



CONGRESSIONAL BUDGET OFFICE  
U.S. Congress  
Washington, DC 20515

*Douglas W. Elmendorf, Director*

March 23, 2012

Honorable Paul Ryan  
Chairman  
Committee on the Budget  
U.S. House of Representatives  
Washington, DC 20515

Dear Mr. Chairman:

The explosive path of federal debt that the Congressional Budget Office (CBO) projects under what many observers would view as current policies underscores the need for policy changes to put the nation on a sustainable course.

The aging of the population and rising costs for health care will push spending for Social Security, Medicare, Medicaid, and other federal health care programs considerably higher as a percentage of gross domestic product (GDP). If that rising level of spending is coupled with revenues that are held close to the average share of GDP that they have represented for the past 40 years, the resulting budget deficits will increase federal debt to unsupportable levels. To prevent that outcome, policymakers will need to increase revenues substantially relative to GDP, decrease spending significantly from projected levels, or adopt some combination of those two approaches.

Allowing changes that are scheduled under current law to take effect—including the expiration of tax cuts that originally went into effect in 2001 and 2003—is one of many possible approaches for preventing deficits from growing in an unsustainable way. Under that approach, which is the assumption about future policy that underlies CBO's baseline projections, federal revenues would increase sharply, and federal spending would be restrained somewhat relative to what would occur under current policies; both the revenues and spending of the federal government would be well above their historical averages as a share of GDP.

You asked CBO to examine two other approaches: an across-the-board increase in income tax rates and an across-the-board reduction in spending other than that for health care entitlement programs. The former approach would require revenue increases even greater than those in CBO's current-law baseline, and the latter would require very sharp cuts in other federal programs.

### **The Long-Term Budget Outlook**

CBO's most recent long-term budget projections were issued in June 2011, in *CBO's 2011 Long-Term Budget Outlook*. Those projections included two scenarios—an extended baseline scenario, which adhered closely to current law at that time, and an alternative fiscal scenario, which incorporated several changes to law that were widely expected to occur or that would modify some provisions of law that might be difficult to sustain for a long period.

Since the release of *CBO's 2011 Long-Term Budget Outlook*, the agency has updated its budget projections spanning the next 10 years to incorporate changes in law and updates in the agency's economic forecast and technical estimating procedures. CBO's most recent projections for the next decade were presented in *Updated Budget Projections: Fiscal Years 2012 to 2022* (March 2012), including both a baseline and an alternative fiscal scenario. For the long-term calculations discussed here, CBO has incorporated those 10-year projections and, for years beyond 2022, has used the interest rates and growth rates for spending and revenues for the two scenarios in last year's *Long-Term Budget Outlook*. The result is interim versions of CBO's long-term projections, encompassing both an extended baseline scenario and an extended alternative fiscal scenario, as follows:

- Under the baseline scenario, revenues are projected to rise from 15½ percent of GDP in 2011 to 21¼ percent in 2023 and 26¼ percent by 2050.<sup>1</sup> Spending apart from interest payments on the debt is projected to rise from 22½ percent of GDP in 2011 to 24½ percent in 2050. Consequently, projected deficits are in the range of 1 percent to 2 percent of GDP for much of that period, and federal debt is projected to decline from 68 percent of GDP in 2011 to 40 percent by 2050.<sup>2</sup>
  
- In contrast, under the alternative fiscal scenario, debt is expected to rise sharply, climbing to 96 percent of GDP by 2023 and over 200 percent by 2050. Debt rises rapidly under that scenario because noninterest spending is increasing as a share of GDP while revenues are not. Specifically, noninterest spending is projected to rise from 22½ percent of GDP to 26 percent between 2011 and 2050, while revenues are projected to remain at about 18½ percent of GDP throughout most of that period. With steadily rising debt service costs, the annual deficit is projected to reach 21 percent of GDP by 2050.

In both scenarios, the rising costs of health care programs play a major role in boosting federal spending over time. From 5 percent of GDP in 2011, spending for Medicare, Medicaid, the Children's Health Insurance Program, and subsidies

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<sup>1</sup> This letter provides various figures for 2023 because that is the first year not included in CBO's reports on its 10-year projections.

<sup>2</sup> For details on CBO's interim long-term budget estimates, see Congressional Budget Office, *The Long-Term Budgetary Impact of Paths for Federal Revenues and Spending Specified by Chairman Ryan* (March 2012).

for the purchase of insurance through exchanges established under the Affordable Care Act is projected to grow to roughly 11 percent or 12 percent of GDP in 2050.

In June, CBO plans to release fully updated versions of both scenarios consistent with the recent 10-year projections and incorporating updates to the long-term economic outlook and to CBO's technical estimating procedures. The results discussed here stop in 2050 because uncertainty about the economy and the budgetary effects of given policies in the more distant future makes calculations beyond that point less meaningful.

