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High and Rising US Federal Debt: Causes and Implications

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High and Rising US Federal Debt: Causes and Implications

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ABSTRACT

The outlook for federal debt represents a significant economic challenge for the United States. Economic developments and policy changes over the past two decades have materially raised the level of current and projected debt, but the primary factors behind the projected upward trajectory of debt remain population aging and rising health care spending. Even under optimistic economic scenarios, debt will soon reach levels well above historical experience, which will impose significant economic costs and risks. Although changes in policy that substantially narrow the deficit have economic and political disadvantages, they are necessary to put the federal budget on a sustainable path.

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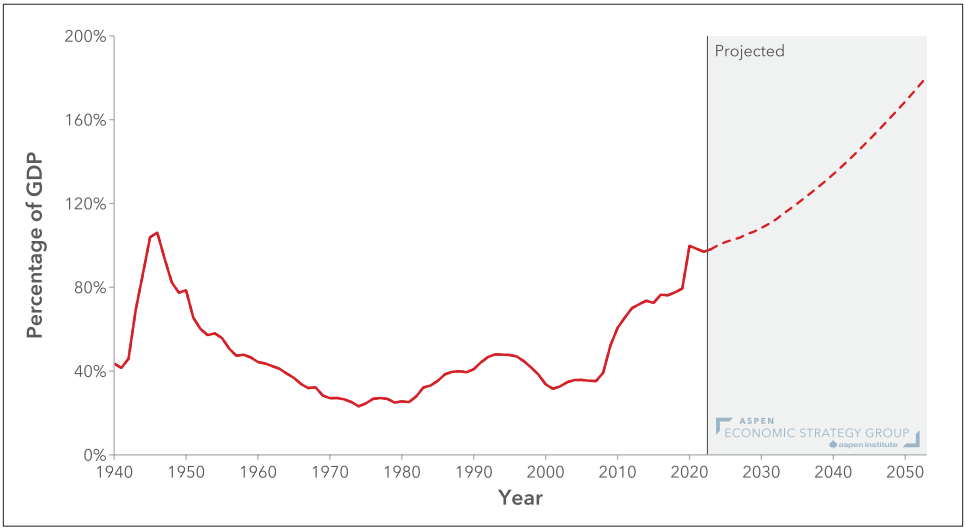
1. Introduction

The outlook for federal debt represents a significant economic challenge for the United States. Currently, federal debt stands at 98 percent of GDP, close to its highest level ever. As shown in figure 1, projections by the Congressional Budget Office (CBO) suggest that, under current law, the federal debt will reach 115 percent of GDP within the next ten years, with a further increase to about 180 percent of GDP by 2053 (CBO 2023c).[1] This paper examines the factors contributing to the high level of debt and its projected upward trajectory, presenting seven key points crucial for understanding the US fiscal outlook.

Figure 1. Federal Debt Held by the Public, 1940-2053



Source: CBO (2023c).

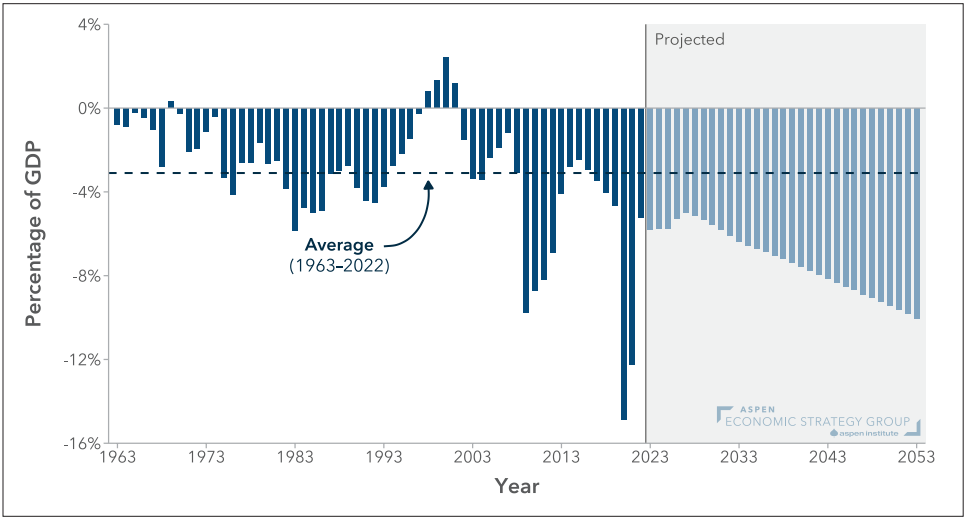
2. Population aging and rising health care spending are the primary factors underlying the sharp upward trajectory of debt.

Behind the projected surge in US federal debt is the expected evolution of the federal budget deficit, which is currently high and projected to rise steeply under existing law. As shown in figure 2, the budget deficit has moderated from its peak during the pandemic, but, at 5.8 percent of GDP in 2023, it is elevated by historical standards.

1 This paper will focus on the unified budget (including Social Security and other programs with trust funds) and will assume that scheduled payments are made even after the relevant trust funds are exhausted. The paper thus abstracts from the point that, in the absence of reform, the Social Security Administration will not have the legal authority to pay full benefits once its trust fund is exhausted (Duggan 2023).

And, like debt, the budget deficit is projected to climb much higher over the next three decades, reaching 10 percent of GDP by 2053. The fundamental cause for the steep increase is that, under current law, some types of government spending will rise considerably as a share of GDP.

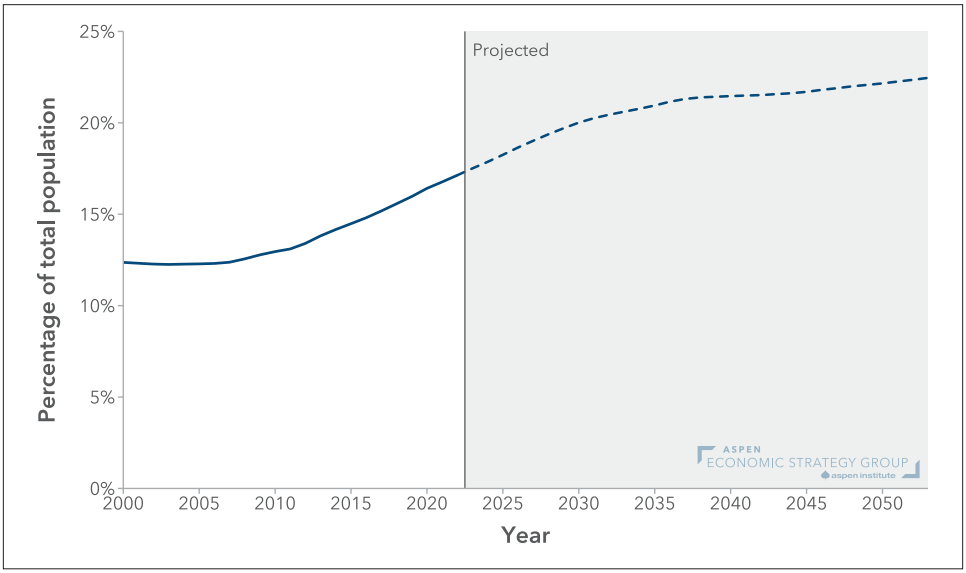
Figure 2. Federal Deficit and Surplus, 1963-2053



Source: CBO (2023c).

The aging US population is a key factor contributing to higher projected government spending. As can be seen in figure 3, the proportion of the US population aged 65 and over has already risen from approximately 12 percent in the first decade of the 2000s to 17 percent today, with projections indicating a further increase to more than 22 percent by 2050 (CBO 2023c). The growing older population will require significant federal support for both income and health care. Sabelhaus (2022) provides a recent discussion of this issue, but as illustrated by the 1990 report of the Social Security trust fund, this point has been long understood (Social Security Administration 1990). The amount of such support will depend on the extent to which support is targeted to more needy older people or provided more broadly; that, in turn, will depend on how society prioritizes the welfare of older people relative to that of younger people as well as long-term fiscal constraints.

