

The Long-Term Fiscal Imbalance

Over the past several years, federal budget deficits have steadily declined as the nation recovers from the financial crisis and 2007–2009 recession. However, the Congressional Budget Office projects that the budget deficit will rise this year. And if current laws generally remain unchanged, budget deficits as a share of the nation’s output—its gross domestic product (GDP)—will grow over the next decade. As a result, federal debt held by the public would rise from its already high level—from 75 percent of GDP today to 86 percent by 2026, CBO projects. Beyond the next 10 years, the long-term budget outlook is projected to worsen further, with debt reaching 141 percent of GDP in 2046—the highest ever recorded (see Table 1-1).

The government’s spending for Social Security and Medicare is a crucial factor in that outlook. Those programs benefit mostly the elderly, a group that has grown significantly and will continue to do so. Rising health care costs per person also will boost Medicare outlays. Therefore, spending for those programs is projected to rise substantially in the coming decades. By 2046, projected spending for those programs (as well as Medicaid spending) for people 65 or older accounts for about half of all federal noninterest spending. The government’s interest costs also are projected to increase significantly, as interest rates rise from their unusually low levels and federal debt grows. Revenues are projected to increase, but much more slowly than spending, leading to larger budget deficits and rising debt.

In this report, CBO presents its projections of federal outlays, revenues, deficits, and debt for the next three decades and describes possible consequences of those projected budgetary outcomes. The projections are consistent with CBO’s current 10-year economic projections, released in January 2016, and the agency’s March 2016 budget projections.¹ These long-term projections extend most of the concepts underlying that baseline for the rest of the projection period and reflect the macroeconomic effects of fiscal policy over that period; hence, they constitute the *extended baseline*. In a change from last

year, the extended baseline spans 30 years rather than 25—consistent with Congressional interest in projections over that period as delineated in the 2016 budget resolution.

CBO’s 10-year and extended baseline projections are not meant to be predictions of budgetary outcomes. Rather, they represent CBO’s best assessment of future revenues, spending, and deficits on the assumption that current laws generally remain unchanged.

The Budget Outlook for the Next 10 Years

Federal debt held by the public ballooned in the past decade. Debt at the end of 2007 stood at 35 percent of GDP. But large deficits stemming from the 2007–2009 recession and the ensuing policy responses caused that debt to grow sharply over the next five years; by the end of 2015, federal debt had more than doubled, measuring 74 percent of GDP. That amount of debt is very high by historical standards. For comparison, debt held by the public has averaged 39 percent of GDP over the past 50 years. And debt has exceeded 70 percent of GDP during only one other period in U.S. history—from 1944 through 1950, because of the surge in federal spending during World War II (see Figure 1-1).

Although the budget deficit has declined each year since its peak of nearly 10 percent of GDP in 2009, it is on track to rise in relation to the size of the economy this year. CBO estimates that the deficit in 2016 will be nearly 3 percent of GDP. By the end of the year, federal debt held by the public is anticipated to creep up to 75 percent of GDP. Under current law, deficits and debt would remain close to those levels through 2018.

1. For information on the March baseline budget projections, see Congressional Budget Office, *Updated Budget Projections: 2016 to 2026* (March 2016), www.cbo.gov/publication/51384. For information on the January 2016 economic projections, see Congressional Budget Office, *The Budget and Economic Outlook: 2016 to 2026* (January 2016), www.cbo.gov/publication/51129.

Table 1-1.

Key Projections in CBO's Extended Baseline

Percentage of Gross Domestic Product

	2016	Projected Annual Average		
		2017–2026	2027–2036	2037–2046
Revenues				
Individual income taxes	8.8	9.3	9.9	10.3
Payroll taxes	5.9	5.8	5.8	5.8
Corporate income taxes	1.8	1.7	1.6	1.6
Other ^a	1.7	1.3	1.3	1.4
Total Revenues	18.2	18.1	18.5	19.1
Outlays				
Mandatory				
Social Security	4.9	5.4	6.2	6.3
Major health care programs ^b	5.5	6.0	7.3	8.4
Other	2.8	2.6	2.4	2.1
Subtotal	13.2	14.0	15.8	16.9
Discretionary	6.5	5.6	5.2	5.2
Net interest	1.4	2.4	3.6	5.1
Total Outlays	21.1	22.0	24.7	27.2
Deficit	-2.9	-3.9	-6.2	-8.1
Debt Held by the Public at the End of the Period	75	86	110	141
Memorandum:				
Social Security				
Revenues ^c	4.5	4.4	4.4	4.4
Outlays ^d	4.9	5.4	6.2	6.3
Contribution to the Federal Deficit ^e	-0.4	-1.0	-1.8	-2.0
Medicare				
Revenues ^c	1.5	1.6	1.5	1.5
Outlays ^d	3.8	4.1	5.5	6.6
Offsetting Receipts	-0.6	-0.7	-0.9	-1.2
Contribution to the Federal Deficit ^e	-1.7	-1.9	-3.0	-3.9
Gross Domestic Product at the End of the Period (Trillions of dollars)	18.5	27.7	41.3	62.3

Source: Congressional Budget Office.

This table satisfies a requirement specified in section 3111 of S. Con. Res. 11, the Concurrent Resolution on the Budget for Fiscal Year 2016.

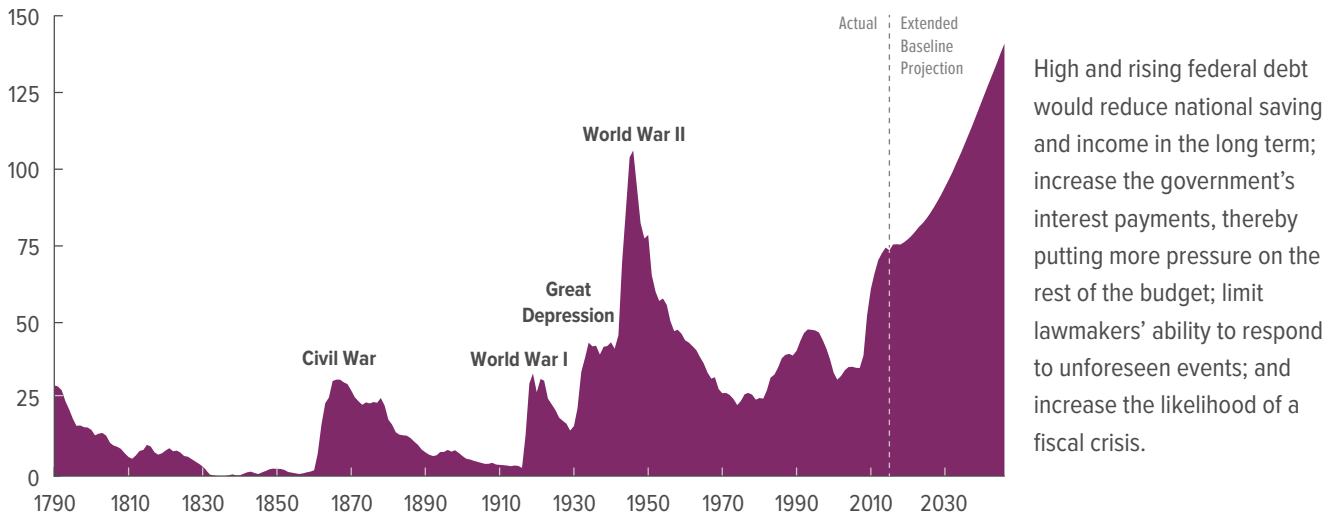
The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

- Consists of excise taxes, remittances to the Treasury from the Federal Reserve System, customs duties, estate and gift taxes, and miscellaneous fees and fines.
- Consists of spending on Medicare (net of offsetting receipts), Medicaid, and the Children's Health Insurance Program, as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.
- Includes payroll taxes for the program other than those paid by the federal government on behalf of its employees (which are intragovernmental transactions). Also includes income taxes paid on Social Security benefits, which are credited to the trust funds.
- Does not include outlays related to administration of the program, which are discretionary.
- The contribution to the deficit shown here differs from the change in the trust fund balance for the program. It does not include intragovernmental transactions, interest earned on balances, and outlays related to administration of the program.

Figure 1-1.

Federal Debt Held by the Public

Percentage of Gross Domestic Product



High and rising federal debt would reduce national saving and income in the long term; increase the government's interest payments, thereby putting more pressure on the rest of the budget; limit lawmakers' ability to respond to unforeseen events; and increase the likelihood of a fiscal crisis.

