

The Long-Term Outlook for the Federal Budget

The Congressional Budget Office projects that the deficit will remain roughly stable as a share of the nation's output—its gross domestic product (GDP)—for the next several years if current laws remain generally unchanged. Federal debt held by the public also will be roughly stable relative to the size of the economy for several years, according to CBO's projections. However, the long-term budget outlook is projected to worsen.

The government's spending for major health care programs and for Social Security is a critical factor in that outlook. Such spending is expected to rise significantly from 2015 through 2040 because of a combination of three factors: the aging of the population; growth in per capita spending on health care; and, to a lesser extent, an increased number of recipients of exchange subsidies and Medicaid benefits attributable to the Affordable Care Act (ACA). That boost in spending is expected to exceed the decline in other noninterest spending relative to GDP over the same 25-year period. In addition, revenues are projected to increase, but more slowly than total non-interest spending. Higher interest payments and larger budget deficits would occur as a result, causing federal debt, which is already quite large relative to the size of the economy, to swell even more.

In this report, CBO presents its projections of federal outlays, revenues, deficits, and debt for the next few decades and discusses the possible consequences of the projected budgetary outcomes. The projections are consistent with CBO's current 10-year economic projections, which were released in January 2015, and the agency's March 2015 budget projections, with adjustments to incorporate the effects of recently enacted legislation.¹ CBO's long-term projections, which focus on the 25-year period ending in 2040, extend the baseline concept into later years; hence, they constitute what is called the *extended baseline*.

CBO's 10-year and extended baselines are meant to serve as benchmarks for assessing the budgetary effects of proposed changes in federal revenues or spending. They are not meant to be predictions of future budgetary outcomes; rather, they represent CBO's best assessment of future revenues, spending, and deficits if current law generally remained unchanged and the economy was generally stable in the long term. In that way, the baselines incorporate the assumption that some policy changes that lawmakers have routinely made in the past—such as extending certain expiring tax provisions—will not be made again.

The Budget Outlook for the Next 10 Years

The budget deficit is on track to fall in 2015 to its smallest percentage of economic output since 2007: CBO estimates that the deficit will be less than 3 percent of GDP, which is less than one-third of its peak of nearly 10 percent in 2009. That decline reflects the economy's gradual recovery from the 2007–2009 recession, the waning budgetary effects of policies enacted in response to the weak economy, and other changes to tax and spending policies. Debt held by the public will remain at about 74 percent

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1. The most important adjustment to the March 2015 baseline was to incorporate the estimated effect of Public Law 114-10, the Medicare Access and CHIP [Children's Health Insurance Program] Reauthorization Act of 2015, which became law on April 16, 2015. See Congressional Budget Office, cost estimate for H.R. 2, the Medicare Access and CHIP Reauthorization Act of 2015 (March 25, 2015), www.cbo.gov/publication/50053. For information on the March baseline budget projections, see Congressional Budget Office, *Updated Budget Projections: 2015 to 2025* (March 2015), www.cbo.gov/publication/49973. For information on the January 2015 economic projections, see Congressional Budget Office, *The Budget and Economic Outlook: 2015 to 2025* (January 2015), www.cbo.gov/publication/49892.

of GDP at the end of 2015—equal to its value in 2014, when it reached its highest level since 1950.

In those projections, a combination of the anticipated further strengthening of the economy and constraints on federal spending built into law keeps deficits close to their current percentage of GDP for the next several years. With deficits staying below 3 percent of GDP from 2015 through 2019, and then rising slowly thereafter, federal debt held by the public is projected to stay between 73 percent and 74 percent of GDP from 2015 through 2020.

Later in the 10-year baseline projection period, under current law, deficits would be notably larger, CBO anticipates. Interest rates are expected to rebound from their present unusually low levels, sharply increasing interest payments on the government's debt. Moreover, increased spending on the major health care programs and on Social Security is projected to cause mandatory spending to rise as a percentage of GDP.² In addition, revenues would remain roughly stable relative to GDP for the next 10 years as an increase in individual income taxes was offset by a decline in receipts from corporate income taxes and remittances from the Federal Reserve (all relative to the size of the economy). By 2025, under current law, the budget deficit would grow to nearly 4 percent of GDP; federal debt would equal 78 percent of GDP and would be on the rise relative to the size of the economy.

The Long-Term Budgetary Imbalance

The detailed long-term budget estimates that CBO presents in this and the following four chapters depend on projections of a host of demographic and economic conditions that the agency bases primarily on historical patterns. The estimates in these five chapters do not incorporate the long-term economic effects of changes in fiscal policies in the extended baseline; those effects are incorporated, however, in the estimates presented in Chapters 6 and 7. The demographic and economic projections that underlie the detailed long-term budget estimates are summarized later in this chapter and discussed

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

in detail in Appendix A. (Appendix B offers a discussion of changes in CBO's projections since last year.)

CBO's extended baseline projections show a substantial imbalance in the federal budget over the long term, with revenues falling well short of spending. Two measures offer complementary perspectives on the size of that imbalance: Projections of federal debt illustrate how the shortfall in revenues relative to spending would accumulate over time under current law; and estimates of how much spending or revenues would need to be changed to achieve a chosen goal for federal debt illustrate the magnitude of the modifications in law that policymakers might consider.

In addition to its extended baseline, CBO has developed an *extended alternative fiscal scenario*, which incorporates the assumptions that certain policies that have been in place for a number of years will be continued, that some provisions of law that might be difficult to sustain for a long period will be modified, and that federal revenues and certain categories of federal spending will be maintained at or near their historical shares of GDP (see Chapter 6). Under that scenario, federal debt would grow even faster than it would under the extended baseline, so larger policy changes would be needed to reach any chosen fiscal target.

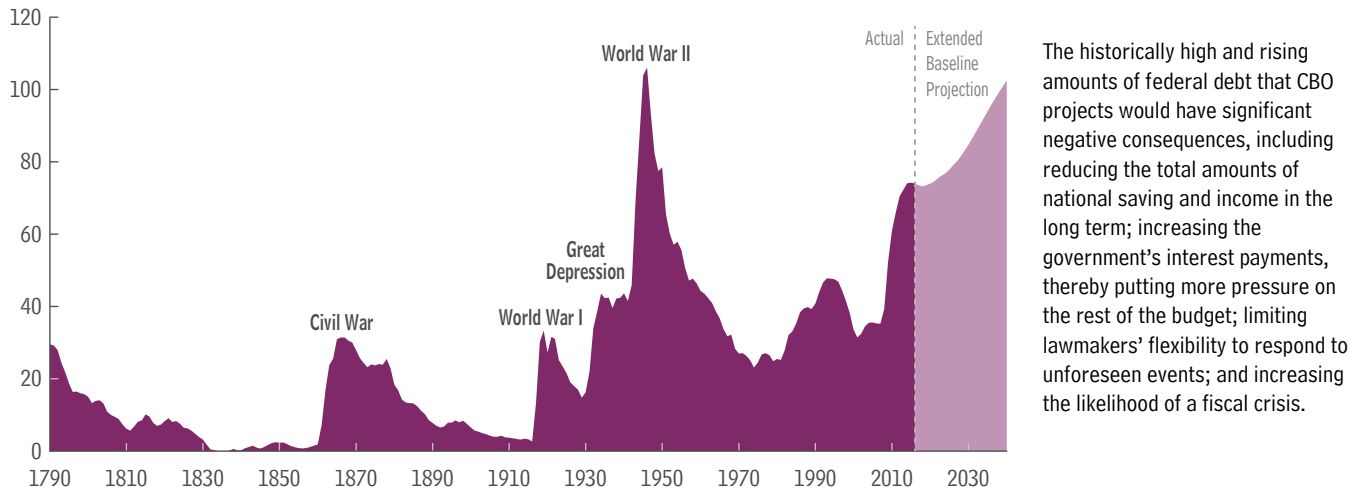
The Accumulation of Federal Debt

Debt held by the public represents the amount that the federal government has borrowed in financial markets, by issuing Treasury securities, to pay for its operations and activities.³ If a given combination of federal spending and revenues is to be sustainable over time, debt held by the public eventually must grow no faster than the economy

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. In contrast, federal debt held by trust funds and other government accounts represents internal transactions of the government and has no direct effect on financial markets. (That debt and debt held by the public together 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. They include increases or decreases in the government's cash balance as well as the cash flows reflected in the financing accounts used for federal credit programs.