Figure 3. Share of US Population 65 and Older, 2000-2053



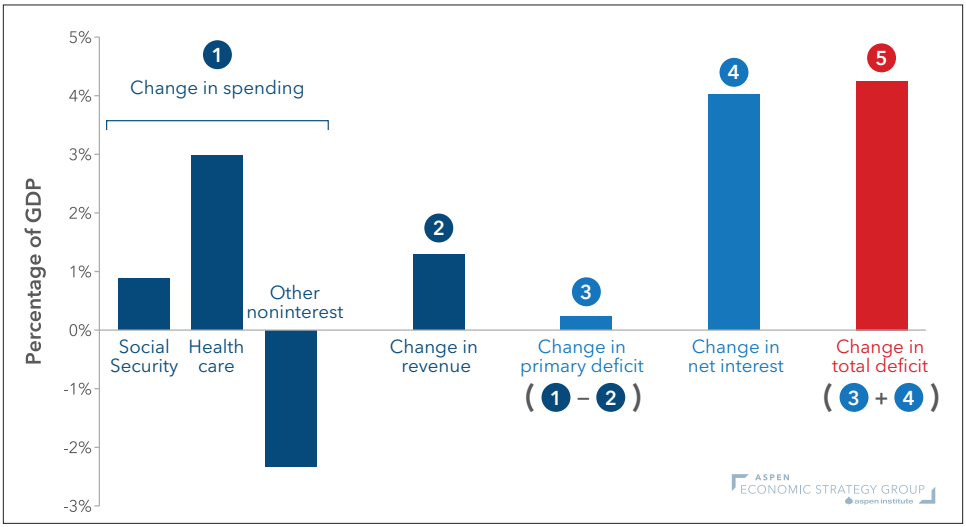
Source: CBO (2023c).

The pace at which health care costs are likely to rise represents another key force pushing up projected federal spending. Growth in spending on health care per person has exceeded GDP growth per person for many years, with analysts at the Centers for Medicare and Medicaid Services (CMS) estimating an average annual "additional cost growth" (also known as "excess cost growth") of 1.3 percent between 1985 and 2021 (Heffler et al. 2023).[2] Although additional cost growth trended down over this period—averaging only 0.5 percent per year between 2005 and 2021—a reasonable expectation is that health care spending growth will materially outpace GDP growth in the years ahead.

Figure 4 sheds light on the quantitative importance of these factors under current law, breaking down the rise in the deficit that CBO projects over the next 30 years into its main components. The figure uses a starting point of 2024 to remove the effects of pandemic-related factors that influence the 2023 federal deficit. CBO projects that the deficit in 2024 will be 5.8 percent of GDP and that the primary deficit (the deficit excluding interest payments) will be 3.0 percent of GDP.

2 I follow CBO in using the term "additional cost growth" in this paper.

Figure 4. Parsing the Change in the Federal Deficit, 2024-2053



Source: CBO (2023c).

The dark blue bars in the graph correspond to 2024–2053 changes in components of the primary deficit (the deficit excluding interest payments on the debt). The first two blue bars show the substantial influence of the aging population and rising health care costs. Social Security outlays are projected to rise by nearly 1 percent of GDP by 2053. Spending on major federal health care programs will rise by 3 percent of GDP. The rise in the primary deficit (the light blue bar) is not that large, at 0.2 percent of GDP, but the limited increase occurs only because of a sizable decline in noninterest spending outside Social Security and major health care programs as well as a material rise in tax revenues.[3] These projections are consistent with current law, but, as discussed below, the potential for changes in the current law means there is upside risk on the spending side and downside risk on the tax side.

While the projected increase in the primary deficit over the next 30 years is small, its starting size is large. At 3 percent of GDP in 2024, the primary deficit is notably higher than its average over the past 50 years of 1.5 percent. These large primary

3 The projected decline in other noninterest spending as a share of GDP reflects several features of current law. First, annual appropriations for so-called discretionary spending are legislated to increase with inflation but not with real GDP growth. Second, the number of people qualifying for many mandatory programs in this category, such as the Supplemental Nutritional Assistance Program, declines as incomes rise. Third, outlays per beneficiary in many mandatory programs rise with inflation but not with real incomes. Under current law, tax revenues increase as a proportion of GDP because rising real income will push people into higher tax brackets and because certain provisions of the 2017 Tax Cuts and Jobs Act are scheduled to expire in a few years.

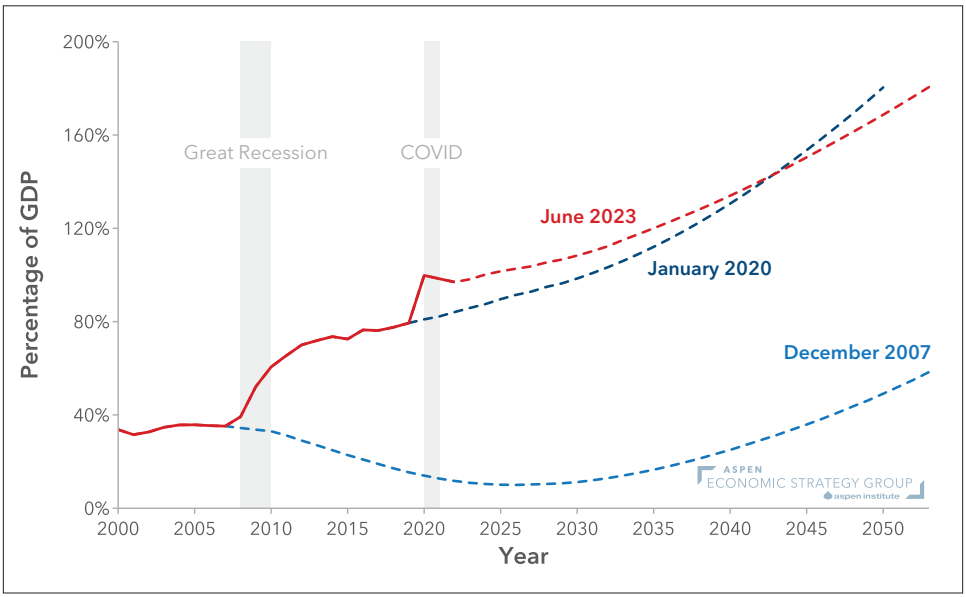
deficits, along with an already-high level of debt and interest costs, lead to a dramatic snowball effect over time that is illustrated by the light blue and red bars in figure 4. Ongoing large primary deficits generate additional debt that then leads to mounting interest costs, which in turn lead to a considerable additional increase in the total deficit and debt. Under the assumption that government borrowing rates remain at levels that are somewhat higher than the levels of the late 2010s but not especially high by historical standards (an issue discussed more fully below), CBO estimates that higher interest costs will push up the overall deficit by a further 4 percentage points (second light blue bar), for a projected increase in the total deficit of roughly 4.3 percentage points of GDP (red bar) over the next 30 years. Absent policy changes, this dynamic will push the deficit and debt ever higher—including in the years beyond CBO's window.

3. Economic developments and policy changes over the past two decades have significantly shifted current and projected levels of federal debt.

The United States has seen two significant adverse shocks to economic activity in the 21st century—the deep and prolonged Great Recession that began in 2007 as a result of the global financial crisis, and the sharp economic downturn that followed the onset of the COVID-19 pandemic in early 2020. Deficits tend to balloon during deep recessions and weak recoveries because lower economic activity reduces taxable income and because fiscal policy aimed at mitigating recession harms and stimulating demand raises government spending and further reduces tax revenues. These recent episodes fit this pattern.

Figure 5 shows different vintages of CBO's federal-debt projections to offer additional perspective on how those downturns (as well as other factors) affected federal debt. Looking at just the actual realizations of debt to date, shown by the solid portion of the red line, one can see the surges in debt that occurred during the Great Recession period and during the COVID-19 pandemic. The other lines in figure 5 show CBO's projections just prior to these episodes. The level of federal debt and its projected trajectory remained higher after each episode, even though, in both cases, the deficit (not shown) shrank considerably as the economy normalized.