Source: Congressional Budget Office. For details about the sources of data used for past debt held by the public, see Congressional Budget Office, *Historical Data on Federal Debt Held by the Public* (July 2010), www.cbo.gov/publication/21728.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

Later in the 10-year baseline period, CBO projects, deficits would be notably larger, approaching 5 percent of GDP if current laws generally remain unchanged. Deficits would rise because spending—particularly mandatory spending and interest costs—would grow faster than revenues.² As the population ages, spending on Social Security and Medicare, the two largest mandatory programs, is projected to rise as a percentage of GDP. People age 65 or older will account for 19 percent of the population in 2026, more than twice the share 50 years ago—increasing the number of beneficiaries for those programs. Rising health care costs per person also will drive up Medicare spending as a percentage of GDP. At the same time, interest rates are expected to rise from their present unusually low levels, sharply increasing interest payments on the government's debt. All told, federal spending is projected to rise from about 21 percent of GDP in 2016 to about 23 percent in 2026.

Meanwhile, rising revenues would keep pace with the economy and remain close to 18 percent of GDP over the next 10 years, largely reflecting offsetting movements in individual and corporate income taxes, payroll taxes, and remittances from the Federal Reserve. With a growing gap between spending and revenues, federal debt would rise to 86 percent of GDP by 2026.

The Long-Term Budget Outlook

CBO's extended baseline projections show a substantial imbalance in the federal budget beyond the next 10 years, with revenues falling short of spending by steadily increasing amounts. As a result, federal debt as a share of GDP would reach unprecedented levels if current laws generally remain unchanged. Such high and rising debt would have serious consequences for the nation's budget and economy. Projections that far into the future are uncertain, but under a variety of plausible scenarios discussed later in this report, federal debt in 30 years would be significantly higher than it is today—twice as high under some scenarios.

The Accumulation of Federal Debt

Debt held by the public represents the amount that the federal government has borrowed in financial markets by

2. In general, lawmakers determine spending for mandatory programs by setting eligibility rules, benefit formulas, and other parameters instead of by appropriating specific amounts each year. In that way, mandatory spending differs from discretionary spending, which is controlled by annual appropriation acts.

issuing Treasury securities to pay for its operations and activities.³ Measuring debt as a percentage of GDP is useful for comparing amounts of debt in different years. That measure accounts for changes in price levels, population, output, and income—all of which affect the scope of potential budgetary adjustments. Examining whether debt as a percentage of GDP is increasing from its current high level is therefore a simple and meaningful way to assess the budget's sustainability.

Federal debt as a share of GDP is projected to rise over the long term in CBO's extended baseline. Beyond the next 10 years, CBO projects, the population will continue to age and health care costs per person will continue to rise. Consequently, under current law, more would be spent on the two largest federal programs that benefit the elderly: Social Security and Medicare. As interest rates and deficits rise, net interest costs also would increase substantially. As a result, the gap between total spending and revenues would continue to widen, leading to ever larger budget deficits and debt. In 2035, debt would surpass the peak of 106 percent of GDP recorded in 1946. By 2046, federal debt would reach 141 percent of GDP (see Figure 1-2)—more than three and a half times the average over the past five decades. Moreover, the debt would be on track to grow even larger.

Those projections are based on many factors that are hard to predict, which means that actual budgetary outcomes would undoubtedly differ from the projections even if current law did not change. When CBO varies four of those factors together—labor force participation, productivity in the economy, interest rates on federal debt, and health care costs per person—federal debt in 2046 is projected to range from 93 percent of GDP to 196 percent. (Chapter 7 discusses those projections.)

3. When the federal government borrows in financial markets, it competes with other participants for financial resources and, in the long term, crowds out private investment—reducing economic output and income. By contrast, federal debt held by trust funds and other government accounts represents internal transactions of the government and does not directly affect financial markets. (Together, that debt and debt held by the public make up gross federal debt.) For more discussion, see Congressional Budget Office, *Federal Debt and Interest Costs* (December 2010), www.cbo.gov/publication/21960. Several factors not directly included in the budget totals also affect the government's need to borrow from the public. Those factors include fluctuations in the government's cash balance as well as the cash flows reflected in the financing accounts used for federal credit programs.

Consequences of a Large and Growing Federal Debt

Large and growing amounts of federal debt over the coming decades would have negative long-term consequences for the economy and would constrain future budget policy. In particular, the projected amounts of debt would:

- Reduce national saving and income in the long term;
- Increase the government's interest costs, putting more pressure on the rest of the budget;
- Limit lawmakers' ability to respond to unforeseen events; and
- Make a fiscal crisis more likely.

Less National Saving and Lower Income. Large federal budget deficits over the long term would reduce investment, resulting in lower national income and higher interest rates than would otherwise occur. If the government borrowed more, people would use more of their savings to buy Treasury securities rather than for private investment, thereby crowding out investment. Both the government and private borrowers would face higher interest rates to compete for savings, and those rates would strengthen people's incentive to save. However, the increased government borrowing would exceed the rise in saving by households and businesses. Therefore, national saving—total saving by all sectors of the economy—would decline, as would private investment and economic output. (Private investment would decline less than national saving because higher interest rates tend to attract more foreign capital to the United States and induce U.S. savers to keep more of their money at home.) With lower investment in capital goods—factories and computers, for example—workers would be less productive. Because productivity growth is the main driver of compensation growth, decreased investment also would reduce compensation per hour, offering people less incentive to work. CBO's extended baseline incorporates those economic effects of rising deficits (described in Chapter 6) as well as the feedback to the budget from those negative effects on the economy.

CBO estimates that the fiscal policies underlying the rising budget deficits in CBO's extended baseline would have a different effect in the short term. Over the next few years, those policies would boost overall demand for goods and services, thus increasing output and employment from what they would be with smaller deficits (or with no deficits). But the influence of greater demand would be temporary because stabilizing forces in the

economy tend to push output back in the direction of its potential (or maximum sustainable) level. Those forces would include the response of prices and longer-term interest rates to greater demand and actions by the Federal Reserve.

Pressure on the Budget From Higher Interest Costs. More federal borrowing and rising interest rates are both projected to push up net interest costs, making it harder to achieve any chosen target for lower budget deficits. (Net interest costs now are a small share of the economy because interest rates are exceptionally low.) CBO projects that as the economy moves back up toward its potential level, interest rates will rise to levels consistent with various factors such as productivity growth, the demand for investment, and federal deficits. Interest costs in the extended baseline are projected to be higher than they would be if deficits were smaller and interest rates were lower.

Because federal spending on net interest is projected to rise, achieving any chosen targets for lower budget deficits and debt would require higher taxes, lower spending on benefits and services, or both. Policies that achieved those goals could affect the economy and people's well-being. For example, if higher taxes came about through higher marginal tax rates (the rates that apply to an additional dollar of income), incentives to work and save would be reduced.⁴ Alternatively, if lower spending was achieved at least in part by reducing federal investments, future output and income also would be reduced.⁵ As another option, if lower spending was achieved by a reduction in benefits, households might increase their supply of labor to make up for lost income, thus increasing output.

Reduced Ability to Respond to Domestic and International Problems. With a relatively small outstanding debt, a government can readily borrow money to address unexpected events, such as recessions, financial crises, natural disasters, or wars. By contrast, with large outstanding debt, a government has less flexibility to address financial and economic crises, which can be costly.⁶ A large amount of debt also can compromise a country's national security by constraining military

spending in times of international crisis or by limiting the country's ability to prepare for such a crisis.

Before the most recent recession, when federal debt was below 40 percent of GDP, the government had some flexibility to respond to the financial crisis and severe recession with policy changes. Such changes included using taxpayer funds to stabilize the financial sector, increasing spending, and cutting taxes—even as lower output and income automatically resulted in sharply lower tax revenues and higher spending on income-support programs. All told, as a result of lower tax revenue and higher spending, federal debt as a percentage of GDP more than doubled from its 2007 level. If federal debt stayed the same or increased further in the future, undertaking similar policies in recessions or fiscal crises would be harder. Hence, such developments could have larger negative effects on the economy and on people's well-being. Moreover, the reduced financial flexibility and increased dependence on foreign investors that would accompany high and rising debt could weaken U.S. leadership in the international arena.

Greater Chance of a Fiscal Crisis. A large and continuously growing federal debt would make a fiscal crisis in the United States more likely.⁷ Specifically, investors might become less willing to finance the government's borrowing unless they were compensated with high interest rates. As a result, interest rates on federal debt would abruptly become higher than the rates of return on other assets, dramatically increasing the cost of future government borrowing. In addition, that increase would reduce the market value of outstanding government bonds. If that happened, investors would lose money. The potential losses for mutual funds, pension funds, insurance companies, banks, and other holders of government debt might be large enough to cause some financial institutions to fail, creating a fiscal crisis. A fiscal crisis also can

4. See Congressional Budget Office, *How the Supply of Labor Responds to Changes in Fiscal Policy* (October 2012), www.cbo.gov/publication/43674.

