



Budgetary and Economic Outcomes Under Paths for Federal Revenues and Noninterest Spending Specified in the Conference Report on the 2016 Budget Resolution

At the request of the Chairman of the Senate Budget Committee, Senator Mike Enzi, and the Chairman of the House Budget Committee, Congressman Tom Price, the Congressional Budget Office has projected budgetary and economic outcomes over the 2016–2025 period assuming certain paths for federal revenues and spending (excluding interest payments). Those paths are consistent with the amounts of overall revenues and spending specified in the conference report on the 2016 budget resolution (S. Con. Res. 11), which was filed on April 29, 2015.¹ However, the projections do not represent a cost estimate for legislation or an analysis of the effects of any specific policies that might be adopted to produce the revenue and spending paths anticipated in the resolution.

The specified paths envision cuts in spending (from the amounts projected to occur under current law) that begin in 2016 and grow successively larger in later years. The paths also envision allowing revenues to rise roughly as projected under current law over the next decade.² Under those paths, the cumulative deficit over the 2016–2025

period, excluding interest savings and macroeconomic effects, would be roughly \$5 trillion lower than in CBO’s current-law baseline, as adjusted to reflect recently enacted legislation.³

The projections in this report represent CBO’s assessment of how federal debt and economic output would evolve from 2016 to 2025 under those specified paths for revenues and noninterest spending. The projections show how the total amounts of federal revenues and spending—and the resulting amount of federal borrowing—under those paths would affect the economy and how those macroeconomic effects (or feedback) in turn would affect the federal budget.

Specifically, under the paths for revenues and noninterest spending specified in the conference report on the 2016 budget resolution, the amount of federal debt held by the public would be smaller in all future years than it would be under CBO’s baseline projections. With interest savings included and the resulting macroeconomic effects incorporated, the cumulative deficit over the 2016–2025 period would be \$6.0 trillion lower than in CBO’s current-law baseline, and the budget would be balanced in 2024, CBO estimates. Federal debt held by the public as a share of gross domestic product (GDP) would fall to 56 percent in

1. See House of Representatives, *Concurrent Resolution on the Budget for Fiscal Year 2016: Conference Report to Accompany S. Con. Res. 11*, House Report 114-96 (April 29, 2015).

2. In this report, the years referred to when describing budget numbers are federal fiscal years (which run from October 1 to September 30) and amounts of federal debt are given as of the end of the fiscal year. The years referred to when describing economic output are calendar years except when noted otherwise.

3. The CBO budgetary baseline referred to in this report is the baseline issued in March 2015, as adjusted to reflect legislation that was enacted after those projections were prepared.

2025 under the specified paths, CBO projects—compared with 78 percent under that baseline.

In addition to the paths specified in the conference report on the 2016 budget resolution, Chairman Enzi and Chairman Price specified paths for revenues and spending for years beyond 2025. Under those longer-term paths, the budget would show a surplus after 2025, and debt would continue to fall relative to GDP—to roughly 20 percent of GDP by 2040, compared with 74 percent today.

Economic output would be lower in the next few years (because less federal spending would reduce total demand for goods and services), and higher in the long term (because less federal borrowing would free up resources for private investment), than under CBO's baseline:

- In the short term, policy changes that decreased federal spending (or increased taxes)—and thus caused budget deficits to shrink—would generally reduce total demand for goods and services. As a result, such fiscal policies would reduce output and employment below the levels projected in CBO's baseline. Policy changes that increased federal spending or decreased taxes would generally have the opposite effect.
- In the long term, policy changes that decreased federal spending (or increased taxes) would lower the amount of federal debt held by the public relative to what it would be otherwise. Over time, smaller federal deficits and debt would leave more funds available for private investment and thereby cause output to be higher than it would be otherwise. Larger federal debt would have the opposite effect, “crowding out” private investment and decreasing output.⁴

CBO's assessment of the macroeconomic effects is limited in scope, however, because the projections reflect only the ways in which deficits and debt differ from those projected under the baseline. They do not show any other potential effects on output or well-being of the fiscal policy changes that might be used to generate those paths. (The budget resolution does not specify the details of such policies.) However, the specified paths for revenues and spending would require major changes in current

4. For a detailed discussion of CBO's analytical methods, see Congressional Budget Office, *How CBO Analyzes the Effects of Changes in Federal Fiscal Policies on the Economy* (November 2014), www.cbo.gov/publication/49494.

law. In particular, by 2025, noninterest spending would be about 16 percent less under those paths than under current law, CBO estimates; if that same proportional reduction had been applied in 2014, it would have represented a reduction of roughly \$500 billion in non-interest spending. The specific policies that were adopted to produce those future paths would affect overall economic output not only by reducing federal borrowing but also by altering people's incentives to work and save and by altering federal investment. In addition, those policies would affect people's well-being in various ways beyond their effects on economic output.