Figure 5. Different Vintages of Federal Debt Projections, 2000-2053



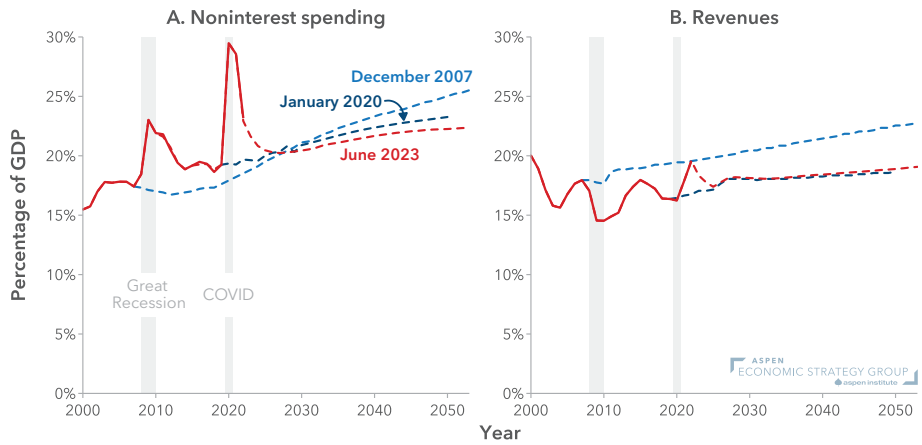
Sources: CBO (2007; 2020; 2023c). 2007 and 2020 projections rebated to match current history at starting point.

The large upward shift in the path of federal debt between 2007 and 2020 (corresponding to the gap between the light-blue and dark-blue lines of figure 5) warrants further attention, as it arose only partly from the effects of the Great Recession. To better understand this change, consider how noninterest spending and revenues have evolved, again using different vintages of CBO projections, shown in panels A and B of figure 6.

Comparing the light-blue line with the red line in panel A reveals that noninterest spending was much higher than expected during the Great Recession and the weak recovery that followed. As would be expected, the disparity gradually diminished as the economy returned to a healthy state in the mid-2010s. The dark-blue line in panel A shows that the projected trajectory for noninterest spending after 2030 was somewhat lower on the eve of the COVID-19 recession than it had been prior to the Great Recession. A deeper dive into the data shows that the downward revision over the longer run can be more than accounted for by revisions to projected spending on major health care programs, which likely reflect significantly lower-than-anticipated additional health care cost growth during the years between the two recessions. CBO's most recent projection (the dashed portion of the red line) shows noninterest spending revised down a bit further relative to pre-COVID-19 expectations over the long run, again because of lower projected health-spending growth as well as other factors.

While changes in the projected path of noninterest spending since 2007 helped lower the longer-term path of debt as a proportion of GDP, the opposite is true of changes in the projected path of tax revenues. As shown in panel B of figure 6, current and projected revenues as a share of GDP have been marked down significantly since 2007. As with noninterest spending, the imprint of the Great Recession is evident, with weak income and temporary tax-relief measures driving actual revenues (red line) considerably below the 2007 projection (light-blue line) during the recession and the early recovery years. In the mid-2010s, tax revenues rose back toward the level projected in 2007, but they subsequently fell again relative to GDP, and CBO's projection in 2020 (dark-blue line) shows revenues well below the 2007 projection. CBO's 2023 projection for tax revenues is nearly identical to its 2020 projection over the longer term.[4] The lasting downshift can be traced to major changes in tax policy, including the extension of the tax cuts implemented in the early 2000s and the further tax cuts enacted in 2017.[5] Indeed, if the provisions of the 2017 tax cuts that are scheduled to expire in the next few years were to be extended, the projected path of tax revenues would shift further down—by between $400 billion and $500 billion per year in the late 2020s and early 2030s, or about 1¼ percent of currently projected GDP (CBO 2023b).

Figure 6. Different Vintages of Federal Noninterest Spending and Revenues Projections, 2000-2053



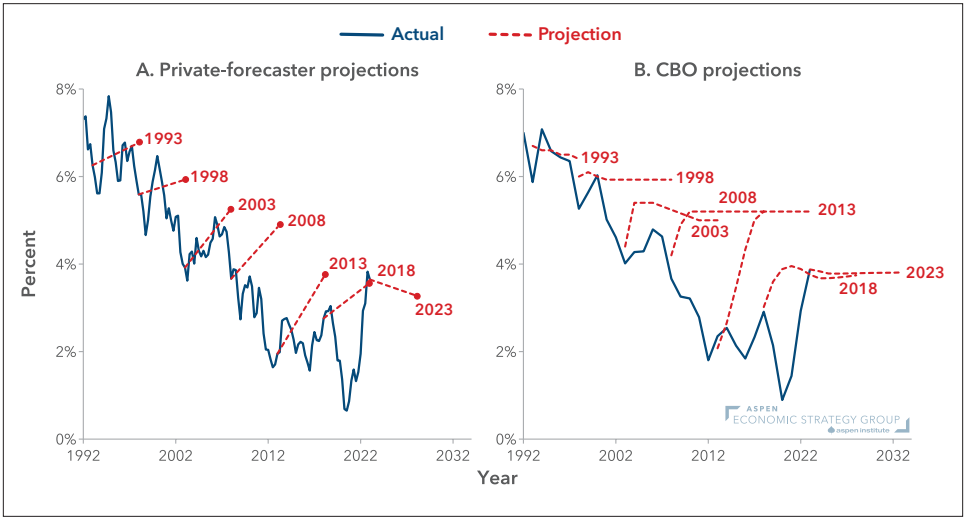
Sources: CBO (2007; 2020; 2023c). 2007 and 2020 projections rebased to match current history at starting point.

4 Comparing the red and dark-blue lines for the last couple of years, one sees that tax revenues came in much higher than projected in 2020. According to CBO (2023c), the higher-than-projected tax revenues reflected special factors that temporarily boosted tax receipts, such as an increase in capital gains realizations following strong asset-price appreciation.

5 For context, revenues as a share of GDP have averaged 17.4 percent over the last 50 years, so the December 2007 projection called for revenues to be above this average by increasing amounts over time.

An unexpected economic development that had a material positive influence on the fiscal outlook in recent decades is a substantial—and what many experts believe to be lasting—decline in interest rates. The interest rate on ten-year Treasury notes, for example, declined from approximately 7 percent in the early 1990s to around 2 percent in the late 2010s. (As Natel and Barrett [2023] highlight, this decline occurred at all maturities and in most advanced economies.) This development has helped the fiscal outlook, because, for given levels of revenues and noninterest spending, lower interest rates result in reduced interest payments and a lower overall deficit. Panels A and B of figure 7 show that this development came largely as a surprise. The dots in the left panel shows different vintages of private forecasters' projection of the average rate on 10-year Treasury notes over the next 10 years; the dots are labeled with the year of the survey and dashed lines connect them with the interest rate at the time of the survey. The dashed lines in the right panel show different vintages of CBO's projection of the same interest rate for each year of the 10-year window following the date of the projection. As can be seen, both private forecasters and the CBO adjusted their interest-rate projections only as the downward trajectory of actual rates unfolded.

Figure 7. Actual and Projected Interest Rate on 10-year Treasury Notes, 1992-2033



Source (Panel A): Survey of Professional Forecasters. Dots show 10-year expected average, plotted 5 years after forecast date.

Source (Panel B): CBO 2023c and earlier CBO economic outlooks; 2003 projection interpolated and smoothed.

One striking fact that highlights the importance of this 3–4 percentage-point decline in interest rates is that actual net interest costs in the decade following CBO's 2007

projection were lower than that projection despite the much higher path of debt that resulted from the Great Recession and the extension of tax cuts made in the early years of the 2000s. In August 2007, CBO projected that net interest costs from 2008 to 2017 would be 1.6 percent of GDP. Net interest costs over this period turned out to be 1.4 percent of GDP, despite a debt path that averaged 34 percentage points of GDP higher than the 2007 projection.

The future course of interest rates has been a topic of much discussion. Just before the pandemic, CBO projected that the interest rate on ten-year Treasury notes would be on average just slightly higher than its 2019 level of 2.1 percent in the early 2020s (CBO 2020). Interest rates turned out to be somewhat lower than anticipated in the early pandemic period because of the weak economy and then, with the surge in inflation in 2021 and 2022, they jumped higher (with the ten-year Treasury rate averaging 3.8 percent in the first nine months of 2023). Over the longer run, forecasters project that interest rates will be above their late 2010s level but remain low by pre-1990 standards. For example, as shown in the rightmost dashed lines in both panels of figure 7, private forecasters and CBO share a belief that the interest rate on the ten-year Treasury note over the next decade will be 3–4 percentage points below the expected level as of the early 1990s. The majority of this revision can be attributed to a downward shift in expectations of the real interest rate, as corresponding inflation forecasts have trended only slightly down—by ½ to 1 percentage point.

