## The Long-Term Budget Outlook Under Alternative Scenarios for the Economy and the Budget

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he Congressional Budget Office projects that if current laws governing revenues and spending generally remained unchanged, federal debt held by the public, boosted by large deficits, would increase from 100 percent of gross domestic product (GDP) in 2025 to 156 percent of GDP in 2055—exceeding any previously recorded level and on track to increase further. The federal budget deficit would remain large by historical standards in relation to GDP over the next 30 years, driving up federal debt. Those long-term budget projections—referred to as CBO's extended baseline—are not predictions of budgetary outcomes; rather, they give lawmakers a benchmark for measuring the effects of policy options or proposed legislation.<sup>2</sup>

Economic conditions that differ from those that CBO projects and fiscal policy that differs from current law could yield noticeably different results. To show how changes in economic conditions or in fiscal policy might affect budgetary and economic outcomes, CBO analyzed eight scenarios that differ from those underlying the agency's extended baseline—six that vary economic conditions and two that vary budgetary conditions.

- Congressional Budget Office, The Long-Term Budget Outlook: 2025 to 2055 (March 2025), www.cbo.gov/publication/61187.
  The long-term projections in that report are based on the agency's January 2025 demographic projections (which reflect information, laws, and policies as of November 15, 2024), economic projections (which reflect laws, policies, and economic developments as of December 4, 2024), and 10-year budget projections (which include the effects of legislation enacted as of January 6, 2025). The projections do not reflect the effects of administrative actions taken or judicial decisions made after those respective dates, including actions and decisions affecting immigration, tariffs, and other policy areas.
- For further discussion of the baseline assumptions set by statute, see Congressional Budget Office, CBO Explains the Statutory Foundations of Its Budget Baseline (May 2023), www.cbo.gov/publication/58955.

- If the productivity of labor and capital in the nonfarm business sector grew 0.5 percentage points per year more quickly or more slowly than CBO projects, federal debt held by the public in 2055 would be 113 percent of GDP or 203 percent of GDP, respectively.
- If the average interest rate on federal debt was higher or lower than the baseline projection by an amount that started at 5 basis points in 2025 and changed by that amount in each year thereafter, federal debt held by the public in 2055 would be 204 percent of GDP or 121 percent of GDP, respectively. (A basis point is one-hundredth of a percentage point.)
- If government borrowing reduced private investment by twice as much as it does in CBO's long-term projections or had no effect on that investment, federal debt held by the public in 2055 would exceed 250 percent of GDP or would be 125 percent of GDP, respectively.
- If, between 2025 and 2055, discretionary spending and revenues equaled their 30-year historical averages measured as a percentage of GDP, federal debt held by the public in 2055 would exceed 250 percent of GDP.³ Under that scenario, discretionary spending is set to 7.0 percent of GDP and revenues are set to 17.2 percent of GDP in every year—1.7 percentage points more and 1.4 percentage points less, respectively, than they average in CBO's projections.

<sup>3.</sup> Discretionary spending encompasses an array of federal activities funded through or controlled by appropriations. Such spending includes most defense spending and spending for many nondefense activities, such as elementary and secondary education, housing assistance, international affairs, the administration of justice, and highway programs.

• If, between 2025 and 2055, fiscal policy was set to maintain federal debt held by the public at 100 percent of GDP (its level in fiscal year 2025), primary deficits (which exclude net outlays for interest) would average 0.4 percent of GDP over that period. Under that scenario, primary deficits are reduced each year by decreasing noninterest spending or increasing revenues in relation to amounts in CBO's extended baseline by an average of 1.6 percent of GDP. (Primary deficits could also be reduced through a combination of changes to spending and revenues that would have an equivalent effect.)

