



# Summary

**T**he long-term outlook for the federal budget has worsened dramatically over the past several years, in the wake of the 2007–2009 recession and slow recovery. Between 2008 and 2012, financial turmoil and a severe drop in economic activity, combined with various policies implemented in response to those conditions, sharply reduced federal revenues and increased spending. As a result, budget deficits rose: They totaled \$5.6 trillion in those five years, and in four of the five years, they were larger relative to the size of the economy than they had been in any year since 1946. Because of the large deficits, federal debt held by the public soared, nearly doubling during the period. It is now equivalent to about 74 percent of the economy’s annual output, or gross domestic product (GDP)—a higher percentage than at any point in U.S. history except a seven-year period around World War II.<sup>1</sup>

If current law remained generally unchanged in the future, federal debt held by the public would decline slightly relative to GDP over the next few years, the Congressional Budget Office projects. After that, however, growing budget deficits—caused mainly by the aging of the population and rising health care costs—would push debt back to, and then above, its current high level. The deficit would grow from less than 3 percent of GDP this year to more than 6 percent in 2040. At that point, 25 years from now, federal debt held by the public would exceed 100 percent of GDP.

Moreover, debt would still be on an upward path relative to the size of the economy. Consequently, the policy

---

1. When analyzing changes in spending, revenues, deficits, and debt, CBO usually measures those amounts relative to economic output. That approach automatically incorporates inflation and growth in population, output, and income, providing context for understanding the size of the government’s activities at different points in time and their effects on the sustainability of the budget.

changes needed to reduce debt to any given amount would become larger and larger over time. The rising debt could not be sustained indefinitely; the government’s creditors would eventually begin to doubt its ability to cut spending or raise revenues by enough to pay its debt obligations, forcing the government to pay much higher interest rates to borrow money.

## What Is the Outlook for the Budget in the Next 10 Years?

The economy’s gradual recovery from the recession, the waning budgetary effects of policies enacted in response to the weak economy, and other changes to tax and spending laws will cause the deficit to shrink in 2015 to its smallest percentage of GDP since 2007, CBO projects—2.7 percent, a much smaller percentage than the recent peak of nearly 10 percent in 2009.<sup>2</sup> Throughout the next decade, however, an aging population, rising health care costs per person, and an increasing number of recipients of exchange subsidies and Medicaid benefits attributable to the Affordable Care Act would push up spending for some of the largest federal programs if current laws governing those programs remained unchanged. Moreover, CBO expects interest rates to rebound in coming years from their current unusually low levels, raising the government’s interest payments on debt.

---

2. The projections in this report are consistent with CBO’s March 2015 budget projections after adjustments are made to incorporate the effects of recently enacted legislation. The most important such adjustment 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. 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](http://www.cbo.gov/publication/49973).

Budget deficits would not substantially increase at first, but eventually they would begin to rise. They would approach 4 percent of GDP toward the end of the 10-year period spanned by CBO's baseline budget projections, the agency anticipates. Deficits over the entire period would total about \$7.4 trillion.

With deficits projected to remain close to their current percentage of GDP for the next few years, federal debt held by the public would remain at a very high level, between 73 percent and 74 percent of GDP, from 2016 through 2021. Thereafter, the larger deficits would boost debt—to 78 percent of GDP by the end of 2025.

## What Is the Outlook for the Budget Through 2040?

To analyze the state of the budget in the long term, CBO has extrapolated its 10-year baseline projections through 2040, yielding a set of *extended* baseline projections that span a total of 25 years. (Both sets of projections generally incorporate the assumption that current law will not change.) Mainly because of the aging of the population and rising health care costs, the extended baseline projections show revenues that fall well short of spending over the long term, producing a substantial imbalance in the federal budget. As a result, budget deficits are projected to rise steadily and, by 2040, to raise federal debt held by the public to a percentage of GDP seen at only one previous time in U.S. history—the final year of World War II and the following year.

The harmful effects that such large debt would have on the economy would worsen the budget outlook. The projected increase in debt relative to the size of the economy, combined with a gradual increase in effective marginal tax rates (that is, the rates that would apply to an additional dollar of income), would make economic output lower and interest rates higher than CBO projected when producing the extended baseline. Those macroeconomic effects would, in turn, feed back into the budget, leading to lower federal revenues and higher interest payments on the debt. (The harm that growing debt would cause to the economy was not factored into CBO's detailed long-term budgetary projections, and it is generally not reflected in the discussion of the extended baseline elsewhere in this summary, but it is addressed in further analysis presented in Chapter 6.)