4. Even under optimistic economic scenarios, debt will reach levels well above historical experience.

The rate at which productivity, defined as output per unit of input, grows is a factor that will significantly influence the evolution of federal debt relative to GDP. Higher-than-expected productivity growth leads to higher GDP growth, which in turn makes rising debt levels easier to manage.

Even under optimistic economic scenarios, debt will soon reach levels well above historical experience, which will impose significant economic costs and risks.

Productivity growth is notoriously hard to predict, with experts often failing to foresee key shifts in productivity trends. One important example is the sizable step-up in trend productivity growth that occurred in the late 1990s: After two sluggish decades, multifactor productivity growth averaged an impressive 2 percent per year between 1995 and 2004. While that surge is now thought to have been related to advances in information technology, it followed a long period in which the broad economic benefits of better computers were unclear. (Some years earlier, Robert Solow, the renowned economist and winner of the 1987

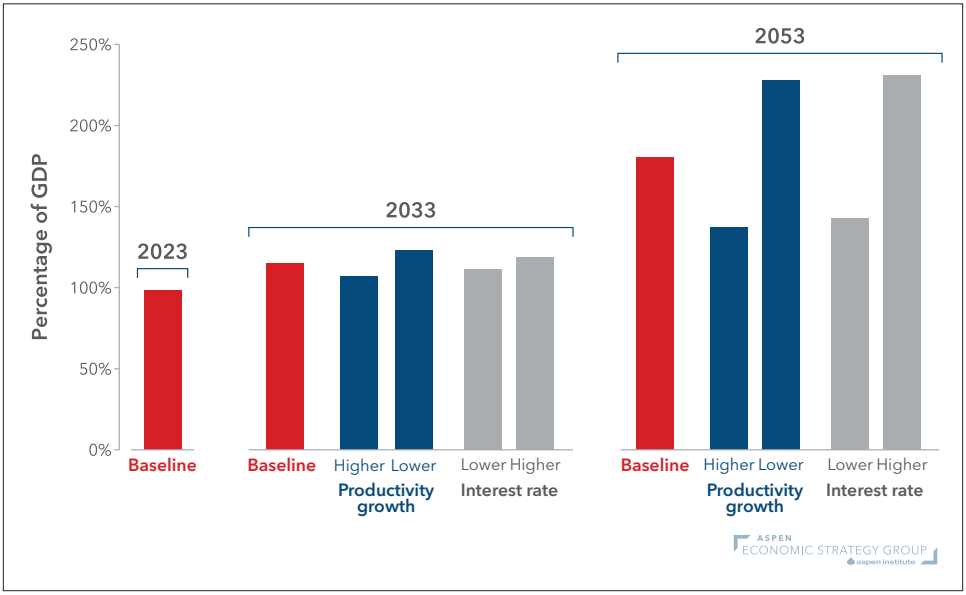
Nobel Prize, famously quipped, "You can see the computer age everywhere but in the productivity statistics.") The end of this pickup in trend productivity growth came in the early years of the 2000s, again without warning, and productivity growth has averaged only 0.9 percent per year since 2005.

CBO has tested the sensitivity of the debt-to-GDP ratio projected in its long-term budget outlook to fluctuations in trend productivity growth (CBO 2023d). CBO's baseline projection assumed that multifactor productivity would increase at a trend rate of 1.1 percent, a bit higher than the average over the first two decades of the 2000s. CBO recomputed the debt-to-GDP ratio under an optimistic scenario, where trend growth is 0.5 percentage points higher, and under a pessimistic scenario, where trend growth is 0.5 percentage points lower.

The blue bars in figure 8 show the results. The differences in the projected debt-to-GDP ratio relative to the baseline (in red) are small ten years from now in both optimistic and pessimistic scenarios but rise considerably over time. Under the optimistic scenario, the debt-to-GDP ratio is 44 percentage points lower in the early 2050s than in the baseline and, under the pessimistic scenario, the debt-to-GDP ratio is 47 percentage points higher. The size of the gap between the optimistic and pessimistic scenarios highlights the uncertainty in budget projections, as it is almost as large as the current ratio of debt to GDP. Still, at 137 percent of GDP in 2053, debt in the more optimistic outcome is well above the historical range and (as in the baseline) would be expected to continue to snowball beyond the projection window.

The unanticipated changes in interest rates discussed earlier suggest that it is also worth considering the sensitivity of projected federal debt relative to GDP to the assumed path of interest rates on government borrowing. As explained earlier, the decline in Treasury yields over the past few decades has improved fiscal outcomes (for given levels of revenue and noninterest spending), and the corresponding reduction in projected yields has improved the fiscal outlook (again, for given levels of revenue and noninterest spending). But predicting how interest rates will evolve over the longer term is challenging. The International Monetary Fund (IMF) (2023) has made forceful arguments that interest rates will remain low by historical standards, and some prominent economists concur (e.g., Blanchard 2023). However, Rogoff, Rossi, and Schmelzing (2022) argue that the last couple of decades may have been anomalous and interest rates may move back toward their previous levels, and other experts have pointed to the rise in government debt around the world as a reason for interest rates to be on a higher track than they were before the pandemic (e.g., Summers 2023). The notable further rise in the ten-year Treasury rate in the early fall of 2023 may be supportive of the more pessimistic view, but, as yet, it is too early to draw firm conclusions.

Figure 8. Projected Debt/GDP Under Alternative Assumptions, 2023, 2033, and 2053



Source: CBO (2023d).

Notes: The higher (lower) productivity growth scenario adds (subtracts) 0.5pp to (from) the baseline growth rate; the lower (higher) interest rate scenario reflects cumulative decreases (increases) in the baseline path of 5 basis points per year.

In its July 2023 long-term budget outlook, CBO assumed that the nominal yield on ten-year Treasury notes would be 3¾ percent ten years from now and then drift up to around 4½ percent over the following two decades (CBO 2023c). With consumer price index (CPI) inflation projected to return to a level consistent with the Federal Reserve's 2-percent target for personal consumption expenditures (PCE) inflation, the real yield on ten-year Treasuries is projected to rise from 1½ percent ten years from now to 2¼ percent by the early 2050s, as surging federal debt begins to drive up the real cost of borrowing. By comparison, that real yield averaged 3¾ percent between 1988 and 1997, 2¼ percent between 1998 and 2007, and ¾ percent between 2008 and 2019.

CBO has assessed the sensitivity of budget projections to its assumed path of the interest rate (CBO 2023d). CBO estimated the ratio of debt to GDP under an optimistic scenario, where the average interest rate on federal debt is below the baseline rate by a differential that starts at 5 basis points in 2023 and increases by 5 basis points each year (before macroeconomic effects are accounted for), and under a pessimistic scenario, where the interest rate on federal debt is above the baseline rate by corresponding amounts.

The gray bars in figure 8 show the results. The difference in the projected debt-to-GDP ratio relative to the baseline (in red) is small ten years from now but rises considerably over time. Under the optimistic scenario, the debt-to-GDP ratio is 38 percentage points lower in the early 2050s than in the baseline and, under the pessimistic scenario, the debt-to-GDP ratio is 50 percentage points higher. Once again, the gap is large, but, even in the more optimistic scenario, the ratio of debt to GDP is well above the historical range by the end of the projection window and likely to climb higher thereafter.

These sensitivity analyses underscore the point that "good luck" with macroeconomic outcomes is unlikely to change the conclusion that US federal debt is on an unsustainable trajectory. They are also a stark reminder that, under current law, less-favorable-than-expected macroeconomic outcomes—which are plausibly just as likely as the optimistic scenarios—will push federal debt to eye-popping levels even earlier. Moreover, as Summers (2023) noted, current law calls for some policy changes that are likely to meet political resistance, such as the scheduled expiration of parts of the 2017 tax cuts and declines in defense and nondefense discretionary spending relative to GDP to levels not seen in the past half-century. This consideration, along with the likelihood that new challenges will emerge that lead Congress and the president to increase spending or reduce taxes for specific purposes, are a further source of upside risk to the trajectory of federal debt.

5. The post-pandemic burst of inflation has been a small positive (on net) in terms of fiscal sustainability but has also raised the risk of an economic slowdown that could more than undo that improvement.

