

The Federal Budget Outlook: We Are Not Winning

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In this article, Auerbach, Gale, and Krupkin discuss the federal budget outlook, examining long-term debt and the fiscal gap using recently updated data from the Congressional Budget Office and the Social Security and Medicare boards of trustees.

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I. Introduction

This article provides new estimates of the federal budget outlook, given new Congressional Budget Office projections that incorporate the 2017 Tax Cuts and Jobs Act (P.L. 115-97) and the 2018 omnibus spending bill as well as new reports by the trustees for Medicare and Social Security.¹

On balance, the medium-term (10-year) outlook has worsened over the past year. The 2017 tax cut, the 2018 spending deals, and higher projected interest rates raise projected deficits and debt, while expectations of a stronger economy (in large part attributable to the fiscal stimulus from policy changes) and lower healthcare spending work in the opposite direction. The net effect is that the CBO now projects a debt-to-GDP ratio of 94.5 percent in 2027 under current law, compared to a projection of 91.2 percent in June 2017.²

The underlying fiscal situation, however, has deteriorated significantly more than the comparison of 2027 debt-to-GDP figures suggests. First, in terms of the government’s underlying fiscal stance, the strong projected economy makes the projections of large deficits more worrisome.

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The 2018 Medicare Trustees Report is at “2018 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds.” The 2018 OASDI Trustees Report is at “The 2018 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds.” Congressional Budget Office, “The 2015 Long-Term Budget Outlook,” CBO 2015 (June 16, 2015); CBO, “An Update to the Budget and Economic Outlook: 2017 to 2027” CBO 2017 (June 29, 2017); CBO, “An Analysis of the President’s 2019 Budget,” CBO 2018a (May 24, 2018); CBO, “The Budget and Economic Outlook: 2018 to 2028,” CBO 2018b (April 9, 2018); and CBO, “The 2018 Long-Term Budget Outlook,” CBO 2018c (June 26, 2018). CBO 2018c incorporates a slightly revised short-term projection compared to CBO 2018b, but the updates do not affect the conclusions in this article. For more details, see CBO 2018a, Table 6.

²CBO 2017, 2018b.

The CBO projects that cumulative actual and potential GDP will be equal, on average, over the 2018-2028 period. The strong economic performance is in significant part attributable to the implementation of the tax legislation. But it also means that the higher projected deficits and debt are essentially full-employment deficits. If the economy falls into recession, the medium-term fiscal outlook is likely to look significantly worse.

Second, under a “current policy” scenario, the problem is considerably worse, as the CBO acknowledges. Whereas current-law projections examine the impact of Congress essentially making no further changes over the projection period, current-policy projections estimate the impact of what might be termed business-as-usual assumptions regarding tax and spending choices — in particular, that policymakers routinely extend temporary provisions.³ Under current law, the CBO projects a debt-to-GDP ratio of 96.2 percent by 2028.⁴ Under current policy, we project a debt-to-GDP ratio of 106.3 percent in that year, which would be the highest ratio in U.S. history, just surpassing the previous high from 1946, right after the close of World War II.

Third, the situation only gets worse after 2028. The fiscal gap measures the tax and spending changes needed to bring the debt-to-GDP ratio to a specified level in a specified year. For example, under current policy, we find that to ensure the debt-to-GDP ratio 30 years from now does not exceed the current level would require a combination of immediate and permanent spending cuts or tax increases totaling 4.2 percent of GDP. This represents about a 22 percent cut in noninterest spending or a 25 percent increase in tax revenue relative to current levels. To put this in perspective, the 2017 tax cuts and 2018 spending bill will raise the deficit by less than 2 percent of GDP in 2018. The required adjustments to keep debt at its current ratio to GDP in 2048 are more than twice as big and in the opposite direction. The longer policymakers wait to

institute changes, the larger those adjustments would have to be to hit a given debt target in a given year. Projecting beyond 2048 also worsens the picture because the fiscal outlook under current policy continues to deteriorate after that date.

Sustained federal deficits and rising federal debt that are used to finance consumption or transfer payments will crowd out future investment; reduce prospects for economic growth; make it more difficult to conduct routine policy, address major new priorities, or deal with the next recession or emergencies; and impose substantial burdens on future generations. The nation’s debt-to-GDP ratio rose by about 35 percentage points during and in the aftermath of the most recent recession. It is hard to believe that policymakers or financial markets would look kindly on the United States’ needing to borrow another 35 percent of GDP when the next recession hits.

II. The 10-Year Budget Outlook

A. Current Law

The CBO is constrained in how it projects the budget. It must assume that expiring tax provisions are not extended, that mandatory programs are reauthorized as scheduled, and that discretionary spending follows the caps set forth in the Budget Control Act of 2011 (which were modified in subsequent legislation) through 2021 and remains constant in real terms thereafter. Figures 1 and 2 and Appendix Table 1 display deficits and debt under current law. The CBO projects the current-law deficit will rise from 4

³The CBO’s current-law projections assume that some actions are taken: the debt ceiling is raised, existing programs are reauthorized, and Social Security and Medicare programs pay scheduled benefits — even if their respective trust funds are depleted.

⁴CBO 2018b.

percent of GDP in 2018 to 5.1 percent in 2028. End-of-year debt rises from 78 percent of GDP to 96 percent over the same period.⁵

B. Current Policy

We construct alternative 10-year projections by starting with the CBO's April 2018 current-law baseline (CBO 2018b) and then making adjustments. In many cases, we can use estimates that the CBO itself provides of alternative policy options. Appendix Table 1 outlines the size of the adjustments relative to the CBO baseline. We emphasize that these adjustments are not policy recommendations; they simply show the effects of what we view as a continuation of current policies.