Figure 1-1.**Federal Debt Held by the Public**

Percentage of Gross Domestic Product



The historically high and rising amounts of federal debt that CBO projects would have significant negative consequences, including reducing the total amounts of national saving and income in the long term; increasing the government's interest payments, thereby putting more pressure on the rest of the budget; limiting lawmakers' flexibility to respond to unforeseen events; and increasing 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.

Note: The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2025 and then extending the baseline concept for the rest of the long-term projection period. These projections do not reflect the macroeconomic feedback of the policies underlying the extended baseline. (For an analysis of those effects and their impact on debt, see Chapter 6.)

does. If debt continued to rise relative to GDP, at some point investors would begin to doubt the government's willingness or ability to repay its obligations. Such doubts would make it more expensive for the government to borrow money, thus necessitating cuts in spending, increases in taxes, or some combination of those two approaches. For that reason, the amount of federal debt held by the public relative to the nation's annual economic output is an important barometer of the government's financial position.

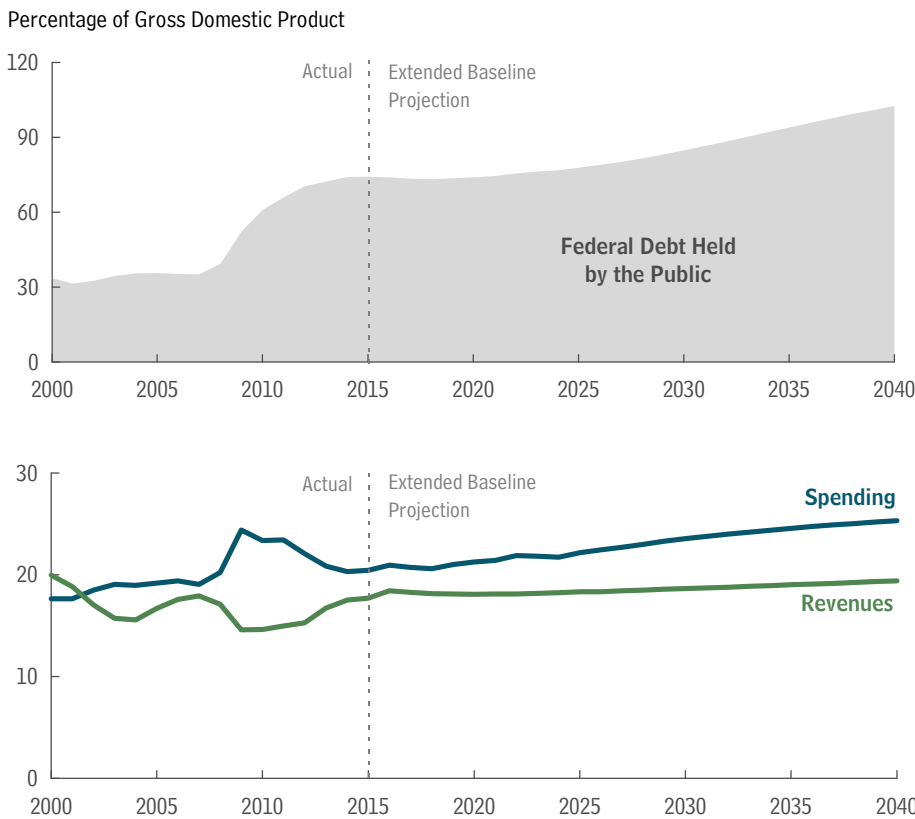
Measuring debt as a percentage of GDP is particularly useful when making comparisons between amounts of debt in different years. That measure accounts for changes in price levels, population, output, and income—all of which affect the scope of potential budgetary adjustments. Examining whether debt as a percentage of GDP is increasing over time from its current high level is therefore a simple and meaningful way to assess the sustainability of the budget.

At the end of 2008, federal debt held by the public stood at 39 percent of GDP, which was close to its average of

the preceding several decades. Since then, large deficits have caused debt held by the public to grow sharply—to 74 percent of GDP in 2014; debt is projected to stay at that level in 2015. Debt has exceeded 70 percent of GDP during only one other period in U.S. history: from 1944 through 1950; it peaked at 106 percent of GDP in 1946 because of the surge in federal spending that occurred during World War II (see Figure 1-1).

CBO projects that, as a share of GDP, debt held by the public will exceed its current level in 2021 and then keep rising if existing laws remain unchanged. By 2040, under the extended baseline, federal debt held by the public would reach 103 percent of GDP, even without accounting for the harmful economic effects of the growing debt (see Figure 1-2)—nearly the same percentage as that recorded in 1945 (104 percent) and in 1946 (106 percent) and more than two and a half times the average percentage during the past several decades. Incorporating the negative economic effects of higher debt pushes the projected debt up to 107 percent of GDP in 2040 (see Chapter 6). Moreover, the debt would be on an upward trajectory, which ultimately would be unsustainable.

Figure 1-2.
Federal Debt, Spending, and Revenues



Deficits and **debt held by the public** will remain roughly stable in the near term, reflecting the anticipated further strengthening of the economy and constraints on federal spending built into law. But the long-term outlook for the budget is projected to worsen . . .

. . . as growth in **total spending** would outpace growth in **total revenues**, resulting in larger budget deficits and debt if current laws remained generally unchanged.

Source: Congressional Budget Office.

Notes: The extended baseline generally reflects current law, following CBO’s 10-year baseline budget projections through 2025 and then extending the baseline concept for the rest of the long-term projection period. These projections do not reflect the macroeconomic feedback of the policies underlying the extended baseline. (For an analysis of those effects and their impact on debt, see Chapter 6.)
GDP = gross domestic product.

Continued

Projections so far into the future are highly uncertain, of course. Nevertheless, under a wide range of possible expectations about key factors affecting budgetary outcomes, CBO anticipates that if current laws generally stayed the same, federal debt in 2040 would be very high by the nation’s historical standards (see Chapter 7).

The Magnitude and Timing of Policy Changes Needed to Meet Various Goals for Federal Debt

An alternative perspective on the long-term fiscal imbalance comes from assessing the changes in revenues or noninterest spending that would be needed to achieve a chosen goal for federal debt. One possible goal would be to try to ensure that federal debt remained the same percentage of GDP in some future year that it is today. Another would be to attempt to make federal debt the

same percentage of GDP in some future year that it has been, on average, during the past several decades. Other goals are possible as well.

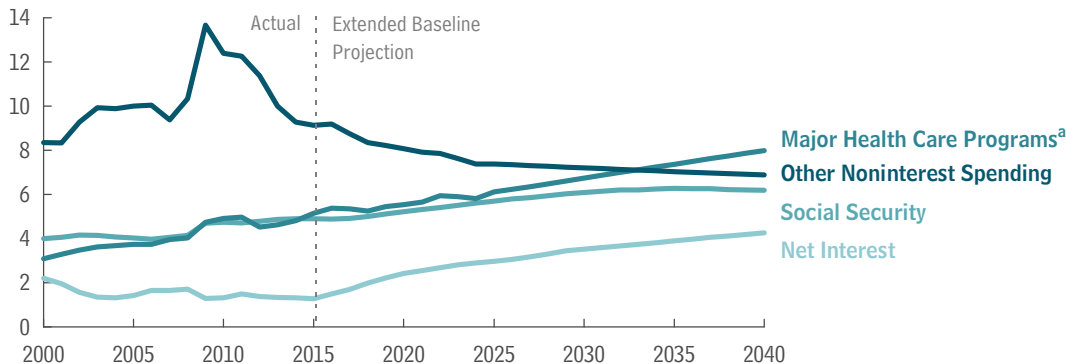
The changes in revenues or noninterest spending that are estimated to be necessary to achieve one of those goals are conceptually similar to the estimated actuarial imbalance—that is, a negative actuarial balance—that is commonly reported for the Social Security trust funds (see Table 3-1 on page 54). An estimated actuarial imbalance for a trust fund over a given period represents the changes in revenues or spending that would be needed to achieve the target balance for the trust funds if those changes were enacted immediately and maintained throughout the period. A similar calculation for the