In this analysis, CBO reports specific economic or budgetary outcomes only for scenarios in which debt does not exceed 250 percent of GDP. That approach is not an indication that the agency considers that level of debt to be a fiscal tipping point. (CBO cannot predict with any confidence whether or when abrupt macroeconomic changes or sudden shifts in financial markets might occur in response to the amount and trajectory of federal debt.) Rather, assessing the economic effects of debt that exceeds 250 percent of GDP would require CBO to reevaluate the economic relationships in its current models.4 The agency's long-term budget and economic projections are subject to significant uncertainty, and that uncertainty increases as projected debt expands far beyond historical experience, in part because of the potential economic effects of debt in that case.

### **Projecting Different Economic Conditions**

CBO's long-term budget projections depend on its forecasts of economic factors, including productivity growth and interest rates, and on the sensitivity of private investment to budget deficits. If economic conditions differed from those in CBO's forecast, budgetary outcomes would diverge from those in the agency's extended baseline.

To illustrate the effects of such differences on federal debt, CBO analyzed how its budget and economic projections would change if productivity growth, interest rates, or private investment's sensitivity to deficits were higher or lower than they are in the agency's extended baseline (see Figure 1).

To illustrate the effects of those differences on the economy, CBO focused on gross national product (GNP) rather than on the more commonly cited GDP (see Figure 2). GNP includes income that U.S. residents earn abroad and excludes income that foreigners earn from domestic sources; thus, GNP per person is a better measure than GDP per person of the resources available to U.S. households.<sup>5</sup>

#### Faster or Slower Growth of Total Factor Productivity

The growth of total factor productivity (TFP)—the average real output (that is, output adjusted to remove the effects of inflation) per unit of combined labor and capital services in the nonfarm business sector—is a key contributor to the growth of GDP. As such, it directly affects federal debt and budget deficits measured as a percentage of GDP. Furthermore, GDP growth affects the growth of income earned by workers and owners of capital. Because that income determines both tax revenues and spending on some mandatory programs that are linked to wage growth, the growth rate of TFP indirectly affects budget deficits and federal debt. For those reasons, CBO examined the effects of changes in the annual growth rate of TFP on its projections of federal debt measured as a percentage of GDP.

The agency projected budgetary and economic outcomes using rates of growth for TFP in the nonfarm business sector that are 0.5 percentage points per year higher or lower than the rates underlying its extended baseline projections. (In those projections, TFP grows at an average annual rate of 1.0 percent over the next 30 years.) After accounting for the effects of the alternative growth rates of TFP on capital and other macroeconomic factors, CBO projected the following:

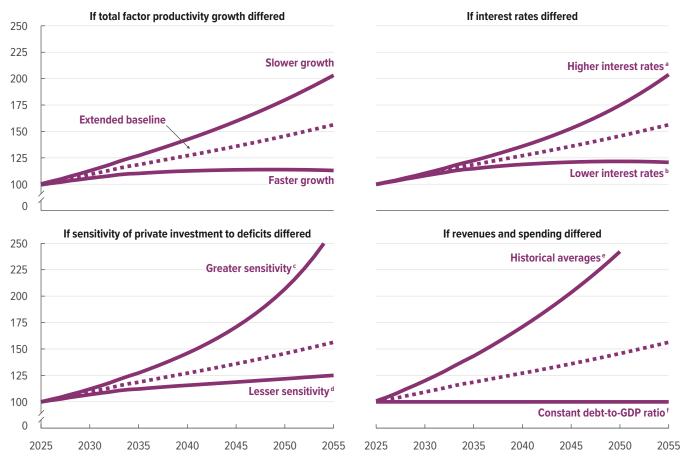
- 5. The difference between GNP and GDP is particularly important in analyzing the long-term effects of economic changes or fiscal policies. When the federal government runs larger budget deficits, more capital tends to flow into the United States from other countries, offsetting some of the reduction in private investment that stems from the increased government borrowing. However, over time, a growing amount of income must be paid to foreign investors as profits or interest on that invested capital. Therefore, other things being equal, increases in debt reduce GNP (and the income of U.S. households) more than they reduce GDP, and decreases in debt increase GNP more than they increase GDP.
- 6. For details, see Congressional Budget Office, *How Changes in Economic Conditions Might Affect the Federal Budget: 2025 to 2035* (March 2025), pp. 6–7, www.cbo.gov/publication/61198.