The budget estimates that CBO presents here are based on benchmark economic projections. CBO's benchmark projections are not intended as a forecast of the path of the economy under any of the scenarios that CBO considers but, rather, are meant to serve as a stable economic foundation for comparing the direct budgetary effects of alternative policies.<sup>3</sup> For the first 10 years, the benchmark projections are CBO's most recent economic projections, which were presented in *The Budget and Economic Outlook: Fiscal Years 2012 to 2022* (January 2012). After 2022, they incorporate an assumption of a stable ratio of debt to GDP and a continuation of historical economic trends.

### **Three Alternative Policies for Achieving Sustainable Debt Levels**

Different combinations of tax increases and spending reductions could reduce budget deficits and prevent the rapid rise in debt that would occur if most current tax and spending policies were continued, as under the extended alternative fiscal scenario. The extended baseline scenario is one such combination, as are the two broad policies you asked CBO to examine: an across-the-board increase in income tax rates and an across-the-board reduction in spending for the government's programs and activities other than its health care entitlement programs.

In order to compare those alternative policies, it is useful to have each alternative policy achieve the same ratio of debt to GDP. Because debt follows a sustainable path under the baseline scenario (reaching 40 percent of GDP by 2050, similar to the average U.S. debt as a percentage of GDP from 1950 to 2008), CBO calculated the increases in taxes and the reductions in spending necessary under the other policies to match the deficit and debt levels under the baseline scenario.

**Extended Baseline Scenario.** Under the baseline scenario, revenues would be higher and spending lower than under the alternative fiscal scenario. At 26¼ percent of GDP by 2050, revenues under the baseline scenario would be well above their average of about 18 percent over the past 40 years. Households would face a tax system that is quite different from what it is today. The scheduled expiration of various tax reductions would boost receipts over the next

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<sup>3</sup> For more discussion, see Congressional Budget Office, *CBO's 2011 Long-Term Budget Outlook* (June 2011), Chapter 2.

several years, as would the scheduled tax increases enacted in the Affordable Care Act. Further increases in revenues would occur in the long run; between 2022 and 2050, revenues are projected to rise by about 5¼ percent of GDP. Although statutory income tax rates would not increase over that period under the baseline scenario, rising real incomes would push an ever-larger proportion of income into higher tax brackets, raising average tax rates (that is, taxes paid as a share of income) and tax revenues. In addition, rising real incomes would increase taxes by reducing the value of various exclusions, deductions, and credits, because certain parameters of the tax system are either specified as fixed dollar amounts or indexed with inflation and therefore do not keep pace with growth in real incomes. Most especially, because the individual alternative minimum tax (AMT) is not indexed for inflation, a rising portion of taxpayers would be subject to the AMT under the baseline scenario. All told, households at all points on the income scale would pay a higher share of their income in taxes than similar households pay today, and a much larger share of households would be subject to the AMT.

The baseline scenario also includes several policies that would constrain the growth of spending relative to what is projected under the alternative fiscal scenario. Among those are the substantial reductions scheduled to occur in Medicare's payment rates for physicians' services and the automatic spending reductions required by the Budget Control Act from fiscal years 2013 through 2021.

Debt as a share of GDP would decline moderately in the baseline scenario, implying slightly more private investment relative to that in CBO's benchmark economic projections. Slightly higher investment would lead to slightly higher output; by 2050, CBO estimates, gross national product (GNP) would be 1 percent to 2 percent higher in the baseline scenario than under the benchmark economic projections.<sup>4</sup>

**Raising Income Tax Rates.** The amount of deficit reduction that various policy changes would need to achieve in order to bring the debt under the alternative fiscal scenario down to the amounts under the baseline scenario is the difference between the primary deficits under the two scenarios (that is, the difference in deficits excluding interest payments on the debt). That difference grows from

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<sup>4</sup> GNP differs from GDP primarily by including the income that U.S. residents earn from their investments abroad and excluding the income that nonresidents earn from their investments in this country. In the context of this analysis of debt, GNP provides a more complete measure of the total income of U.S. residents.

The cited estimates account for long-run effects of government debt on the economy. Other economic effects of budgetary policies include the effects of marginal tax rates on incentives to work and save, the effect of government transfer programs on work and saving, and the effect of productive government investment on output over the long run. Those other effects were not incorporated into the estimates presented here. For additional information, see Congressional Budget Office, *The Long-Term Budgetary Impact of Paths for Federal Revenues and Spending Specified by Chairman Ryan* (March 2012).