Inflation soared to levels not seen since the early 1980s in the wake of a post-pandemic surge in demand that went well beyond aggregate supply, as bottlenecks, supply-chain issues, worker shortages, and other factors held back the productive capacity of the economy. CPI inflation rose from 1.3 percent in 2020 (on a twelve-month basis) to 7.2 percent in 2021 before moderating slightly to 6.4 percent in 2022. It has slowed somewhat further since then, but as of late summer 2023, underlying inflation appeared to still be well above 3 percent, with growing support for the view that inflation will return to more normal levels only gradually (see, for example, Bernanke and Blanchard 2023 and Cecchetti et al. 2023). This rise in inflation, along with a sharp tightening of monetary policy aimed at reducing inflation, has pushed up government borrowing rates. At 3.8 percent over the first nine months of 2023, the interest rate on ten-year Treasury notes was much higher than its level of 1 percent at the beginning of 2021.

These developments affect the fiscal outlook through multiple channels. Starting with the primary budget deficit, an increase in inflation has mixed effects. Higher inflation tends to push up government spending through larger cost-of-living adjustments (COLAs) and through higher prices of goods and services purchased by the government. However, tax revenues also rise with higher inflation. Although much of the tax code is indexed for inflation, some parts are not, such as the income thresholds above which taxpayers pay the net investment income tax. In addition, tax revenue from capital income is higher during periods of high inflation, as capital income increases with inflation and is taxed based on nominal values. These offsetting factors tend to largely balance each other out: A March 2022 CBO analysis considered the potential effect of higher inflation alongside increased interest rates on the primary deficit and concluded that the net changes in the primary deficit over the following ten years would be minor (CBO 2022a).

The higher nominal interest rates that have accompanied high inflation are a negative for the fiscal picture, as newly issued federal debt will have higher interest rates. These higher rates will boost payments both on new borrowing and on debt that is rolled over. Some sense of the magnitude of this effect over the past year can be seen through CBO's revision to projected net interest costs: Relative to what was expected in March 2021, interest costs are now projected to be $4.2 trillion higher over the 2021 to 2031 period (although that change would also incorporate the effects of incoming data, policy changes, and other adjustments to CBO's assumptions).

Nominal interest rates would be expected to revert toward earlier norms as inflation eventually returns to the Fed's 2-percent target. However, interest rates might not fully recover if the inflation-risk premium on government debt is permanently higher. In particular, with a heightened sensitivity to the possibility of being paid back in dollars worth less than anticipated, future prospective investors may demand some additional compensation to purchase debt.

Importantly, higher inflation also has positive effects on the fiscal outlook as the interest burden on debt that is already outstanding shrinks relative to the tax revenue collected. Because the interest payments on existing debt are a fixed nominal percentage, nominal interest payments on debt that is already outstanding do not increase. However, higher inflation leads to higher nominal incomes, which raises nominal tax collections.[6] Quantitatively, this positive effect is significant and, over the short term, tends to dominate the effects of higher interest costs on new debt and any changes in the primary deficit on the numerator.[7] For example,

6 The indexation of much of the tax code means that the tax rate on any given amount of real income is little changed when inflation is higher, but there will still be more income in nominal terms to tax.

7 As Arslanalp and Eichengreen (2023) emphasize, raising inflation is not a strategy for attaining long-run fiscal sustainability; although nominal tax revenue may continue to grow at a higher pace, the boost to interest costs from higher inflation will rise over time as debt issued at higher nominal interest rates comes to be a larger share of the government's portfolio.

CBO's rules of thumb imply that if both inflation and nominal interest rates were 1 percentage point higher than in their baseline projection for the next ten years (and provided that other key economic assumptions remained unchanged), federal debt relative to GDP would be ½ percentage point lower than baseline in 2024 and 4¼ percentage points lower by 2033.[8]

A crucial caveat to the above arguments is that they essentially assume that all else is equal when it comes to the performance of the real economy. If taming inflation ultimately requires the economy to slow markedly, the implications for the fiscal outlook could be much different. In its efforts to combat inflation, the Federal Reserve raised its policy rate repeatedly between March 2022 and July 2023 for a total increase of 5¼ percentage points. This increase, which was much larger than initially anticipated, represented the most aggressive monetary tightening since the early 1980s. As yet, it is unclear whether the US economy will experience a so-called soft landing, where inflation subsides with below-trend-but-positive growth and a recession is avoided. To date, US economic activity has remained solid, with consumer spending continuing to rise, housing activity looking to have stabilized, and the unemployment rate remaining close to its lowest level in decades. However, amid concerns about lagged effects of monetary policy, the potential for further rate hikes, and troubles in the banking sector, economists surveyed by the *Wall Street Journal* in mid-July put the odds of the US economy entering at least a mild recession over the following 12 months as greater than 50 percent (Torry and DeBarros 2023). As discussed earlier, a recession—particularly a deep recession—would seriously hurt the fiscal outlook.

6. The increasing amounts of federal debt relative to GDP that would occur under current law will impose increasing economic costs and growing risks for the country.

Economists have long warned that high government debt comes with costs and risks. As William Gale cautioned in a 2019 paper written for the Aspen Economic Strategy Group, "rising debt will slowly but surely make it harder to grow the economy, boost living standards, respond to wars or recessions, address social needs, and maintain the nation's role as a global leader" (Gale 2019).

One major concern about higher government debt is that increased borrowing by the government crowds out borrowing by households and businesses. This competition for funds drives up interest rates, making it more expensive for individuals and

8 This calculation was done using CBO's *Workbook for How Changes in Economic Conditions Might Affect the Federal Budget: 2023 to 2033* (CBO 2023a). The workbook constrains the assumed changes to inflation and interest rates to be no greater than 1 percent each year.

businesses to borrow. As a result, private investment in productive capital decreases, leading to lower future output and national income. Elmendorf and Mankiw (1999) characterize the cost of crowding out as "significant," using a model to show that eliminating government debt at the time (when it was equal to about half of annual GDP) would increase real GDP over time by as much as 3½ percent. To put this figure in context, it implies that having that amount of government debt would be the equivalent of giving up three to four years of productivity growth.[9]

A second concern about high government debt is that it raises the risk of a fiscal crisis. If investors become reluctant to lend money to the government because they fear the debt will not be repaid, government borrowing rates can rise suddenly as prospective lenders demand more compensation to hold government debt. In addition, higher inflation can result if people come to believe that the government will need to print more money to cover its debt payments and other expenses—and worries about higher inflation can push up borrowing costs and can become self-fulfilling as well. In addition, the value of the dollar may decline as foreign securities become more attractive for people looking for "safe" investments, possibly sharply if there are worries about debt monetization and recession. The European sovereign debt crises in the early 2010s demonstrate how damaging fiscal crises can be for economies and how difficult they can be to fix—even in higher-income countries.

A further and related risk comes from the debt ceiling set by law, which prohibits the Treasury Department from issuing debt beyond the ceiling to finance government activities. The logic of having a legislated debt ceiling is unclear because it can restrict the issuance of debt that is required to fill the gap between government spending and revenues that have been set by other legislation.[10] Periods when federal debt is approaching the debt ceiling often see substantial politically driven legislative maneuvering, raising the risk that the ceiling will be breached and, in turn, that US government debt will not be honored in a full and timely way. Indeed, presumably in reflection of this risk, past episodes of brinksmanship over the debt ceiling have been associated with higher government borrowing rates prior to resolution; according to an analysis by the Government Accountability Office (GAO), the temporary increase in Treasury rates that resulted from the 2011 delay in rising the debt limit cost the government $1.3 billion in fiscal year 2011 (GAO 2012). Moreover, and more worryingly, if the debt ceiling were actually breached, even for a short period, that could significantly reduce the appeal of Treasury securities as a safe asset—at best,

9 A more recent estimate from Smetters and Dinerstein (2021) is roughly consistent, showing that adding $1 trillion of debt now (about 4 percent of GDP) could lower GDP by as much as 0.28 percent in 2050. Importantly, Smetters and Dinerstein point out that the effect depends on what the debt is used to finance; their calculation assumes the debt finances government measures that do not enhance potential GDP over the longer run.

10 This inconsistency may be why debt ceilings are extremely uncommon in other countries.

such an outcome would likely lead to permanently higher interest rates on Treasury securities, and, at worst, cause a fiscal crisis.