We assume that major temporary tax-cut provisions are made permanent, including those in the TCJA. This includes 100 percent bonus depreciation (expensing of business investment in qualifying equipment) and the personal income tax cuts scheduled to expire after 2025.⁶

We also assume that enacted tax provisions for which implementation has already been delayed will be permanently delayed (that is, the provisions will not take effect). This includes some postponed or suspended healthcare taxes in the Affordable Care Act, such as the medical device excise tax and the tax on high-premium insurance (the Cadillac Tax). With bipartisan support, implementation of those taxes was postponed by two years in the Protecting

Americans From Tax Hikes Act in December 2015, and by another two years in the January 2018 short-term continuing resolution.

On the spending side, the CBO sets discretionary spending through 2021 at the levels created by the discretionary spending caps and sequestration procedures (as imposed in the Budget Control Act of 2011 and modified by the Bipartisan Budget Acts of 2013, 2015, and 2018) and then allows them rise with inflation. In our specification, we allow defense spending to rise with inflation, starting in 2019, so that real defense expenditures remain constant at 2018 levels.⁷ We allow non-defense discretionary spending to rise with the rate of inflation and the rate of population growth, so that real per-capita spending remains constant at 2018 levels.

Both assumptions are meant to reflect a rough approximation of a budget that maintains current services. For defense, largely a non-rival public good, it seems reasonable to assume that current services can be maintained without regard to population over the short term. For non-defense programs, it is more likely that maintaining current services requires a population adjustment.

Also, we let non-defense emergency funding fall to its historical average, removing the extrapolation of funds for recent hurricanes and wildfires in CBO's baseline.

Deficits and debt under current policy are reported in Figures 1 and 2 and in Appendix Table 1. Deficits rise from 4 percent of GDP in 2018 to 7.4 percent by 2028. The debt-to-GDP ratio grows slowly to 81.4 percent of GDP by 2020, after which it starts rising more rapidly to reach 106.3 percent by 2028.

C. Discussion

1. Deficits.

Over the next decade, deficits average 4.9 percent of GDP under current law and 6.1 percent under current policy. In the post-war period, the United States has had deficits above 4.9 percent in only a handful of years: a few years in the mid-1980s during a steep recession and 2009-2012 after

⁵ CBO 2018b, page 3, explains that the deficit for fiscal 2018 will be about \$44 billion lower than would otherwise be expected because October 1, 2017, (the beginning of fiscal 2018) fell on a weekend, thus pushing some October payments up to the end of September in the previous fiscal year. The same issue raises the deficit in 2022 and reduces it 2024. For similar reasons, the deficit in 2028 will be about \$89 billion larger than otherwise expected. Accounting for this shift would reduce spending in 2028 and simultaneously increase spending in 2029 relative to the baseline and would thus have very little net effect on our fiscal gap estimates. As an extreme case, if the entire timing shift were attributable to Medicare payments — which grow faster on average than primary spending — and if we simply eliminated \$89 billion of Medicare payments in 2028, rather than assigning them to later years, the estimated fiscal gap through 2048 would fall to about 3.9 percent of GDP, as compared to our base case (current policy) estimate of 4.2 percent, which is shown in Table 1.

⁶ Examples of major expiring provisions in the TCJA include the top marginal income tax rate of 37 percent, the increased standard deduction, the repeal of personal exemptions, and the 20 percent deduction for specific passthrough income. Examples of expiring provisions outside of the TCJA include the section 48 energy investment credit, the credit for alternative fuel vehicle refueling property, and empowerment zone tax incentives. For a complete list, see tab 7 of the supplemental revenue projection file that accompanies CBO 2018b.

⁷ CBO 2018b uses a mix of the employment cost index and the GDP price index to measure inflation.

the financial crisis and Great Recession. The deficit exceeded 6.1 percent of GDP only from 2009-2012.

The projected deficits are, on average, full-employment deficits because cumulative actual GDP is projected to equal cumulative potential GDP over the period.⁸ This gives a strong sense of how large the fiscal imbalance is. The average full-employment deficit between 1965 and 2017 was just 2.6 percent of GDP.⁹

Figure 1 shows that the primary (ex-interest) deficit is positive under both current law and current policy and rises over time as a share of GDP under current policy.

2. Debt.

At 77 percent of GDP, publicly held federal debt is already higher than at any time in U.S. history other than a seven-year period around World War II. From 1957 to 2007, the ratio never exceeded 50 percent and averaged just 36 percent. In 2007, the last year before the financial crisis and the Great Recession, the ratio was 35 percent.

The debt-to-GDP ratio rises by more than 28 percentage points from 2018 to 2028 under current policy. By 2028 the debt-to-GDP ratio under current policy is projected to be the highest ever, barely edging out a figure of 106.1 percent in 1946. As shown later, the ratio is projected to rise further. This highlights a key difference between the current situation and previous high-debt episodes in U.S. history. In those episodes — the Civil War, World War I, and World War II — the debt-to-GDP ratio was cut in half roughly 10 to 15 years after the war ended.¹⁰ In our current

situation, however, we are facing a chronic imbalance between revenue and spending, in considerable part because of the aging of the population, rather than a one-time spike in spending attributable to a war. Also, we are unlikely to achieve the economic growth rates we experienced post-WWII.

