

MACROECONOMIC ANALYSIS OF THE TAX CUTS AND JOBS ACT AS PASSED BY THE HOUSE OF REPRESENTATIVES

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The Tax Policy Center has released an analysis of the macroeconomic effects of the Tax Cuts and Jobs Act as passed by the US House of Representatives on November 16, 2017. We find the legislation would boost US economic output by 0.6 percent of gross domestic product (GDP) in 2018, 0.3 percent of GDP in 2027, and 0.2 percent of GDP in 2037. The resulting increase in taxable incomes would reduce the revenue loss created by the legislation by \$169 billion from 2018 to 2027 and by \$136 billion from 2028 to 2037. Including macroeconomic effects and interest costs, the legislation is projected to increase debt as a share of GDP by just over 5 percent in 2027 and by just over 9 percent in 2037.

The Tax Cuts and Jobs Act, introduced as H.R. 1 on November 2, 2017, and passed by the House of Representatives on November 16, 2017, would make major changes to the individual and corporate income taxes, estate and gift taxes, and certain federal excise taxes.¹

The Tax Policy Center has analyzed the macroeconomic effects of the legislation. We find the following:

- The legislation would increase GDP over the first two decades—by 0.6 percent in 2018 and 0.2 percent in 2037.
- The increase in output would boost revenues, offsetting roughly a tenth of the revenue loss projected under the legislation without accounting for macroeconomic feedbacks.
- Macroeconomic feedback would reduce the projected effect of the legislation on the national debt by 0.7 percent of GDP in 2027 and by 0.9 percent of GDP in 2037, compared to the projected levels under conventional revenue-estimating methods.

¹ The [legislative text](#) is available on the House Rules Committee website. A description of H.R. 1 as introduced is available at [JCX-50-17](#) on the Joint Committee of Taxation's website. The Tax Policy Center released a distributional analysis of this bill on November 13, 2017; see <http://www.taxpolicycenter.org/publications/distributional-analysis-tax-cuts-and-jobs-act-passed-house-ways-and-means-committee>.

EFFECTS ON OUTPUT

The proposed legislation would affect output primarily through its influence on aggregate demand, labor supply, and saving and investment.

Aggregate Demand

The legislation would increase aggregate demand, and therefore output, in two main ways. First, it would reduce average tax rates for most households over the first few years after enactment, increasing after-tax incomes. Households would spend some of that additional income, increasing demand for goods and services. These economic benefits would be modest because most tax reductions would accrue to high-income households, who spend a smaller share of any increases in after-tax income than lower-income households. Second, by allowing businesses to elect to immediately deduct (expense) new investment over the next five years, the legislation would encourage firms to increase their near-term investment, further increasing demand. The boost in demand would raise output relative to its potential level for several years until higher interest rates and prices cause output to return to its long-run potential level. Because the economy is near full employment, the impact of increased demand on output would be smaller and diminish more quickly than it would if the economy were currently in recession.

Labor Supply

The legislation would modestly reduce effective tax rates on labor income (i.e., wages and salaries for employees and self-employment income for others), primarily by reducing marginal income tax rates for most workers. The resultant increase in the after-tax wage rate increases labor supply, mostly by encouraging lower-earning spouses to enter the work force or work additional hours.

Saving and Investment

Largely because the plan would reduce the corporate income tax rate and temporarily allow businesses to expense investment, the legislation would increase the after-tax returns to saving and investment significantly. That would encourage saving, foreign capital inflows, and investment.

Although the legislation would increase incentives to save and invest, it would also substantially increase budget deficits unless offset by spending cuts. Higher deficits would push up interest rates, which would tend to discourage investment. Thus, while the plan would initially increase investment, we estimate that rising interest rates would eventually negate the incentive effects of lower tax rates on capital income and decrease investment below baseline levels in later years.

Output

Taking all these effects into account, TPC estimates that the legislation would boost GDP by 0.6 percent in fiscal year 2018, mostly because of its effect on aggregate demand (table 1). By 2027, the legislation would raise GDP by 0.3 percent, and in 2037 it would raise GDP by 0.2 percent. The estimated boost to output diminishes over time primarily because the effects of aggregate demand fade and the effects of additional federal debt on interest rates grow.

Because the legislation is estimated to increase net inflows of foreign capital investment, it would also increase payments of profits and interest to foreign investors out of domestic production. Those payments do not affect GDP, but they do reduce gross national product (GNP), which is a better measure of the proposal's effect on US incomes.

TPC’s models estimate that the legislation would increase GNP about 0.3 percent in 2027 and 0.1 percent in 2037 (compared with estimated increases of 0.3 percent and 0.2 percent for GDP in those years).

