Tax Cuts Are Primarily Responsible for the Increasing Debt Ratio

By Bobby Kogan  March 2023

Introduction and summary

The need to increase the debt limit has focused attention on the size and trajectory of the federal debt. Long-term projections show that federal debt as a percentage of the U.S. economy is on a path to grow indefinitely, with increased noninterest spending due to demographic changes such as increasing life expectancy, declining fertility, and decreased immigration and rising health care costs permanently outstripping revenues under projections based on current law. House Republican leaders have used this fact to call for spending cuts, but it does not address the true cause of rising debt: Tax cuts initially enacted during Republican trifectas in the past 25 years slashed taxes disproportionately for the wealthy and profitable corporations, severely reducing federal revenues. In fact, relative to earlier projections, spending is down, not up. But revenues are down significantly more. If not for the Bush tax cuts and their extensions—as well as the Trump tax cuts—revenues would be on track to keep pace with spending indefinitely, and the debt ratio (debt as a percentage of the economy) would be declining. Instead, these tax cuts have added $10 trillion to the debt since their enactment and are responsible for 57 percent of the increase in the debt ratio since 2001, and more than 90 percent of the increase in the debt ratio if the one-time costs of bills responding to COVID-19 and the Great Recession are excluded. Eventually, the tax cuts are projected to grow to more than 100 percent of the increase.

Fiscal policy in the postwar era

In the 34 years after 1946, the federal debt declined from 106 percent of gross domestic product (GDP) to just 25 percent, despite the federal government’s running deficits in 26 of those years. The debt ratio declined for two reasons. First, the government ran a “primary,” or noninterest, surplus in a large majority of those years. This means that, not counting interest payments, the budget was in surplus.
Second, the economic growth rate exceeded the Treasury interest rate in a large majority of those years. These two factors—along with the starting debt ratio—are the levers that control debt ratio sustainability.7 With a primary balance, the growth rate need only match the Treasury interest rate for the debt ratio to be stable. The presence of both primary surpluses and growth rates that exceeded the Treasury interest rate created significant downward pressure on the debt ratio.8

The nation’s fiscal picture changed in 1981 when President Ronald Reagan enacted the largest tax cut in U.S. history,7 reducing revenues by the equivalent of $19 trillion over a decade in today’s terms. Although Congress raised taxes10 in many of the subsequent years of the Reagan administration to claw back close to half the revenue loss,11 the equivalent of $10 trillion of the president’s 1981 tax cut remained.

These massive tax cuts set off more than a decade of bipartisan efforts to reduce spending and increase revenues, which, along with a booming economy, resulted in budget surpluses at the end of the Clinton administration.

**Debt ratio stabilization and its drivers**

In the past few decades,12 there has been considerable discussion and rethinking of what constitutes an appropriate level of national debt. At this point, many experts argue13 that the focus should be on whether debt as a percentage of the economy is increasing or is stable over the long run, not on the amount of debt per se. Understanding the drivers of the increase in the debt as a percentage of the economy is critical to this analysis. While one-time costs, such as those made in response to an economic or public health emergency, increase the level of debt, sometimes by large amounts, they do not increase the rate of growth in the debt ratio over the long run. Debt ratio stability is driven by four components: 1) the size of the primary deficit—the deficit exclusive of interest costs—as a percentage of GDP; 2) the starting ratio of debt to GDP (the debt ratio); 3) the rate of economic growth; and 4) the prevailing interest rate on new Treasury securities.14 The cause of the upward trajectory of the debt ratio—a series of massive tax cuts that have been extended with bipartisan support—are largely responsible for recent budget shortfalls.