Figure 1-2. **Continued**

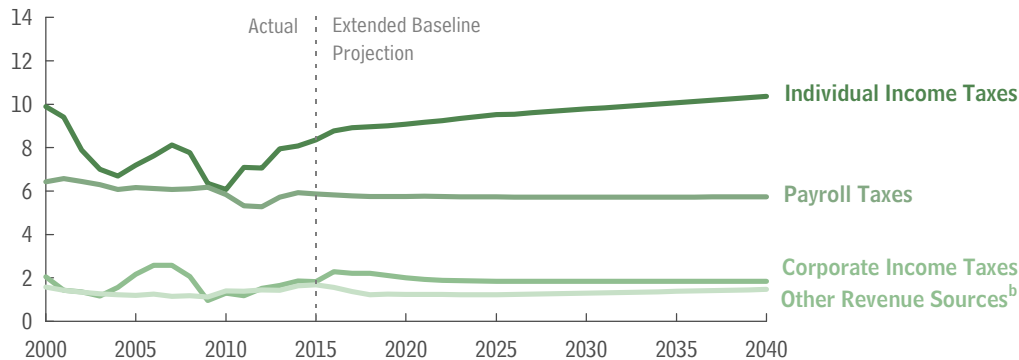
Federal Debt, Spending, and Revenues

Percentage of Gross Domestic Product

Growth in certain components of spending—the major health care programs and Social Security—is expected to exceed the decline in other noninterest spending relative to GDP. Net interest costs will also grow, as interest rates rebound . . .



. . . and as revenues grow only slightly more rapidly than GDP. A boost in one of the sources of revenues—individual income taxes—accounts for the rise in total revenues; receipts from all other sources, taken together, are projected to decline.



- a. Consists of spending on Medicare (net of offsetting receipts), Medicaid, the Children’s Health Insurance Program, and subsidies offered through health insurance exchanges.
- b. 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 government as a whole is one way to summarize the projected fiscal imbalance over a specified period.

The magnitude of the policy changes that would be needed to achieve a chosen goal for federal debt would depend, in part, on how quickly that goal was expected to be reached. Determining the timing of policy changes involves various trade-offs, including the economic effects of those changes and the burdens borne by different generations.

The Magnitude of Policy Changes Needed to Meet Various Goals. The scale of the changes in noninterest spending or revenues that would be needed to ensure that federal debt equaled its current percentage of GDP at a specific date in the future is often referred to as the fiscal gap.⁴ In CBO’s extended baseline, the fiscal gap for the 2016–2040 period amounts to 1.1 percent of GDP (without accounting for the economic effects of the policy changes that might be used to close the gap). That is,

relative to the extended baseline, a combination of cuts in noninterest spending and increases in revenues that equaled 1.1 percent of GDP in each year beginning in 2016—amounting to about \$210 billion in that year or

4. The fiscal gap equals the present value of noninterest outlays and other means of financing minus the present value of revenues over the projected period with adjustments to make the ratio of federal debt to GDP at the end of the period equal to the current ratio. Specifically, current debt is added to the present value of outlays and other means of financing, and the present value of the target end-of-period debt (which equals GDP in the last year of the period multiplied by the ratio of debt to GDP at the end of 2015) is added to the present value of revenues. The present value of a flow of revenues or outlays over time is a single number that expresses that flow in terms of an equivalent sum received or paid at a specific time. The present value depends on a rate of interest (known as the discount rate) that is used to translate past and future cash flows into current dollars. Other means of financing include changes in the government’s cash balances and the cash flows of federal credit programs (mostly programs that provide loans and loan guarantees).

\$650 per person—would result in debt in 2040 that would equal 74 percent of GDP, or the same percentage of GDP in 25 years that it equals now. If those changes came entirely from revenues or entirely from spending, they would amount, roughly, to a 6 percent increase in revenues or a 5½ percent cut in noninterest spending relative to the amounts projected for the 2016–2040 period.

Increases in revenues or reductions in noninterest spending would need to be larger to reduce debt to the percentages of GDP that are more typical of those in recent decades. For debt as a share of GDP to return to its average percentage over the past 50 years—38 percent—by 2040, the government would need to pursue a combination of increases in revenues and cuts in noninterest spending (relative to current-law projections) that totaled 2.6 percent of GDP each year. (Those increases and cuts would not account for the economic effects of the reduction in debt and the policy changes that might be used to achieve the goal; in 2016, 2.6 percent of GDP would be about \$480 billion or \$1,450 per person.)⁵ Many combinations of policies could be adopted to meet that goal, including the following:

- If those changes came from increases of equal percentage in all types of revenues, they would represent an increase of about 14 percent, under the extended baseline, for each year in the 2016–2040 period. For households in the middle fifth of the income distribution in 2016, for example, such an increase would raise annual federal tax payments by about \$1,700, on average.
- If the changes came from cuts of equal percentage in all types of noninterest spending, they would represent a cut of about 13 percent for each of the next 25 years. For example, people in the middle fifth of the lifetime earnings distribution who were born in the 1950s and who claimed benefits at age 65 would have their initial annual Social Security benefits lowered by about \$2,400, on average, by such a cut.

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—

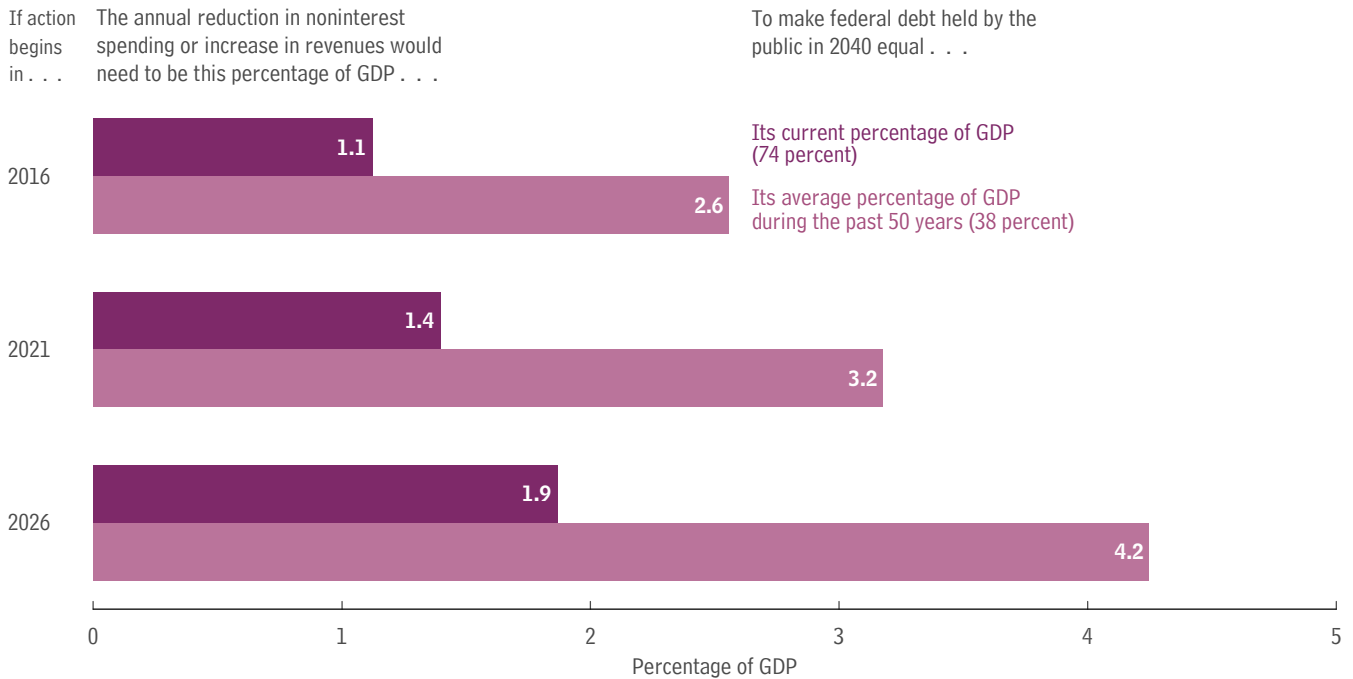
regardless of the chosen goal for federal debt—lawmakers face trade-offs:

- The sooner significant deficit reduction was implemented, the smaller the government’s accumulated debt would be, the smaller the policy changes would need to be to achieve a particular long-term outcome, and the less uncertainty there would be about what policies would be adopted. However, if lawmakers implemented spending cuts or tax increases quickly, people would have little time to plan and adjust to the policy changes, and those changes would weaken the economic expansion over the next two years or so.
- By contrast, reductions in federal spending or increases in taxes that were implemented several years from now would have a smaller effect on output and employment in the short term. However, if lawmakers waited for some time before reducing federal spending or increasing taxes, the result would be a greater accumulation of debt, which would represent a greater drag on output and income in the long term and would increase the size of the policy changes needed to reach any chosen target for debt.

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 more sacrifices by today’s older workers and retirees for the benefit of today’s younger workers and future generations. Reducing deficits later would require smaller sacrifices by older people and greater sacrifices by younger workers and future generations.

CBO has tried to illustrate that collection of trade-offs in three ways. First, the agency has estimated the macroeconomic consequences of several paths for federal debt in both the short term and the longer term. For example, it has analyzed the effects of phasing in deficit reduction so that, excluding interest payments, deficits would be \$2 trillion lower through 2025 than under the baseline and, in subsequent years, would be reduced by the same percentage of GDP as in 2025. Under that scenario, CBO estimates, economic output would be slightly lower over the next few years but about 3 percent higher in

5. That figure is calculated in the same manner as the fiscal gap except that it uses a different target for end-of-period debt.

Figure 1-3.**The Magnitude and Timing of Policy Changes Needed to Make Federal Debt Meet Two Goals**

Source: Congressional Budget Office.

Note: GDP = gross domestic product.

2040 than if current laws generally remained in effect. Those results and corresponding results for other scenarios are discussed in Chapter 6.

Second, CBO has estimated the amount by which delaying deficit reduction would increase the size of the policy adjustments needed to achieve any chosen goal for debt. For example, if the goal of lawmakers was for debt as a percentage of GDP to return to its historical average, but policy changes did not take effect until 2021, those changes would need to amount to 3.2 percent rather than 2.6 percent of GDP (see Figure 1-3). Waiting an additional five years would require even larger changes, amounting to 4.2 percent of GDP.

Third, CBO has 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 a policy that would stabilize the debt-to-GDP ratio starting in 2015 with outcomes under a policy that would delay stabilizing the ratio until 2025.⁶ That analysis suggested that generations born after the earlier implementation date would be worse off if action to stabilize the debt-to-GDP ratio was postponed an additional

10 years. People born more than 25 years before that earlier implementation date, however, would be better off if action was delayed—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.⁷

Even if policy changes to reduce deficits in the long term were not implemented for several years, making decisions about them sooner rather than later would offer significant advantages. If decisions were reached sooner, people would have more time to plan and adjust their behavior to be prepared for the time when changes would be

6. 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.
7. 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.

implemented. In addition, decisions about policy changes that reduced future debt relative to amounts under current law would tend to increase output and employment in the next few years by holding down longer-term interest rates, reducing uncertainty, and enhancing businesses' and consumers' confidence.

Budgetary Imbalances Beyond the Next 25 Years

After 2040, the pressures of rising federal budget deficits and debt held by the public would increase further unless laws governing taxes and spending were changed. Although projections for the very long term are highly uncertain, CBO estimates that debt held by the public would be much larger relative to GDP after 75 years than it would be after 25 years. For information on CBO's projections for the very long term, see the supplemental material accompanying this report on the agency's website (www.cbo.gov/publication/50250).

Consequences of a Large and Growing Federal Debt

The high and rising amounts of federal debt held by the public that CBO projects for the coming decades under the extended baseline would have significant negative consequences for the economy in the long term and would impose significant constraints on future budget policy. In particular, the projected amounts of debt would reduce the total amounts of 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' flexibility to respond to unforeseen events; and increase the likelihood of a fiscal crisis.

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. Increased government borrowing would cause a larger share of the savings potentially available for investment to be used for purchasing government securities, such as Treasury bonds. Those purchases would crowd out investment in capital goods—factories and computers, for example—which would make workers less productive. Because wages are determined mainly by workers' productivity, the reduction in investment would reduce wages as well, lessening people's incentive to work. 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 rise in saving by households and businesses would be a good deal smaller than the increase in federal borrowing represented by the change in the deficit, so national saving—total saving by all sectors of the economy—would decline, as would private investment. (For a detailed analysis of those economic effects, see Chapter 6.)

In the short term, budget deficits would boost overall demand for goods and services, thus increasing output and employment relative to what they would be with smaller deficits or with no deficits at all. The impact of greater demand would be temporary, though, 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 for Larger Tax Increases or Spending Cuts

When the federal debt is large, the government ordinarily must make substantial interest payments to its lenders, and growth in the debt causes those interest payments to increase. (Net interest payments are currently fairly small relative to the size of the economy because interest rates are exceptionally low, but CBO anticipates that those payments will increase considerably as interest rates rise to their long-term levels.)

With rising debt and more normal interest rates, federal spending on interest payments would rise, thus requiring higher taxes, lower spending for benefits and services, or both to achieve any chosen targets for budget deficits and debt. If taxes were increased by raising marginal tax rates (the rates that apply to an additional dollar of income), those higher rates would discourage people from working and saving, thus further reducing output and income. Alternatively, lawmakers could choose to offset higher interest costs at least in part by reducing government benefits and services. Those reductions could be made in many ways, but to the extent that they came from cutting federal investments, future output and income also would be reduced. As another option, lawmakers could respond to higher interest payments by allowing deficits to increase for some period, but that approach would require greater deficit reduction later if lawmakers wanted to avoid a long-term increase in the debt-to-GDP ratio.

Reduced Ability to Respond to Domestic and International Problems

When the amount of outstanding debt is relatively small, a government can borrow money to address significant unexpected events—recessions, financial crises, or wars, for example. In contrast, when outstanding debt is large, a government has less flexibility to address financial and economic crises, which can be very costly for many countries.⁸ 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.

Several years ago, when federal debt was below 40 percent of GDP, the government had some flexibility to respond to the financial crisis and severe recession by increasing spending and cutting taxes to stimulate economic activity, providing public funding to stabilize the financial sector, and continuing to pay for other programs even as tax revenues dropped sharply because of the decline in output and income. As a result, federal debt almost doubled as a percentage of GDP. If federal debt stayed at its current percentage of GDP or increased further, the government would find it more difficult to undertake similar policies under similar conditions in the future. As a result, future recessions and financial crises 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 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 have another significant negative consequence: It would increase the likelihood of a fiscal crisis in the United States.⁹ Specifically, there would be a greater risk that investors would become unwilling to finance the

government's borrowing needs unless they were compensated with very high interest rates; as a result, interest rates on federal debt would rise suddenly and sharply relative to rates of return on other assets. That increase in interest rates would reduce the market value of outstanding government bonds, causing losses for investors and perhaps precipitating a broader financial crisis by creating losses for mutual funds, pension funds, insurance companies, banks, and other holders of government debt—losses that might be large enough to cause some financial institutions to fail. A fiscal crisis can also make private-sector borrowing more expensive because uncertainty about the government's responses can reduce confidence in the viability of private-sector enterprises. Higher private-sector interest rates, when combined with reduced government spending and increased taxes, have tended to worsen economic conditions in the short term.