<sup>4.</sup> In those models, the responses of private saving, capital inflows, and interest rates to changes in fiscal policy are based on the nation's historical experience with federal borrowing. But in certain alternative scenarios, debt measured as a percentage of GDP grows to levels well outside that experience.

Figure 1.

#### Federal Debt Under the Extended Baseline and Eight Alternative Scenarios, by Fiscal Year

Percentage of gross domestic product



Data source: Congressional Budget Office. See www.cbo.gov/publication/61332#data.

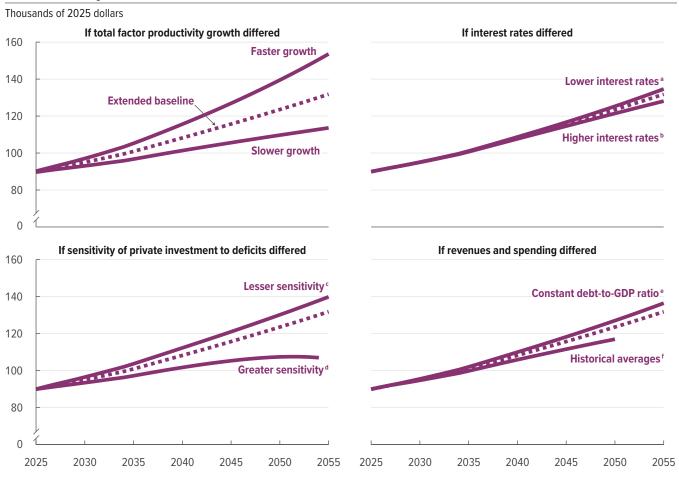
Total factor productivity growth is the growth of average real output (that is, output adjusted to remove the effects of inflation) per unit of combined labor and capital services in the nonfarm business sector. The interest rate is the average interest rate on federal debt.

Referred to as the extended baseline, CBO's long-term budget projections follow the agency's 10-year baseline budget projections and then extend most of the concepts underlying those projections for an additional 20 years. (Most recently published in January 2025, those 10-year projections conform to a set of assumptions specified in law.) The extended baseline relies on demographic projections that reflect information, laws, and policies as of November 15, 2024; economic projections that reflect laws, policies, and economic developments as of December 4, 2024; and budget projections that incorporate the effects of legislation enacted as of January 6, 2025. None of those projections account for the effects of administrative actions taken or judicial decisions made after those respective dates, including actions and decisions affecting immigration, tariffs, and other policy areas.

- a. Under this scenario, the average interest rate on federal debt was boosted above the rate underlying CBO's extended baseline by a differential that starts at 5 basis points in 2025 and increases by 5 basis points each year (before macroeconomic effects are accounted for)—that is, the interest rate is 5 basis points higher than the baseline rate in 2025, 10 basis points higher than the baseline rate in 2027, and so on. (A basis point is one-hundredth of a percentage point.)
- b. Under this scenario, the average interest rate on federal debt was pushed below the rate underlying CBO's extended baseline by a differential that starts at 5 basis points in 2025 and increases by 5 basis points each year (before macroeconomic effects are accounted for)—that is, the interest rate is 5 basis points lower than the baseline rate in 2025, 10 basis points lower than the baseline rate in 2027, and so on.
- c. Under this scenario, the effect of federal borrowing on private investment is twice as large as it is in CBO's extended baseline.
- d. Under this scenario, federal borrowing has no effect on private investment.
- e. Under this scenario, discretionary outlays equal 7.0 percent of GDP and revenues equal 17.2 percent of GDP over the entire projection period.
- f. Under this scenario, primary deficits are reduced each year so that debt remains at 100 percent of GDP (its level in fiscal year 2025) throughout the projection period.

Figure 2.