The underlying fiscal result of Clinton-era policy—having, at the very least, a primary surplus and a declining debt ratio—was projected to persist indefinitely until the Bush tax cuts were made permanent. The Congressional Budget Office’s (CBO’s) last long-term budget outlook before those tax cuts were largely permanently extended15 projected that revenues would be higher than noninterest spending for each of the 65 years that its extended baseline covered.16 In other words, right up until before the Bush tax cuts were made permanent, the CBO was projecting that, even with an aging population and ever-growing health care costs, revenues were nonetheless expected to keep up with program costs. However, in the next year, that was no longer the case.17 As a result of the massive tax cut, the CBO projected that revenues would no longer keep up due to being cut so drastically and, as a result, the debt ratio would rise indefinitely.
Tax cuts changed the fiscal outlook

As shown in recent analysis, this new change has further cemented itself: revenues are now projected to lag significantly behind noninterest spending. Of particular interest is that projected levels of both revenues and noninterest spending have decreased: Both are projected to be lower than in the CBO’s projections issued before the permanent extension of the Bush tax cuts. This decrease in noninterest spending is the equivalent of more than $4.5 trillion in lower spending over a decade. But the drop in revenue was three-and-a-half times as large, the equivalent of more than $16 trillion in lower revenues over a decade. Despite the rhetoric of runaway spending, projections of long-term primary spending have decreased, but projections of long-term revenues have decreased vastly more. The United States does not have a high-spending problem; it has a low-tax problem.

FIGURE 1
Both revenues and spending are lower than earlier projections, meaning low revenues are responsible for persistent primary deficits
2012 and 2019 Congressional Budget Office projections of annual revenues and primary spending as a percentage of gross domestic product

Note: 2019 was the last year in which the Congressional Budget Office produced long-term budget outlooks that contained data without macrodynamic feedback, which are essential to fiscal gap analysis. Therefore, the 2019 outlook is the most recent comparison possible. This analysis assumes that the temporary portions of the Trump tax cuts expire as specified in current law: “Primary spending” means spending excluding interest costs. Primary, not total, deficits are one of the three factors that determine whether debt will be stable as a percentage of gross domestic product.

The United States is a low-tax country

Compared with other nations in the Organization for Economic Cooperation and Development (OECD), the United States ranks 32nd out of 38 in revenue as a percentage of GDP. But it’s not just that the United States is near the bottom end of revenue; it is nowhere close even to the average. Over the CBO’s 10-year budget window, the United States will collect $26 trillion less in revenues than it would if its revenue as a percentage of GDP were as high as the average OECD nation. When compared to EU nations, that number rises to $36 trillion.

In contrast, the $289 billion projected revenue increase in the Inflation Reduction Act still leaves the United States ranking 32nd out of 38 OECD countries.

**FIGURE 2**

The United States is a low-tax country

Total revenues as a percentage of gross domestic product for each nation in the Organization for Economic Cooperation and Development (OECD)

Notes: OECD data are for 2021, except for Japan and Australia, for which 2020 data are the most recent. The EU average excludes countries for which the OECD does not have data. The difference between the U.S. revenue level, which is 26.6 percent of GDP, and the average OECD revenue level excluding the United States (34.3 percent of GDP) is 7.7 percentage points. This is the tax cut the United States would need to enact, if it were currently at the OECD average revenue level, for its revenue level (as a percentage of GDP) to equal its current level. The author converted that 7.7 percentage-point difference to dollars—$26 trillion—by applying it to the Congressional Budget Office’s projection of U.S. GDP over the current budget window—the 10-year period from 2024 to 2033—because budget analysts commonly display proposed budget changes as 10-year totals. The $36 trillion difference between the U.S. level and the average EU level is calculated analogously.

Recent large tax cuts

Analytically, the best way to measure why current projections show what they do is to assess what changed relative to older projections. This means looking at what new laws have been enacted. Increases above current levels that were already on track to happen under current law (and thus were already assumed in the baseline) are, by definition, not responsible for the CBO changing its estimate of long-term projections. This means that rising health care and Social Security costs are not responsible for the increased federal debt; the CBO already assumed them, but the CBO also projected sufficient revenue to keep up with rising health care and Social Security costs. In fact, the CBO has dramatically lowered the expected growth in health care costs. As this report has already shown, projections of long-term spending, relative to older projections, have significantly decreased and thus have been responsible for decreased, not increased, debt in the CBO’s outlook. It is tax cuts that have caused the dramatic increase in primary deficit projections.