5. For more information, see Congressional Budget Office, *The Macroeconomic and Budgetary Effects of Federal Investment* (June 2016), www.cbo.gov/publication/51628.

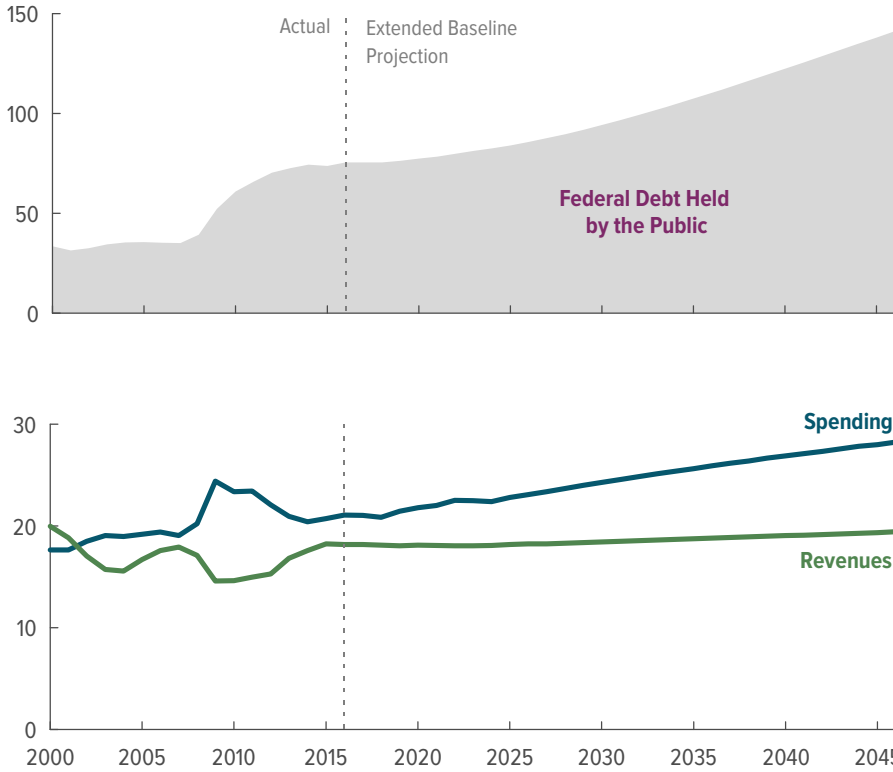
6. See, for example, Carmen M. Reinhart and Vincent R. Reinhart, "After the Fall," *Macroeconomic Challenges: The Decade Ahead* (Federal Reserve Bank of Kansas City, 2010), <http://tinyurl.com/Intnp6j> (PDF, 1.6 MB); and Carmen M. Reinhart and Kenneth S. Rogoff, "The Aftermath of Financial Crises," *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 466–472, <http://dx.doi.org/10.1257/aer.99.2.466>. Also see Luc Laeven and Fabian Valencia, *Systemic Banking Crises Database: An Update*, Working Paper 12/163 (International Monetary Fund, June 2012), <http://tinyurl.com/p2clvmy>.

7. For more information, see Congressional Budget Office, *Federal Debt and the Risk of a Fiscal Crisis* (July 2010), www.cbo.gov/publication/21625.

Figure 1-2.

Federal Debt, Spending, and Revenues

Percentage of Gross Domestic Product



In CBO’s extended baseline, **debt held by the public** rises . . .

. . . because growth in **total spending** outpaces growth in **total revenues**, resulting in larger budget deficits.

Source: Congressional Budget Office.

The extended baseline generally reflects current law, following CBO’s 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

GDP = gross domestic product.

Continued

make private-sector borrowing more expensive because uncertainty about the government’s responses can reduce confidence in the viability of private-sector enterprises.

Unfortunately, no one can confidently predict whether or when such a fiscal crisis might occur in the United States. In particular, the debt-to-GDP ratio has no identifiable tipping point to indicate that a crisis is likely or imminent. All else being equal, however, the larger a government’s debt, the greater the risk of a fiscal crisis.

The likelihood of such a crisis also depends on economic conditions. If investors expect continued economic growth, they are generally less concerned about the government’s debt burden; conversely, substantial debt can reinforce more generalized concern about an economy. Thus, fiscal crises around the world often have begun during recessions—and, in turn, have exacerbated them.

If a fiscal crisis occurred in the United States, policymakers would have only limited—and unattractive—options for responding. The government would need to undertake some combination of three approaches: restructure the debt (that is, seek to modify the contractual terms of existing obligations), use monetary policy to raise inflation above expectations, and adopt large and abrupt spending cuts and tax increases.

Illustrating the Magnitude of the Long-Term Fiscal Imbalance

One way to measure the severity of the long-term fiscal imbalance is to assess the changes in revenues or non-interest spending that would be necessary to achieve a chosen goal for federal debt. CBO examined the implications of two illustrative goals: Trying to ensure that federal debt in some future year would be at the same percentage of GDP that it is today and trying to make

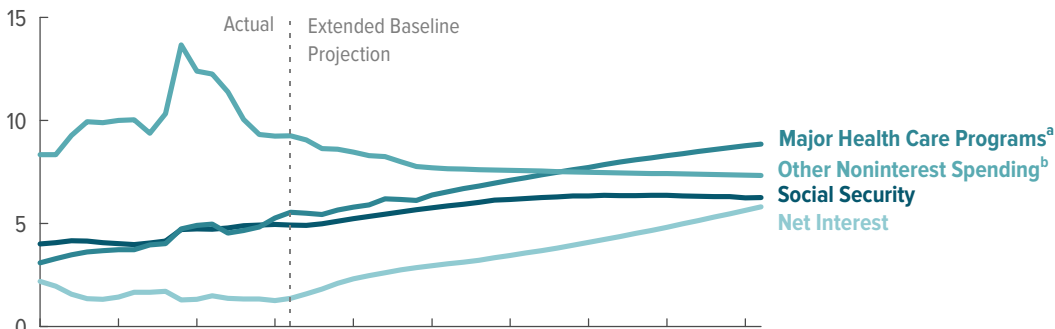
Figure 1-2.

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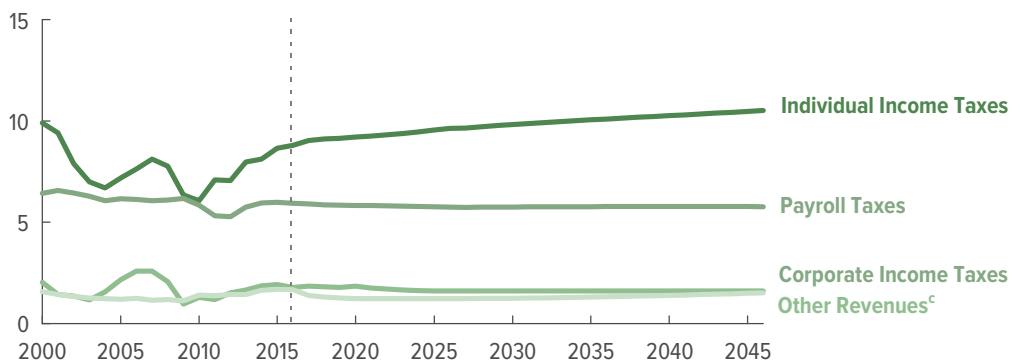
Federal Debt, Spending, and Revenues

Percentage of Gross Domestic Product

Certain **components of spending**—Social Security, the major health care programs, and net interest—are projected to rise in relation to GDP; other spending, in total, is projected to decline.



A projected boost in one **type of revenues**—individual income taxes—accounts for the rise in total revenues in relation to GDP. Receipts from all other sources, taken together, are projected to decline.



- a. Consists of spending on Medicare (net of offsetting receipts), Medicaid, and the Children’s Health Insurance Program, as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.
- b. Consists of all federal spending other than that for Social Security, the major health care programs, and net interest.
- c. Consists of excise taxes, remittances to the Treasury from the Federal Reserve System, customs duties, estate and gift taxes, and miscellaneous fees and fines.

federal debt the same percentage of GDP in some future year that it has been, on average, over the past 50 years. Estimating the effects on federal debt of alternative paths for federal deficits offers another way to show the magnitude of the imbalance.

The Magnitude of Policy Changes Needed to Meet Various Goals for Federal Debt. The scale of changes in noninterest spending or revenues would depend on the target level of federal debt. Suppose that lawmakers set out to ensure that debt in 2046 would equal 75 percent of GDP (the current share). Cutting noninterest spending or raising revenues in each year, or both, beginning in 2017, by amounts totaling 1.7 percent of GDP (about \$330 billion in 2017, or \$1,000 per person) would achieve that result (see Figure 1-3).⁸ Those amounts are calculated before macroeconomic feedback is taken into account.