The amounts of federal debt and economic output estimated under current law and under the specified paths are highly uncertain. That uncertainty stems from the difficulties inherent in any budgetary projections, as well as from the difficulties in projecting the effects on the economy of changes in federal fiscal policies.

What Would Outcomes Be Under Current Law?

This analysis is based on CBO's current 10-year economic projections, which were released in January 2015, and on CBO's March 2015 budget projections, with adjustments to incorporate the effects of recently enacted legislation.⁵

Because they incorporate the assumption that current law generally continues without change, CBO's 10-year baseline budget projections provide a benchmark against which to measure the potential effects of proposals that would alter federal taxes or spending. The total deficit under CBO's March 2015 baseline, as adjusted for recently enacted legislation, would grow from 2.8 percent of GDP in 2014 to 3.8 percent in 2025. Federal debt

5. 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 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 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.

held by the public would grow from 74 percent of GDP in 2014 to 78 percent by 2025.

Those estimates of federal deficits and debt reflect economic conditions as projected in CBO's current 10-year economic baseline, which was released in January 2015. On the basis of those projections, CBO anticipates that continued growth of productivity and the capital stock will make output and income per person higher in the future than they are now. Expressed in 2015 dollars, real (inflation-adjusted) gross national product, or GNP, is projected to be about \$58,000 per person in 2016 and about \$64,000 per person in 2025 under the baseline projections. In assessing the long-term impact of tax and spending policies on output, CBO focuses on effects on gross national product rather than on the more commonly cited gross domestic product. GNP includes the income that U.S. residents earn abroad and excludes the income that foreigners earn in the United States; thus, GNP is a better measure than GDP of the resources available to U.S. households.⁶

What Paths for Federal Revenues and Noninterest Spending Are Specified in the Conference Report on the 2016 Budget Resolution?

The conference report on S. Con. Res. 11 specifies the following paths for federal revenues and noninterest spending (not including macroeconomic effects) that CBO used in this analysis (see Figure 1):

- For revenues, annual amounts decline slightly as a share of the economy, from 18.4 percent of GDP in 2016 to 18.3 percent in 2025.⁷

6. The difference between GNP and GDP is particularly important in analyzing the effects of fiscal policies over the long term: When the federal government runs larger budget deficits, more capital tends to flow into the United States from other countries, offsetting some of the crowding out of investment that government borrowing produces. 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 cause a greater reduction in GNP (and the income of U.S. households) than in GDP, and decreases in debt cause a greater rise in GNP than in GDP. In the short run, by contrast, fiscal policies affect GNP and GDP very similarly through their effects on total demand. For comparability with CBO's other budget analyses, the paths for federal revenues and noninterest spending examined in this report are expressed as percentages of GDP.

- For noninterest spending, annual amounts fall over time relative to the size of the economy. As a percentage of GDP, noninterest spending decreases from 18.8 percent in 2016 to 16.2 percent in 2025.⁸

Over the 2016–2025 period, the cumulative deficit (excluding interest savings and macroeconomic effects) would be about \$5 trillion less than in CBO's baseline. Compared with the baseline, those paths would keep revenues very similar during that 10-year period and would reduce cumulative spending on programs and activities other than interest payments by 11 percent during those years.

The specified paths for revenues and noninterest spending would require major changes in current law. For example, by 2025, noninterest spending would be about 16 percent less than CBO projects under current law. If that same proportional reduction had been applied in 2014, it would have represented a decrease of roughly \$500 billion in noninterest spending.

What Would Economic Outcomes Be Over the Next 10 Years Under the Specified Paths?

The specified paths would reduce output in the short run and increase it in the long run relative to CBO's baseline projections. Those estimated effects include the impact of reduced spending on aggregate demand and the impact of reduced deficits on private investment, but they do not incorporate the effects of any specific policies on output or other aspects of people's well-being because CBO did not analyze a set of policies underlying the specified paths. In particular, the estimates presented here do not incorporate the effects of differences in people's incentives to work or save that might stem directly from changes in tax policies or benefit programs relative to those under the baseline.