The Bush tax cuts

The George W. Bush administration, empowered by a trifecta in 2001, enacted sweeping tax cuts that will have cost more than $8 trillion by the end of fiscal year 2023. The tax cuts lowered personal income tax rates across the board, both for labor income and for capital gains, and they significantly increased the untaxed portion of estates and lowered the estate tax rate. These changes were enormously tilted toward the rich and wealthy. While these increases were paired with an expansion of the child tax credit and the earned income tax credit, the total package gave significantly greater savings to the wealthy and also made the U.S. tax code significantly more regressive. In 2013, a significant majority of the Bush tax cuts were made permanent with bipartisan support, locking in lower tax rates and deep cuts to the estate tax. These changes led to a significantly more regressive tax code than existed before the Bush tax cuts were enacted, and one that brought in vastly less revenue.

The Trump tax cuts

President Donald Trump’s signature tax bill, enacted when Republicans gained control of the White House and both houses of Congress in 2017, will have cost roughly $1.7 trillion by the end of fiscal year 2023. These tax cuts reduced personal income tax rates and permanently lowered the corporate tax rate, among other changes. Despite being paired with a further expansion of the child tax credit, the 2017 changes also largely benefited the wealthy, once again making the U.S. tax code significantly more regressive.
Taken together, the Bush tax cuts, their bipartisan extensions, and the Trump tax cuts, have cost $10 trillion since their creation and are responsible for 57 percent of the increase in the debt ratio since then. They are responsible for more than 90 percent of the increase in the debt ratio if you exclude the one-time costs for responding to COVID-19 and the Great Recession. While these one-time costs increased the level of debt, they did nothing to affect the trajectory of the debt ratio. With or without them, the United States would currently have stable debt, albeit potentially at a higher level, despite rising spending. In other words, these legislative changes—the Bush and Trump tax cuts—are responsible for more than 90 percent of the change in the trajectory of the debt ratio to date (see Figure 3) and will grow to be responsible for more than 100 percent of the debt ratio increase in the future. They are thus entirely responsible for the fiscal gap—the magnitude of the reduction in the primary deficit needed to stabilize the debt ratio over the long run. The current fiscal gap is roughly 2.4 percent of GDP. Thus, maintaining a stable debt-to-GDP ratio over the long run would require the primary deficit as a percentage of GDP to average 2.4 percent less over the period. Because the costs of the Bush tax cuts, their extensions, and the Trump tax cuts—on average, roughly 3.8 percent of GDP over the period—exceeds the fiscal gap, without them, all else being equal, debt as a percentage of the economy would decline indefinitely.

FIGURE 3

Tax cuts, the Great Recession, and COVID-19 are responsible for the growth in the U.S. debt ratio

Debt held by the public as a percentage of gross domestic product, 2001–2023

Notes: All figures include net debt service effects. Note also that the tax cuts are policies whose costs keep increasing, while the increase in the debt ratio caused by the Great Recession and legislation to fight it, in addition to the legislation to fight the health and economic effects of COVID-19, were temporary. While the Great Recession and COVID-19 increased the level of debt, it is therefore the tax cuts that continue to keep deficits high and exert upward pressure on the debt ratio even when the economic situation is more normal.

Source: Author’s calculations using cost estimates from the Congressional Budget Office (CBO) and U.S. Congressional Joint Committee on Taxation, CBO baselines, historical data from the U.S. Office of Management and Budget, and Federal Reserve data. A full list of sources is available in the “Figure 3 sources” appendix below and is also available at https://www.americanprogress.org/wp-content/uploads/sites/2/2023/03/DebtRatio-sources.pdf.
Republican plans for future tax cuts

Recent proposals by some Republicans, whose party now controls the House majority, would further reduce revenues. In fact, the first bill passed in the 118th Congress, which was introduced by Rep. Adrian Smith (R-NE) and passed with only Republican votes, would rescind all unobligated portions of the $80 billion in funding for the IRS that was provided in the Inflation Reduction Act. The Inflation Reduction Act funding for the IRS is projected to pay for itself several times over through increased enforcement of taxes already owed by the wealthy and by large corporations; the Office of Management and Budget estimated that this funding would raise more than $440 billion over the decade.

Rep. Vern Buchanan (R-FL) has also introduced legislation to make permanent President Trump’s 2017 tax cuts, at a cost of roughly $2.6 trillion over the next decade.