# Real Gross National Product per Person Under the Extended Baseline and Eight Alternative Scenarios, by Calendar Year



Data source: Congressional Budget Office. See www.cbo.gov/publication/61332#data.

Total factor productivity growth is the growth of average real output (that is, output adjusted to remove the effects of inflation) per unit of combined labor and capital services in the nonfarm business sector. The interest rate is the average interest rate on federal debt.

Referred to as the extended baseline, CBO's long-term budget projections follow the agency's 10-year baseline budget projections and then extend most of the concepts underlying those projections for an additional 20 years. (Most recently published in January 2025, those 10-year projections conform to a set of assumptions specified in law.) The extended baseline relies on demographic projections that reflect information, laws, and policies as of November 15, 2024; economic projections that reflect laws, policies, and economic developments as of December 4, 2024; and budget projections that incorporate the effects of legislation enacted as of January 6, 2025. None of those projections account for the effects of administrative actions taken or judicial decisions made after those respective dates, including actions and decisions affecting immigration, tariffs, and other policy areas.

Whereas gross domestic product, the more common measure of economic output, is the value of all final goods and services produced within the borders of the United States, gross national product is the value of all final goods and services produced by labor and capital supplied by residents of the United States, regardless of where that labor and capital are located.

- a. Under this scenario, the average interest rate on federal debt was pushed below the rate underlying CBO's extended baseline by a differential that starts at 5 basis points in 2025 and increases by 5 basis points each year (before macroeconomic effects are accounted for)—that is, the interest rate is 5 basis points lower than the baseline rate in 2025, 10 basis points lower than the baseline rate in 2027, and so on. (A basis point is one-hundredth of a percentage point.)
- b. Under this scenario, the average interest rate on federal debt was boosted above the rate underlying CBO's extended baseline by a differential that starts at 5 basis points in 2025 and increases by 5 basis points each year (before macroeconomic effects are accounted for)—that is, the interest rate is 5 basis points higher than the baseline rate in 2025, 10 basis points higher than the baseline rate in 2027, and so on.
- c. Under this scenario, federal borrowing has no effect on private investment.
- d. Under this scenario, the effect of federal borrowing on private investment is twice as large as it is in CBO's extended baseline.
- e. Under this scenario, primary deficits are reduced each year so that debt remains at 100 percent of GDP (its level in fiscal year 2025) throughout the projection period.
- f. Under this scenario, discretionary outlays equal 7.0 percent of GDP and revenues equal 17.2 percent of GDP over the entire projection period.

- If TFP in the nonfarm business sector grew 0.5 percentage points more quickly than CBO projects in each year, federal debt held by the public in 2055 would be 113 percent of GDP instead of the 156 percent it amounts to in the extended baseline. The average interest rate on federal debt in 2055 would be 4.2 percent—0.5 percentage points higher than the rate in the agency's baseline forecast. Real GNP per person would be 17 percent (or \$21,800, in 2025 dollars) higher in that year than it is in CBO's extended baseline.
- If TFP in the nonfarm business sector grew 0.5 percentage points more slowly than projected in each year, then federal debt held by the public would be 203 percent of GDP in 2055. The average interest rate on federal debt in 2055 would be 3.1 percent—0.5 percentage points lower than the rate in the agency's baseline forecast. Real GNP per person would be 14 percent (or \$18,200) lower in that year than it is in CBO's extended baseline.

The budgetary effects of faster or slower TFP growth are highly uncertain. That is because of uncertainty in the responses of economic variables to changes in TFP growth and in how those responses would affect spending and revenues.

#### Higher or Lower Interest Rates on Federal Debt Held by the Public

CBO also projected budgetary and economic outcomes under two scenarios in which interest rates on federal debt are higher or lower than the rates underlying the agency's extended baseline. For the first scenario, CBO analyzed a path for the average interest rate on federal debt that is above the baseline rate by an amount that starts at 5 basis points in 2025 and increases by that amount in each year thereafter (before incorporating macroeconomic effects, which are described below). For the second scenario, the average interest rate on federal borrowing was set below the baseline rate by those same amounts each year.