The projected effects on debt include both the direct effects of the specified policy changes and the resulting macroeconomic feedback to both spending and revenues. That feedback reflects the positive economic effects of lowering the debt but no assumptions about the specifics of the policy changes.

Those policy changes, for example, could alter incentives to work and save, which would then affect overall economic output and have feedback effects on the federal

8. That estimate is similar to the fiscal gap estimated in last year’s report. The key differences this year are that the positive macroeconomic effects of lowering the debt have been incorporated and that the period of analysis is now 30 years rather than 25 (see Appendix B in this volume and Congressional Budget Office, *The 2015 Long-Term Budget Outlook*, www.cbo.gov/publication/50250).

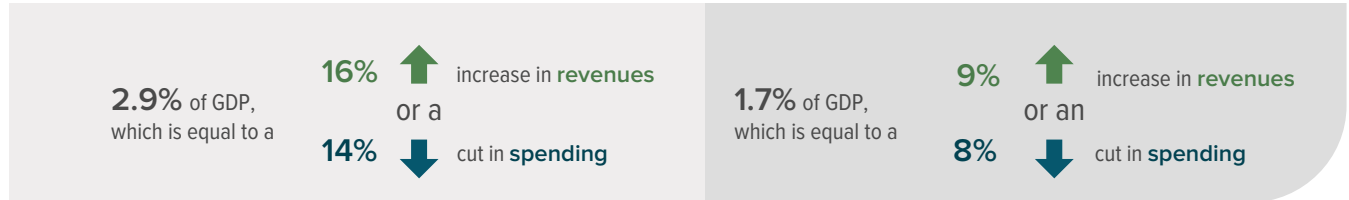
Figure 1-3.

The Size of Policy Changes Needed to Make Federal Debt Meet Two Possible Goals in 2046

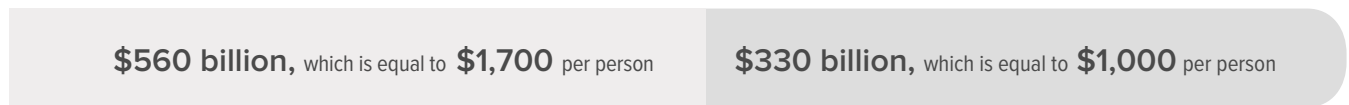
If lawmakers aimed for debt in 2046 to equal . . .



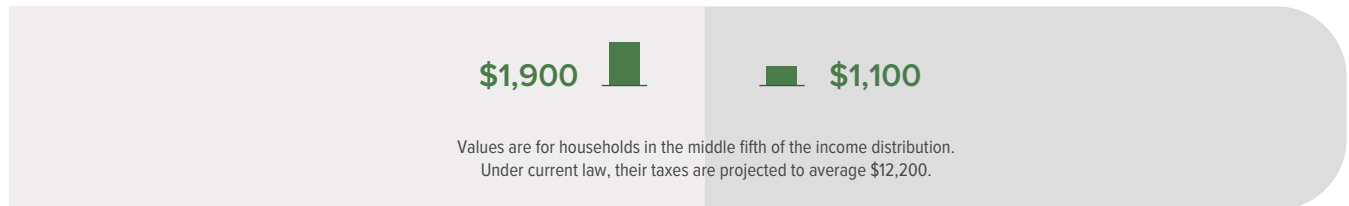
Each year, they would need to **increase revenues** or **reduce noninterest spending** by . . .



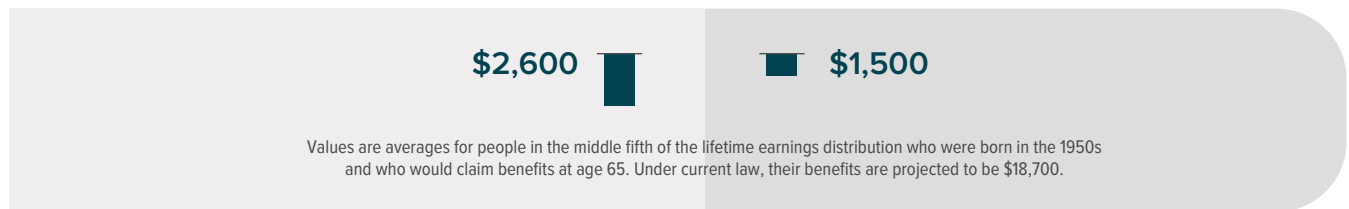
In 2017, that would amount to . . .



If the changes were increases (of equal percentage) in all types of revenues, one effect in 2017 is that **taxes per household** would be higher than under current law by . . .



If the changes were cuts (of equal percentage) in all types of noninterest spending, one effect in 2017 is that **initial Social Security benefits** would be lower than under current law by . . .



Source: Congressional Budget Office.

In this figure, the indicated sizes of policy changes are relative to CBO's extended baseline. The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period. The policy changes shown above are calculated before macroeconomic feedback is taken into account. The projected effects on debt include both the direct effects of the specified policy changes and the resulting macroeconomic feedback to both spending and revenues. That feedback reflects the positive economic effects of lowering the debt but no assumptions about the specifics of the policy changes.

GDP = gross domestic product.

budget. If those changes came entirely from revenues or entirely from spending, they would amount, roughly, to a 9 percent increase in revenues or an 8 percent cut in noninterest spending in comparison with the extended baseline.

Increases in revenues or reductions in noninterest spending would need to be larger than 1.7 percent of GDP to reduce debt to the percentages of GDP that are more typical of those in recent decades. Suppose that lawmakers wanted to return the debt to 39 percent of GDP (its average over the past 50 years) by 2046. One way to do so would be to increase revenues or cut noninterest spending (in relation to current law), or do some combination of the two, beginning in 2017 by amounts totaling 2.9 percent of GDP each year. (In 2017, 2.9 percent of GDP would be about \$560 billion, or \$1,700 per person.) Again, the projected effects on debt include both the direct effects of the specified policy changes and the resulting macroeconomic feedback to the budget. That feedback reflects the positive economic effects of lowering the debt but no assumptions about the specifics of the policy changes.

Lawmakers could adopt many combinations of policies to meet that goal, including the following:

- *Increase all types of revenues by equal percentages.* Such changes would represent an increase of about 16 percent, under the extended baseline, for each year in the 2017–2046 period. For households in the middle fifth of the income distribution in 2017, for example, such increases would raise federal taxes per household by about \$1,900, on average.
- *Cut all types of noninterest spending by equal percentages.* Such changes would represent a decrease of about 14 percent for each of the next 30 years. For example, for people in the middle fifth of the lifetime earnings distribution who were born in the 1950s and who claimed benefits at age 65, such cuts would lower their initial annual Social Security benefits by about \$2,600, on average.

The magnitude of the policy changes needed to achieve a chosen goal for federal debt would depend, in part, on how quickly that goal was expected to be reached (see Box 1-1).

How Different Amounts of Deficit Reduction Would Affect Federal Debt. CBO also analyzed the effects of phasing in deficit reduction so that cumulative deficits

(excluding interest payments and macroeconomic feedback) would be either \$2 trillion or \$4 trillion lower through 2026 than under the extended baseline. In later years, deficits would be reduced by the same percentage of GDP as in 2026.

CBO estimates that under those paths—after adjustment for the economic effects of the reduction in debt—federal debt as a share of GDP would still be higher than the nation’s historical average. The –\$2 trillion path would result in federal debt equal to 96 percent of GDP in 2046, well above today’s 75 percent. The –\$4 trillion path would result in federal debt amounting to 55 percent of GDP in 2046—lower than today’s level but still higher than the historical average. Under both illustrative paths, economic output would be slightly lower over the next few years but higher in 2046 than under the extended baseline. Interest rates on federal debt would be lower in the long term. (Chapter 6 describes those results and the corresponding results for a budget path that adds \$2 trillion to the deficit over the next 10 years.)

Projected Spending Through 2046

Spending for the government’s programs and activities, as well as its interest costs, is projected to be a higher percentage of GDP in coming years than it has been over the past several decades. Over the past 50 years, federal outlays (other than those for the government’s net interest costs) have averaged 18 percent of GDP. However, since 2009, noninterest spending has been well above that average, both because of underlying demographic trends and because of temporary circumstances (namely, the financial crisis, weak economy, and ensuing policies). Noninterest spending spiked to 23 percent of GDP in 2009 but then declined to about 19 percent by 2014 as the economy recovered. Because of pressures from underlying demographic trends, CBO projects that noninterest outlays would reach almost 20 percent of GDP this year and remain close to that percentage throughout the coming decade. During that time, mandatory spending would generally increase as a share of the economy, whereas discretionary spending would decrease.