Conclusion

A series of massive, permanent tax cuts have created large federal budget primary shortfalls and continue to exert upward pressure on the debt ratio. In other words, the current fiscal gap—the growing debt as a percentage of the economy—stems from legislation that cut taxes, disproportionately for the very rich. While it is true that the Great Recession and legislation to fight it, along with the costs of responding to the health and economic effects of COVID-19, pushed the level of debt higher, these costs were temporary and did not change the trajectory of the debt ratio. If Congress wants to decrease deficits, it should look first toward reversing tax cuts that largely benefited the wealthy, which were responsible for the United States’ current fiscal outlook.

Acknowledgments

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Methodology

The cost of the Bush tax cuts was taken from various Congressional Budget Office and Joint Committee on Taxation (JCT) estimates. The Bush tax cuts and their extensions include the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs and Growth Tax Relief Reconciliation Act of 2003, the Working Families Tax Relief Act of 2004, and the Tax Increase Prevention and
Reconciliation Act of 2005, as well as the alternative minimum tax (AMT) patches in the Tax Increase Prevention Act of 2007, the Emergency Economic Stabilization Act of 2008, and the American Recovery and Reinvestment Act of 2009. They also include the Bush tax cuts, the Lincoln-Kyl estate tax agreement, and the AMT patch sections of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, as well as the extensions of the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003 and the permanent AMT patch in the American Taxpayer Relief Act of 2012. These estimates include both the revenue and outlay effects of these laws, as well as the increased interest costs from these measures.

The cost of the Trump tax cuts was taken from the CBO’s April 2018 baseline. As with the Bush tax cuts, these estimates include both the revenue and outlay effects of the law, as well as the increased interest costs from the measures.

To determine interest costs associated with the Bush and Trump tax cuts, as well as the one-time costs of responding to COVID-19 and the Great Recession, this analysis uses a historical interest matrix. It calculates the interest costs on debt by blending various historical Treasury constant maturities to estimate the effective interest rate on new debt and debt rolled over in any given year.

The cost of the response to the Great Recession and the COVID-19 pandemic includes the Economic Stimulus Act of 2008, the American Recovery and Reinvestment Act of 2009 (minus the AMT patch, so as not to double count), the Troubled Assets Relief Program actual costs as recorded, the Coronavirus Preparedness and Response Supplemental Appropriations Act of 2020, the Families First Coronavirus Response Act, the Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Paycheck Protection Program and Health Care Enhancement Act, the COVID-19 provisions (Divisions M and N) of the December 2020 omnibus, and the American Rescue Plan. These costs were run through the historical interest matrix to calculate interest costs.

The Reagan tax cut cost was estimated using the cost (as re-scored in President Reagan’s final budget) as a percentage of projected gross national product (GNP). The average size of the cut as a percentage of GNP was then applied to current GDP estimates.

The cost of extending the Trump tax cuts was estimated using the CBO’s May 2022 baseline estimates of the individual income tax cuts and the higher estate and gift tax exemptions. These components were extrapolated out a year to 2033 and adjusted for the CBO’s February 2023 baseline GDP projections.
The OECD nominal revenue comparisons were estimated using the difference between the average OECD/EU member nation’s revenue as a percentage of GDP and the United States’ revenue as a percentage of GDP\textsuperscript{60} and then multiplying that percentage-point difference by the current GDP estimates as projected in the CBO’s February 2023 baseline.\textsuperscript{61}

The data underlying the figures in this report can be downloaded at this link: https://www.americanprogress.org/wp-content/uploads/sites/2/2023/03/Data-backing-up-figures-for-Kogan-taxes-and-debt-report-v2-FINAL.xlsx.
Endnotes


8 There are two reasons this analysis talks about “primary” spending and “primary” deficits—that is, spending and deficits not counting interest payments. The policy reason is that interest costs result from government debt, which grows with the annual deficit—and the annual deficit is a function of this year’s revenues, this year’s program spending, and inherited debt. In short, interest is just as much a result of tax policy as spending policy. The analytical reason is that budgeteers look at debt (and deficits) relative to the size of the economy—i.e., at the ratio of debt to GDP. As explained by professor Alan Auerbach in the 1990s, this calculation depends on four factors: the primary deficit as a percentage of GDP, the starting level of the debt as a percentage of GDP, the Treasury’s interest rate, and the GDP growth rate. Their algebra shows, for example, that if the Treasury’s interest rate equals the GDP growth rate, then a primary deficit of zero will keep the debt ratio constant even though the total budget, including interest, is running a deficit. That’s why the Congressional Budget Office focuses on the primary deficit when considering the trajectory of debt. See Alan J. Auerbach, “The U.S. Fiscal Problem: Where We Are, How We Got Here, and Where We’re Going,” NBER Macroeconomics Annual 9 (1994): 141-186, available at https://www.nber.org/system/files/chapters/cf1009/cf1009a.pdf.