Real GNP per person would be lower by as much as 0.6 percent under the specified paths than under the

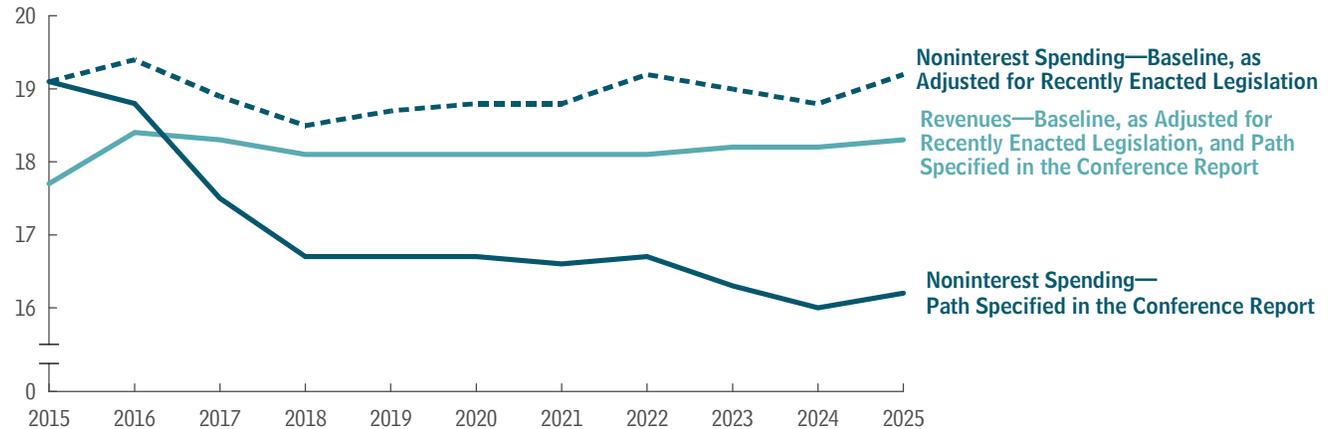
7. The percentages of GDP shown in Table 2 of the conference report differ slightly from those described here because the numbers described here include no macroeconomic effects on output or on the budget from the specified paths.

8. For more details, see the supplemental material posted with this report on CBO's website (www.cbo.gov/publication/50115).

Figure 1.

Revenues and Noninterest Spending Under Paths Specified in the Conference Report on the 2016 Budget Resolution, Without Macroeconomic Effects and Under CBO's 10-Year Baseline, as Adjusted for Recently Enacted Legislation, 2015 to 2025

Percentage of Gross Domestic Product, by Fiscal Year



Source: Congressional Budget Office.

Notes: CBO's 10-year baseline generally adheres closely to current law. Projections under the baseline incorporate effects from changes over time in incentives to work or save under current law. The 10-year economic baseline used in this report refers to the projections for the economy that CBO released in January 2015. The 10-year budget baseline used in this report refers to the projections for the budget that CBO released in March 2015, as adjusted for recently enacted legislation.

The paths for revenues and noninterest spending specified in the conference report on the 2016 budget resolution reduce deficits (excluding interest payments) as a percentage of gross domestic product by increasing amounts over time relative to the 10-year baseline. The paths do not include effects from differences in economic conditions relative to those incorporated in the 10-year baseline.

baseline from 2016 to 2018, CBO estimates, because reduced federal spending relative to current law would dampen overall demand for goods and services (see Figure 2).⁹ Because CBO did not analyze a set of policies that might underlie the specified paths, the agency relied on the same broad assumption that it used in *The 2014 Long-Term Budget Outlook* to estimate the effects of unspecified policies underlying illustrative deficit reduction paths. According to that assumption, each \$1 of real deficit reduction would—in the short term, under current economic conditions—reduce real output by a total of \$1 over several quarters. That dollar-for-dollar response is within the ranges of estimated effects on output that CBO has used in some of its past policy analyses.