3. Spending.

Total spending under current policy rises from 20.6 percent of GDP in 2018 to 24.7 percent by 2028 (Figure 3). By comparison, total spending averaged 20.4 percent of GDP from 1965 to 2017 (weighted by GDP). As a share of GDP, net interest and mandatory spending are projected to rise, while discretionary spending is slated to decline.

Net interest payments are projected to rise from 1.6 percent of GDP in 2018 to 3.4 percent in 2028. The rise is attributable to projections of growing debt and rising interest rates.¹¹ From 1965 to 2017, by comparison, net interest averaged 1.9 percent of GDP.

Overall noninterest spending rises from 19 percent of GDP in 2018 to 21.3 percent by 2028 (Figure 3), considerably above the average (weighted) value from 1965 to 2017 of about 18.6 percent.

Mandatory spending is projected to rise from 12.7 percent of GDP in 2018 to 15.2 percent in 2028, a big part of this growth attributable to Social Security (about 1.1 percent of GDP) and net Medicare spending (1.3 percent of GDP). Among the remaining programs, Medicaid benefits, Children's Health Insurance Program (CHIP), and exchange subsidies rise by about 0.3 percent of GDP, offset in part by a decline of 0.2 percent of GDP in spending on other entitlements (Figure 4).

Discretionary spending falls from 6.4 percent of GDP in 2018 to 6.1 percent in 2028, even under current policy. Within that category, defense

⁸ CBO 2018b.

⁹ This figure is a weighted average, where the weight is GDP. The unweighted average is 2.3 percent.

¹⁰ Many observers believe the economy has entered a new era of permanently lower interest rates (Douglas Elmendorf and Louise Sheiner, "Federal Budget Policy With an Aging Population and Persistently Low Interest Rates," 31(3) *J.Econ.Persp.* 175-94 (2017); Lawrence H. Summers, "The Age of Secular Stagnation," *Foreign Affairs* (Mar./Apr. 2016)). To test the effect of interest rate assumptions on the budget outlook, we ran a sensitivity analysis that we believe to be extremely optimistic (for budgetary purposes) — namely, that a weighted average of nominal interest rates on all government debt stays constant at its implied 2018 value (2.1 percent). This interest rate is calculated by dividing the estimated net interest payments in 2018 from CBO 2018b by the debt at the end of 2017. We thank Richard Kogan for developing a matrix that allows us to estimate the effects of constant interest rates over time. Under this scenario, still assuming current policy for tax and spending programs, we find that in 2028, the deficit would be 6 percent of GDP and debt would be about 95 percent of GDP.

¹¹ The three-month Treasury bill rate rises to 3.8 percent in 2021 compared with 1.6 percent in 2018. The 10-year Treasury note rate rises to 4.2 percent in 2021 compared with 2.8 percent in 2018. Various measures of the inflation rate such as the Consumer Price Index are expected to rise around 0.3 percentage points over the same period; the remainder of the interest-rate increases represents changes in real interest rates. The interest rates are projected to fall to 2.8 and 3.7 percent, respectively, by 2028. Note, though, that this moderation is in part attributable to the removal of fiscal stimulus under current law through the expiration of tax provisions and very low discretionary spending growth — factors not present under our current-policy scenario.

spending declines from 3.1 percent in 2018 to 2.9 percent in 2028, while non-defense discretionary spending falls from 3.3 percent of GDP in 2018 to 3.2 percent in 2028. All of these shares are low relative to historical figures. Since 1965, the lowest discretionary spending share of GDP occurred in 1999, at 6 percent. The lowest share for defense spending was 2.9 percent in 1999-2001. The lowest nondefense discretionary spending share of GDP was 3.1 percent in 1998-2000.

4. Revenue.

Revenue is projected to increase from 16.6 percent of GDP in 2018 to 17.3 percent in 2028 under current policy. (Under current law, revenue rises to 18.5 percent of GDP by 2028.) By comparison, revenue averaged 17.2 percent of GDP from 1965 to 2017 (weighted). Notably, individual income tax revenue is projected to rise from 8.2 percent of GDP currently to 8.9 percent by 2028 under current policy. The increase in individual income tax revenue is paired with a small increase in corporate tax revenue from 1.2 percent of GDP in 2018 to 1.4 percent in 2028 and a smaller increase in payroll tax revenue. Other revenue is projected to drop as a share of the economy over the period.

D. Trust Funds

The federal government runs several trust funds, most notably for Social Security (Old Age and Survivors Insurance), disability insurance, Medicare (two separate funds), civilian and military retirement, and transportation spending. All the projections highlighted above integrate the trust funds into the overall budget. These projections also assume that scheduled benefit payments will be made even if trust fund balances run to zero. However, many of the trust funds are not legally allowed to pay out benefits that would draw their balances below zero.

This is not just an academic concern. That trust fund constraint was one of the proximate causes of Social Security reform in 1983; the trust fund had almost run out of money, an eventuality that would have required cuts in promised benefits so that they would not exceed incoming revenue. The Social Security trust fund is scheduled to make forced adjustments by 2034 (according to the Social Security trustees; 2032

according to CBO). The disability insurance trust fund is scheduled to make forced adjustments by 2032 (according to the Social Security trustees; 2025 according to CBO).¹² The Medicare Part A (hospital insurance) fund appears, according to CBO and the 2018 trustees report, likely to hit a similar constraint by 2026.¹³ Each of these dates may prompt at least limited fiscal action. In each case, legislators will be forced to override the rules regarding trust funds, make interfund transfers, reduce benefits, or raise taxes. In contrast, Medicare parts B (supplementary medical insurance) and D (prescription drug coverage) receive substantial general-revenue funding and do not have the constraint that spending can be financed only by trust fund payments.