9 The Committee for a Responsible Federal Budget shows that President Reagan’s 1981 tax cuts were bigger than any tax cuts since 1940. Both the CBO and the Office of Management and Budget show that President Reagan’s 1981 tax cuts were more than twice the size, phasing up to more than 6 percent of GNP. The only potential contenders before 1940 are the tax cut following the end of the Civil War and the tax cuts following the 1920 election. The Civil War income tax applied a 3 percent flat tax, plus a 5 percent rate on incomes the equivalent of many millions of dollars. That repeal definitionally cannot exceed 5 percent (and thus must be smaller than the Reagan 1981 tax cut) and in reality was likely below 2.5 percent of GDP. The tax decreases following the 1920 election were enacted in a series of bills. Each of them as a team decreased revenues by roughly 4 percent of GDP. Taken together, and certainly taken individually, they were therefore smaller than the Reagan 1981 tax cuts. See Committee for a Responsible Federal Budget, “Is President Trump’s Tax Cut the Largest in History?”, April 26, 2017, available at https://www.cbo.org/blogs/president-trumps-tax-cut-largest-history; Congressional Budget Office, “Budget and Economic Data: Revenue Projections, by Category, table 8b of February 2023 baseline revenue backup table,” 2023, available at https://www.cbo.gov/data/budget-economic-data; Office of Management and Budget, “Budget of the United States, Fiscal Year 1989” (Washington: Executive Office of the President, 1989), pp. 95 and 588, available at https://fraser.stlouisfed.org/title/budget-united-states-government-54-fiscal-year-1989-198995.


11 Ibid.

12 Auerbach, “The U.S. Fiscal Problem: Where We Are, How We Got Here, and Where We’re Going.”

13 “Researchers have not found any threshold above which debt dramatically slows economic growth. But a debt ratio that is high by historical standards has led some policymakers and analysts to call for more deficit reduction in order to lower it. Reducing deficits while the economy is weak is harmful, but economists generally believe that the debt ratio should be stable or declining when the economy is strong.” Center on Budget and Policy Priorities, “Policy Basics: Deficits, Debt, and Interest” (Washington), available at https://www.cbpp.org/research/federal-budget/deficits-debt-and-interest (last accessed March 2023).

14 Kogan and others, “Difference Between Economic Growth Rates and Treasury Interest Rates Significantly Affects Long-Term Budget Outlook.”


19 This analysis compares the CBO’s 2012 long-term budget outlook with its 2019 long-term budget outlook because 2019 was the last year in which the CBO produced long-term budget outlooks that contained figures without macrodynamic feedback, which are essential to fiscal gap analysis. Therefore, the 2019 long-term budget outlook is the most recent direct comparison possible. Comparing 2012 to 2023, which produces an apples-to-oranges analysis, yields similar results: both noninterest spending and revenues below 2012 projections but revenues significantly lower.

This is the net present value over 30 years, as a percent-of-GDP ratio at the level chosen over the window chosen.

The technical definition is that the fiscal gap measures the net present value of how much primary deficit reduction as a percentage of GDP is necessary to stabilize the debt ratio at the level chosen over the window chosen.

This report can thus assert with full confidence that the net present values of the Bush and Trump tax cuts are larger than the fiscal gap and therefore that without them, there would be no fiscal gap. See Congressional Budget Office, “The 2014 Long-Term Budget Outlook” (Washington: 2014), available at https://www.cbo.gov/publication/53651.


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59 Congressional Budget Office, “The Budget and Economic Outlook: 2023 to 2033.”


61 Congressional Budget Office, “The Budget and Economic Outlook: 2023 to 2033.”
Figure 3 sources