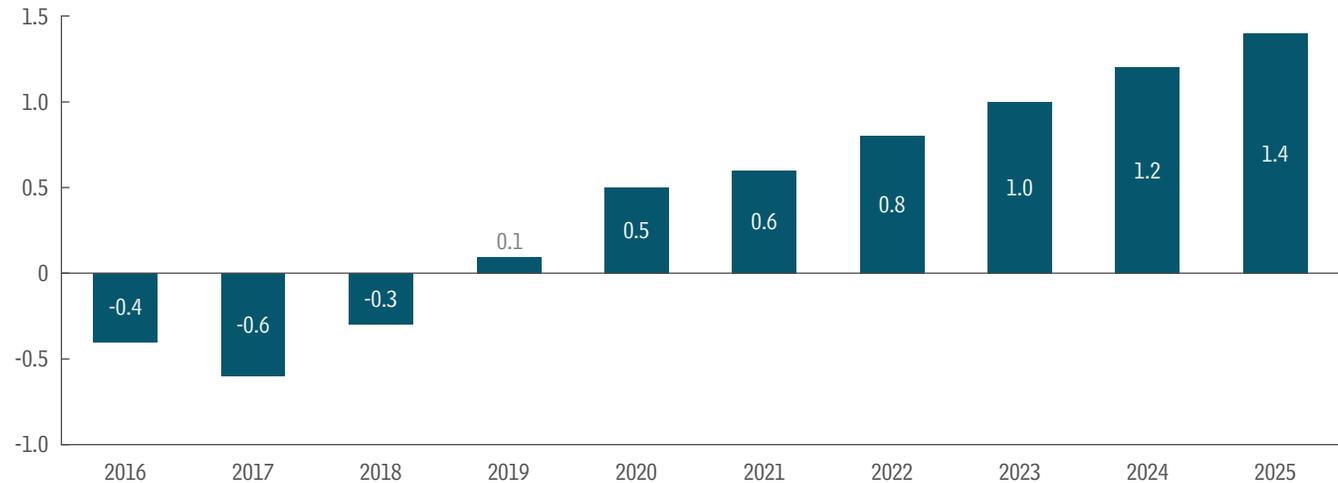
9. Throughout this report, differences in real GNP per person—which are illustrated in the figure—are assumed to be proportional to the estimated differences in real GNP because CBO has no basis for estimating any changes in the size of the population arising from the paths for revenues and noninterest spending specified in the conference report on the 2016 budget resolution.

Starting in 2019, real per capita GNP under the specified paths would be higher than under the baseline—by 1.4 percent in 2025, CBO estimates. GNP would be higher in the long term because smaller federal deficits and debt would lead to both an increase in private investment and a decrease in net inflows of capital from foreign countries, boosting domestic production and reducing net payments of interest and profits to foreigners, compared with what would occur under current law. Real average family income, before accounting for federal transfer payments and taxes, would also be higher than under the baseline. The effects might differ across families, however, with some receiving more income and others potentially receiving less. Effects on family income after accounting for federal transfer payments and taxes would depend on how the particular policies that were adopted to produce the specified paths compared with the policies in the baseline. Moreover, the specific policies adopted would affect people's well-being in various ways beyond the effects on economic output.

Figure 2.

Effects of the Revenues and Noninterest Spending Specified in the Conference Report on the 2016 Budget Resolution on Real Gross National Product per Person Relative to CBO's 10-Year Baseline, as Adjusted for Recently Enacted Legislation, 2016 to 2025

Percentage Difference, by Calendar Year



Source: Congressional Budget Office.

Notes: The macroeconomic effects of the paths for revenues and noninterest spending specified in the conference report on the 2016 budget resolution include the short-term effects of changes in demand for goods and services and the long-term effects of changes in federal debt. Because CBO did not analyze specific policies that might underlie those paths, the estimates do not incorporate effects from any differences in incentives to work and save, or any differences in government investment, stemming from the policies that might be adopted to achieve those paths.

Unlike the more commonly cited gross domestic product, real (inflation-adjusted) **gross national product** includes the income that U.S. residents earn abroad and excludes the income that foreigners earn in the United States.

CBO's **10-year baseline** generally adheres closely to current law. Projections under the baseline incorporate effects from changes over time in incentives to work or save under current law. The 10-year economic baseline used in this report refers to the projections for the economy that CBO released in January 2015. The 10-year budget baseline used in this report refers to the projections for the budget that CBO released in March 2015, as adjusted for recently enacted legislation.

The **paths for revenues and noninterest spending** specified in the conference report on the 2016 budget resolution reduce deficits (excluding interest payments) as a percentage of gross domestic product by increasing amounts over time relative to the 10-year baseline.