Unfortunately, predicting with any confidence whether or when such a fiscal crisis might occur in the United States is not possible. In particular, there is no identifiable tipping point in the debt-to-GDP ratio 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, in many cases around the world, fiscal crises have begun during recessions—and, in turn, have exacerbated them. In some instances, a crisis has been triggered by news that a government would need to borrow an unexpectedly large amount of money. Then, as investors lost confidence and interest rates spiked, borrowing became more expensive for the government.

If a fiscal crisis were to occur in the United States, policymakers would have only limited—and unattractive—options for responding. In particular, 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), pursue an inflationary monetary policy, and adopt an austerity program of spending cuts and tax increases. Thus, such a crisis would confront policymakers with extremely difficult choices and probably have a significantly negative effect on the country.

8. See, for example, 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://tinyurl.com/ml9kchv>; and 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/lntnp6j> (PDF, 1.6 MB). 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>.

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

CBO's Approach to Producing Long-Term Projections

Under the extended baseline, CBO's assumptions about policies governing federal spending and revenues generally reflect current law, incorporating the same assumptions underlying the agency's 10-year baseline through 2025 and then extending the baseline concept to later years. To formulate its extended baseline, CBO projects demographic and economic conditions for the decades ahead and develops assumptions about future policies for the major categories of federal spending and revenues. The set of projected demographic and economic conditions, which CBO refers to as its economic benchmark, is consistent with CBO's 10-year baseline projections, as adjusted for recently enacted legislation, and reflects CBO's assessment of long-term demographic and economic trends thereafter; instead of incorporating the changes in federal debt and tax rates under the extended baseline, the economic benchmark incorporates the assumption that federal debt as a share of GDP and marginal tax rates remain constant at their 2025 levels in subsequent years. (That approach produces a relatively stable economic benchmark, which is described more fully in Appendix A.) Because the long-term projections of federal spending, revenues, and debt presented in this and the next four chapters reflect the relatively stable economic conditions underlying the economic benchmark, those projections do not incorporate the economic effects of rising debt beyond 2025 or possible changes to fiscal policies; those considerations are addressed in Chapters 6 and 7.

Economic Projections

Economic growth will be slower in the future than it has been in the past, CBO projects, largely because of a slowdown in the growth of the labor force resulting from the retirement of members of the baby-boom generation, declining birthrates, and the leveling-off of increases in women's participation in the labor market. The labor force is projected to grow at an average annual rate of 0.5 percent over the next 25 years, compared with the 1.7 percent recorded during the 1965–2007 period.¹⁰ CBO projects that future productivity growth will be close to its historical average. Accounting for those and other economic variables, CBO projects that real

(inflation-adjusted) GDP will increase at an average annual rate of 2.2 percent over the next 25 years, compared with 3.3 percent during the 1965–2007 period.

In the economic benchmark—where debt as a percentage of GDP is assumed to remain constant at the 2025 level—CBO projects that interest rates will rise from the unusually low levels in effect today but still be lower in the future than they have been, on average, during the past few decades. According to CBO's most recent economic projection for the next decade, the real interest rate (specifically, the interest rate after adjusting for the rate of increase in the consumer price index) on 10-year Treasury notes is projected to rise to 2.2 percent for the 2020–2025 period. After 2025, it is projected to rise to 2.3 percent and remain at that level, below its average of 3.1 percent over both the 1965–2007 and 1990–2007 periods.¹¹

The average interest rate on all federal debt held by the public tends to be a little lower than the rate on 10-year Treasury notes because interest rates are generally lower on shorter-term debt than on longer-term debt; and, since the 1950s, the average maturity of federal debt has been shorter than 10 years. CBO projects that the average real interest rate on all federal debt held by the public will be 2.0 percent after 2025.

For the 2015–2040 period, the real interest rate on 10-year Treasury notes is projected to average 2.2 percent, and the rate for all federal debt held by the public is projected to average 1.5 percent. The average interest rate on federal debt is projected to rise more slowly than rates on 10-year Treasury notes because only a portion of federal debt matures each year.

If those figures for real interest rates were adjusted instead to reflect the rate of increase in the GDP price index (or the price index for personal consumption expenditures), the real interest rate on all federal debt held by the public over the next 25 years would average 1.9 percent. Thus, during the next 25 years as a whole, the growth rate of GDP—at 2.2 percent—is projected to exceed the average real interest rate on federal debt. (Beyond 2025, the

10. In its assessment of historical experience, CBO has excluded the years that have elapsed since 2007 because of the effects of the recession.

11. For comparisons of historical real rates, past values of the consumer price index were based on the Consumer Price Index Research Series Using Current Methods from the Bureau of Labor Statistics; that series accounts for changes over time in how that index measures inflation.

average interest rate on federal debt is projected to be only slightly higher than the growth rate of GDP.) When the interest rate is about the same as the growth rate of GDP, the ratio of debt to GDP would remain steady over time if the federal budget, excluding interest payments, was in balance.

Policy Assumptions

Under CBO's extended baseline, projections for the 2016–2025 period are identical to those in the agency's 10-year baseline, as adjusted for recently enacted legislation. For later years, the extended baseline generally follows the baseline concept (see Table 1-1 for a summary of CBO's policy assumptions).

Major Health Care Programs. CBO projects federal spending for the government's major health care programs—Medicare, Medicaid, the Children's Health Insurance Program, and insurance subsidies provided through the exchanges created under the ACA—for 2015 through 2025 under the assumption that there will generally be no changes to laws currently governing those programs. (Unless otherwise specified, Medicare outlays are presented net of offsetting receipts, mostly premiums paid by enrollees, which reduce net outlays for that program.)

Beyond 2025, the considerable uncertainty that surrounds the evolution of the health care delivery and financing systems leads CBO to employ a formulaic approach in its projections of federal spending for health care programs. Specifically, CBO combines estimates of the number of people who will be receiving benefits from the government's health care programs with fairly mechanical estimates of the growth in spending per beneficiary. (See Chapter 2 for details about the long-term projections for the major health care programs; CBO assumes that Medicare will pay benefits as scheduled under current law regardless of the status of the program's trust funds—an assumption that is consistent with a statutory requirement that, in its 10-year baseline projections, CBO assume that funding for entitlement programs is adequate to make all payments required by law.)¹²

Social Security. CBO projects spending for Social Security under the assumption that there will be no changes to laws currently governing that program. The agency also

assumes that Social Security will pay benefits as scheduled under current law regardless of the status of the program's trust funds.¹³ (For more on Social Security, see Chapter 3.)

Other Mandatory Programs. For other mandatory programs—such as retirement programs for federal civilian and military employees, certain veterans' programs, the Supplemental Nutrition Assistance Program (SNAP), unemployment compensation, and refundable tax credits—the projections through 2025 are based on the assumption that current law will remain generally unchanged.¹⁴ For years after 2025, CBO projects outlays for refundable tax credits as part of its revenue projections and projects spending for the remaining mandatory programs as a whole by assuming that such spending will decline as a share of GDP after 2025 at the same annual rate that it is projected to fall between 2020 and 2025. That is, CBO does not estimate outlays for each program separately after 2025 (see Chapter 4).

Discretionary Spending. Discretionary spending in the extended baseline matches that in the 10-year baseline through 2025. Under current law, most of the government's discretionary appropriations for the 2015–2021 period are constrained by the caps put in place by the Budget Control Act of 2011, as amended. For 2022 through 2025, those appropriations are assumed to grow from the 2021 amount at the rate of anticipated inflation. Funding for certain purposes, such as war-related activities, is not constrained by the caps; CBO assumes that such funding will increase each year through 2025 at the rate of inflation, starting from the amount appropriated for the current year. After 2025, discretionary spending is assumed to remain fixed at its percentage of GDP in 2025 (see Chapter 4).

Revenues. Revenue projections through 2025 follow the 10-year baseline, which generally incorporates the

12. Section 257(b)(1) of the Balanced Budget and Emergency Deficit Control Act of 1985, 2 U.S.C. §907(b)(1).

13. The balances of the trust funds represent the total amount that the government is legally authorized to spend for those purposes. For a discussion of 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).