After 2026, under the assumptions that govern the extended baseline, noninterest spending would continue to rise in relation to the size of the economy, reaching 22.4 percent of GDP by 2046. (Table 1-2 on page 16 summarizes CBO’s policy assumptions.) That increase would be mostly the result of rising spending for Social Security and the government’s major health care programs.

Box 1-1.

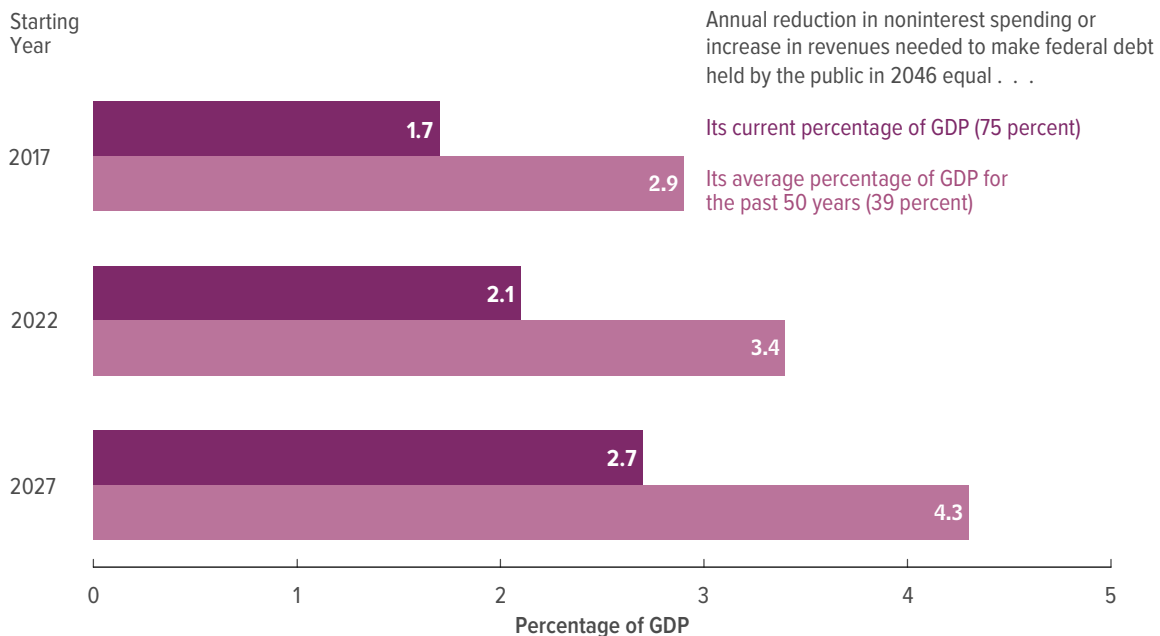
The Timing of Policy Changes Needed to Meet Various Goals

In deciding how quickly to implement policies to put federal debt on a sustainable path—regardless of the chosen goal for federal debt—lawmakers face trade-offs. Reducing the deficit sooner would have several benefits—less accumulated debt, smaller policy changes required to achieve long-term outcomes, and less uncertainty about what policies lawmakers would adopt. However, if lawmakers implemented spending cuts or tax increases quickly, people would have little time to plan and adjust to the policy changes. Those changes also would weaken the economic expansion over the next two years or so. By contrast, waiting several years to reduce federal spending or increase taxes would mean more accumulated debt over the long run, which would slow long-term growth in output and income. Also, reaching any chosen target for debt would require larger policy changes. However, waiting several years would affect the economy less over the next few years than if lawmakers implemented policy changes immediately.

In addition, faster or slower implementation of policies to reduce budget deficits would tend to impose different burdens on different generations. Reducing deficits sooner would probably require today’s older workers and retirees to sacrifice more and would benefit today’s younger workers and future generations. By contrast, reducing deficits later would require smaller sacrifices by older people and greater sacrifices by younger workers and future generations.

CBO shows that collection of trade-offs in two ways. First, CBO estimated how the size of policy adjustments would change if deficit reduction was delayed. For example, suppose that lawmakers sought to return debt as a percentage of GDP to its historical 50-year average. But if the associated policy changes did not take effect until 2022, they would need to amount to 3.4 percent rather than the 2.9 percent of GDP that would accomplish that goal if the policy changes were made in 2017 (see the figure). Waiting five more years would require even larger changes, amounting to 4.3 percent of GDP.

How Timing Affects the Size of Policy Changes Needed to Make Federal Debt Meet Two Possible Goals in 2046



Source: Congressional Budget Office.

GDP = gross domestic product.

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Box 1-1.

Continued

The Timing of Policy Changes Needed to Meet Various Goals

Second, CBO studied how waiting to resolve the long-term fiscal imbalance would affect various generations of the U.S. population. In 2010, CBO compared economic outcomes under two policies. One would stabilize the debt-to-GDP ratio starting in a particular year; the other would wait 10 years to do so.¹ That analysis suggested that generations born after the earlier implementation date would be worse off under the second option. People born more than 25 years before that earlier implementation date, however, would be better off with delayed action—largely because they would partly or entirely avoid the policy changes needed to stabilize the debt. Generations born between those two groups could either gain or lose from delayed action, depending on the details of the policy changes.²

Even if lawmakers waited several years to implement policy changes to reduce deficits in the long term, making decisions about them sooner would offer advantages. With decisions reached sooner, people would have more time to prepare for the time when changes would be implemented. Also, policy changes that reduced future debt would hold down longer-term interest rates, reduce uncertainty, and enhance businesses' and consumers' confidence. Therefore, output and employment in the next few years would increase.

1. See Congressional Budget Office, *Economic Impacts of Waiting to Resolve the Long-Term Budget Imbalance* (December 2010), www.cbo.gov/publication/21959. That analysis was based on a projection of slower growth in debt than CBO now projects, so the estimated effects of a similar policy today would be close, but not identical, to the effects estimated in that earlier analysis. For a different approach to analyzing the cost of debt reduction for different generations, see Felix Reichling and Shinichi Nishiyama, *The Costs to Different Generations of Policies That Close the Fiscal Gap*, Working Paper 2015-10 (Congressional Budget Office, December 2015), www.cbo.gov/publication/51097.
2. Those conclusions do not incorporate the possible negative effects of a fiscal crisis or effects that might arise from the government's reduced flexibility to respond to unexpected challenges.

In addition, CBO projects that, under current law, net outlays for interest would jump from 1.4 percent of GDP this year to 3.0 percent 10 years from now as interest rates rise from their unusually low levels and debt accumulates. By 2046, interest costs would be 5.8 percent of GDP, bringing total federal spending to over 28.2 percent of GDP (see Figure 1-4). Only during World War II did federal spending constitute a larger share of the economy, topping 40 percent of GDP for three years.

Spending for Social Security and Major Health Care Programs

Mandatory programs have accounted for a rising share of the federal government's noninterest spending over the past few decades, exceeding 60 percent for the past several years. Much of the growth has occurred because Social Security and Medicare—the largest mandatory programs—benefit primarily people age 65 or older, a group that has been growing significantly. Federal outlays for those two programs made up almost 40 percent of the government's noninterest spending, on average, during the past 10 years, compared with 16 percent 50 years ago.

Projected Growth in Spending. CBO projects that spending for Social Security would increase noticeably as a share of the economy—from 4.9 percent of GDP in

2016 to 6.3 percent in 2046. The agency's projections of federal spending for Social Security incorporate the assumption that the laws governing that program will not change. For these projections, CBO also assumes that Social Security will pay benefits as scheduled under current law regardless of the status of the program's trust funds.⁹ That approach is consistent with a statutory requirement that CBO's 10-year baseline projections incorporate the assumption that funding for entitlement programs is adequate to make all payments required by law.¹⁰ (For more on Social Security, see Chapter 2.)

9. The balances of the trust funds represent the total amount that the government is legally authorized to spend for those purposes. CBO currently projects that, under current law, the two Social Security trust funds combined would be exhausted in 2029. For more about the legal issues related to exhaustion of a trust fund, see Noah P. Meyerson, *Social Security: What Would Happen If the Trust Funds Ran Out?* Report for Congress RL33514 (Congressional Research Service, August 28, 2014), available from U.S. House of Representatives, Committee on Ways and Means, *2014 Green Book*, Chapter 1: Social Security, "Social Security Congressional Research Service Reports" (accessed July 8, 2016), <http://go.usa.gov/cCXcG>.
10. Sec. 257(b)(1) of the Balanced Budget and Emergency Deficit Control Act of 1985, Public Law 99-177 (codified at 2 U.S.C. §907(b)(1) (2012)).