In the extended baseline projections, before those feedback effects are considered, federal spending rises from

20.5 percent of GDP this year to 25.3 percent of GDP by 2040 (see Summary Table 1). (Its average over the past 50 years has been 20.1 percent.) The projected increase reflects the following paths for various types of spending:

- Federal spending for Social Security and the government's major health care programs—Medicare, Medicaid, the Children's Health Insurance Program, and subsidies for health insurance purchased through the exchanges created by the Affordable Care Act—would rise sharply, to 14.2 percent of GDP by 2040, if current law remained generally unchanged. That percentage would be more than twice the 6.5 percent average seen over the past 50 years. The boost in spending is projected to occur because of 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.
- The government's net outlays for interest would grow to 4.3 percent of GDP by 2040, CBO projects. That percentage would be higher than the 2.0 percent average of the past 50 years, because federal debt would be much larger.
- In contrast, other noninterest spending—that is, spending on everything other than Social Security, the major health care programs, and net interest—would decline to 6.9 percent of GDP by 2040, which would be well below the 11.6 percent average of the past 50 years.

Federal revenues would also increase relative to GDP under current law, but much more slowly than federal spending would. Revenues would equal 19.4 percent of GDP by 2040, CBO projects, which would be higher than the 50-year average of 17.4 percent. That increase would occur mainly because people's income grew more rapidly than inflation, pushing more income into higher tax brackets over time.<sup>3</sup>

3. One consequence is that individual income and payroll taxes as a share of income would grow for many households. For example, a married couple with two children earning the median income in 2014 and filing a joint tax return would have paid about 16 percent of their income in individual income and payroll taxes. Under current law, a similar couple earning the median income 25 years from now would pay about 19 percent of their income in individual income and payroll taxes.

**Summary Table 1.****Key Projections Under CBO's Extended Baseline**

Percentage of Gross Domestic Product

	2015	2025	2040
		Without Macroeconomic Feedback <sup>a</sup>	
Revenues			
Individual income taxes	8.4	9.5	10.4
Payroll taxes	5.9	5.7	5.7
Corporate income taxes	1.8	1.8	1.8
Other sources of revenues	1.7	1.2	1.5
<b>Total Revenues</b>	<b>17.7</b>	<b>18.3</b>	<b>19.4</b>
Spending			
Mandatory			
Social Security	4.9	5.7	6.2
Major health care programs <sup>b</sup>	5.2	6.1	8.0
Other mandatory programs	2.6	2.3	1.8
Subtotal	12.7	14.1	16.0
Discretionary	6.5	5.1	5.1
Net interest	1.3	3.0	4.3
<b>Total Spending</b>	<b>20.5</b>	<b>22.2</b>	<b>25.3</b>
Deficit	-2.7	-3.8	-5.9
Debt Held by the Public at the End of the Year	74	78	103
		With Macroeconomic Feedback	
Deficit	-2.7	-3.8	-6.6
Debt Held by the Public at the End of the Year	74	78	107
<b>Memorandum:</b>			
Social Security <sup>a</sup>			
Revenues <sup>c</sup>	4.4	4.3	4.3
Spending	4.9	5.7	6.2
Net increase (-) in deficit	-0.5	-1.4	-1.9
Medicare <sup>a</sup>			
Revenues <sup>c</sup>	1.5	1.6	1.7
Spending	3.5	4.4	6.3
Offsetting receipts	-0.5	-0.8	-1.2
Net increase (-) in deficit	-1.5	-2.0	-3.4
Tax Expenditures	8.1	n.a.	n.a.
Gross Domestic Product (Billions of dollars) <sup>a</sup>	18,016	27,456	50,800

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.

n.a. = not available.

- These projections do not reflect the macroeconomic feedback of the policies underlying the extended baseline after 2025. (For an analysis of those effects and their impact on debt, see Chapter 6.)
- Net of offsetting receipts for Medicare.
- Revenues include payroll taxes other than those paid by the federal government for federal employees, which are intragovernmental transactions. Revenues also include income taxes paid on Social Security benefits, which are credited to the trust funds.

By 2040, in CBO's projections that do not account for macroeconomic feedback effects, the deficit equals 5.9 percent of GDP, a higher percentage than in any year between 1947 and 2008. The resulting debt reaches 103 percent of GDP in 2040, more than in any year except 1945 and 1946.

Under the extended baseline with feedback effects included, CBO's estimate of the deficit in 2040 is higher—6.6 percent of GDP—and so is its estimate of federal debt held by the public: 107 percent of GDP.