14. The law governing CBO's baseline projections (section 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.

Table 1-1.**Assumptions About Policies for Spending and Revenues Underlying CBO's Extended Baseline**

Assumptions About Policies for Spending	
Social Security	As scheduled under current law ^a
Medicare	As scheduled under current law through 2025; thereafter, projected spending depends on the estimated number of beneficiaries and health care costs per beneficiary (for which growth is projected to move smoothly to the underlying path of excess cost growth rates over the succeeding 15 years and then follow that path) ^a
Medicaid	As scheduled under current law through 2025; thereafter, projected spending depends on the estimated number of beneficiaries and health care costs per beneficiary (for which growth is projected to move smoothly to the underlying path of excess cost growth rates over the succeeding 15 years and then follow that path)
Children's Health Insurance Program	As projected in CBO's baseline through 2025; remaining constant as a percentage of GDP thereafter
Exchange Subsidies	As scheduled under current law through 2025; thereafter, projected spending depends on the estimated number of beneficiaries, an additional indexing factor for subsidies, and health care costs per beneficiary (for which growth is projected to move smoothly to the underlying path of excess cost growth rates over the succeeding 15 years and then follow that path)
Other Mandatory Spending	As scheduled under current law through 2025; 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 the same annual rate at which it is projected to decline between 2020 and 2025
Discretionary Spending	As projected in CBO's baseline through 2025; remaining constant as a percentage of GDP thereafter
Assumptions About Policies for Revenues	
Individual Income Taxes	As scheduled under current law
Payroll Taxes	As scheduled under current law
Corporate Income Taxes	As scheduled under current law through 2025; remaining constant as a percentage of GDP thereafter
Excise Taxes	As scheduled under current law ^b
Estate and Gift Taxes	As scheduled under current law
Other Sources of Revenues	As scheduled under current law through 2025; remaining constant as a percentage of GDP thereafter

Source: Congressional Budget Office.

Notes: The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2025 and then extending the baseline concept for the rest of the long-term projection period.

For CBO's most recent 10-year baseline projections, see Congressional Budget Office, *Updated Budget Projections: 2015 to 2025* (March 2015), www.cbo.gov/publication/49973.

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. 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.

assumption that various tax provisions will expire as scheduled even if they have routinely been extended in the past. After 2025, rules for individual income taxes, payroll taxes, excise taxes, and estate and gift taxes are assumed to evolve as scheduled under current law.¹⁵ Because of the structure of current tax law, total federal revenues from those sources are estimated to grow faster than GDP over the long term. Revenues from corporate income taxes and other sources (such as receipts from the Federal Reserve) are assumed to remain constant as a percentage of GDP after 2025 (see Chapter 5).

Projected Spending Through 2040

Over the past 50 years, federal outlays other than those for the government's net interest costs have averaged 18 percent of GDP. However, in the past several years, noninterest spending has been well above that average, both because of underlying trends and because of temporary circumstances (namely, the financial crisis, the weak economy, and policies implemented in response to them). Noninterest spending spiked to 23 percent of GDP in 2009 but then declined, falling to about 19 percent this year. If current laws that affect spending were unchanged, noninterest outlays would remain at about 19 percent of GDP throughout the coming decade, CBO projects, as an increase in mandatory spending was offset by a decline in discretionary spending relative to the size of the economy. After the mid-2020s, however, under the assumptions of the extended baseline, noninterest spending would rise relative to the size of the economy, mostly because of increased spending for major health care programs, reaching 21 percent of GDP by 2040.

CBO projects that, under current law, net outlays for interest would jump from 1.3 percent of GDP this year to almost 3 percent 10 years from now. By 2040, interest costs would be 4.3 percent of GDP, bringing total federal spending to over 25 percent of GDP (see Figure 1-4). Federal spending has been larger relative to the size of the economy only during World War II, when it topped 40 percent of GDP for three years.

15. 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 they have been routinely extended in the past.

Spending for Major Health Care Programs and Social Security

Mandatory programs have accounted for a rising share of the federal government's noninterest spending over the past few decades, reaching more than 60 percent in recent years. Most of the growth in mandatory spending has involved the three largest programs—Medicare, Medicaid, and Social Security. Federal outlays for those programs together made up almost half of the government's noninterest spending, on average, during the past 10 years, compared with less than a sixth five decades ago.

Most of the anticipated growth in noninterest spending as a share of GDP over the long term is expected to come from the government's major health care programs: Medicare, Medicaid, the Children's Health Insurance Program, and the subsidies for health insurance purchased through the exchanges created under the ACA. CBO projects that, under current law, total outlays for those programs over the next 25 years, net of offsetting receipts, would grow much faster than the overall economy, increasing from 5.2 percent of GDP now to 8.0 percent in 2040 (see Chapter 2). Spending for Social Security also would increase relative to the size of the economy, but by much less—from 4.9 percent of GDP in 2015 to 6.2 percent in 2040 and beyond (see Chapter 3).

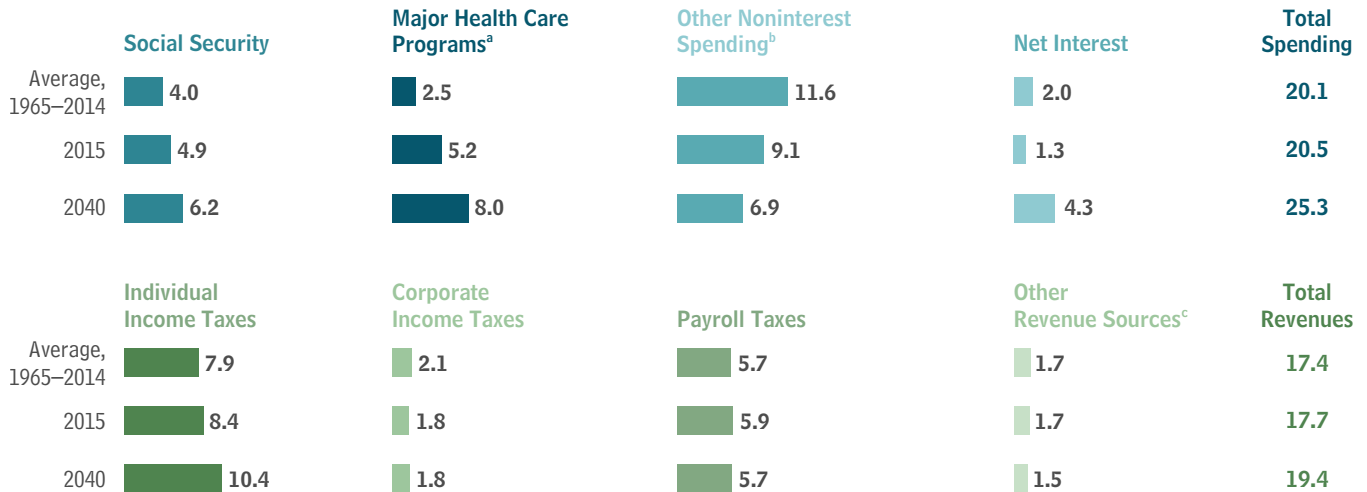
Those projected increases in spending for the government's major health care programs and Social Security between 2015 and 2040 are attributable primarily to three causes: the aging of the population; rising health care spending per beneficiary; and, to a lesser extent, an increased number of recipients of exchange subsidies and Medicaid benefits attributable to the ACA. (For estimates of the extent to which each cause contributes to the projected increases in spending, see Box 1-1 on page 24.)

The Aging of the Population. The retirement of members of the baby-boom generation portends a long-lasting shift in the age profile of the U.S. population—a change that will substantially alter the balance between working-age and retirement-age groups. During the next decade alone, the number of people age 65 or older is expected to rise by more than one-third, and the share of the population age 65 or older is projected to grow from the current 15 percent to 21 percent in 2040. By contrast, the share of the population between the ages of 20 and 64 is expected to drop from 59 percent to 54 percent.

Figure 1-4.