3¾ percent of GDP in 2023 to 9½ percent by 2050. If that gap was to be closed entirely by increasing tax collections, total revenues would have to rise to about 22 percent of GDP in 2023 and to 28 percent by 2050 (see Figure 1).<sup>5</sup>

Under the alternative fiscal scenario, individual and corporate income tax revenues together are projected to account for roughly 60 percent of total revenues and about 11 percent of GDP for years after 2022. Therefore, if policymakers chose to close the gap in primary deficits between the alternative fiscal scenario and the baseline scenario in 2023 entirely by boosting receipts from income taxes, revenues from those taxes would have to be increased by 33 percent.<sup>6</sup> Because the gap in primary deficits between the two scenarios would continue to grow after 2023, the necessary percentage increase in income taxes would also continue to grow, amounting to 48 percent in 2030 and 86 percent in 2050.

A proportional increase in all statutory individual and corporate income tax rates would yield a roughly proportional increase in revenues from income taxes (before any changes in taxpayers' behavior and other feedback effects of tax increases were factored in). For example, achieving a 33 percent increase in income tax revenues would require roughly a 33 percent increase in income tax rates. If such an increase was applied to current individual income tax rates, the 15 percent rate would increase to about 20 percent, the 28 percent rate to about 37 percent, and the 35 percent rate to about 47 percent; if such an increase was applied to current corporate income tax rates, the 35 percent top corporate rate would increase to about 47 percent. By 2050, the individual income tax rates of 15 percent, 28 percent, and 35 percent would need to rise to about 28 percent, 52 percent, and 65 percent, respectively, and the 35 percent corporate income tax rate would need to rise to about 65 percent.

However, taxpayers would respond to higher individual and corporate marginal tax rates in ways that would result in revenue increases that were less than proportional to the rate increases. Taxpayers would be expected to respond by:

- Changing the timing of their activities (such as accelerating bonus payments or asset sales into a certain year if they thought that tax rates on earnings or capital gains would rise in future years);
- Adjusting the form of their activities (such as substituting tax-preferred fringe benefits for cash wages if the tax rate on wages went up); or

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<sup>5</sup> Tax revenues need to be higher under this scenario than under the baseline scenario because, under the baseline scenario, restraints on noninterest spending would help to reduce deficits relative to those under the alternative fiscal scenario.

<sup>6</sup> The necessary percentage increase is calculated by taking the difference in primary deficits as a percentage of GDP between the alternative fiscal scenario and the baseline scenario (3¾) and dividing that number by receipts from income taxes as a percentage of GDP (11 percent) under the alternative fiscal scenario.

- Changing more-fundamental aspects of their behavior (such as choosing to work or save less if tax rates on earnings or capital income rose).

Increases in tax rates of the magnitudes just described could have a significant impact on the economy. Raising marginal tax rates by 33 percent, 48 percent, or 86 percent would probably lead to much lower output and income than the amounts in CBO's long-term economic benchmark. Debt as a share of GDP would be slightly lower under this policy than in CBO's benchmark economic projections, which would tend to raise output (as discussed for the baseline scenario above). However, that effect would be outweighed by the sharply higher tax rates under this scenario. Because the loss in output and income would, in turn, reduce revenues, the required increases in tax rates would need to be much larger than the increases calculated without accounting for feedback effects.

Alternatively, revenues could be increased in ways other than raising statutory income tax rates—for example, by broadening the income tax base. Indeed, the tax base is effectively broadened under the extended baseline scenario, as a larger share of households becomes subject to the AMT, which has a broader base than the regular individual income tax (although effective marginal tax rates are also effectively increased in that scenario through the channels described above). CBO has not analyzed the long-term effects of a policy that would raise revenues entirely by broadening the tax base.

**Reducing Spending Other Than That for Health Care Entitlements.** Under the alternative fiscal scenario, spending other than that for health care entitlements and interest would equal about 14 percent of GDP from 2023 through 2050. Roughly 40 percent of that spending would be for Social Security. If policymakers chose to close the gap in primary deficits between the alternative fiscal scenario and the baseline scenario entirely by cutting such spending, it would need to be reduced by 26 percent in 2023, 36 percent by 2030, and 66 percent by 2050. With reductions like that, spending other than that for health care entitlements and interest would fall to about 5 percent of GDP in 2050, compared with its average share during the past 40 years of about 16 percent. Debt as a share of GDP would be slightly lower under this policy than in CBO's benchmark economic projections, which would tend to raise output (as discussed for the baseline scenario above). However, the drastic reductions in federal spending other than that for health care entitlements and interest could reduce output. For example, cutting spending on roads, highways, and other physical infrastructure could lower output in ways similar to the effects of cuts in private capital investment. Similarly, cutting federal support for education, such as loans or grants for attending college, could lower long-term productivity by reducing people's skills.<sup>7</sup>

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<sup>7</sup> For more discussion of those effects, see Congressional Budget Office, [letter to the Honorable Tim Huelskamp, responding to questions about the effects of government spending on economic growth](#) (August 11, 2011).