## What Consequences Would a Large and Growing Federal Debt Have?

How long the nation could sustain such growth in federal debt is impossible to predict with any confidence. At some point, investors would begin to doubt the government's willingness or ability to meet its debt obligations, requiring it to pay much higher interest costs in order to continue borrowing money. Such a fiscal crisis would present policymakers with extremely difficult choices and would probably have a substantial negative impact on the country. Unfortunately, there is no way to predict confidently whether or when such a fiscal crisis might occur in the United States. In particular, as the debt-to-GDP ratio rises, there is no identifiable point indicating that a crisis is likely or imminent. But all else being equal, the larger a government's debt, the greater the risk of a fiscal crisis.<sup>4</sup>

Even before a crisis occurred, the high and rising debt that CBO projects in the extended baseline would have macroeconomic effects with significant negative consequences for both the economy and the federal budget:

- The large amount of federal borrowing would draw money away from private investment in productive capital over the long term, because the portion of people's savings used to buy government securities would not be available to finance private investment. The result would be a smaller stock of capital, and therefore lower output and income, than would otherwise have been the case, all else being equal. (Despite those reductions, output and income per person, adjusted for inflation, would be higher in the future than they are now, thanks to the continued growth of productivity.)

- Federal spending on interest payments would rise, thus requiring the government to raise taxes, reduce spending for benefits and services, or both to achieve any targets that it might choose for budget deficits and debt.
- The large amount of debt would restrict policymakers' ability to use tax and spending policies to respond to unexpected challenges, such as economic downturns or financial crises. As a result, those challenges would tend to have larger negative effects on the economy and on people's well-being than they would otherwise. The large amount of debt could also compromise national security by constraining defense spending in times of international crisis or by limiting the country's ability to prepare for such a crisis.

## What Effects Would Alternative Fiscal Policies Have?

Again, most of the projections in this report are based on the assumption that federal tax and spending policies will generally not differ from what current law specifies. (CBO makes that assumption not because it expects current law to remain the same, but because the budgetary and economic implications of current law are a useful benchmark for policymakers when they consider changing laws.) However, if tax and spending policies differed significantly from those specified in current law, budgetary and economic outcomes could differ significantly as well. To illustrate some possible differences, CBO analyzed the effects of three additional sets of fiscal policies: an extended alternative fiscal scenario, which would result in more debt than in the extended baseline; and two illustrative scenarios, which would result in less.

Under the extended alternative fiscal scenario, certain policies that are now in place but that are scheduled to change under current law are assumed to continue; some provisions of law that might be difficult to sustain for a long period are assumed to be modified; and federal revenues and certain kinds of federal spending are assumed to be maintained at or near their historical shares of GDP. If those changes to current law occurred, deficits (excluding interest payments) would be about \$2 trillion higher over the next decade than they are in CBO's baseline; in subsequent years, such deficits would exceed those projected in the extended baseline by rapidly growing amounts. The harmful effects on the economy from the resulting increase in federal debt would be partly offset by the lower marginal tax rates that would be in place under

4. For further discussion, see Congressional Budget Office, *Federal Debt and the Risk of a Fiscal Crisis* (July 2010), [www.cbo.gov/publication/21625](http://www.cbo.gov/publication/21625).

the scenario. Nevertheless, in the long term, economic output would be lower and interest rates would be higher under the scenario than they would be if current law remained in place. After including the effects of those macroeconomic changes, CBO projects that federal debt held by the public would rise sharply—to about 175 percent of GDP in 2040.

Under the first of the two illustrative scenarios, budget deficits would be smaller than those projected under current law. Deficit reduction would be phased in so that deficits (excluding interest payments) would be a total of \$2 trillion smaller through 2025 than they are in CBO's baseline; thereafter, deficits would be reduced each year by the same percentage of GDP by which they had been reduced in 2025. If that scenario occurred, output would be higher and interest rates would be lower in the long term than they would be if current law remained unchanged. Factoring in the effects of those macroeconomic changes on the budget, CBO projects that federal debt held by the public would equal about 72 percent of GDP in 2040, close to its percentage in 2013.

Under the other illustrative scenario, one with twice as much deficit reduction as in the previous scenario—a total decrease of \$4 trillion in deficits (excluding interest payments) through 2025—CBO projects that federal debt held by the public would fall to 39 percent of GDP in 2040. That percentage would be close to the average ratio of debt to GDP over the past 50 years (38 percent). As in the preceding scenario, output would be higher and interest rates would be lower in the long term than they would be if current law did not change.