Although low trust fund balances may require action, low balances and actions to address them relate to individual programs and the nature of their funding sources. They also provide an incomplete picture of the federal government's overall fiscal position over the longer term, an issue to which we now turn our attention.

III. The Long-Term Budget Outlook

As shown, deficits are projected to rise relative to GDP over the next decade. This suggests that looking only at the next 10 years gives an incomplete and overly optimistic picture of the fiscal outlook, even with our adjustments made in characterizing current policy. In this section, we examine the fiscal outlook over longer horizons. We report fiscal gaps and debt-to-GDP ratios under various scenarios.

A. Definitions and Assumptions

The fiscal gap is an accounting measure that is intended to reflect the long-term budgetary status of the government.¹⁴ The fiscal gap answers the

¹² OASDI Trustees Report; CBO 2018c.

¹³ 2018 Medicare Trustees Report; CBO 2018b.

¹⁴ Alan J. Auerbach, "The U.S. Fiscal Problem: Where We Are, How We Got Here, and Where We're Going," *National Bureau of Economic Research Macroeconomics Annual 1994, Volume 9*, 141-175. Auerbach et al., "Budget Blues: The Fiscal Outlook and Options for Reform" in Henry J. Aaron, James Lindsay, and Pietro Nivola (eds.), *Agenda for the Nation*, 109-143, discuss the relationship between the fiscal gap, generational accounting, accrual accounting, and other ways of accounting for government.

question: to start a policy change in a given year and reach a given debt-to-GDP target in a given future year, what is the size of the annual, constant-share-of-GDP increase in taxes or reductions in noninterest expenditures (or combination of the two) that would be required, holding projected economic performance unchanged? For example, one might ask what immediate and constant policy change would be needed to obtain the same debt-to-GDP in 2048 as exists today?¹⁵ Or one might ask, what constant share-of-GDP change would be required, starting in 2021, to achieve a debt-to-GDP ratio of 60 percent by 2048?

For our base case, we use the current policy projections developed for the first 10 years, assume that policymakers start making fiscal adjustments in 2018, and set a debt-to-GDP target for the future equal to the ratio at the beginning of fiscal 2018, 76.5 percent.

We use long-term economic growth assumptions implied in CBO 2018c. From 2029 to 2048, the average nominal economic growth rate is 4.11 percent. CBO 2018c does not report growth rates after 2048, so we assume that the economy grows at the same average rate in subsequent years.

We assume the weighted average nominal interest rate on government debt rises gradually from 3.4 percent in 2029 to 3.9 percent in 2048, following CBO 2018c. After 2048, we gradually increase the interest rate to 5 percent by 2093, consistent with the long-term nominal interest rate projected by the 2018 trustees' report, adjusted for differences in economic growth between the trustees' report and CBO 2018c.

For Medicare and OASDI, we project all elements of spending and dedicated revenue (payroll taxes, income taxes on benefits,

premiums, and contributions from states) using the growth rates in the intermediate projections in the 2018 trustees' reports for 2029 to 2093.¹⁶ For Medicaid, CHIP, and exchange subsidies, we use growth rates implied by CBO's most recent long-term static projections¹⁷ (CBO 2018c) through 2048. After 2048, the growth rate follows CBO 2015, but the level is adjusted for the difference in average spending between CBO 2015 and CBO 2018c for 2044-2048.¹⁸

We assume that all other revenue, all other mandatory spending, and all discretionary spending remains constant as its 2028 share of GDP. This implicitly assumes that policymakers will make a series of (small) tax cuts and discretionary spending increases over time.

After 2093, all noninterest spending and all revenue is assumed to be constant as a share of GDP, in all the scenarios.

We also undertake the following sensitivity analyses:¹⁹

- Use the current-law baseline for the first 10 years.
- Assume that policymakers delay changes until 2021 or 2025.
- Allow Medicare spending to rise faster than under the base case. As noted, our base case uses the intermediate projections of the Medicare trustees,²⁰ which have for many years incorporated the assumption that Medicare growth will eventually slow. Starting in the 2010 report, however, the trustees' official projections have assumed a much stronger slowdown because of

¹⁶Details of these computations are available from the authors upon request. 2018 Medicare Trustees Report and 2018 OASDI Trustees Report, *supra* note 1. These figures are adjusted upward to match CBO totals in 2028.

¹⁷The static projections are based on macroeconomic forecasts for a constant debt-to-GDP ratio and constant marginal tax rates after 2028; that is, excluding the negative effects of economic policy during this period.

¹⁸CBO 2015 includes a 75-year projection, while CBO 2018c has only a 30-year projection. Our procedure aims to extend the data in CBO 2018c for the other 45 years. From 2044-2048, projections in CBO 2018c for Medicaid, CHIP, and exchange subsidies as a share of GDP are about 5 percent larger than the projections in CBO 2015.

¹⁹David Kamin, "Are We There Yet? On a Path to Closing America's Long-Run Deficit," *Tax Notes*, Oct. 1, 2012, p. 53; and Richard Kogan, Kathy Ruffing, and Paul N. Van de Water, "Long-Term Budget Outlook Remains Challenging, But Recent Legislation Has Made It More Manageable," Center on Budget and Policy Priorities (2013), provide additional perspective on these assumptions.

²⁰2018 Medicare Trustees Report, *supra* note 1.