• Under the scenario with higher interest rates, federal debt held by the public would reach 204 percent of GDP in 2055 instead of the 156 percent of GDP it equals in the extended baseline. Real GNP per person would be 3 percent (or \$3,700) lower in that year than it is in CBO's extended baseline. Under the scenario with lower interest rates, federal debt held by the public would be 121 percent of GDP in 2055. Real GNP per person would be 2 percent (or \$2,800) higher in that year than it is in the extended baseline.

The boost to interest rates under the first scenario increases projections of the government's interest costs and thus deficits. Larger deficits—and the increased federal borrowing required to finance them—reduce the amount of resources available for private investment. The decrease in private investment reduces the amount of capital and increases the return on investment because more workers make use of each unit of capital. When the return on capital grows, interest rates—including the rates that the federal government pays on debt held by the public—rise further. Thus, macroeconomic effects push interest rates above the initial boost that was built into the scenario.

Under the scenario with higher interest rates, the average interest rate on federal debt is 5.4 percent in 2055, instead of the 3.6 percent that year in the extended baseline. Of the 1.8 percentage-point difference between the rates in 2055, about two-tenths (0.2) of a percentage point results from macroeconomic effects (larger deficits, less investment and capital, and additional increases in interest rates) rather than from the initial boost to interest rates.

The lower interest rates under the second scenario result in smaller interest payments and smaller deficits than those in CBO's extended baseline. Those smaller deficits spur private investment, increasing the amount of capital per worker and decreasing the return on capital—and, ultimately, interest rates. The average interest rate on federal debt declines to 1.9 percent in 2055 under that scenario. That rate is 1.7 percentage points lower than it is in that year in the extended baseline. Of that 1.7 percentage-point difference, about 0.2 percentage points results from macroeconomic effects.

The budgetary and economic effects of higher or lower interest rates are uncertain because they depend on the amount of debt accrued at those rates and on the macroeconomic effects of the rates. Furthermore, any particular effects (in relation to CBO's baseline projections) would

<sup>7.</sup> That is, the interest rate was boosted above the baseline rate by 5 basis points in 2025, 10 basis points in 2026, 15 basis points in 2027, and so on.

<sup>8.</sup> For more discussion of the effects of federal borrowing on private investment, see Jonathan Huntley, *The Long-Run Effects of Federal Budget Deficits on National Saving and Private Domestic Investment*, Working Paper 2014-02 (Congressional Budget Office, February 2014), www.cbo.gov/publication/45140.

depend on the circumstances that caused interest rates to change. For simplicity—and to avoid presuming which circumstances caused interest rates to change—CBO's analysis does not account for those particular effects on the economy or the budget.

#### **Greater or Lesser Sensitivity of Private Investment to Deficits**

When the federal government borrows money in financial markets, it decreases the amount of resources available for private investment. In the extended baseline, CBO reduced private investment by 33 cents for every additional dollar of deficits to reflect the agency's assessment of the average effect on investment of changes in fiscal policy. The decline in private investment reduces the stock of private capital and economic output over time.

CBO examined two cases in which the sensitivity of private investment to deficits differs from that in the agency's extended baseline:

- First, CBO examined the economic and budgetary outcomes that would occur if government borrowing had twice the effect on private investment as it does in CBO's long-term projections. In the case of greater sensitivity to deficits, every dollar of change in the deficit would reduce private investment by 66 cents. Under that scenario, federal debt held by the public would exceed 250 percent of GDP beginning in 2055.
- Second, CBO examined outcomes under a scenario in which government borrowing had no effect on private investment. Under that scenario, federal debt held by the public would be 125 percent of GDP in 2055 instead of the 156 percent it amounts to in the extended baseline.

