 billion over the 10-year budget window, but worsen deficits in the long-run.

And the cost of the legislation rises if the expiring provisions are assumed to be permanent. According to CBO, extending the provision that allows businesses to immediately deduct the cost of their investments—which expires in 2022—would increase deficits by \$122 billion over the 2019–28 period. Extending expiring individual income tax provisions and the increase in the estate and gift tax exemption would add another \$650 billion to the cost. Along with extensions of several smaller non-TCJA tax provisions, and postponement of healthcare taxes, this alternative fiscal scenario increases the federal debt by an additional \$1.2 trillion by 2028. This would place federal debt at 105 percent of GDP that year, its highest level since World War II.

These soaring deficits will eventually have deleterious economic and social impacts—although the nature of impact depends on the eventual response by Congress. Here I address two potential outcomes: one where Congress responds by extending the tax cuts without a simultaneous change in spending, and another where steep cuts lead to marked reductions in social programs such as Social Security and Medicare. Congress could also respond by raising future revenue or by cutting discretionary spending; the impact of these scenarios would depend precisely on the nature of the policy response. It should be noted, however, that non-defense discretionary spending has already been driven near historic lows as a result of the Budget Control Act of 2011 and the subsequent failure of the Joint Select Committee on Deficit Reduction, which resulted in automatic cuts to most discretionary spending programs.

Under a situation where debt as a share of GDP continually grows, we will likely see sharply increased interest rates—which will crowd out private investment and increase the cost of borrowing for homeowners, student loan recipients, small business loan holders, and consumers of all stripes. Unfortunately, the risks of this scenario are compounded by the potential for dramatically higher debt to destabilize the financial sector. This timing of this situation is difficult to predict as U.S. publicly held debt well in excess of 100 percent of GDP is unprecedented in the modern economy.

An alternative scenario is one in which policymakers attempt to avoid a future debt crisis by cutting major public programs, such as Social Security and Medicare. As Social Security is the bedrock of the U.S. retirement system, any systematic and widespread reductions in benefits would have marked implications on the wellbeing of American retirees. Roughly half of elderly

households rely on Social Security for all or nearly all of their retirement income, while another quarter of elderly households depend on Social Security benefits for a substantial portion of their income. For these households, cuts in Social Security benefits would result in a severe deterioration in their standard of living.

Medicare is nearly as important as Social Security to the livelihood of American retirees. In 2018, the current Medicare expenditure per beneficiary is \$13,576; any substantial cuts to Medicare that are not paired with cost-reduction reforms would be detrimental to the wellbeing of millions of retirees. Likewise, while Medicaid benefits are less universal than Medicare, they are still crucial for those Americans requiring long-term care. In recent years, nearly half of all long-term care costs for elderly individuals were paid by Medicaid. Sharp cuts in either of these programs would undoubtedly harm older Americans, many of whom cannot plausibly return to the labor market and who have limited assets. For these lower-income retirees, cuts in public programs may result in difficult choices between paying for medical care and purchasing basic necessities, like housing, clothing, and food.

(3) The TCJA is poorly designed to raise wages and benefit workers.

In broad terms, there are two primary ways that tax reform (or tax cuts) can increase after-tax wages. One is by increasing pre-tax wages by raising worker productivity through the provision of higher business investment. Under this scenario, tax reforms that boost investment can eventually lead to higher wages by first increasing the level of investment, which can then boost worker productivity, which can then theoretically raise wages. There are plenty of caveats to this situation, including the weakened link between productivity and real wage gains since the mid-1970s and increasing concern over limited labor market competition. Importantly, too, under this scenario only a small fraction of each dollar of foregone business tax revenue would eventually be recaptured in higher wages—organizations that project the economic impact of tax cuts typically put the incidence of the corporate tax on labor at around one-fifth.

