Key Points

- PWBM previously analyzed the effects of the tax bill passed this December. Most of that bill's tax cuts for individuals (non-businesses) expire at year-end 2025. This brief reports the budgetary and economic effects of indefinitely extending the individual-side tax cuts.

- By 2027, we project that debt increases between $573 billion and $736 billion. However, GDP is relatively unchanged, although slightly contracts, because this standard 10-year budget window covers only two years of tax cut extensions.

- By 2040, we project that GDP contracts by 0.6 percent to 0.9 percent relative to current law, where the tax cuts for individuals are set to expire. Debt increases between $5.2 trillion and $6.1 trillion.

Summary

Most of the recent tax cuts for individual taxpayers will expire at the end of 2025. We project that extending the individual-side (non-business) tax cuts increases government debt by over $5 trillion by 2040 and actually *reduces* GDP during the first 10 years and beyond.

The Tax Cuts and Jobs Act: Extending Changes to Individual Taxes

Introduction

Penn Wharton Budget Model (PWBM) previously reported static and dynamic analyses of the Tax Cuts and Jobs Act (TCJA), as signed into law. In the TCJA, many of the individual-side (non-business) tax cuts expire at year-end in 2025. Recently, some lawmakers have expressed interest in making those changes permanent.

This brief reports our static and dynamic analysis of permanently extending the individual-side tax cuts in the TCJA. The Penn Wharton Budget Model is well positioned to analyze the long-run effects of tax reform because PWBM matches IRS and Census public use files using a rigorous methodology, thereby allowing us to capture longer-run trends in numerous economic and demographic variables as well as filing status. Readers are encouraged to read some of our previous analyses for related definitions used in this brief. Detailed descriptions of our models can be found on our website.

Changes to Individual Taxes in the TCJA that Expire

The TCJA changed U.S. individual, corporate and international taxes. For individuals, however, many of the tax changes are scheduled to expire at year-end 2025. On that date, the top rate is scheduled to increase from 37 percent to 39.6 percent (its value before the TCJA) and the exemption from the Alternative Minimum Tax (AMT) will be lowered. Households will no longer be able to deduct 20 percent of the first $315,000 in income from pass-through businesses. The standard deduction will also fall, almost in half, in exchange for the personal exemptions that existed prior to the TCJA. For households who itemize deductions, the cap on the Mortgage Interest Deduction is scheduled to increase to $1 million in mortgage debt and the deduction for State and Local property taxes will no longer be capped at $10,000. The Child Tax Credit (CTC) will be reduced from $2,000 to $1,000 per qualifying child while the amount of the CTC that is refundable will be reduced to $1,000. The CTC

will also begin to phase out at $110,000 of income for married households rather than at $400,000 consistent with the TCJA.

Revenue Effects: Static (Conventional) Projections

Table 1 reports PWBM's projected static (conventional) revenue losses from permanently extending the individual-side provisions of the TCJA that are currently set to expire.[1] Revenue estimates are provided both with and without changes to federal outlays.[2] The revenue loss projections are stated relative to current policy which is *inclusive* of the TCJA. In other words, the revenue losses reported in Table 1 are in addition to the revenue losses that we previously reported for the TCJA law that included the aforementioned individual-side expiring provisions.

Table 1: Estimates of Extending the Changes to Individual Taxes in the TCJA on Federal Tax Revenues Relative to Current Policy [3]

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Tax Provision	Revenue Effect 2018-2027 (billions of $)	Revenue Effect 2018-2040 (billions of $)
New tax rate and bracket structure	-384	-3,817
Expand the standard deduction and repeal personal exemptions	123	1,172
New pass-through business deduction	-116	-1,052
Pass-through business loss limits	45	444
Expand Child Tax Credit (CTC) and new non-child dependent credit	-138	-1,187
Modifications to itemized deductions	148	1,675
Increase Alternative Minimum Tax (AMT) exemption phaseout threshold	-95	-978
Reforms to certain deductions and credits	6	60
TOTAL (with Outlay Effects)	**-410**	**-3,684**
REVENUE (Total without Outlay Effects)	**-394**	**-3,556**

Note: Effects on federal outlays include tax refunds. Reforms to certain credits and deductions includes requiring Social Security numbers for for each child to claim refundable portion of CTC and repeal of the moving expense deduction.

As noted above, the TCJA's changes to individual household provisions are set to expire at year-end 2025. Therefore, our projected revenue losses within the standard 10-year budget window (2018 - 2027) includes the cost of extending the individual-side tax cuts for just two years, that is, for just 2026 and 2027. Excluding outlay effects, Table 1 shows that extending the individual tax changes reduces revenue by $394 billion over the first 10 years.

However, the individual tax cut extension naturally becomes substantially more costly after 2027. In particular, we project a static revenue loss of $3.6 trillion between 2018 to 2040.

Revenue Effects: Dynamic Projections

Table 2 presents dynamic revenue estimates that include the impact of the tax extensions on economic activity. Table 2 shows that over the 10-year budget window ending in 2027, extending the individual tax cuts is, on a dynamic basis, projected to reduce federal tax revenues between $389 billion (low initial return to capital) and $407 billion (high initial return to capital). Over this period, debt rises between $573 billion and $736 billion, including debt service. By 2040, revenue falls between $3.8 trillion and $4.0 trillion while debt increases between $5.2 trillion and $6.1 trillion.