Spending and Revenues Under CBO’s Extended Baseline, Compared With Past Averages

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

Note: The extended baseline generally reflects current law, following CBO’s 10-year baseline budget projections through 2025 and then extending the baseline concept for the rest of the long-term projection period.

- a. Consists of spending on Medicare (net of offsetting receipts), Medicaid, the Children’s Health Insurance Program, and subsidies offered through health insurance exchanges.
- b. Consists of all federal spending other than that for the major health care programs, Social Security, 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.

The aging of the population is the main factor driving the projected growth of Social Security spending as a percentage of GDP. Initial Social Security benefits are based on a person’s earnings history, but those earnings are indexed to the overall growth of wages in the economy, so average benefits increase at approximately the same rate as average earnings. As a result, economic growth does not significantly alter spending for Social Security as a share of GDP. Rather, that share depends primarily on the ratio of the number of people working in jobs covered by Social Security (covered workers) to the number of Social Security beneficiaries. CBO projects that the ratio of covered workers to beneficiaries will decline significantly over the next quarter century—from 3 to 1 now to almost 2 to 1 in 2040—and then continue to drift downward.

Rising Health Care Spending per Beneficiary. Although the growth of health care spending has been slower during the past several years than it had been historically, CBO projects that per-enrollee spending in federal health care programs will continue to increase at a faster pace than potential GDP per capita over the next 25 years.

The growth rate of spending per beneficiary in Medicare and Medicaid is projected to remain very low over the next few years but is then projected to increase gradually through 2040 (although remaining below its average growth rate of the past few decades). Compared with Medicare and Medicaid, costs per enrollee in private insurance are expected to grow more rapidly over the coming decade, but CBO projects a gradual slowing in later years. Although costs per beneficiary in federal health care programs are projected to increase faster than potential GDP per capita over the 25-year projection period, the difference between those two growth rates will be smaller than its average of recent decades, CBO projects (see Chapter 2).

Increased Number of Recipients of Exchange Subsidies and Medicaid Benefits. Under the ACA, many people can purchase subsidized insurance through the health insurance exchanges (or marketplaces) that are operated by the federal or state governments. Those subsidies come in two forms: refundable tax credits that can be applied to premiums, and cost-sharing subsidies that reduce deductibles and copayments. CBO anticipates that the number

of participants will increase over the next few years and that between 16 million and 17 million people will receive subsidized health insurance coverage through the exchanges in each year between 2019 and 2025, compared with 8 million now.¹⁶ Also, several million others will obtain unsubsidized coverage through the exchanges.

In addition, as a result of the ACA and a subsequent Supreme Court ruling, each state has the option to expand eligibility for Medicaid to most nonelderly adults whose income is below 138 percent of the federal poverty guidelines (commonly known as the federal poverty level, or FPL).¹⁷ By calendar year 2020, CBO anticipates, 80 percent of the people who meet the new eligibility criteria will live in states that will have expanded their programs.¹⁸ Each year between 2020 and 2025, about 14 million more people, on net, are projected to have coverage through Medicaid than would have had such coverage in the absence of the ACA, compared with 10 million more now.

Other Noninterest Spending

In the extended baseline, total federal spending for everything other than the major health care programs, Social Security, and net interest declines to a smaller percentage of GDP than has been the case for more than 70 years. Such spending has amounted to more than 8 percent of GDP each year since the 1930s, reaching as much as 13 percent of GDP in 1965 and 12 percent in 1990; CBO estimates that it will be 9.1 percent of GDP in 2015. Under the assumptions used for this analysis, that spending is projected to fall below 8 percent of GDP in

2021 and then to decline further, dropping to 6.9 percent of GDP in 2040 (see Chapter 4).

Spending for discretionary programs is projected to decline significantly over the next 10 years relative to GDP—from 6.5 percent to 5.1 percent—because of the constraints on discretionary funding imposed by the Budget Control Act. For its long-term projections, CBO assumed that, in subsequent years, discretionary outlays would remain at the share of GDP projected for 2025.

Spending for mandatory programs other than the major health care programs and Social Security also is projected to decline relative to the size of the economy over the next 10 years. That spending accounts for 2.6 percent of GDP today and, under current law, is projected to fall to 2.3 percent of GDP in 2025. That decline would occur in part because the improving economy would reduce the number of people eligible for some programs in this category and in part because payments per beneficiary under some programs tend to rise with prices (which usually increase more slowly than people's income). Beyond 2025, CBO projects, other mandatory spending, excluding the portion stemming from refundable tax credits, would decline as a share of GDP at the same annual rate at which it is projected to fall between 2020 and 2025. As a result, other mandatory spending would fall to 1.8 percent of GDP by 2040—lower than at any point at least since 1962 (the first year for which comparable data are available).

Interest Payments

CBO expects interest rates to rebound in coming years from their current unusually low levels. As a result, the government's net interest costs are projected to more than double relative to the size of the economy over the next decade—from 1.3 percent of GDP in 2015 to 3.0 percent by 2025—even though, under current law, federal debt would be only slightly larger relative to GDP at the end of that decade than it is today.

Beyond 2025, interest rates in the economic benchmark are assumed to increase only slightly from their projected levels in 2025, so changes in net interest costs would roughly parallel changes in the amount of federal debt held by the public. By 2040, those costs would reach 4.3 percent of GDP under current law. Growth in net interest payments and growth in debt are mutually reinforcing: Rising interest payments push up deficits and debt, and rising debt pushes up interest payments.

16. See Congressional Budget Office, *Effects of the Affordable Care Act on Health Insurance Coverage—Baseline Projections* (March 2015), Table 3, www.cbo.gov/publication/43900.

17. The ACA expanded eligibility for Medicaid to include nonelderly residents with income of up to 133 percent of the FPL, but the law defines the income used to determine eligibility in a way that effectively increases that threshold to 138 percent of the FPL. The FPL is currently \$24,250 for a family of four. See Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, “2015 Poverty Guidelines” (January 2015), <http://aspe.hhs.gov/poverty/15poverty.cfm>. As a result of the Supreme Court's decision on June 28, 2012, in *National Federation of Independent Business v. Sebelius*, 132 S. Ct. 2566 (2012), some states may choose not to expand their programs.

18. See Congressional Budget Office, *The Budget and Economic Outlook: 2015 to 2025* (January 2015), p. 69, www.cbo.gov/publication/49892.

Box 1-1.**Causes of Projected Growth in Federal Spending for the Major Health Care Programs and Social Security**

Under its extended baseline, the Congressional Budget Office projects that the growth of federal non-interest spending as a share of gross domestic product (GDP) between 2015 and 2040 would result entirely from increases in spending for four large mandatory programs—Medicare, Medicaid, the subsidies provided through the health insurance exchanges established under the Affordable Care Act (ACA), and Social Security.¹ The health care programs currently account for about half of the overall spending for those four programs, and they would be responsible for more than two-thirds of the projected increase in such spending over the next 25 years. (By contrast, under the assumptions that govern the extended baseline, total federal spending on everything other than those four programs and net interest is projected to fall significantly as a percentage of GDP over the next 25 years.)

Three factors underlie the projected increase in federal spending for the health care programs and Social Security relative to the size of the economy:

- The aging of the U.S. population, which will increase the share of the population receiving benefits from those programs and also affect the average age, and thus the average health care costs, of beneficiaries;
- The effects of excess cost growth—that is, the extent to which health care costs per beneficiary, as adjusted for demographic changes, grow faster than potential GDP per capita;² and

1. The Children's Health Insurance Program, which is usually grouped with major federal health care programs in CBO's long-term projections, is not included in this analysis of the causes of projected growth.

- The increase, beyond that which has occurred through 2015, in enrollment in Medicaid under the ACA and in the number of people receiving subsidies for health insurance purchased through the exchanges.

CBO calculated how much of the projected growth in federal spending for the major health care programs and Social Security over the 2015–2040 period could be attributed to each of the three factors. (Of those factors, aging is the only one that affects CBO's projections for Social Security.) The agency compared the outlays projected for those programs under the extended baseline with the outlays that would occur under three alternative paths, each of which includes no increase in the number of recipients of exchange subsidies and Medicaid benefits attributable to the ACA: One included aging of the population but no excess cost growth; one included excess cost growth but no aging of the population; and one included both aging and excess cost growth.