Higher debt also comes with the costs of reduced "fiscal space," meaning a limited capacity to increase the budget deficit, even temporarily, without endangering the access of a country's government to financial markets or the sustainability of its debt. A lack of fiscal space constrains a country's ability to effectively address sudden domestic needs, such as economic crises or pandemics, as well as international threats. This limitation has adverse implications for both welfare and economic growth. For instance, amid worries about high federal debt, Congress passed no further discretionary fiscal packages to address the harms of the Great Recession after 2012, even though the potential for hardship and scarring was still high (in 2013, long-term unemployment was down from its high but still averaged about 3.5 times its pre-recession level). In practice, measuring fiscal space is challenging, but even the perception that a country has exhausted its room for maneuvering can complicate the political dynamics of responding to an economic crisis.

A perceived lack of fiscal space can also, of course, reduce the political appetite for government spending that would address longer-run challenges. Pardue and Kearney (2023) offer a recent example, highlighting proposals to impose certain work requirements and make other changes to key safety-net programs—the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, and Medicaid—as part of negotiations over raising the debt limit in the spring of 2023. Pardue and Kearney argue that such limits to eligibility for these programs would be "neither an effective way to rein in the spending that is driving up US debt, nor … in the nation's long-term interests," citing evidence of both the programs' limited share of the federal budget and the programs' benefits in terms of better long-run economic outcomes.

But note that higher government debt can have upsides. For example, debt may be used to finance public investments in productive assets, which can offset some or all of the harms associated with the crowding out of private investment. Alternatively, debt may fund other changes in fiscal policy that bring benefits to the economy and society (including the better long-run outcomes associated with the safety-net programs just discussed). In addition, the higher interest rates that come with increased debt provide more flexibility for monetary policy to respond to weak aggregate demand. Indeed, as argued by Summers and Rachel (2019), the zero-lower-bound issues that hampered countercyclical monetary policy in many advanced countries in the pre-pandemic period would have been much worse had it not been for the significant expansion of global government debt in the late twentieth and early 21st centuries.

7. Determining a plausible policy framework for keeping federal debt manageable is difficult.

Notwithstanding the very real costs of high levels of outstanding debt described in the previous section, we lack compelling evidence regarding the largest feasible amount of debt and there is no clear prescription for the optimal amount of debt.

On the largest feasible amount of debt, there is no reason to believe a preordained threshold for debt exists beyond which a fiscal crisis will occur. Rather, a crisis will occur if and when financial-market participants come to believe that the country will not honor its obligation to make payments on the federal debt. Such a change in beliefs would hinge on assessments of political will as much as economic strength and would likely be spurred by evaluating many indicators beyond the amount of debt.

Regarding the optimal amount of debt, the answer depends primarily on the amount of government saving or dissaving that would be needed to achieve a chosen amount of national saving. National saving is the sum of savings by households, businesses, and government, with government saving a negative under budget deficits. Economics alone cannot say what that level of saving should be. Generally, younger generations and generations yet to be born benefit from more national saving, and older generations benefit from less saving. How to weight the welfare of different generations is a choice that society needs to make.

Another approach to the question of how much the government should save is to leave aside national saving and instead evaluate the appropriate amount of saving for the government itself. For example, one could argue that each generation should pay for its own activities and not impose those costs on later generations. However, this potential approach is not practical at this point, as Social Security and Medicare were launched and have functioned mostly as pay-as-you-go systems, so early generations benefited from those programs beyond what they paid in, and later generations need to bear those costs in some fashion.[11]

One traditional rule of thumb for federal fiscal policy is to balance the budget. This goal is straightforward to understand, and it continues to have some political appeal.[12] However, the goal is more stringent than necessary to keep federal debt on a sustainable path, and it is so ambitious relative to the current outlook as to be unrealistic.

11 More generally, this fact underscores that important considerations for any proposals that would put Social Security and Medicare on sustainable paths are the relative burdens borne by people in different generations and the relative burdens borne by people with different lifetime resources within generations.

12 Many state governments use some version of a balanced-budget rule, but the specifics of those rules vary across states, and capital expenditures are generally excluded.

For example, balancing the overall budget would be a much larger change than is needed to keep federal debt from increasing much beyond its current size of roughly 100 percent of GDP. According to CBO (2022b), achieving that goal would require some combination of reductions in noninterest spending and increases in taxes beginning in 2027 that would average 2.8 percent of GDP. This amount of belt-tightening would be substantial, amounting to about an $800 billion reduction in the deficit in 2027—or about $2,400 per person. But the overall deficit in 2027 was projected to be 4.6 percent of GDP or roughly $1.4 trillion, about 1.75 times as large as the cuts needed to stabilize debt. Therefore, balancing the overall budget would lead debt to drop over time relative to GDP. Such a policy might (or might not) be desirable for various reasons, but it would be associated with much larger changes than are needed to keep debt from snowballing—and, as will be discussed in the next section, those changes come with their own costs.

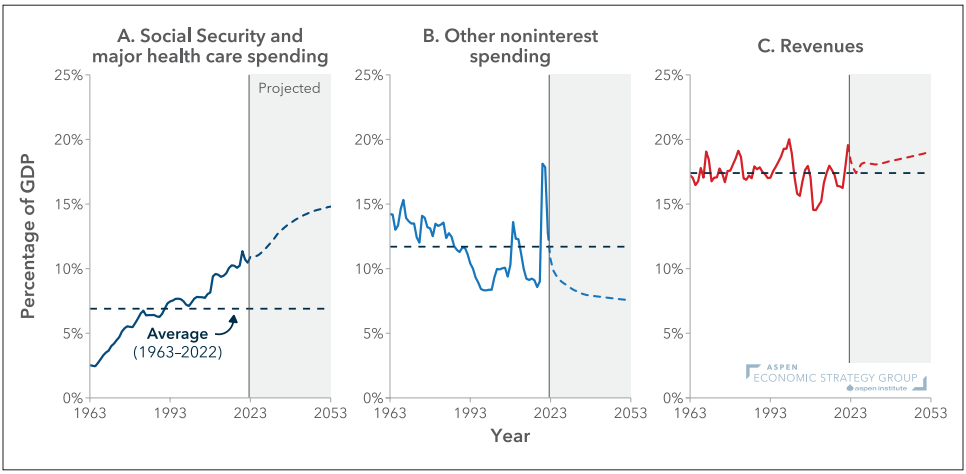
An alternative and less demanding benchmark would be to balance the *primary* budget—that is, to set tax revenue equal to noninterest spending. Achieving that goal would imply increases in revenue or reductions in spending that reduce the deficit by an average of 3.3 percent of GDP over the 2027 to 2052 period. With this amount somewhat higher than what would be required to keep federal debt where it is now, this approach (if pursued in 2027 and beyond) would be expected to result in debt falling slowly relative to GDP.[13]

8. There are a variety of policy changes that would help bring the structural deficit back to sustainable levels, but they all have disadvantages as well.

The "fiscal gaps" described above may not seem insurmountable. For example, as noted, a combination of reductions in noninterest spending and increases in taxes that reduce the deficit by an average of 2.8 percent of GDP in coming decades would be expected to keep the ratio of debt to GDP at its current level. That figure does not appear particularly problematic in an economy with annual growth in real GDP of roughly 2 percent. However, in practice, policymakers will have great difficulty enacting changes of that magnitude.

13 It is not uncommon for economists to raise the issue of how "r" compares with "g" in discussions of fiscal sustainability. The former refers to the real interest rate and the latter refers to the growth rate of real GDP, which, as already discussed, are crucial determinants of the path of federal debt relative to GDP. If "r=g" and the primary budget were in balance, debt-to-GDP would be stable because the government would only be borrowing to cover its interest payments; therefore, debt would grow at the rate of interest, and GDP would grow at the same rate. In CBO's 2022 projection, the projected interest rate on all federal debt was slightly less than the projected growth rate of the economy—so balancing the primary budget would be more than sufficient to keep the debt-to-GDP ratio from rising.

Figure 9. Federal Spending and Revenues, 1963-2053



Source: CBO (2023c).

To set the stage for this discussion, figure 9 shows history and projections for the major contributors to the primary federal deficit, along with dashed lines in each panel indicating the average value for the past 60 years. Panel A shows the steep projected increase in federal spending on Social Security and Medicare; at 11 percent of GDP today, this spending is already above its historical average of 7 percent. As discussed earlier, the aging of the population and the excess growth of health care spending relative to GDP means that, under current law, this spending is likely to rise to 15 percent of GDP in 2053. Panel B shows other noninterest federal spending, which is now fairly close to its average value of 12 percent of GDP but projected to decline to less than 8 percent of GDP in 2053. Panel C shows tax revenues, which have been hovering around their historical average of 17½ percent in recent years but are on track to rise to 19 percent by 2053 under current law.