¹⁵Over an infinite planning horizon, this requirement is equivalent to assuming that the debt-to-GDP ratio does not explode (Auerbach, *id.* 1994; and Auerbach, "Quantifying the Current U.S. Fiscal Imbalance," 50(3) *Nat'l Tax J.* 387-98). For the current value of the national debt, we use publicly held debt. An alternative might be to subtract government financial assets from this debt measure, but the impact on our long-term calculations would be small (reducing the fiscal gaps by less than 0.1 percent of GDP).

provisions in the ACA. These assumptions, though they may be consistent with the impact of the bill's provisions should they remain in force over the long term, are not adopted by other forecasters, who have a more pessimistic outlook. The illustrative scenario in the trustees' report and the extended baseline in CBO 2018c include projections showing faster spending growth.

- Have some forms of spending fall as a share of GDP after 2028, by adjusting mandatory spending (other than Social Security, Medicare, and Medicaid) and non-defense discretionary spending for inflation and population, and defense spending only for inflation. As noted earlier, this assumption would essentially maintain current services.
- Allow income tax revenue to rise as a share of GDP after 2028 because of bracket creep and rising withdrawals from retirement plans.
- Fix interest rates on government debt at their 2018 levels throughout the period in question.
- Assume the debt-to-GDP target is 60 percent, a ratio proposed by at least two budget commissions.²¹

B. Results

Under our base case, the debt-to-GDP ratio, after reaching 106 percent in 2028, would rise to 149 percent in 2038, and 200 percent in 2048, if policymakers do not take corrective fiscal actions. The first entry on the first row of Table 1 shows that it would require immediate and permanent tax increases or spending cuts totaling 4.2 percent of GDP starting in 2018 to bring the debt-to-GDP ratio in 2048 down to 76.5 percent, the level at the end of 2017.

The first row of Table 1 also shows that the analogous fiscal gap through 2093 is 5.6 percent of GDP. On a permanent basis, the required adjustment is 6.7 percent of GDP. The rest of the

table offers sensitivity analyses, in terms of deviations from the baseline results.²²

Using the current-law baseline assumptions over the first 10 years instead of the current-policy baseline reduces the 2048 debt-to-GDP ratio by 47 percentage points and reduces the 2048 fiscal gap by 1.6 percent of GDP. As noted, the longer policymakers wait to make the adjustments, the larger the eventual adjustments will have to be. The required adjustments to meet a 2048 target would be 0.5 percent of GDP larger if implementation were delayed until 2021 and 1.2 percent of GDP larger (relative to the baseline) if delayed until 2025.

Through 2048 the differences in the fiscal gaps implied by the different Medicare scenarios are relatively small. Over longer periods, however, the differences are much larger.

If baseline outlays for non-defense discretionary and other mandatory programs are held constant in real, per-capita terms after 2028 and defense spending remains constant in real terms (instead of each item being a constant share of GDP), the fiscal gap falls by about 0.6 percent of GDP through 2048, 2.2 percent of GDP through 2093, and about 3.5 percent of GDP on a permanent basis.

If baseline income tax revenue grows with bracket creep and retirement withdrawals after 2028 (instead of remaining a constant share of GDP), the fiscal gap falls by 0.3 percent of GDP through 2048, 1.4 percent of GDP through 2093, and 2.5 percent of GDP on a permanent basis.

Holding the interest rate constant at its implied 2018 level reduces the fiscal gap by about 0.8 percent of GDP through 2048.

Finally, setting the debt-to-GDP target at 60 percent raises the fiscal gap by about 0.5 percent of GDP through 2048 and 0.2 percent of GDP through 2093.

²¹ See Debt Reduction Task Force, "Restoring America's Future: Reviving the Economy, Cutting Spending and Debt, and Creating a Simple, Pro-Growth Tax System," Bipartisan Policy Center (2010); and the Peterson-Pew Commission on Budget Reform, "Red Ink Rising: A Call to Action to Stem the Mounting Federal Debt" (Dec. 2009).

²² The results are roughly additive across scenarios. For example, the fiscal gap through 2048 of a scenario with current law for the first 10 years, lower spending, higher revenue, and the illustrative scenario for Medicare could be approximated by the base case gap plus the incremental gaps to generate an approximate fiscal gap through 2048 of 1.78 percent of GDP (4.17 - 1.61 - 0.6 - 0.32 + 0.15, with rounding). A formal estimate that explicitly incorporates all those factors generates a fiscal gap of 1.8 percent of GDP.

IV. Discussion

The nation is on course for routine trillion-dollar annual deficits, and the highest debt-to-GDP ratio in our history is within sight — in 2028 under current policy. However, there is worse news. Beyond the next decade, deficits and debt are projected to rise steadily because of rising entitlement spending and net interest payments and, as of yet, an unwillingness to either reduce such outlays or provide the revenue needed to finance them.

The adjustments needed to put the nation on a sustainable and stable path are more substantial than anything discussed in the current political arena. It is useful to emphasize that even if the main driver of long-term fiscal imbalances is the growth of entitlement benefits, this does not mean that the only solutions are some combination of benefit cuts now and benefit cuts in the future. For example, when budget surpluses began to emerge in the late 1990s, President Clinton devised a plan to use the funds to save Social Security first. Without judging the merits of that plan, our point is that Clinton recognized that Social Security faced long-term shortfalls and, rather than ignoring those shortfalls, aimed to address the problem in a way that went beyond simply cutting benefits.