TABLE 1
Dynamic Effects of House Bill on GDP
FY 2018–37



	Fiscal Year										
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2037
GDP (\$ billions)											
Before macroeconomic feedback	19,926	20,661	21,378	22,168	23,037	23,948	24,899	25,889	26,917	27,985	41,419
After macroeconomic feedback	20,037	20,758	21,447	22,246	23,129	24,042	25,000	25,993	27,021	28,083	41,482
Percentage change in GDP caused by macroeconomic feedback											
	0.6	0.5	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2

Source: The GDP forecast through 2027 is from CBO, *The Budget and Economic Outlook: 2017 to 2027* (January 2017) and for 2028-2037 is from CBO, *The 2017 Long-Term Budget Outlook* (March 2017); TPC Keynesian and neoclassical models.

Note: GDP = gross domestic product.

EFFECTS ON REVENUES

The increase in output from the legislation would raise taxable incomes for individuals and businesses. That would in turn alter the revenue impact of the proposal, increasing it (relative to the impact before macroeconomic feedback) by \$21 billion in fiscal year 2018. Between 2018 and 2027 the estimated feedback effect is a cumulative \$169 billion, and between 2028 and 2037 it is a cumulative \$136 billion (table 2). Macroeconomic feedback effects would reduce the revenue losses from the plan about 12 percent over the first decade and about 8 percent over the second decade.

TABLE 2
Revenue Effects of Tax Proposals in the House Bill
Billions of dollars, fiscal years 2018–37



	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2018–27	2028–37
Revenue change without macroeconomic feedback	-108	-227	-222	-203	-189	-88	-34	-64	-128	-171	-1,436	-1,630
Difference in revenue change caused by macroeconomic feedback	21	18	12	14	16	17	18	18	18	17	169	136
Revenue change with macroeconomic feedback	-87	-209	-209	-190	-173	-72	-17	-46	-110	-154	-1,266	-1,494

Sources: Joint Committee on Taxation (JCT) and Urban-Brookings Tax Policy Center (TPC) macroeconomic models.

Note: Estimates for fiscal years 2018–27 are from JCT, *Estimated Revenue Effects of H.R. 1, the "Tax Cuts and Jobs Act," as ordered reported by the Committee on Ways and Means on November 9, 2017 (JCX-57-17)*; estimates for fiscal years 2028–37 are TPC calculations based on extensions of JCT estimates.

EFFECTS ON DEBT

The revenue losses from the legislation would have an additional effect on the national debt because of their impact on debt service. Dynamic effects would alter that additional impact in two ways: by reducing the size of the projected additions to federal debt and by increasing interest rates. Dynamic effects reduce the revenue impact on the deficit and therefore also reduce the amount of additional debt that accumulates and, consequently, the additional debt service costs. That effect is offset modestly because the legislation is projected to increase interest rates and, therefore, the debt service cost per dollar of debt. Interest rates are projected to rise in the short run because the legislation would boost aggregate demand and output, leading the Federal Reserve to increase interest rates to avoid a surge in inflation. In addition, interest rates are also projected to rise in the longer run because increased government borrowing would boost demand for savings, pushing up the price of borrowing. TPC projects that including additional interest costs, but not including macroeconomic feedbacks, the legislation would increase US debt by about \$1.4 trillion (or 6.0 percent of GDP) in 2027 and by about \$4.2 trillion (or 10.1 percent of GDP) in 2037. Including macroeconomic effects, the projected impact on the debt would fall to about \$1.5 trillion (or 5.3 percent of GDP) in 2027 and about \$3.8 trillion (or 9.2 percent of GDP) in 2037 (table 3). Compared to debt level projections using conventional revenue-estimating

methods, macroeconomic effects reduce the increase in debt by about 0.7 percent of GDP in 2027 and by about 0.9 percent of GDP in 2037.

TABLE 3

Effects of the House Bill on Debt Service Costs

Trillions of dollars



	2018–27	2028–37
Total revenue effect		
Without macroeconomic effects	(1.4)	(1.6)
With macroeconomic effects	(1.3)	(1.5)
Increase in interest costs		
Without macroeconomic effects	0.3	0.9
With macroeconomic effects	0.2	0.8
Increase in deficit		
Without macroeconomic effects	1.7	2.5
With macroeconomic effects	1.5	2.2
Increase in federal debt (end of period)		
Without macroeconomic effects	1.7	4.2
With macroeconomic effects	1.5	3.8
GDP (last year of period)		
Without macroeconomic effects	28.0	41.4
With macroeconomic effects	28.1	41.5
Increase in ratio of federal debt to GDP (end of period, in percentage points)		
Without macroeconomic effects	6.0	10.1
With macroeconomic effects	5.3	9.2

Sources: Joint Committee on Taxation (JCT) and Urban-Brookings Tax Policy Center (TPC) Macroeconomic Models.

Note: GDP = gross domestic product. Estimates for fiscal years 2018–27 are from JCT, *Estimated Revenue Effects of H.R. 1, the "Tax Cuts and Jobs Act,"* as ordered reported by the Committee on Ways and Means on November 9, 2017 (JCX-57-17); estimates for fiscal years 2028–37 are TPC calculations based on extensions of JCT estimates. The GDP forecast through 2027 is from CBO, *The Budget and Economic Outlook: 2017 to 2027* (January 2017) and for 2028-2037 is from CBO, *The 2017 Long-Term Budget Outlook* (March 2017).

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