The fiscal policies in the three scenarios would also affect the economy in the short term, reflecting the short-term impact of tax and spending policies on the overall demand for goods and services. The first scenario, by making spending higher and taxes lower than they would be under current law, would increase demand and thereby raise output and employment over the next few years. By contrast, the deficit reduction that would take place under the other scenarios would decrease demand and thus reduce output and employment over the next few years.

## How Uncertain Are the Long-Term Budget Projections?

Even if future tax and spending policies did not vary from what current law specifies, budgetary outcomes would undoubtedly differ from CBO's projections because of unexpected changes in the economy, demographics, and other factors.

To illustrate the uncertainty of its projections, CBO examined how varying its estimates of four factors—future mortality rates, productivity growth, interest rates on federal debt, and federal spending on Medicare and Medicaid—would affect the projections in a version of the extended baseline that included the macroeconomic effects of fiscal policies on the budget. In that version of the extended baseline, CBO's central estimate is that federal debt will equal 107 percent of GDP in 2040. The degree of variation in the four factors was based on their past variation as well as on possible future developments. For instance, during recent 25-year periods, beginning in the 1950–1974 period and ending in the 1990–2014 period, the average growth rate of total factor productivity—the average real output per unit of combined capital and labor—varied by about 1 percentage point. CBO therefore projected economic and budgetary outcomes if total factor productivity grew by 0.8 percent per year or by 1.8 percent per year over the next 25 years—that is, 0.5 percentage points more slowly or more quickly than the 1.3 percent projected for the extended baseline. The estimates show the following:

- In cases in which CBO varied only one of the four factors, federal debt held by the public after 25 years ranged from 18 percent of GDP below the agency's central estimate to 23 percent above it.
- In a case in which all four factors varied simultaneously in a way that raised projected deficits, but varied only 60 percent as much as in the individual cases just mentioned, federal debt after 25 years was projected to be about 37 percent of GDP higher than the agency's central estimate. Conversely, in a case in which all four factors varied in a way that lowered deficits but, again, by only 60 percent as much as in the individual cases, debt after 25 years was projected to be lower than CBO's central estimate by 31 percent of GDP.

Those calculations do not cover the full range of possible outcomes, nor do they address other sources of uncertainty in the budget projections, such as the risk of an economic depression or major war or the possibility of unexpected changes in birthrates, immigration, or labor force participation. Nonetheless, they show that the main implication of this report applies under a wide range of possible values for some key factors that influence federal spending and revenues. That is, in 25 years, if current law remained generally unchanged, federal debt—which is already high by historical standards—would probably be at least as high as it is today and would most likely be much higher.

### What Choices Do Policymakers Have?

The unsustainable nature of the federal tax and spending policies specified in current law presents lawmakers and the public with difficult choices. Unless substantial changes were made to the major health care programs and Social Security, spending for those programs would equal a much larger percentage of GDP in the future than in the past. Federal spending as a whole would rise rapidly—even though, under current law, spending for all other federal benefits and services would make up a smaller percentage of GDP by 2025 than at any point in more than 70 years. Federal revenues would also represent a larger percentage of GDP in the future than they have, on average, in the past few decades. Even so, spending would soon start to exceed revenues by increasing amounts relative to GDP, generating rising budget deficits. As a result, federal debt held by the public would grow faster than the economy, starting a few years from now. Because debt is already unusually high relative to GDP, further sustained increases could be especially harmful to economic growth.

To put the federal budget on a sustainable path for the long term, lawmakers would have to make major changes to tax policies, spending policies, or both—by reducing spending for large benefit programs below the projected amounts, letting revenues rise more than they would under current law, or adopting some combination of those approaches. The size of such changes would depend on the amount of federal debt that lawmakers considered appropriate.

For instance, if lawmakers set a goal for 2040 of reducing debt held by the public to the average percentage of GDP

seen over the past 50 years (38 percent), one approach would be to increase revenues and cut noninterest spending, relative to current law, by a total of 2.6 percent of GDP in each year beginning in 2016. That would come to about \$480 billion, or \$1,450 per person, in 2016 (see Summary Figure 1).<sup>5</sup> Many combinations of policies could be adopted to meet that goal, including the following:

- At one end of the spectrum, lawmakers could choose to reduce deficits solely by increasing revenues. Such a policy would require boosting revenues by 14 percent in each year over the 2016–2040 period relative to the amounts that CBO projects in the extended baseline. For households in the middle fifth of the income distribution in 2016, a 14 percent increase in all types of revenues would raise federal tax payments for that year by about \$1,700, on average.
- At the other end of the spectrum, lawmakers could choose to reduce deficits solely by cutting noninterest spending, in which case they would have to make such spending 13 percent lower than projected in the extended baseline in each of the next 25 years. For example, a 13 percent cut would lower initial Social Security benefits by an average of about \$2,400 for people in the middle fifth of the lifetime earnings distribution who were born in the 1950s and who claimed benefits at age 65.