A second way that tax legislation can increase after-tax return to work is by directly cutting the tax on wages. The most direct way to achieve this is through a payroll tax cut, as that tax only applies to wage income (as opposed to the income tax, which applies to both wages and other forms of income). If the purpose of a tax cut is to boost workers' wages, it is difficult to conceive of a more direct and effective approach than a reduction in the worker's share of the payroll tax—either by directly cutting the tax or by providing a refundable tax credit based on payroll taxes paid. For example, in 2010 the employee-side payroll tax was reduced by 2 percentage points for two years; this cut had similar economic impacts as the Making Work Pay Tax Credit, which was effectively a rebate up to \$800 (\$400 for single filers) on payroll taxes paid. Making the Earned Income Tax Credit more generous is an attendant strategy if the goal of tax reform is to boost after-tax return to work for lower-income workers.

Tax reform can also boost incomes through more targeted reductions in tax rates on wage income. In particular, reforms that reduce effective marginal tax rates—which include the

effects of both taxes and transfer programs—can increase incentives for non-workers to enter the workforce and for current workers to supply more labor. Tax rates can be exceptionally high for subsets of workers, especially those who are in the phase-out range for various programs—such as the Earned Income Tax Credit and Supplemental Nutrition Assistance Program benefits.⁸

Unfortunately, the TCJA receives poor marks on these various criteria. As described above, a necessary condition for the TJCA to boost wages through higher investment is that investment must itself rise to a higher level than would have occurred in the absence of the legislation (i.e., simply observing that investment is rising or falling is insufficient to make the case that the changes are caused by the tax change). Future academic studies will shed light on the effect of the TCJA on various types of investment, but initial evidence suggests that it has yet to have an impact.

A recent presentation by Jason Furman, Professor of Practice at the Kennedy School of Government, suggests that investment has yet to respond to the legislation. For example, Furman showed that several measures of investment—including new orders of non-defense capital goods, the ISM Manufacturing New Orders Index, and the Future Capital Expenditures Diffusion Index—started rising in 2016 before the tax cuts could be anticipated and are actually flat or down since the Act’s passage. In addition, the massive rise in buybacks—which, according to Goldman Sachs, are on pace to increase by nearly 50 percent in 2018 to roughly \$1 trillion—suggests that companies are devoting their lower tax bills to share purchases rather than new investment. These preliminary observations, coupled with the observed stagnation in wages since the passage of the TCJA, strongly suggests that wage gains owing to productivity enhancements have yet to occur.

The TCJA is poorly targeted at labor income, with a large share of the cuts directed at lowering corporate tax burdens, and the TCJA is especially stingy when it comes to cuts on labor income for low- and middle-income taxpayers. While the new tax expenditure for pass-through businesses will likely benefit those with the ability to restructure their labor income, and the cuts in income tax rates are most beneficial to those at higher income levels, the TCJA’s cuts provide relatively limited relief to millions of working families in the initial years of the cut. With the expiration of the income tax cuts in 2025, and the permanently higher indexing rates, tens of millions of working families will see tax increases beginning in 2026 and continuing indefinitely.

Lastly, not only does the TCJA’s expiration mean that the average tax burden will rise for low- and middle-income families, but higher marginal tax rates on labor income will serve as a disincentive for working age Americans to enter the work force or to work more hours. CBO’s projections estimate that marginal tax rates on labor will rise beginning in 2026, offsetting over time any gains made from the initial and temporary cut. The magnitude of this impact will depend on the eventual response by Congress, but the current tax code will increasingly serve as a barrier to work if the existing shortcomings are not repaired.

⁸ For example, CBO (2015) found that “When federal payroll taxes, state income taxes, and benefits from SNAP and the cost-sharing subsidies for health insurance are included, the marginal tax rates are much higher: Only 16 percent of taxpayers will face marginal tax rates between 10 percent and 19 percent, and 78 percent will face higher rates. More than half will face marginal tax rates between 20 percent and 39 percent.”

IV. Conclusion

The TCJA is one of the most consequential pieces of tax legislation in decades. However, there is often a stark discrepancy between consequential and beneficial. Estimates from a wide range of independent institutions project that, after a decade, national income will be largely unchanged, while American taxpayers will face an additional \$2 trillion in debt. In my opinion, if Congress elects to take on such a large increase in debt for future generations, there are far more productive outlets than the tax cut that passed last December.

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