A more general point is that addressing entitlement funding imbalances can be justified precisely because one wants to preserve and enhance the programs, not just because one might want to reduce the size of the programs. Likewise, addressing these imbalances may also involve reforming the structure of other spending, raising or restructuring revenue, or creating new programs. Nor do spending cuts or tax changes need to be uniform across the board. Given the magnitude of the necessary overall adjustments, it is likely to be a much better approach, if not a politically easy one, to make choices among programs. For example, one could provide more

investment in infrastructure or children's programs even in the context of overall spending reductions. And the aging of the population and the requisite rise in spending will necessitate higher taxes as a share of GDP.

Clearly, there is substantial uncertainty regarding budget projections. Nevertheless, a range of reasonable estimates implies an unsustainable fiscal path that will generate significant problems if left unaddressed. How should the presence of that uncertainty affect when and how we make policy changes?²³ One argument is that we should wait; after all, the fiscal problem could go away. However, uncertainty can cut both ways, and the greater the uncertainty, the more we should want to address at least part of the problem now. There are benefits to getting the deficit under control — including economic growth and fiscal flexibility. If carrying high debt were costless economically and politically, many more countries would have done so before the Great Recession. In fact, very few had net debt-to-GDP ratios above 70 percent. Addressing the issue now does not necessarily mean cutting back on *current* expenditures or raising *current* taxes; rather, it may involve addressing future spending and revenue flows now, in a credible manner. However, the longer we wait to act, the larger and more disruptive the eventual policy solutions will need to be.

²³ Auerbach, "Fiscal Uncertainty and How to Deal with It," Hutchins Center, Brookings Institution (2014).

Table 1. Fiscal Gaps (percentage of GDP)

	2048 Fiscal Gap	2093 Fiscal Gap	Permanent Fiscal Gap
Central estimate			
Current policy baseline ^a	4.17%	5.65%	6.68%
Alternative options (incremental effects relative to current policy baseline)			
Current law for the first 10 years	-1.61%	-1.82%	-1.89%
Start in 2021	0.47%	0.23%	0.08%
Start in 2025	1.22%	0.56%	0.17%
CMS illustrative alternative health spending	0.15%	1.06%	2.05%
CBO extended baseline health spending	0.16%	1.7%	3.55%
NDDS and other mandatory grows with inflation and population, defense grows with inflation	-0.6%	-2.17%	-3.51%
Income tax grows with bracket creep and retirement withdrawals	-0.32%	-1.38%	-2.53%
Low interest rates	-0.85%	-1.03%	n/a
Debt target = 60 percent of GDP	0.46%	0.16%	n/a
<i>Source:</i> Authors' calculations.			
^a Uses current policy for the first 10 years, Medicare Trustees for health.			