Those different degrees of sensitivity have economic and budgetary implications because they alter the relationship between private investment and government borrowing. Under the first scenario, in which debt held by the public exceeds 250 percent of GDP beginning in 2055, private investment would be smaller than projected in CBO's extended baseline. The reduction in private investment would, over time, lower the stock of private capital and reduce output. Lower economic output would reduce federal revenues and lead to even larger deficits as the effect on private investment compounded. Reductions in private investment would also decrease the

amount of capital used by each worker, thereby increasing the return on capital and the return on investments (including government bonds).

In CBO's assessment, that greater sensitivity of private investment to deficits would increase the average interest rate on federal debt in 2054 by 1.9 percentage points in relation to the agency's extended baseline. Real GNP per person would be 18 percent (or \$23,200) lower in that year than it is in CBO's extended baseline.

Under the second scenario, private investment would be larger than projected in CBO's extended baseline. The increase in private investment would, over time, boost the stock of private capital and output. It would also increase the amount of capital used by each worker, thereby reducing the return on capital and the return on investments (including government bonds). In CBO's assessment, the reduced sensitivity of private investment to deficits would lower the average interest rate on federal debt by 0.6 percentage points in 2055 in relation to the agency's extended baseline. Real GNP per person under that scenario would be 6 percent (or \$8,100) higher in that year than it is in CBO's extended baseline.

## Projecting Different Budgetary Conditions

In CBO's extended baseline, current laws governing taxes and spending generally remain unchanged. Fiscal policy that differed from current law could yield noticeably different budgetary outcomes.

To illustrate the effects of differences in fiscal policy on federal debt, CBO analyzed how its budget and economic projections would differ under two scenarios. In the first scenario, discretionary spending and revenues each equal their 30-year historical average amounts, measured as a percentage of GDP, from 1995 to 2024. (In that scenario, discretionary spending would be larger, and revenues would be smaller, than they are in CBO's extended baseline.)<sup>10</sup> In the second scenario, from 2025 to 2055, the path of primary deficits ensures that federal

<sup>10.</sup> When developing its baseline projections of spending and revenues, CBO follows procedures specified in law as well as long-standing guidelines. For example, the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99–177) requires CBO to incorporate the assumption that future discretionary funding will match the amounts most recently provided, with adjustments for inflation, through the first 10 years of the projection period. For later years, in the extended baseline, CBO assumes that after a five-year transition period, discretionary spending would grow at the rate of nominal GDP.

debt held by the public remains at 100 percent of GDP throughout the projection period—its level in fiscal year 2025.

### **Keeping Discretionary Spending and Revenues** at Their Historical Averages

Under this scenario, discretionary outlays are set to 7.0 percent of GDP, an amount that exceeds the amount in the extended baseline by an average of 1.7 percentage points between 2025 and 2055. Discretionary spending (measured as a percentage of GDP) under this scenario exceeds such spending in the extended baseline by 0.9 percentage points in 2025; that difference increases to 1.9 percentage points in 2055. 11

Also under this scenario, revenues are set to 17.2 percent of GDP, an amount that is less than the amount in the extended baseline by an average of 1.4 percentage points between 2025 and 2055. Measured as a percentage of GDP, revenues under this scenario are roughly the same as they are in the extended baseline in 2025 and lower by 2.1 percentage points in 2055. The scenario are roughly the same as they are in the extended baseline in 2025 and lower by 2.1 percentage points in 2055.

Outcomes Under the Scenario. Under the historical-average scenario, debt held by the public would amount to 242 percent of GDP in 2050 (97 percentage points larger than in the agency's extended baseline projections for that year) and would exceed 250 percent of GDP beginning in 2051 (see Figure 1 on page 3). The primary deficit would be 4.3 percentage points larger in 2050 than it is in CBO's extended baseline. Once the increasing costs of debt service were added, the total deficit in 2050 under this scenario would be 8.7 percentage points larger than the baseline amount. In terms of output, under the historical-average scenario, real GNP per person would be 5 percent (or \$6,600) lower in 2050 than it is in CBO's extended baseline (see Figure 2 on page 4).