The option of cutting spending on mandatory programs like Social Security and Medicare is frequently discussed because these programs are so large and because they are likely to grow significantly in coming decades. Also, while one can debate the economic significance of the Social Security and Medicare trust funds, the fact that they are likely to be fully depleted in the next decade or two is likely to carry substantial political weight.

However, it is crucial to understand the tradeoffs associated with potential cuts to Social Security and Medicare. Reductions in the benefits provided by these programs could inflict hardship on some older Americans, especially if the cuts are across

the board.[14] Based on an analysis of poverty data, for example, Burtless (2019) concludes that the Social Security program has produced "spectacular and sustained improvements in well-being" among the older population. According to data from the Census Supplemental Measure, all else equal, an additional 18 million adults 65 or older would have been in poverty in 2021 without their Social Security benefits (Creamer et al. 2022). At the same time, some people who receive Social Security benefits also have other sources of income that would support adequate consumption in retirement even if Social Security benefits were reduced to some extent.

Note also that cuts in Social Security may take the form of raising the retirement age, on the logic that people are living longer. However, doing so on a uniform basis would be problematic, as improvements in life expectancy seem to have been limited to the top three quintiles of the income distribution (National Academies of Sciences, Engineering, and Medicine 2015).

Reductions in Medicare spending could take different forms, but large cuts would be problematic. An increase in the eligibility age, for example, could leave people without health insurance at a point in their lives when significant medical problems tend to emerge. Cutbacks in payment rates for health care services could impinge on the finances of hospitals and physician practices and then ultimately on the quality of care they provide. Restructuring the ways in which Medicare covers health care could be useful, but many experiments with different models of payment have not been successful. Medicaid is also important to the welfare of older Americans, as it funds more than half of long-term care (Chidambaram and Burns 2022).

Turning to other types of non-interest spending, reductions in mandatory spending on younger Americans, particularly poor children and their families, would also hurt vulnerable people. Moreover, many types of cuts would be likely to reduce economic mobility. A growing body of evidence shows that programs such as Medicaid, the Supplemental Nutrition Assistance Program, and the Earned Income Tax Credit not only provide support for low-income families today but also represent crucial investments in the future lives of the children in those families. Children whose families benefit from those programs tend to experience better outcomes as adults, in terms of earnings and other measures, and those higher earnings boost potential output and tax revenues over time.[15] The implication is that cutting these programs has costs that go beyond increasing current hardship. Further, because the composition of those who benefit from these programs skews toward minorities, the programs represent important steps toward reducing a variety of economic inequities.

14 Duggan (2023: p. 50 of this volume) argues that, in the absence of reform, the Social Security Administration is likely to make across-the-board cuts in benefits when its trust fund is exhausted.

15 A 2019 special issue of the *Annals of the American Academy of Political and Social Science* on entitlement reform has chapters on different programs documenting the evidence regarding their short-term and long-term benefits (Moffitt and Ziliak 2019).

Cutting discretionary government spending can seem appealing in the abstract to policymakers, because plans for future cuts are often not specific about which programs would see spending reductions—but such cuts become much less appealing when specific choices need to be made. Reducing defense spending (about half of total discretionary spending) could jeopardize national security in a world facing increased geopolitical tensions. Reducing nondefense discretionary spending could lower federal investments in infrastructure and in research and development that are important for future potential output and well-being. Alternatively, such reductions could lower benefits like Pell Grants and low-income housing assistance that, like the mandatory benefit programs just discussed, support people today and brighten their futures. Moreover, nondefense discretionary spending represents only about 15 percent of total noninterest federal spending and has experienced no trend relative to GDP for the past 60 years—suggesting that, despite repeated calls for cutbacks, policymakers believe that such spending serves legitimate purposes.

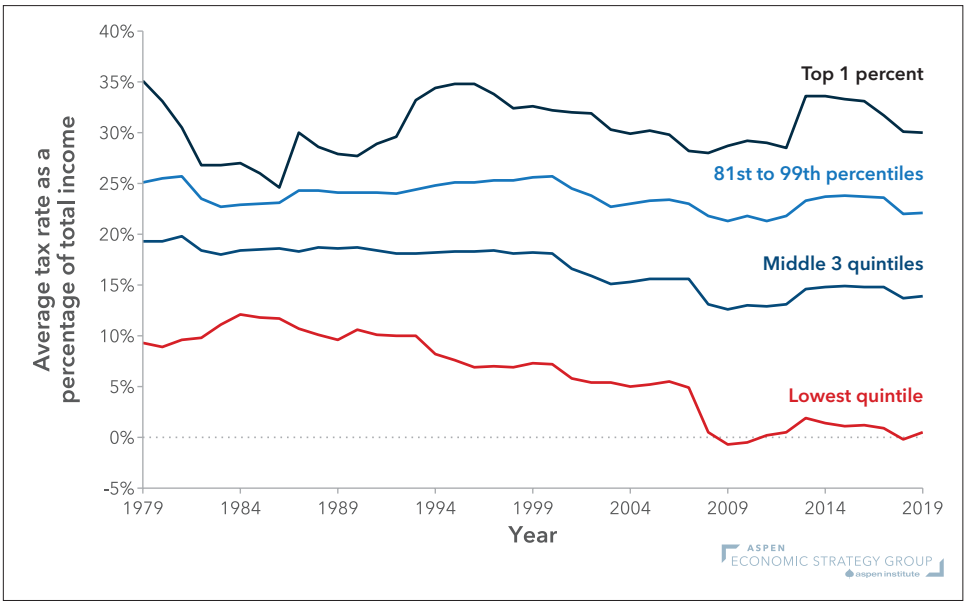
Legislation to raise taxes could help to put federal debt on a more sustainable path. Increases in household and business income tax rates would be on top of the increases built into current law and would have distortionary effects. Enactment of other taxes, such as a value-added tax or a tax on carbon emissions, would have different sorts of effects that would need to be analyzed separately; for example, a carbon tax would provide a useful incentive to reduce carbon emissions.

Many people seem to think that federal taxes have increased significantly over time, but that perception is not borne out by the data. Panel C of figure 9 shows that federal tax revenue as a share of GDP has shown some variability but little trend over the past half-century, as the increases that would arise from "real" bracket creep (as income growth in excess of inflation pushes more income into higher tax brackets) have been effectively offset by changes in the economy and legislated reductions in taxes. In addition, CBO (2022c) estimates that the overall federal tax rate paid across most of the income distribution has declined over the past 40 years, which is the period for which comparable data are available. The estimates of those tax rates include all sources of pre-tax income (including imputed income from noncash compensation) in the denominators and all federal taxes (including taxes associated with Social Security and Medicare as well as an allocation of corporate taxes) in the numerators.

Figure 10 shows that overall federal tax rates have declined notably over time for households in the bottom quintile and have declined slightly over time for households in the middle three quintiles taken together and for households in the 81st to 99th percentiles. For households in the top 1 percent of pre-tax income, the

overall federal tax rate has fluctuated considerably and currently stands near the middle of its range during the past 40 years.[16]

Figure 10. Average Federal Tax Rates by Income Bracket, 1979-2019



Source: CBO (2022c).

However, if the expiring provisions of the 2017 tax-cut law are allowed to end as scheduled, this change will combine with real bracket creep to increase revenue relative to GDP in the future. This increase, which is built into CBO's baseline projections, can be seen in the dashed portion of Panel C of figure 9. The increase would raise the tax burden and, by pushing up effective marginal tax rates, would increase the distortion to behavior caused by the tax system. Those distortions could cause people to work less, save less, invest less, and innovate less.

9. Conclusion

The challenge posed by high and rising federal debt is significant but manageable as a matter of economics. The big problem is political. Most voters have little understanding of the composition of federal spending, the distribution of the federal tax burden, trends in federal spending and revenue, and the consequences of alternative budget

16 See Zidar and Zwick (2023: p. 131 of this volume) for a discussion of how the tax rate for this group has been affected by the conversion of labor income to "pass-through" business income.

decisions. That lack of understanding is natural, because voters have other things to do with their lives besides examine budget data. But, as a result, voters are dependent on their elected leaders to communicate the facts and tradeoffs the country faces, and our elected leaders have not done this well. Promises not to touch key elements of federal spending or revenue are popular, but they cannot all be realized if we are to put the budget on a sustainable path.