Figure 1. Alternative Deficit Projections, 2018-2028

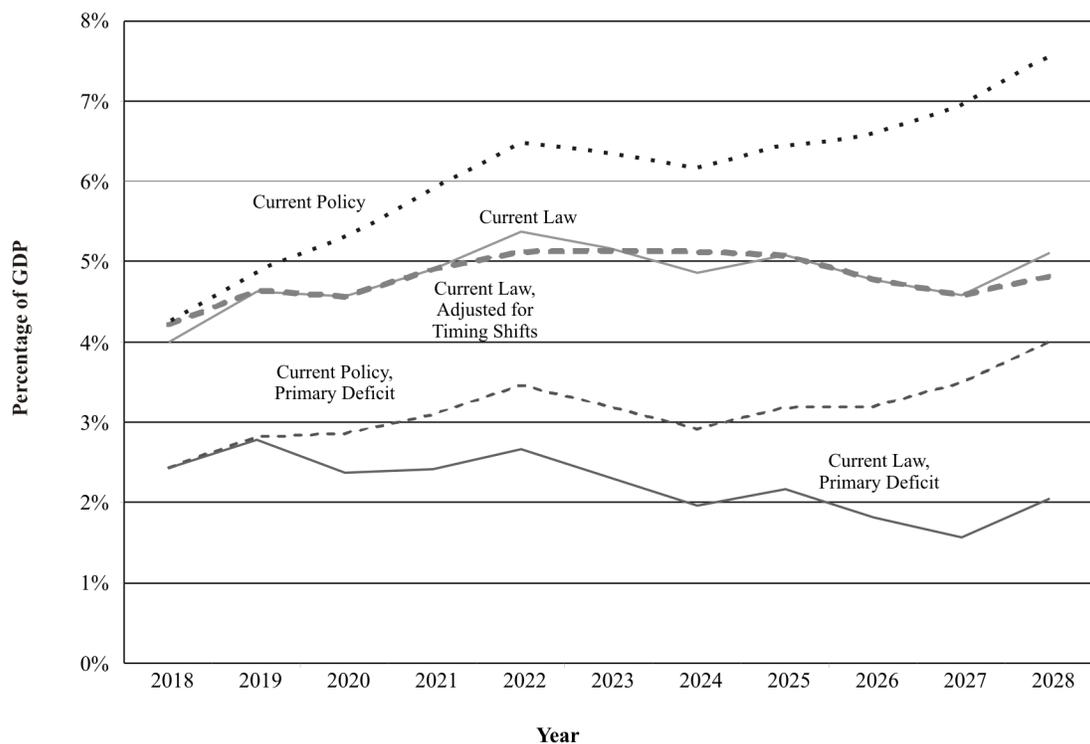


Figure 2. Debt Projections, 2018-2028

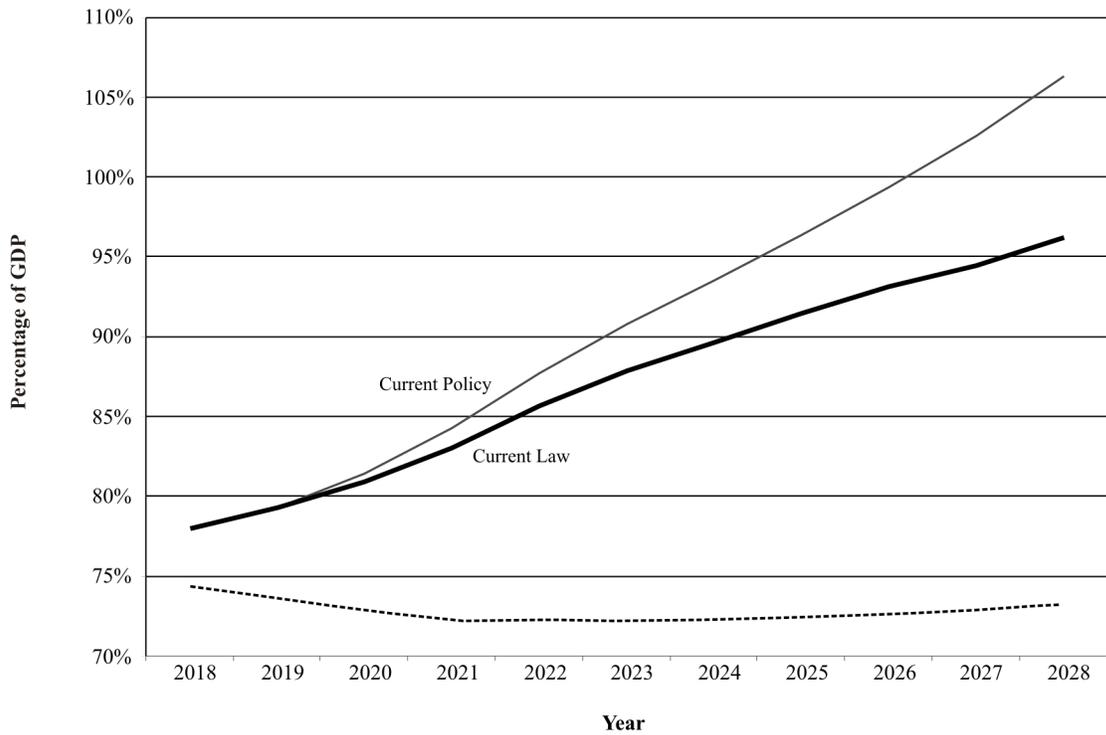


Figure 3. Spending, Revenue, and Deficits Under Current Policy, 2018-2028

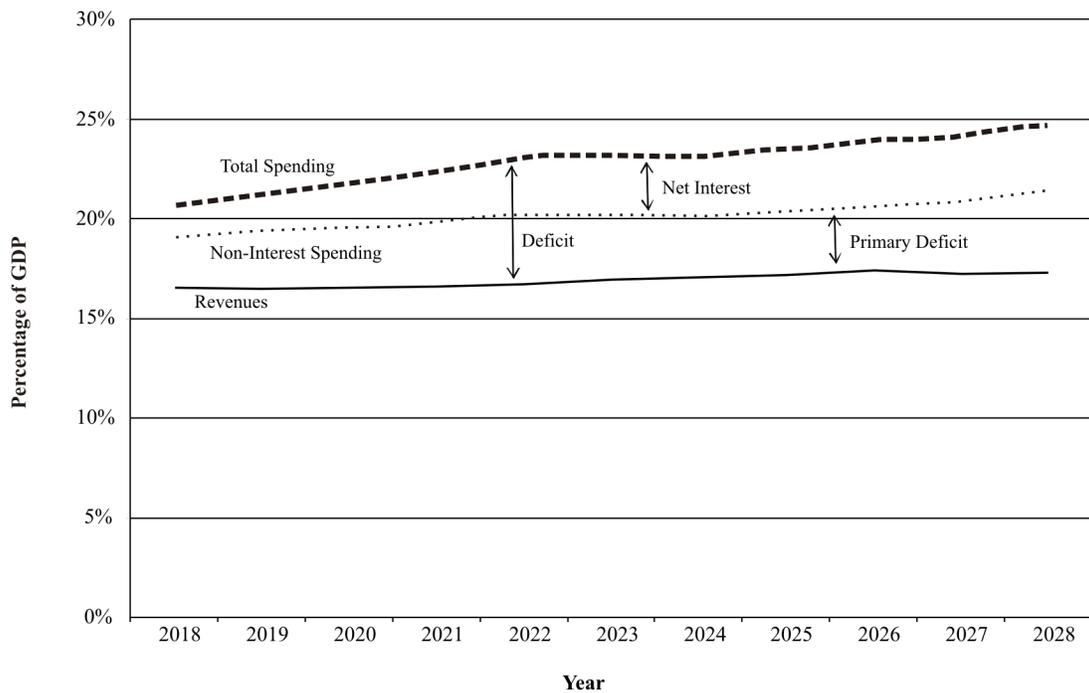
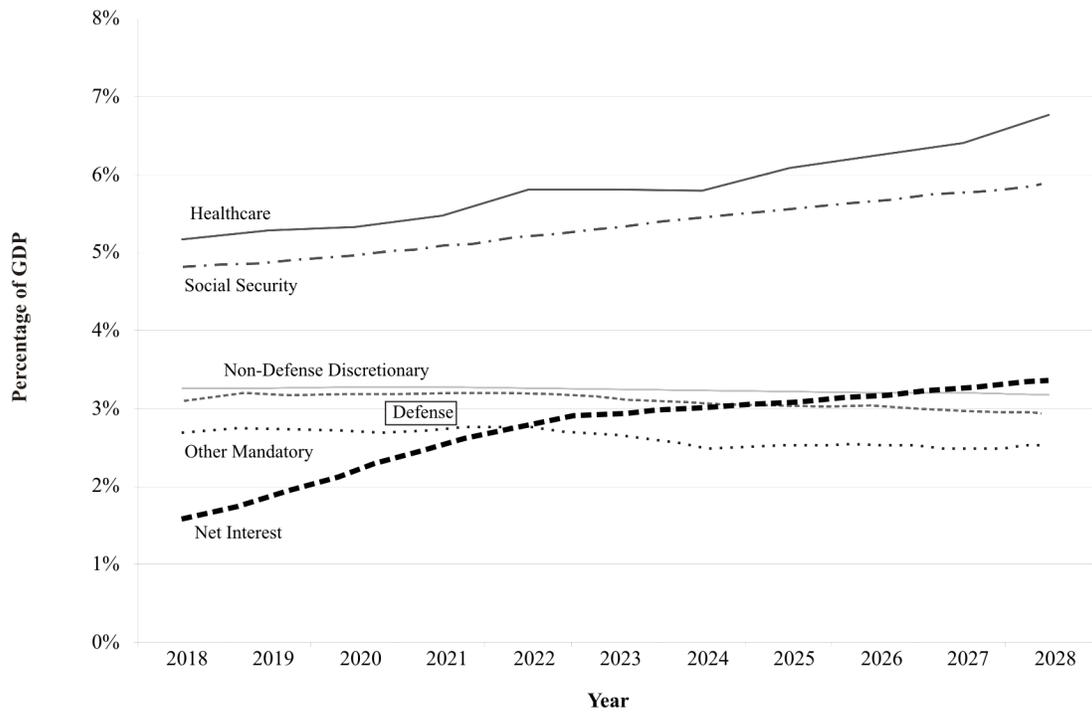