Table 2: Effects of Extending the Changes to Individual Taxes in the TCJA on Revenue and Debt Relative to Current Policy 4

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	Cumulative Revenue (billions of $)			Change in Debt (billions of $)		
	Static	Dynamic		Static	Dynamic	
Years		High return to capital	Low return to capital		High return to capital	Low return to capital
2018-2027	-$394	-$407	-$389	$439	$736	$573
2018-2040	-$3,556	-$3,968	-$3,772	$4,793	$6,054	$5,245

Note: The revenue estimates in this table focuses on the official definition of "revenue" and, therefore, does not incorporate changes in outlays. Table 1 reports static analysis both inclusive and exclusive of changes in outlays. Changes in debt include changes in outlays. Consistent with our previous dynamic analysis and the empirical evidence, the projections above assume that the U.S. economy is 40 percent open and 60 percent closed. Specifically, 40 percent of new government debt is purchased by foreigners.

Economic Effects

Extending the individual-side tax cuts in the TCJA has effects beyond federal revenues, including the impact on GDP, labor income and U.S. capital services, as summarized in Table 3. By 2027 GDP falls slightly, by about 0.1 percent, relative to current policy in that year without the individual-side tax extensions. There is little impact during the first 10 years because, as noted above, the tax extension impacts only two years, 2026 and 2027. However, by 2040, GDP falls between 0.6 percent and 0.9 percent, relative to current policy (the TCJA without the tax extenders) in that year.

Table 3: Effects of Extending the Changes to Individual Taxes in the TCJA on Key Economic Variables Relative to Current Policy 5 in Year Shown

DOWNLOAD DATA

Year	GDP (% change)		Labor Income (% change)		Capital Services (% change)	
	High return to capital	Low return to capital	High return to capital	Low return to capital	High return to capital	Low return to capital
2027	-0.1%	-0.1%	-0.1%	-0.1%	-0.3%	-0.2%
2040	-0.9%	-0.6%	-0.9%	-0.6%	-2.2%	-1.3%

Note: Percent change relative to current policy in 2027 and 2040, respectively. Consistent with our previous dynamic analysis and the empirical evidence, the projections above assume that the U.S. economy is 40 percent open and 60 percent closed. Specifically, 40 percent of new government debt is purchased by foreigners.

Table 3 reports changes in the level of GDP relative to current policy in the shown year. An alternative measure, Table 4 reports the corresponding changes in the *annual growth rate* of GDP from the tax cut extension relative to current policy. PWBM finds that over the next 10 years, average annual GDP growth only slightly falls. However, from 2028 to 2040, average annual GDP growth falls between 0.04 and 0.06 percentage points, due to larger debt effects.

Table 4: Effects of Extending the Changes to Individual Taxes in the TCJA on Average Annual GDP Growth Relative to Current Policy6 over Period of Time Shown

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Years	Average Annual GDP Growth Rate (percentage point change)	
	Dynamic	
	High return to capital	Low return to capital
2018-2027	-0.01	-0.01
2028-2040	-0.06	-0.04

Note: Percentage point change relative to current policy from 2018–2027 and 2028–2040, respectively. Consistent with our previous dynamic analysis and the empirical evidence, the projections above assume that the U.S. economy is 40 percent open and 60 percent closed. Specifically, 40 percent of new government debt is purchased by foreigners.

Negative Dynamic Scores

Our previous analyses of the current-law TCJA (with the expiring provisions) projected dynamic revenue losses that are smaller than their corresponding static values. This difference was due TCJA's positive impact on economic growth, which also grew the associated tax bases. In sharp contrast, our revenue projections of the individual-side tax extensions examined in this brief indicate that the dynamic revenue losses will be larger than their corresponding static values (Table 2). The reason is symmetric: we project that the individual-side tax extensions will now modestly shrink economic growth.

So why would the individual-side tax extension actually contract the U.S. economy? The reason is that the potential positive benefits to the size of the economy from extending the individual-side tax cuts are smaller than the negative effects associated with more debt. Indeed, some of the individual-side tax extenders considered in this brief, such as making the Child Tax Credit permanent, can produce positive "income effects" that actually reduce labor supply without providing any strong incentive to increase saving for investments. In

contrast, some of the business tax cuts in the original TCJA legislation provided additional incentives to save and work. Our projections also differ across the assumed initial rate of return on capital.7

Conclusion

Penn Wharton Budget Model's dynamic analysis projects that extending the individual tax changes in the TCJA increases federal debt relative to current policy. In the near term, effects on GDP are small but negative. However, in the long run, economic growth is more moderately reduced.

1. Based on our reading of the current discussion on Capitol Hill, our analysis does not include permanent extensions of estate and gift tax exemptions. ↩

2. Effects on federal outlays include tax refunds. JCT reports its numbers with changes to outlays, and so we provide this information for future comparison with their values. ↩

3. PWBM's integrated model includes both revenue and spending policy. For our tax simulator, we model "current law" that allows tax provisions to expire as scheduled, consistent with JCT's approach. For our spending side, we model "current policy" that does not, for example, allow changes to mandatory spending when, for example, the Social Security's trust funds are exhausted. For debt calculations and dynamic analysis, this integration provides a more holistic analysis since some government benefit formulas, including the initial calculation of Social Security benefits upon retirement, are explicitly tied to the growth in average wages throughout a participant's lifetime. ↩

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7. As discussed in our previous analysis, we also provide our estimates under two different assumptions for the initial rate of return on capital. A "high" rate of return produces macroeconomic results that are generally more favorable for tax cuts. However, a "high" rate of return also increases the negative effect of

higher debt. As seen in Tables 3 and 4, when the overriding effect of tax cuts is to increase federal debt, assuming a "high" rate of return means tax extenders produce a bigger drag on the economy. ↩