The challenge posed by high and rising federal debt is significant but manageable as a matter of economics. The big problem is political.

References

Blanchard, Olivier. 2023. *Fiscal Policy Under Low Interest Rates.* Cambridge, MA: MIT Press.

Bernanke, Ben, and Olivier Blanchard. 2023. "What Caused the U.S. Pandemic-Era Inflation?" Brookings Institution, conference draft, May 23. https://www.brookings.edu/wp-content/uploads/2023/04/Bernanke-Blanchard-conference-draft_5.23.23.pdf.

Burtless, Gary. 2019. "Fixing Social Security: Major Reform or Minor Repairs?" *Annals of the American Academy of Political and Social Science* 686, no. 1: 38–62.

Cecchetti, Stephen G., Michael Feroli, Peter Hooper, Frederic S. Mishkin, and Kermit L. Schoenholtz. 2023. "Managing Disinflations." CEPR Press Discussion Paper no. 18068, April.

Chidambaram, Priya, and Alice Burns. 2022. "10 Things about Long-Term Services and Supports." *KFF*, September 15. https://www.kff.org/medicaid/issue-brief/10-things-about-long-term-services-and-supports-ltss/.

Congressional Budget Office. 2007. *The 2007 Long-Term Budget Outlook*. Washington, DC: Congressional Budget Office, December. https://www.cbo.gov/publication/41650?index=8877.

Congressional Budget Office. 2020. *The Budget and Economic Outlook: 2020 to 2030*. Washington, DC: Congressional Budget Office, January. https://www.cbo.gov/publication/56020.

Congressional Budget Office. 2022a. "The Budgetary Effects of Higher Inflation and Interest Rates." Letter to Senator Mike Crapo, March 2. https://www.cbo.gov/system/files/2022-03/57868-Senator-Crapo.pdf.

Congressional Budget Office. 2022b. *The 2022 Long Term Budget Outlook*. Washington, DC: Congressional Budget Office, July. https://www.cbo.gov/system/files/2022-07/57971-LTBO.pdf.

Congressional Budget Office. 2022c. *The Distribution of Household Income, 2019*. Washington, DC: Congressional Budget Office, November. https://www.cbo.gov/system/files/2022-11/58353-HouseholdIncome.pdf.

Congressional Budget Office. 2023a. *Workbook for How Changes in Economic Conditions Might Affect the Federal Budget: 2023 to 2033*. Washington, DC: Congressional Budget Office, March 28. https://www.cbo.gov/publication/59027.

Congressional Budget Office. 2023b. *Budgetary Outcomes under Alternative Assumptions about Spending and Revenues.* Washington, DC: Congressional Budget Office, May. https://www.cbo.gov/publication/59154.

Congressional Budget Office. 2023c. *The 2023 Long-Term Budget Outlook.* Washington, DC: Congressional Budget Office, June. https://www.cbo.gov/publication/59331.

Congressional Budget Office. 2023d. *The Long-Term Budget Outlook Under Alternative Scenarios for the Economy and the Budget.* Washington, DC: Congressional Budget Office, June. https://www.cbo.gov/publication/59233.

Creamer, John, Emily A. Shrider, Kalee Burns, and Frances Chen. 2022. *Poverty in the United States: 2021.* Report no. P60-277. Washington, DC: US Census Bureau, September 13. https://www.census.gov/library/publications/2022/demo/p60-277.html.

Duggan, Mark. 2023. "Reforming Social Security for the Long Haul." In *Building a More Resilient US Economy*, edited by Melissa S. Kearney, Justin Schardin, and Luke Pardue, 50. Washington, DC: Aspen Institute.

Elmendorf, Douglas W., and Gregory N. Mankiw. 1999. "Government Debt." In *Handbook of Macroeconomics,* edited by John B. Taylor and Michael Woodford, 1615–69. Amsterdam: Elsevier.

Gale, William. 2019. "Fiscal Policy with High Debt and Low Interest Rates." In *Maintaining the Strength of American Capitalism,* edited by Melissa S. Kearney and Amy Ganz, 78–115. Washington, DC: Aspen Institute.

Government Accountability Office. 2012. *Debt Limit: Analysis of 2011-2012 Actions Taken and Effect of Delayed Increase on Borrowing Costs*. Washington, DC: Government Accountability Office, July 23.

Heffler, Stephen K., Todd G. Caldis, Sheila D. Smith, and Gigi A. Cuckler. 2023. "The Long-Term Projection Methods for Medicare and Aggregate National Health Expenditures." Baltimore, MD: Centers for Medicare and Medicaid Services, March 31. https://www.cms.gov/files/document/conceptual-view-long-term-projection-methods-medicare-and-aggregate-national-health-expenditures.pdf.

International Monetary Fund. 2023. *World Economic Outlook: A Rocky Recovery.* Washington, DC: International Monetary Fund, April. https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023.

Moffitt, Robert A., and James P. Ziliak, eds. 2019. *Entitlement Reform.* Special issue. *Annals of the American Academy of Political and Social Science* 686, no. 1 (November). https://journals.sagepub.com/toc/anna/686/1.

Pardue, Luke, and Melissa S. Kearney. 2023. "In Brief: Cutting the Safety Net Is Not an Effective Way to Reduce Government Spending." Aspen Economic Strategy Group memo, May 24. https://www.economicstrategygroup.org/publication/in-brief-cutting-the-safety-net-is-not-an-effective-way-to-reduce-government-spending/.

Natel, Jean-Marc, and Philip Barrett. 2023. "Interest Rates Likely to Return toward Pre-Pandemic Levels When Inflation Is Tamed." *IMF Blog,* April 10. https://www.imf.org/en/Blogs/Articles/2023/04/10/interest-rates-likely-to-return-towards-pre-pandemic-levels-when-inflation-is-tamed.

National Academies of Sciences, Engineering, and Medicine. 2015. *The Growing Gap in Life Expectancy by Income: Implications for Federal Programs and Policy Responses.* Washington, DC: National Academies Press.

Rogoff, Ken, Barbara Rossi, and Paul Schmelzing. 2022. "Long-Run Trends in Long-Maturity Real Rates: 1311–2021." NBER Working Paper no. 30475, October. https://www.nber.org/papers/w30475.

Torry, Harriet and Anthony DeBarros. 2023. "Economists Are Cutting Back Their Recession Expectations." *Wall Street Journal*, July 15.

Sabelhaus, John. 2022. "Will Population Aging Push Us over a Fiscal Cliff?" In *Economic Policy in a More Uncertain World*, edited by Melissa S. Kearney and Amy Ganz, 128–55. Washington, DC: Aspen Institute.

Serkan Arslanalp, Serkan and Barry Eichengreen. 2023. *Living with High Public Debt.* Federal Reserve Bank of Kansas City 2023 Jackson Hole Economic Policy Symposium, conference draft, August 2023. https://www.kansascityfed.org/Jackson%20Hole/documents/9749/Living_With_High_Public_SA_Sep_2_2023.pdf

Social Security Administration. 1990. *Annual Report of the Trustees of the Federal Old-Age and Survivors' Insurance and Disability Insurance Trust Funds.* Washington, DC: Government Printing Office, April 19. https://www.ssa.gov/history/reports/trust/1990/1990.pdf.

Smetters, Kent, and Marcos Dinerstein. 2021. "Explainer: Capital Crowd Out Effects of Government Debt." *Penn Wharton Budget Model* (blog), June 28. https://budgetmodel.wharton.upenn.edu/issues/2021/6/28/explainer-capital-crowd-out-effects-of-government-debt.

Summers, Lawrence H. 2023. "Rethinking Fiscal Policy—Global Perspectives." Keynote address, Peterson Institute for International Economics, May 31, Washington, DC. https://www.hks.harvard.edu/centers/mrcbg/programs/growthpolicy/rethinking-fiscal-policy-global-perspectives-keynote.

Summers, Lawrence H., and Łukasz Rachel. 2019. "On Secular Stagnation in the Industrialized World." *Brookings Papers on Economic Activity* (Spring): 1–76. https://www.brookings.edu/wp-content/uploads/2019/03/RachelSummers_web.pdf.

Zidar, Owen M., and Eric Zwick. 2023. "The Next Business Tax Regime: What Comes After the TCJA?" In *Building a More Resilient US Economy*, edited by Melissa S. Kearney, Justin Schardin, and Luke Pardue, 131. Washington, DC: Aspen Institute.

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