Another goal might be to reduce debt in 2040 to its current percentage of GDP—74 percent. Meeting that goal would require increases in revenues and cuts in noninterest spending, relative to current law, totaling 1.1 percent of GDP in each year beginning in 2016.<sup>6</sup> Of course, other goals and other patterns for the timing of savings are possible as well.

In deciding how quickly to carry out policies to put federal debt on a sustainable path—regardless of the chosen goal for debt—lawmakers would face difficult trade-offs:

- 
5. The estimated size of those policy changes does not account for the macroeconomic effects either of the particular policies that might be changed or of the reduction in debt.
  6. The estimated size of those policy changes does not account for the macroeconomic effects of the particular policies that might be changed.

**Summary Figure 1.**

**The Size of Policy Changes Needed Over 25 Years to Make Federal Debt Meet Two Possible Goals in 2040**

**If Lawmakers Aimed for . . .**

Debt in 2040 to Equal Its 50-Year Average of **38%** of GDP . . .

Debt in 2040 to Equal Its Current Level of **74%** of GDP . . .

**How Much Would They Need to Increase Revenues or Reduce Noninterest Spending per Year?**

**2.6%** of GDP, which is equal to a **14%** ↑ Increase in **Revenues** or **13%** ↓ Cut in **Spending**

**1.1%** of GDP, which is equal to a **6%** ↑ Increase in **Revenues** or **5½%** ↓ Cut in **Spending**

**What Would That Increase in Revenues or Reduction in Noninterest Spending Amount to in 2016?**

**\$480 billion**, which is equal to **\$1,450** per person

**\$210 billion**, which is equal to **\$650** per person

**What If the Changes Were Increases (of Equal Percentage) in All Types of Revenues?**

**+\$1,700** One effect in 2016 is that, on average, **taxes on households** would be higher than under current law. **+\$750**

Values are for households in the middle fifth of the income distribution. Those taxes are projected to be \$12,300 under current law.

**What If the Changes Were Cuts (of Equal Percentage) in All Types of Noninterest Spending?**

**-\$2,400** One effect is that **initial Social Security benefits** would be lower than under current law. **-\$1,050**

Values are averages for people in the middle fifth of the lifetime earnings distribution who were born in the 1950s and who would claim benefits at age 65. Those benefits are projected to be \$18,650 (in 2016 dollars) under current law.

Source: Congressional Budget Office.

Notes: The values shown in this figure are relative to CBO's extended baseline. 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. The sizes of the policy changes do not account for the macroeconomic feedback of the policies that might be used to achieve the goals or, in the case of the goal to reduce debt to 38 percent of GDP, of the reduction in debt.

GDP = gross domestic product.

- 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 the chosen goal; and the less uncertainty there would be about what policies might be adopted. However, precipitous spending cuts or tax increases would give people little time to plan and adjust to those policy changes, and the changes would weaken the economic expansion during the next two years or so—a period when the Federal Reserve would have little ability to lower short-term interest rates to boost the economy.
- Spending cuts or tax increases that were implemented several years from now would have a smaller negative effect on output and employment in the short term. However, waiting for some time before reducing spending or increasing taxes would result in a greater accumulation of debt, which would represent a greater drag on output and income in the long term and increase the size of the policy changes needed to reach the chosen target for debt.

CBO has estimated how much a delay in deficit reduction would increase the size of the policy changes needed to achieve a chosen goal for debt. If the goal was to reduce debt to its 50-year historical average by 2040, but lawmakers waited to implement new policies until 2021, the combination of increases in revenues and reductions in noninterest spending over the 2021–2040 period would need to equal 3.2 percent of GDP—0.6 percentage points more than if policy changes took effect in 2016. If lawmakers chose the same goal but postponed taking action until 2026, the necessary policy changes over the 2026–2040 period would amount to 4.2 percent of GDP.

Even if policy changes that shrank deficits in the long term were not implemented for several years, making decisions about them sooner rather than later could hold down longer-term interest rates, reduce uncertainty, and enhance businesses' and consumers' confidence. Such decisions could thereby make output and employment higher in the next few years than they would have been otherwise.