How CBO Projected Those Outcomes. Fiscal policy underlying the historical-average scenario would differ significantly from the extended baseline. For simplicity—and to avoid presuming which fiscal policies lawmakers might implement to alter the deficit—CBO analyzed the scenario without specifying the underlying policies affecting revenues and spending. Under the scenario, transfer payments to people are the same as they are under the extended baseline, and the effective marginal tax rates on labor and capital income decline proportionally for all households as revenues are reduced to meet the specified targets.

Those changes in fiscal policy would affect the economy in ways that would feed back into the budget. CBO has not analyzed every way in which that could occur. Instead, for the simplified analysis presented in this report, the agency accounted for these three effects:

- Effective marginal tax rates on income from labor would be lower under the historical-average scenario than they are in the extended baseline. Those lower rates would encourage people to work and save more and would thus increase output.<sup>14</sup>
- Effective marginal tax rates on income from most types of capital would also be lower under the historical-average scenario. Those lower rates would encourage saving and investment and would thus further boost output.<sup>15</sup>
- Federal debt would be larger under the historical-average scenario than it is in the extended baseline. The increase in federal borrowing would draw money away from investment in capital goods and services, thus reducing the stock of private capital and decreasing output.

Changes to fiscal policy also could alter incentives in other ways, possibly affecting the economy significantly in the long term. For example, changes to tax policy might affect businesses' choices about how they were structured, and those choices might, in turn, alter the effective marginal tax rate on capital income. Similarly, changes in the tax treatment of mortgage debt would affect households' decisions about how much to save.

<sup>11.</sup> In the extended baseline, discretionary spending amounts to 6.1 percent of GDP in 2025, declines to 5.1 percent in 2038, and then is assumed to remain at that level through 2055. Such spending averages 5.3 percent of GDP over the 30-year projection period.

<sup>12.</sup> In the extended baseline, CBO's projections of revenues reflect the assumption that certain provisions affecting the tax code—including changes in statutory tax rates—will expire as scheduled under current law.

<sup>13.</sup> In the extended baseline, revenues equal 17.1 percent of GDP in 2025. They generally increase as a share of the economy through 2055, reaching 19.3 percent of GDP in that year. Revenues average 18.6 percent of GDP over the projection period.

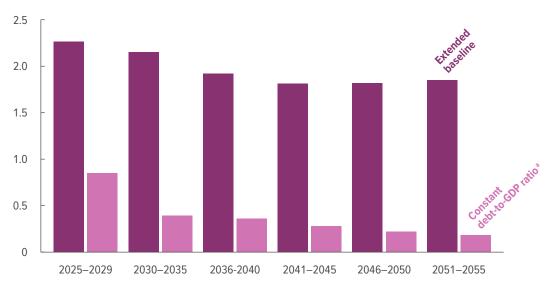
<sup>14.</sup> The effective marginal tax rate on labor income is the share (averaged among all taxpayers by assigning them weights proportional to their labor income) of an additional dollar of such income that is paid in federal individual income taxes and payroll taxes.

<sup>15.</sup> The effective marginal tax rate on capital income is the share of the return on an additional dollar of investment made in a particular year that will be paid in federal taxes over the life of that investment.

Figure 3.

# Average Primary Deficits Under the Extended Baseline and the Scenario With a Constant Debt-to-GDP Ratio, by Fiscal Year

Percentage of gross domestic product



Under the scenario with a constant debt-to-GDP ratio, primary deficits would average 0.4 percent of GDP from 2025 to 2055—1.6 percentage points smaller than their average in CBO's extended baseline.

Data source: Congressional Budget Office. See www.cbo.gov/publication/61332#data.

Referred to as the extended baseline, CBO's long-term budget projections follow the agency's 10-year baseline budget projections and then extend most of the concepts underlying those projections for an additional 20 years. (Most recently published in January 2025, those 10-year projections conform to a set of assumptions specified in law.) The extended baseline relies on demographic projections that reflect information, laws, and policies as of November 15, 2024; economic projections that reflect laws, policies, and economic developments as of December 4, 2024; and budget projections that incorporate the effects of legislation enacted as of January 6, 2025. None of those projections account for the effects of administrative actions taken or judicial decisions made after those respective dates, including actions and decisions affecting immigration, tariffs, and other policy areas.