In CBO's estimates, the macroeconomic effects of the specified paths are determined by effects on the demand for goods and services in fiscal year 2016, by effects on the nation's capital stock and labor supply starting in 2020, and by a combination of those factors from 2017 through 2019.¹⁰ CBO's estimates of those effects on economic output reflect only the differences in deficits and debt between those paths and the agency's baseline projections.

Significantly changing the paths for revenues and non-interest spending from those projected to occur under current law would almost certainly involve altering people's incentives to work and save and changing the amount of federal investment, thereby affecting output. If so, the overall economic effects would depend on how

the policies underlying the specified paths altered those factors, as well as on the consequences of the changes in federal debt considered in this analysis. However, the estimates presented here do not incorporate such effects

10. Specifically, CBO combined results from its modeling approaches as follows: Estimates for fiscal year 2016 were based entirely on short-run economic effects; estimates for fiscal years 2017, 2018, and 2019 placed weights of 0.75, 0.50, and 0.25, respectively, on the short-run effects, and the remaining weights on the long-run effects on the capital stock and labor supply; and estimates for fiscal years 2020 and beyond were based entirely on effects on the capital stock and labor supply. For additional discussion of the agency's analytical methods, see Congressional Budget Office, *How CBO Analyzes the Effects of Changes in Federal Fiscal Policies on the Economy* (November 2014), www.cbo.gov/publication/49494.

because CBO did not analyze particular policies that might produce the specified paths. CBO assumed, for example, that effective marginal tax rates (the percentage of an additional dollar of income that is unavailable to an individual because it is paid in taxes or offset by reductions in benefits from government programs) would be the same under the specified paths as under the baseline. In addition, CBO's analysis incorporates the assumption that the paths do not change the contributions of federal investment to future productivity and output.¹¹ Thus, CBO's estimates of the macroeconomic effects of the specified paths reflect only the ways in which deficits and debt differ from those projected under the baseline.

What Would Budgetary Outcomes Be Over the Next 10 Years Under the Specified Paths?

Incorporating the interest savings and macroeconomic effects that would result from the paths for federal revenues and noninterest spending specified in the conference report on the 2016 budget resolution, the budget would be balanced in 2024, CBO estimates. Federal debt held by the public as a share of GDP would fall to 56 percent in 2025 under the specified paths, CBO projects—compared with 78 percent under the baseline, as adjusted for recently enacted legislation (see Figure 3). Declining levels of federal debt relative to GDP would have additional positive consequences beyond their effects on output and on the budget: Because federal debt would be much lower than under the baseline, policymakers would have more leeway to use tax and spending policies to respond to economic downturns or wars, and the risk of a fiscal crisis would be much smaller.

To incorporate economic effects into the analysis of budgetary outcomes, CBO generally used procedures it has used for similar long-term analyses in the past.¹² The agency estimated that increases in output would raise revenues, primarily because income and payroll taxes would rise with higher income. CBO also estimated that, over the long term, increases in output would boost spending for the government's retirement programs

11. For discussion of the long-term economic benefits of federal investment, see Congressional Budget Office, *Federal Investment* (December 2013), www.cbo.gov/publication/44974. See also Congressional Budget Office, *How CBO Analyzes the Effects of Changes in Federal Fiscal Policies on the Economy* (November 2014), pp. 9–10, www.cbo.gov/publication/49494.

(because of formulas used in those programs that link benefits to earnings) and spending for health care programs (in keeping with CBO's standard approach for projecting the long-term growth of health care costs). Decreases in output were estimated to have the opposite effects. For other types of noninterest spending, by contrast, CBO assumed that spending in the long run would be unaffected by changes in output. Over the first five years of the analysis, CBO also incorporated budgetary effects stemming from changes in output that arise from changes in overall demand. During that period, decreases in output were estimated to increase spending on programs such as unemployment insurance, and increases in output were estimated to have the opposite effect.

What Would the Long-Term Budgetary and Economic Effects Be Under the Specified Paths?