Table 1-2.

Assumptions About Spending and Revenues That Underlie CBO's Extended Baseline

Assumptions About Spending	
Social Security	As scheduled under current law ^a
Medicare	As scheduled under current law through 2026; thereafter, projected spending depends on the estimated number of beneficiaries and health care costs per beneficiary (for which excess cost growth is projected to move smoothly to a rate of 1.0 between 2027 and 2046) ^a
Medicaid	As scheduled under current law through 2026; thereafter, projected spending depends on the estimated number of beneficiaries and health care costs per beneficiary (for which excess cost growth is projected to move smoothly to a rate of 1.0 between 2027 and 2046)
Children's Health Insurance Program	As projected in CBO's baseline through 2026; remaining constant as a percentage of GDP thereafter
Subsidies for Health Insurance Purchased Through the Marketplaces	As scheduled under current law through 2026; thereafter, projected spending depends on the estimated number of beneficiaries, an additional indexing factor for subsidies, and excess cost growth for private health insurance premiums (which is projected to move smoothly to a rate of 1.0 between 2027 and 2046)
Other Mandatory Spending	As scheduled under current law through 2026; thereafter, refundable tax credits are estimated as part of revenue projections, and the rest of other mandatory spending is assumed to decline as a percentage of GDP at roughly the same annual rate at which it is projected to decline between 2021 and 2026 ^b
Discretionary Spending	As projected in CBO's baseline through 2026; remaining roughly constant as a percentage of GDP thereafter ^c
Assumptions About Revenues	
Individual Income Taxes	As scheduled under current law
Payroll Taxes	As scheduled under current law
Corporate Income Taxes	As scheduled under current law (remaining constant as a percentage of GDP after 2026)
Excise Taxes	As scheduled under current law ^d
Estate and Gift Taxes	As scheduled under current law
Other Sources of Revenues	As scheduled under current law (remaining constant as a percentage of GDP after 2026)

Source: Congressional Budget Office.

For CBO's most recent 10-year baseline projections, see Congressional Budget Office, *Updated Budget Projections: 2016 to 2026* (March 2016), www.cbo.gov/publication/51384.

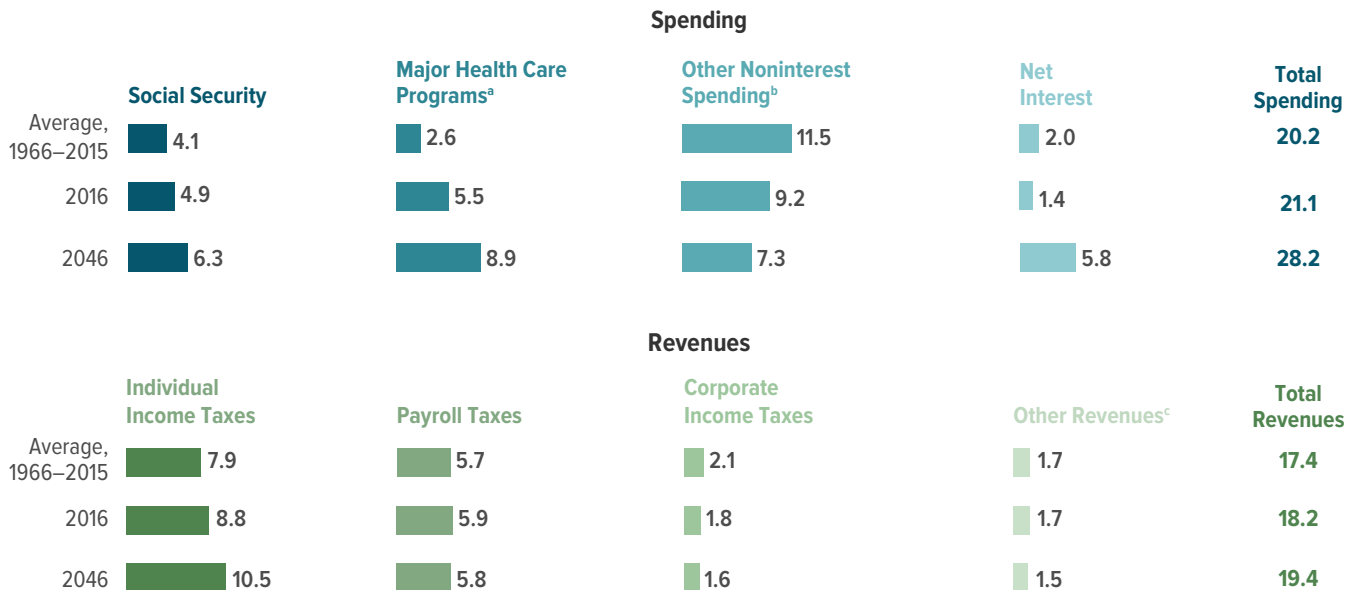
GDP = gross domestic product.

- a. Assumes the payment of full benefits as calculated under current law, regardless of the amounts available in the program's trust funds.
 - b. In that projection, GDP includes the macroeconomic effects of the policies underlying the extended baseline. If it did not, the rest of other mandatory spending after 2026 would decline at precisely the same rate at which it is projected to decline between 2021 and 2026.
 - c. In that projection, GDP includes the macroeconomic effects of the policies underlying the extended baseline. If it did not, discretionary spending after 2026 would remain precisely the same (measured as a percentage of GDP) as projected for 2026.
 - d. The sole exception to the current-law assumption applies to expiring excise taxes dedicated to trust funds. The Balanced Budget and Emergency Deficit Control Act of 1985 requires CBO's baseline to reflect the assumption that those taxes would be extended at their current rates. That law does not stipulate that the baseline include the extension of other expiring tax provisions, even if they have been routinely extended in the past.
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Figure 1-4.

Spending and Revenues in the Past and Under CBO's Extended Baseline

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

- Consists of spending on Medicare (net of offsetting receipts), Medicaid, and the Children's Health Insurance Program, as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.
- Consists of all federal spending other than that for Social Security, the major health care programs, and net interest.
- Consists of excise taxes, remittances to the Treasury from the Federal Reserve System, customs duties, estate and gift taxes, and miscellaneous fees and fines.

In the extended baseline, spending for the major health care programs is projected to grow much faster than the economy. Those programs include Medicare, Medicaid, and the Children's Health Insurance Program, as well as spending on subsidies for health insurance purchased through the marketplaces established by the Affordable Care Act (ACA) and related spending.¹¹ Total outlays for those programs over the next 30 years, net of offsetting receipts, would increase from 5.5 percent of GDP now to 8.9 percent in 2046.¹² About three-quarters of

that increase would come from spending for the Medicare program. CBO projects federal spending for the government's major health care programs for 2016 through 2026 under the assumption that the laws governing those programs will, in general, remain unchanged. As with Social Security, CBO assumes that Medicare will pay benefits as scheduled under current law regardless of the status of the program's trust funds. For projections beyond 2026, considerable uncertainty surrounds the evolution of the health care delivery and financing systems. That uncertainty leads CBO to employ a formulaic approach: CBO combines estimates from the government's health care programs of the number of expected beneficiaries with mechanical estimates of the growth in spending per beneficiary. (Chapter 3 describes the long-term projections for the major health care programs.)

Causes of Spending Growth. The aging population and excess cost growth account for the projected rise (with respect to GDP) in spending on Social Security and the