Figure 4. Composition of Spending Under Current Policy, 2018-2028



Appendix Table 1. Federal Budget Deficit, CBO Baseline and Extended Policy 2018-2028^{a,b}

		Deficit (dollars in billions)											
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019-2028
CBO Baseline		\$804	\$981	\$1,008	\$1,123	\$1,276	\$1,273	\$1,244	\$1,352	\$1,320	\$1,316	\$1,526	\$12,418
as percentage of nominal GDP		4%	4.6%	4.6%	4.9%	5.4%	5.2%	4.9%	5.1%	4.8%	4.6%	5.1%	4.9%
Adjustments for tax policy													
Extend temporary provisions in the Tax Cuts and Jobs Act		\$0	\$0	\$3	\$4	\$4	\$11	\$20	\$32	\$129	\$277	\$291	\$771
Repeal certain postponed or suspended health taxes ^c		\$0	\$0	\$15	\$16	\$24	\$32	\$37	\$41	\$47	\$53	\$60	\$324
Extend other expiring tax provisions		\$1	\$4	\$5	\$5	\$6	\$8	\$9	\$10	\$11	\$12	\$13	\$85
Subtotal		\$1	\$5	\$22	\$25	\$34	\$51	\$66	\$84	\$187	\$343	\$364	\$1,180
Net interest		\$0	\$0	\$1	\$2	\$3	\$4	\$6	\$9	\$13	\$22	\$37	\$96
Total adjustments for tax policy		\$1	\$5	\$23	\$27	\$37	\$55	\$72	\$92	\$200	\$364	\$402	\$1,276
as percent of nominal GDP		0%	0%	0.1%	0.1%	0.2%	0.2%	0.3%	0.3%	0.7%	1.3%	1.3%	0.5%
Adjustments for spending policy													
Increase non-defense discretionary spending with inflation and population		\$0	\$11	\$66	\$98	\$117	\$132	\$147	\$159	\$171	\$184	\$197	\$1,281
Increase defense with inflation		\$0	\$4	\$51	\$74	\$85	\$91	\$96	\$99	\$102	\$105	\$108	\$816
Maintain emergency funding at historical average		\$0	-\$14	-\$30	-\$40	-\$49	-\$58	-\$66	-\$73	-\$79	-\$81	-\$86	-\$577
Subtotal		\$0	\$1	\$86	\$132	\$153	\$165	\$177	\$185	\$194	\$208	\$218	\$1,520
Net interest		\$0	\$0	\$2	\$6	\$12	\$17	\$23	\$29	\$35	\$42	\$52	\$217
Total adjustments for spending policy		\$0	\$1	\$88	\$138	\$164	\$183	\$200	\$214	\$229	\$250	\$270	\$1,737
as percent of nominal GDP		0%	0%	0.4%	0.6%	0.7%	0.7%	0.8%	0.8%	0.8%	0.9%	0.9%	0.7%
Current Policy		\$805	\$986	\$1,118	\$1,287	\$1,477	\$1,510	\$1,515	\$1,658	\$1,750	\$1,931	\$2,198	\$15,431
as a percentage of nominal GDP		4%	4.7%	5.1%	5.6%	6.2%	6.1%	5.9%	6.2%	6.3%	6.7%	7.4%	6.1%
GDP		\$20,103	\$21,136	\$22,034	\$22,872	\$23,716	\$24,621	\$25,583	\$26,595	\$27,608	\$28,677	\$29,803	\$252,646

^aColumns may not sum to total due to rounding.

^bThe source of these estimates is CBO (2018) "The Budget and Economic Outlook: 2018 to 2028."

^cThese include the Cadillac tax, the medical device tax, and the tax on health insurance providers.