In addition to the paths specified in the conference report on the 2016 budget resolution, Chairman Enzi and Chairman Price specified paths for revenues and spending for years beyond 2025. For revenues, annual amounts after 2025 equal the amounts in CBO's extended baseline—which reflects the assumption that current laws and policies continue unchanged after 2025—until revenues reach 19 percent of GDP and then remain at 19 percent of GDP each year thereafter. For noninterest spending,

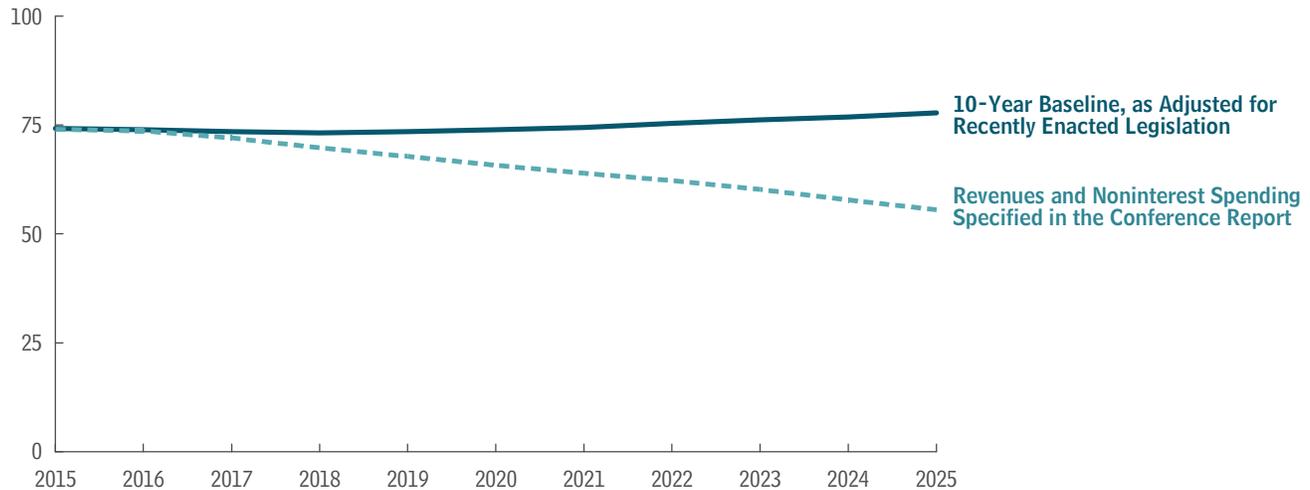
12. For example, see Congressional Budget Office, *Budgetary and Economic Outcomes Under Paths for Federal Revenues and Noninterest Spending Specified by Chairman Price, March 2015* (March 2015), www.cbo.gov/publication/49977, and *Budgetary and Economic Outcomes Under Paths for Federal Revenues and Noninterest Spending Specified by Chairman Enzi, March 2015* (March 2015), www.cbo.gov/publication/49976. (This analysis differs from the two published in March 2015 in that it incorporates the March 2015 baseline budget projections, as adjusted for recently enacted legislation, rather than the January 2015 budget baseline. Incorporating those more recent baseline budget projections has only minor effects on the analysis.)

For other examples, see Congressional Budget Office, *The 2014 Long-Term Budget Outlook* (July 2014), Chapter 6, www.cbo.gov/publication/45471, *Budgetary and Economic Outcomes Under Paths for Federal Revenues and Noninterest Spending Specified by Chairman Ryan, April 2014* (April 2014), www.cbo.gov/publication/45211, and *Macroeconomic Effects of Alternative Budgetary Paths* (February 2013), Appendix A, www.cbo.gov/publication/43769.

Figure 3.

Federal Debt Held by the Public Under Paths Specified in the Conference Report on the 2016 Budget Resolution, With Macroeconomic Effects and Under CBO's 10-Year Baseline, as Adjusted for Recently Enacted Legislation, 2015 to 2025

Percentage of Gross Domestic Product, by Fiscal Year



Source: Congressional Budget Office.

Notes: These results account for the following macroeconomic effects (or feedback): the ways in which changes in federal debt affect investment in capital goods (such as factories and computers), the ways in which changes in after-tax wages (resulting from changes in capital investment) affect the supply of labor, and the ways in which those economic effects in turn affect the federal budget. The analysis incorporates the assumption that the budget scenarios do not alter the contributions that government investment makes to future productivity and output.

CBO's **10-year baseline** generally adheres closely to current law. Projections under the baseline incorporate effects from changes over time in incentives to work or save under current law. The 10-year economic baseline used in this report refers to the projections for the economy that CBO released in January 2015. The 10-year budget baseline used in this report refers to the projections for the budget that CBO released in March 2015, as adjusted for recently enacted legislation.