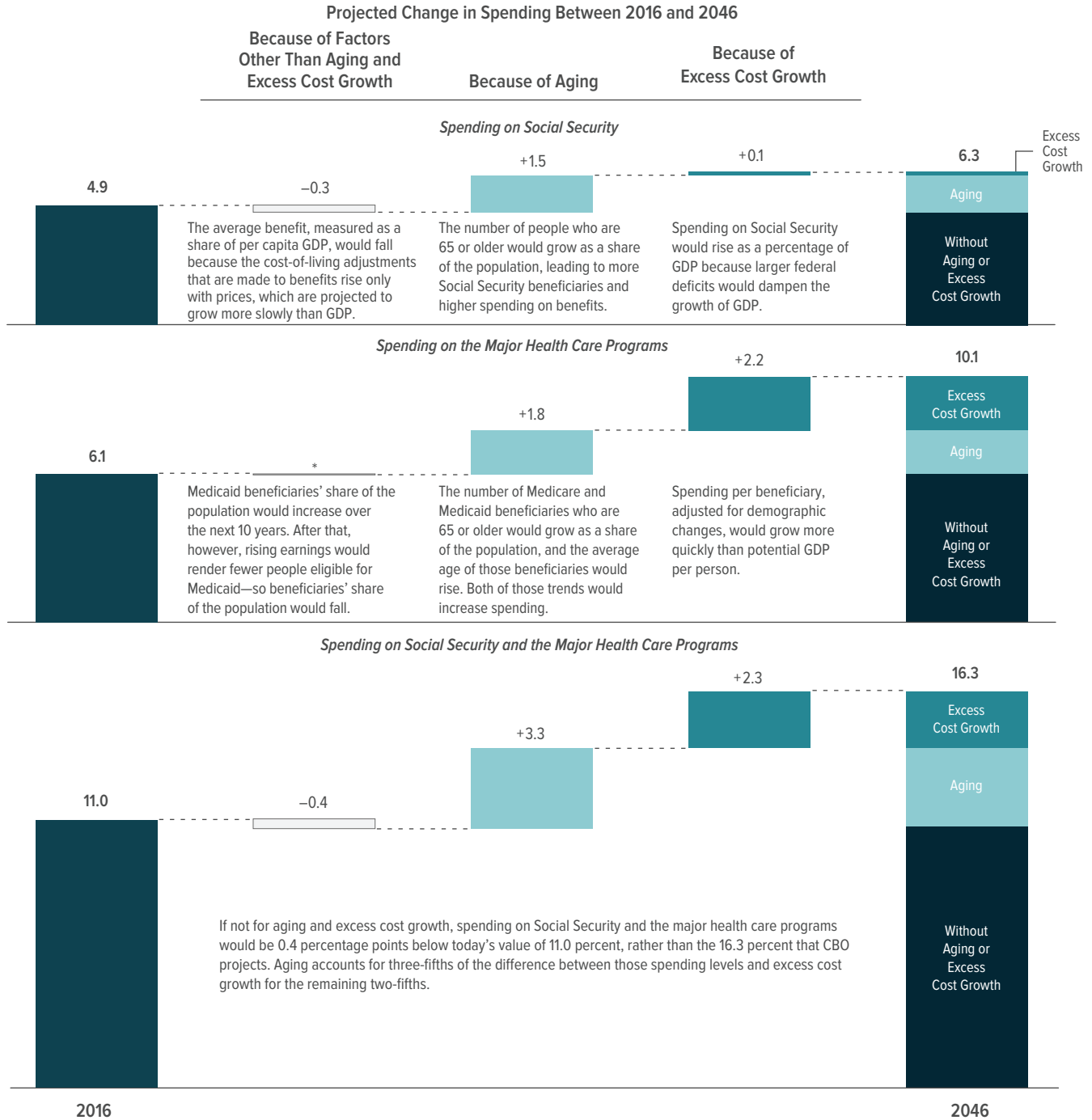
11. Spending related to subsidies for insurance purchased through the marketplaces (formerly called exchanges in CBO's publications) includes spending for subsidies for insurance provided through the Basic Health Program, spending for the risk-adjustment and reinsurance programs that were established by the ACA to stabilize premiums for health insurance purchased by individuals and small employers, and spending to provide grants to states for establishing a marketplace.

12. In particular, unless otherwise specified, Medicare outlays are presented net of offsetting receipts—mostly enrollee-paid premiums, which reduce net outlays for that program.

Figure 1-5.

Causes of Projected Spending Growth in Social Security and the Major Health Care Programs

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

Outlays for the major health care programs consist of gross spending for Medicare (which does not account for offsetting receipts that are credited to the program), Medicaid, and the Children’s Health Insurance Program, as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.

Excess cost growth is defined as the extent to which the growth of health care costs per beneficiary, adjusted for demographic changes, exceeds the growth of potential GDP per person. (Potential GDP is the maximum sustainable output of the economy.)

This figure highlights the most important effects of aging and excess cost growth. Other effects, such as the effect of aging on the number of Social Security Disability Insurance beneficiaries, are smaller.

GDP = gross domestic product; * = between zero and -0.1 percent.

major federal health care programs.¹³ Without aging or excess cost growth, spending on Social Security and major health care programs as a share of GDP in 2046 would be 0.4 percentage points below today's value of 11.0 percent, CBO projects; in the extended baseline, that spending is projected to be 16.3 percent of GDP (see Figure 1-5).¹⁴ Aging accounts for 3.3 percentage points, or roughly 60 percent of the difference. Excess cost growth accounts for the rest, at 2.3 percentage points.

The Aging Population. The retirement of the baby boomers and continued increases in life expectancy will substantially increase the share of the population that is of retirement age (65 and older). Between 2016 and 2046, that share will increase from 15 percent to 21 percent.

Aging accounts for nearly all the projected long-term increase in Social Security spending as a percentage of GDP.¹⁵ Because of aging, the number of people who are 65 or older would grow as a share of the population, leading to more Social Security beneficiaries and higher federal spending on benefits.

Aging also contributes to the projected increase in spending for major health care programs as a share of GDP—particularly for Medicare, the largest federal health care program. As the population ages, Medicare beneficiaries will make up more of the population. Beneficiaries will be older, on average, and older beneficiaries tend to have higher average spending. Both of those trends would increase Medicare spending. CBO estimates that aging explains just under half of the increase in spending for major health care programs as a share of GDP between 2016 and 2046.

13. Excess cost growth is the extent to which health care costs per beneficiary, as adjusted for demographic changes, grow faster than potential GDP per capita. For the analysis of causes of spending growth, spending on major health care programs includes gross spending on Medicare, Medicaid, and the Children's Health Insurance Program, as well as subsidies for health insurance purchased through the marketplaces and related programs.

14. Spending under the scenario with no aging or excess cost growth is projected by setting the shares of the population by age at today's proportions and by setting excess cost growth at zero.

15. Excess cost growth accounts for a small portion of the difference between those scenarios in spending for Social Security in 2046. Accounting for excess cost growth increases spending on Social Security as a share of GDP slightly because higher spending on federal health care programs leads to higher deficits, slowing the growth of GDP.

Rising Health Care Spending per Beneficiary. Even though growth in health care spending has slowed in recent years, CBO projects that excess cost growth will be greater than zero, on average, over the next 30 years (see Chapter 3). For major health care programs, excess cost growth accounts for just over half of the increase in spending as a share of GDP between 2016 and 2046. That contribution occurs mainly because excess cost growth means that spending per beneficiary grows faster than the potential GDP. Secondly, such cost growth leads to higher federal debt—which slows the growth of GDP and therefore slightly raises spending as a share of GDP.

Other Noninterest Spending

In the extended baseline, total federal spending for everything other than Social Security, the major health care programs, and net interest declines to a smaller percentage of GDP than has been the case for more than 70 years. During the past 50 years, such spending has averaged 12 percent of GDP, reaching as much as 15 percent in 1968 and falling to as little as 8 percent in the late 1990s and early 2000s. CBO estimates that other noninterest spending will equal 9.2 percent of GDP in 2016. Under the assumptions used for this analysis, that spending is projected to fall to 7.7 percent of GDP in 2026 and to 7.3 percent of GDP in 2046.

Outlays for discretionary programs as a share of GDP are projected to decline significantly over the next 10 years—from 6.5 percent to 5.2 percent—in part because of the constraints on discretionary funding imposed by the Budget Control Act of 2011. After 2026, discretionary spending is assumed to remain roughly constant as a percentage of GDP.

Spending for mandatory programs other than Social Security and the major health care programs also is projected to decline as a share of the economy over the next 10 years. Those mandatory programs include retirement programs for federal civilian and military employees, certain veterans' programs, the Supplemental Nutrition Assistance Program (SNAP), unemployment compensation, and refundable tax credits. That spending accounts for 2.8 percent of GDP today and is projected to fall to 2.5 percent of GDP in 2026, if current laws generally remain unchanged.¹⁶ In CBO's extended baseline, that

16. The law governing CBO's baseline projections (sec. 257(b)(2) of the Deficit Control Act) makes exceptions for some programs, such as SNAP, that have expiring authorizations but that are assumed to continue as currently authorized.

spending is projected to fall to 2.1 percent of GDP by 2046—lower than at any point at least since 1962, the first year for which comparable data are available. (For more on other noninterest spending, see Chapter 4.)

Net Interest Costs

The government's net interest costs are projected to more than double as a share of the economy over the next decade—from 1.4 percent of GDP in 2016 to 3.0 percent by 2026. By 2046, those costs would reach 5.8 percent of GDP under the extended baseline. Net interest costs are projected to increase as interest rates rise from unusually low levels and as greater federal borrowing directly leads to greater debt-service costs. In addition, greater federal borrowing is projected to put further upward pressure on interest rates and thus on interest costs. Growth in net interest costs and growth in debt reinforce each other: Rising interest costs push up deficits and debt, and rising debt pushes up interest costs.