The ways in which the aging of the population and excess cost growth interact accentuate those factors' individual effects. For example, as aging causes the number of Medicare beneficiaries to increase, rising health care spending per person has a greater impact on federal spending for health care. Likewise, when per-person health care costs rise, the increasing number of beneficiaries has greater budgetary consequences. The effect of that interaction can be identified separately—or, as in CBO's analysis, it can be allocated in proportion to the shares of projected growth that are attributable to the two factors: aging and excess cost growth.

2. Potential GDP is the economy's maximum sustainable output.

Continued

Projected Revenues Through 2040

Over the past 50 years, federal revenues as a share of GDP have averaged 17.4 percent—fluctuating between 14.6 percent and 20 percent of GDP—with no evident trend over time. After amounting to 17.9 percent of GDP in

2007, federal revenues fell sharply in 2009, to 14.6 percent of GDP, primarily because of the recession. With an improving economy and changes in certain tax rules that have resulted in higher tax rates, revenues will rebound to 17.7 percent of GDP in 2015, CBO estimates.

Box 1-1.

Continued

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

Explaining Projected Growth in Federal Spending for the Major Health Care Programs and Social Security as a Share of GDP

	Percentage of Projected Growth Through	
	2025	2040
Major Health Care Programs and Social Security		
Aging	62	56
Excess Cost Growth	17	35
Increased Number of Recipients of Exchange Subsidies and Medicaid Benefits Attributable to the ACA	21	10
Major Health Care Programs		
Aging	42	43
Excess Cost Growth	26	45
Increased Number of Recipients of Exchange Subsidies and Medicaid Benefits Attributable to the ACA	32	12

Source: Congressional Budget Office.

Note: ACA = Affordable Care Act; GDP = gross domestic product.

The aging of the population and excess cost growth also affect the budgetary impact of the additional recipients of exchange subsidies and Medicaid benefits attributable to the ACA but in different directions: Excess cost growth increases the effect of the increased number of recipients on federal health care spending, but aging decreases the effect by reducing the share of the population that is under the age of 65 and, therefore, potentially eligible for the expanded federal benefits.

According to CBO’s calculations, the aging of the population accounts for 56 percent of the projected growth in federal spending for the major health care programs and Social Security as a share of GDP through 2040 (see the table). Excess cost growth accounts for 35 percent, and the increased number of recipients of exchange subsidies and Medicaid benefits attributable to the ACA accounts for the remaining 10 percent. (For more information about CBO’s projections of demographic changes over the 25-year period, see Figure 2-3 on page 45; for more information about excess cost growth and spending on federal health care programs, see Chapter 2.)

For the major health care programs alone, the relative impact of the population’s aging is smaller, and the significance of factors related to health care is greater. Through 2040, aging accounts for 43 percent of projected growth in federal spending for those programs as a share of GDP, excess cost growth accounts for 45 percent, and the increased number of recipients of exchange subsidies and Medicaid benefits attributable to the ACA together account for 12 percent; most of that growth is projected to occur during the next few years. Total federal spending for those programs would increase from 5.2 percent of GDP in 2015 to 8.0 percent in 2040 under current law, CBO projects. Of that 2.8 percentage-point increase, aging would contribute 1.2 percentage points; excess cost growth, 1.3 percentage points; and the increased number of recipients of the exchange subsidies and Medicaid benefits attributable to the ACA, 0.3 percentage points.

Individual income taxes account for the bulk of federal revenues, almost half of all revenues in 2014; payroll taxes (also known as social insurance taxes) account for about one-third of all revenues; and corporate income taxes and excise taxes account for most of the remainder.¹⁹

CBO projects that, under current law, revenues would grow over the coming decade relative to GDP—to 18.3 percent of GDP in 2025. Individual income taxes would rise as a percentage of GDP largely because of structural features of the tax system, most significantly, real bracket creep—the pushing of a growing share of income into higher tax brackets because of a growth in real (inflation-adjusted) income and the interaction of the tax system with inflation. That increase would be

19. Most payroll tax revenues come from taxes designated for Social Security and Medicare; the rest come mainly from taxes for unemployment insurance.

partially offset by declines in other taxes relative to GDP, most notably receipts from the Federal Reserve.

Over the long term, revenues would keep growing slightly more rapidly than GDP under current law, as the effect of real bracket creep continues and certain tax increases enacted in the ACA generate a growing amount of revenues in relation to the size of the economy. By 2040, total revenues would be 19.4 percent of GDP, CBO projects. Increases in receipts from individual income taxes account for more than the 1.7 percentage-point rise in total revenues as a percentage of GDP over the next 25 years; receipts from all other sources, taken together, are projected to decline slightly as a percentage of GDP (see Chapter 5).

Even if no changes in tax law were enacted in the future, the effects of the tax system in 2040 would differ in significant ways from what those effects are today. Average taxpayers at all income levels would pay a greater share of income in taxes than similar taxpayers do now, primarily because a greater share of their income would be taxed in higher tax brackets. Moreover, the effective marginal tax rate on labor income (the percentage of an additional dollar of labor income paid in federal taxes) would be about 32 percent, compared with the current 29 percent. In contrast, the effective marginal tax rate on capital income (the percentage of an additional dollar of income from investments paid in federal taxes) would rise only slightly and remain close to 18 percent.

Changes From Last Year's Long-Term Budget Outlook

Each time it prepares long-term budget projections, CBO incorporates the effects of new legislation and updates the economic and technical aspects of its projections. The projections of federal revenues and overall noninterest outlays presented in this report are generally similar to those published in 2014, despite certain changes in law, revisions to some of the agency's assumptions and methods, and the availability of more recent data.²⁰ A downward revision to the projections for interest rates has lowered the projection for net interest costs and, as a result, CBO projects slightly lower debt in 2040 than the agency projected last year. That same downward revision

to the projections for interest rates and some other changes have led CBO to estimate a smaller fiscal gap and a greater actuarial deficit for Social Security. (The key revisions to the projections since last year are discussed in Appendix B.)

Taken together, legislative, economic, and technical changes had the following effects on CBO's view of the federal budget in the long term:

- Under the extended baseline, CBO now projects that debt would reach 101 percent of GDP in 2039, compared with a projection last year of 106 percent. (Those figures do not incorporate feedback from the economic impact of those paths for federal debt; with such feedback considered, debt in 2039 is now projected to grow to 105 percent of GDP, compared with the 111 percent projected last year.)
- The estimated fiscal gap is smaller this year than last year. For the 2016–2040 period, CBO now estimates that cuts in noninterest spending or increases in revenues equal to 1.1 percent of GDP in each year through 2040 would be required to have debt in 2040 equal the same percentage of GDP that it constitutes today; last year, for the 2015–2039 period, CBO estimated that changes equal to 1.2 percent of GDP would be required. By itself, the reduction in projected interest rates on federal debt would have brought the gap down by 0.3 percent of GDP, but changes in projected GDP and the shift in the projection period offset most of that effect.
- The actuarial shortfall for the Social Security trust funds is estimated to be larger this year than was estimated last year. The estimated actuarial balance for Social Security is the sum of the present value of projected tax revenues and the trust funds' current balance minus the sum of the present value of projected outlays and a target balance at the end of the period; that difference is traditionally presented as a percentage of the present value of taxable payroll. CBO now estimates that the 75-year actuarial deficit for Social Security is 4.4 percent of taxable payroll, compared with the previous projection of 4.0 percent. That change reflects the reduction in projected interest rates, lower payroll tax revenues resulting from a lower projection of the taxable share of earnings, updated data, and other factors (see Chapter 3 and Appendix B).

20. For CBO's long-term projections for the 2014–2039 period, see Congressional Budget Office, *The 2014 Long-Term Budget Outlook* (July 2014), www.cbo.gov/publication/45471.