The **paths for revenues and noninterest spending** specified in the conference report on the 2016 budget resolution reduce deficits (excluding interest payments) as a percentage of gross domestic product by increasing amounts over time relative to the 10-year baseline. The macroeconomic effects of those paths include the short-term effects of changes in demand for goods and services and the long-term effects of changes in federal debt. However, the estimates do not incorporate effects from any differences in incentives to work or save that might stem directly from differences in policies relative to those under the 10-year baseline because CBO did not analyze specific policies that might underlie those paths.

annual amounts hover around 16 percent in most years beyond 2025.

Under those longer-term paths, the budget would show a surplus after 2025, and debt would continue to fall relative to GDP. CBO estimates that debt would be in the neighborhood of 40 percent of GDP by 2030, 30 percent of GDP by 2035, and 20 percent of GDP by 2040, compared with 74 percent today. The reduction in debt relative to GDP under the specified paths would have increasingly positive effects on output, the budget, and the economy more broadly as compared with CBO's extended baseline. Under CBO's extended baseline, debt would continue to rise as a share of GDP.¹³

Decreased borrowing by the government under the specified paths would eventually increase private investment in productive capital because the portion of total saving that investors would have used to buy Treasury securities would instead be available to finance private investment. The result would be a larger stock of capital and higher output and income in the long term than

13. For detail on how CBO formulates an extended baseline that extends beyond 2025, see *Budgetary and Economic Outcomes Under Paths for Federal Revenues and Noninterest Spending Specified by Chairman Price, March 2015* (March 2015), www.cbo.gov/publication/49977.

would otherwise be the case. Higher income would increase tax revenues; it would also raise federal spending, though by a smaller amount, by increasing spending on health care and retirement programs over the long term.¹⁴

The smaller amount of federal debt that CBO projects under the specified paths would have significant positive consequences besides its effects on output and the economic feedback on the budget. Lower federal spending for interest on the debt would require smaller changes in tax and spending policies to meet any chosen targets for budget deficits and debt. At the same time, the government would have more flexibility to use tax and spending policies to respond to unexpected challenges, such as economic downturns or wars. In addition, the risk of a fiscal crisis—in which investors would demand very high interest rates to finance the government's borrowing needs—would be reduced.

How Uncertain Are the Projected Outcomes?

The projections for federal debt and economic output presented in this report are highly uncertain because of the difficulties inherent in any budgetary and economic projections and the difficulties in projecting the effects of changes in federal fiscal policies on the economy.

The projections of economic effects are based on CBO's central estimates for key parameters of economic behavior—including the extent to which government borrowing crowds out capital investment in the long run and the effect that changes in real after-tax wages have on the supply of labor. Estimates of those and other economic parameters are uncertain, and analysis using different parameters can produce results that are substantially higher or lower than CBO's central estimates. For example, under the ranges of estimates that CBO uses for the

crowding out of investment and the responsiveness of the labor supply, the estimated increase in real GNP in 2025 under the specified paths, relative to the amount projected under the baseline, would be between 0.8 percent and 2.0 percent.

This type of analysis is also sensitive to other uncertain factors. As an example, differences in future interest rates would alter the rate at which decreases or increases in deficits would cumulate to differences in debt over time. Moreover, the macroeconomic effects of the specified paths could differ from the estimates reported here because of the particular policies chosen to achieve those budgetary outcomes and the ways in which households and businesses responded to those policies.

This Congressional Budget Office report was prepared at the request of the Chairman of the Senate Budget Committee, Senator Mike Enzi, and the Chairman of the House Budget Committee, Congressman Tom Price. In keeping with CBO's mandate to provide objective, impartial analysis, the report makes no recommendations.

Alexander Arnon, Devrim Demirel, Jeffrey Holland, Jonathan Huntley, Leah Loversky, Benjamin Page, Felix Reichling, Frank Russek, Michael Simpson, and Julie Topoleski prepared the report or contributed to the analysis, with guidance from Wendy Edelberg. Theresa Gullo, Kim Kowalewski, Sam Papenfuss, and David Weiner provided helpful comments.

Jeffrey Kling and Robert Sunshine reviewed the report, Loretta Lettner edited it, and Jeanine Rees prepared it for publication. An electronic version is available on CBO's website (www.cbo.gov/publication/50115).



Keith Hall
Director



14. Federal spending would be higher if income was higher because Social Security benefits are linked to earnings and because spending on health care tends to vary with total income over the long term. This analysis incorporates the assumption that other noninterest spending would be unaffected by changes in income.