CBO projects that interest rates will rise from today's low rates as the economy grows but that they still will be lower than they have been, on average, during the past few decades. Over the long term, interest rates are projected to rise to levels consistent with factors such as labor force growth, productivity growth, the demand for investment, and federal deficits. According to CBO's projections, factors that push interest rates down from their historical levels—such as slower growth of the labor force—would outweigh factors that push interest rates up from their historical levels—such as rising federal debt. For example, in CBO's latest 10-year economic projections, the interest rate on 10-year Treasury notes would rise from 2.2 percent at the end of 2015 to 4.1 percent in 2026. In the extended baseline, the rates on those notes would rise to 4.7 percent in 2046—still below the average of 5.8 percent between 1990 and 2007. (CBO uses the 1990–2007 period for comparison because it featured stable expectations for inflation and no significant financial crises or severe economic downturns.)

The average interest rate on all federal debt held by the public tends to be lower than the rate on 10-year Treasury notes. (In general, interest rates are lower on shorter-term debt than on longer-term debt; since the 1950s, the average maturity of federal debt has been shorter than 10 years.) On the basis of the agency's projected spreads of interest rates and the term structure of federal debt, beyond 2026, CBO anticipates that the average interest rate on federal debt will be about 0.4 percentage points

lower than the interest rate on 10-year Treasury notes. As a result, CBO projects that the rate will rise to 4.4 percent in 2046.

Rising rates will add significantly to interest costs and thus increase federal debt (as a share of the economy) in CBO's extended baseline. Although interest rates are projected to remain notably below their average in recent decades, anticipated increases in rates account for roughly three-quarters of the projected increase in debt as a percentage of GDP by 2046.

Projected Revenues Through 2046

In CBO's extended baseline, revenues are projected to constitute a larger share of GDP than they have, on average, in recent decades. Over the past 50 years, federal revenues as a share of GDP have averaged 17 percent—fluctuating between 15 percent and 20 percent as a result of changes in tax laws and interactions between tax law and economic conditions.

CBO projects that, under current law, revenues as a share of GDP would be roughly flat over the coming decade—fluctuating between 18.0 percent and 18.2 percent. For years beyond 2026, CBO assumes that the rules for all tax sources will evolve as scheduled under current law.¹⁷ Under those assumptions, revenues would grow slightly faster than GDP beyond 2026. During that time, real bracket creep would continue to push a growing share of income into higher tax brackets because of growth in real (inflation-adjusted) income and the tax system's interaction with inflation. Also, certain tax increases enacted under the ACA, especially the high-premium excise tax, would generate increasing revenues in relation to the size of the economy. By 2046, total revenues would be 19.4 percent of GDP (see Chapter 5).

Even if lawmakers enacted no future changes in tax law, the effects of the tax system in 2046 would differ substantially from today's. Average taxpayers at all income levels would pay more of their income in taxes than similar taxpayers do now, primarily because more of their income

17. The sole exception to that current-law assumption applies to expiring excise taxes dedicated to trust funds. The Deficit Control Act requires CBO's baseline to reflect the assumption that those taxes would be extended at their current rates. That law does not stipulate that the baseline include the extension of other expiring tax provisions, even if lawmakers have routinely extended them before.

would be taxed in higher brackets. Higher marginal tax rates on both labor and capital would dampen economic activity, reducing overall tax revenue from what it would be otherwise, CBO estimates.

Economic and Demographic Projections Underlying CBO's Long-Term Projections

Through 2026, the economic and demographic projections in this report are the same as the agency's 10-year baseline. For later years, CBO projects economic and demographic conditions according to its assessment of long-term trends. (Appendix A describes CBO's economic and demographic projections). Those economic projections reflect the effects that projected fiscal policies—namely, increased federal borrowing and rising marginal tax rates—would have on the economy. Such effects would result in lower labor supply, a smaller stock of capital, and lower output than would otherwise be the case. (Chapter 6 further describes how CBO assesses the long-term macroeconomic effects of federal tax and spending policies.)

Economic Projections

Future economic growth will be slower than over the past 50 years, CBO projects, largely because of less growth in the labor force. The labor force is projected to grow by an average of 0.4 percent per year over the next 30 years, compared with 1.5 percent between 1966 and 2015. Contributing factors include the retiring baby boomers, declining birthrates, and declining participation in the labor force. In addition, rising debt would slow the growth of the capital stock and therefore future economic output. CBO also projects that total factor productivity will grow slightly more slowly than its historical average, increasing by 1.3 percent per year, on average, from 2016 to 2046. That average growth rate is about 0.2 percentage points slower than the average annual rate of nearly 1.5 percent since 1950. Taking into account those and other economic variables, CBO projects that, under the extended baseline, real GDP would increase by 2.1 percent per year, on average, over the next 30 years, compared with 2.9 percent between 1966 and 2015.

Another measure of economic growth is gross national product (GNP). Unlike the more commonly cited GDP, GNP includes the income that U.S. residents earn abroad and excludes the income that foreigners earn in this country. GNP is therefore a better measure of the resources available to U.S. households. In the extended

baseline, CBO projects that real GNP will increase by 2.0 percent per year, on average, over the next 30 years, compared with 2.9 percent over the past 50 years. Real GNP per person would rise from \$58,000 today to \$86,000 (in 2016 dollars) in 2046, growing by 1.3 percent per year, on average, over the entire period. That growth rate is slower than the 1.9 percent experienced during the 1966–2015 period.

Demographic Projections

The size and age profile of the U.S. population affects budgetary and economic outcomes for the nation. The size of the labor force and number of Social Security beneficiaries are two examples. The U.S. population will grow from 328 million at the beginning of this year to 400 million in 2046, CBO projects, expanding by 0.7 percent per year, on average. That rate is slower than the 0.9 percent experienced over the past 50 years. The population's age distribution will continue to shift over the coming decades as well, maintaining a long-standing historical trend. By 2046, 21 percent of the population will be age 65 or older, CBO anticipates, compared with 15 percent today.

To estimate the U.S. population in the coming decades, CBO projects rates of fertility, immigration, and mortality. CBO anticipates an average of 1.9 children born per woman between 2016 and 2046, continuing a decline from the recent peak of 2.1 in 2007. Net immigration will decline from an estimated 4.0 immigrants per thousand people today to 3.7 by 2046, according to CBO's estimates. Mortality rates—the number of deaths per thousand people in the population—for specific age and sex groups are expected to improve, on average, at the same rate each experienced from 1950 to 2012.

Changes From Last Year's Long-Term Budget Outlook

Each time it prepares long-term budget projections, CBO updates them to incorporate legislative, economic, and technical changes. The projections of federal deficits and resulting debt presented here are generally higher than those published in 2015.¹⁸ Much of that increase stems from reduced corporate and individual income taxes, resulting from the extension of tax provisions by

18. For CBO's long-term projections for the 2015–2040 period, see Congressional Budget Office, *The 2015 Long-Term Budget Outlook* (June 2015), www.cbo.gov/publication/50250.

the Consolidated Appropriations Act, 2016. Downward revisions to CBO's economic forecast and technical changes have also, on net, increased projected deficits. (Appendix B describes the key revisions to the budgetary projections since last year.)

Projections in this report incorporate estimates of the macroeconomic effects of the fiscal policy that is projected to occur if current laws generally remained unchanged. That approach represents a departure from last year's report, in which the detailed spending projections and the economic projections presented in Appendix A did not incorporate the macroeconomic effects of fiscal policy after the first 10 years. (Chapter 6 in last year's report described estimates that incorporated the macroeconomic effects of fiscal policy.)

Taken together, legislative, economic, and technical changes affected CBO's view of the long-term outlook for the federal budget in several ways. Under the extended baseline, CBO now projects that debt would reach 122 percent of GDP in 2040, compared with

107 percent projected last year. (Those figures incorporate feedback to the budget from the macroeconomic effects of those paths for federal debt.) Higher deficits in this year's report also mean that larger budgetary changes would be required to make federal debt equal today's level in 25 years (last year's projection period). To ensure that debt in 2041 would equal today's level, lawmakers would have to cut noninterest spending or increase revenues (or undertake some combination of the two) by roughly 1.7 percent of GDP in each year from 2017 through 2041 (before taking into account macroeconomic feedback). The projected effects on debt include both the direct effects of the specified policy changes and the resulting macroeconomic feedback to the budget. That feedback reflects the positive macroeconomic effects of lowering the debt but no assumptions about the specifics of the policy changes. Without those positive macroeconomic effects, that change would be 2.0 percent of GDP. Last year, for the 2016–2040 period, CBO estimated that doing so would require changes equal to 1.1 percent of GDP (excluding all macroeconomic effects).