Primary deficits exclude net outlays for interest.

a. Under this scenario, primary deficits are reduced each year so that debt remains at 100 percent of GDP (its level in fiscal year 2025) throughout the projection period. To allow for a clearer analysis of the underlying annual trends, the estimates incorporate a projection of primary deficits in the extended baseline that is adjusted to exclude the effects of shifts in the timing of certain payments that are ordinarily made on the first day of the month. When October 1, the first day of the fiscal year, occurs on a weekend, those payments are made in September, which is in a different fiscal year. For this analysis, the payments are treated as if made in October.

### Maintaining a Constant Debt-to-GDP Ratio of 100 Percent After 2025

Under this scenario, primary deficits are reduced each year so that debt remains at 100 percent of GDP (its level in fiscal year 2025) throughout the projection period. Primary deficits could be reduced by decreasing noninterest spending or increasing revenues (or through a combination of such changes that would have an equivalent effect). Because CBO does not specify the changes to fiscal policy that would cause primary deficits to decrease, outcomes under this scenario do not include any effects on households' incentives to work and save that could result from such policy changes. Since primary deficits fluctuate over time in CBO's extended baseline, the size of the required changes to primary deficits varies in each year.

Outcomes Under the Scenario. Under the scenario with a constant debt-to-GDP ratio, primary deficits would average 0.4 percent of GDP from 2025 to 2055, falling from an average of 0.9 percent of GDP from 2025 to 2029 to 0.2 percent of GDP from 2051 to 2055 (see Figure 3). From 2025 to 2029, primary deficits would need to be cut by about 1.4 percent of GDP, on average. The amount of the reduction to primary deficits would increase later in the projection period, averaging 1.7 percent of GDP from 2051 to 2055.

If those changes were entirely attributable to increased revenues, total revenues would average 19.3 percent of GDP from 2025 to 2029 and 20.9 percent of GDP from 2051 to 2055, instead of the 17.8 percent and 19.2 percent, respectively, projected in the extended baseline. If

the changes were attributable to decreased noninterest spending, such spending would average 18.7 percent of GDP from 2025 to 2029 and 19.4 percent of GDP from 2051 to 2055, instead of the 20.1 percent and 21.1 percent, respectively, projected in the baseline.

In terms of output, under the scenario with a constant debt-to-GDP ratio, real GNP per person would be 4 percent (or \$4,600) higher in 2055 than it is in CBO's extended baseline (see Figure 2 on page 4).

How CBO Projected Those Outcomes. Fiscal policy underlying the scenario with a constant debt-to-GDP ratio would differ significantly from current law. As in the historical-average scenario, CBO analyzed this scenario without specifying the underlying policies affecting revenues and spending. The analysis also did not account for any changes in individuals' or businesses' incentives or activities that might result from changes to effective marginal tax rates. CBO did, however, account for the effect that reducing deficits would have on private investment.

This report supplements the series of reports on the state of the budget and the economy that the Congressional Budget Office issues every year. In keeping with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

Joseph Anderson, Aaron Betz, and Daniel Crown prepared the report with guidance from Molly Dahl and Jaeger Nelson, as well as Devrim Demirel, Edward Harris, John McClelland, Molly Saunders-Scott, and Julie Topoleski. Kyoung Mook Lim and Matthew Wilson contributed to the analysis. Noah Swart fact-checked the report.

Jeffrey Kling reviewed the report, Scott Craver edited it, and Casey Labrack created the graphics and prepared the report for publication. Daniel Crown prepared the supplemental data files. The report is available at www.cbo.gov/publication/61332.

CBO seeks feedback to make its work as useful as possible. Please send comments to communications@cbo.gov.

Phillip L. Swagel Director