Honorable Paul Ryan  
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I hope that this information is helpful to you. If you have any questions, please contact me or CBO staff. The primary staff contact for this report is David Weiner.

Sincerely,

A handwritten signature in black ink that reads "Douglas W. Elmendorf". The signature is written in a cursive style with a large, sweeping "D" and "E".

Douglas W. Elmendorf  
Director

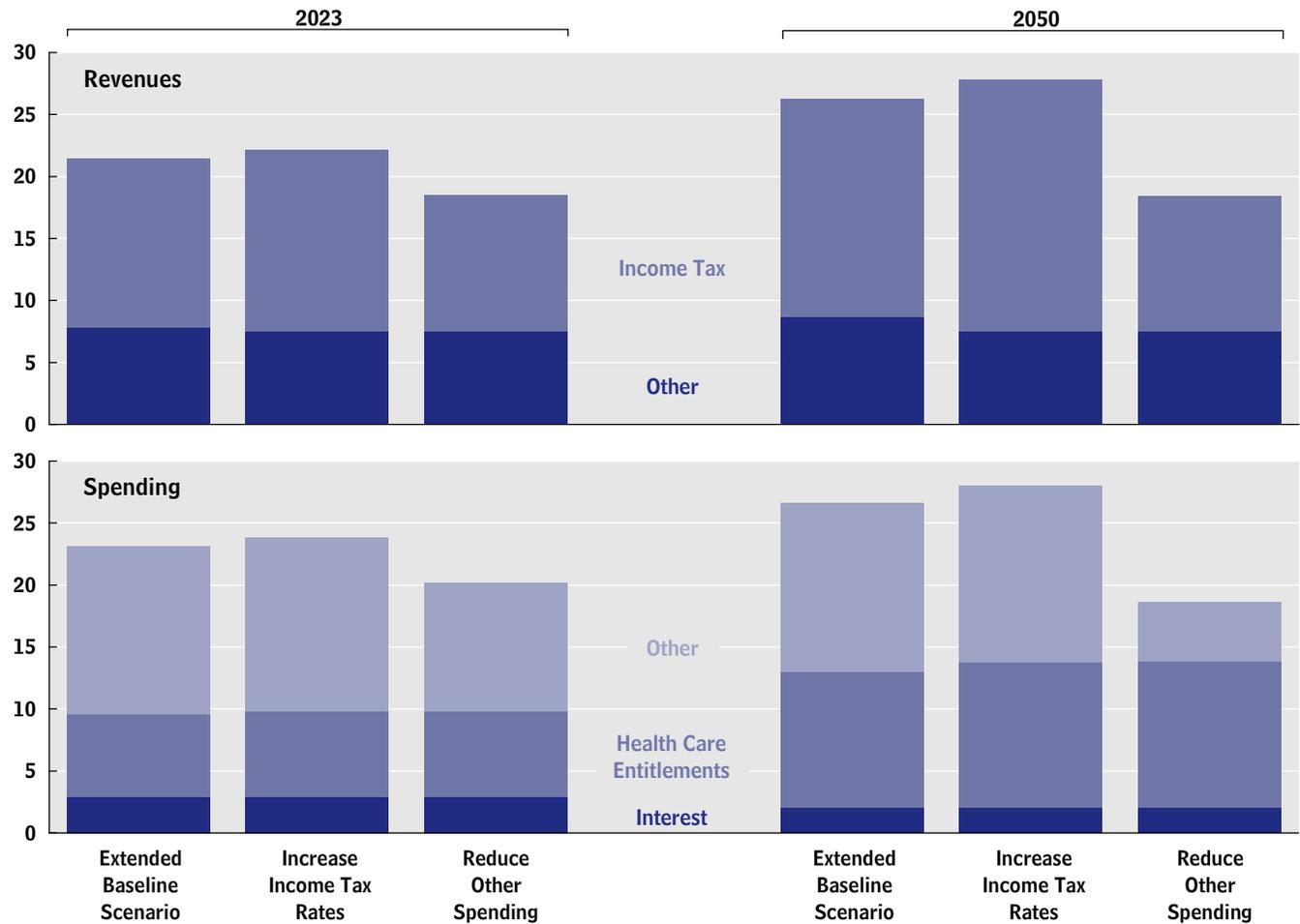
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cc: Honorable Chris Van Hollen  
Ranking Member

**Figure 1.**

## Revenues and Spending Under the Extended Baseline Scenario and Two Alternatives That Target the Same Amount of Debt

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Notes: The alternative that would raise income tax rates would keep other revenues and noninterest spending the same as they are under CBO's extended alternative fiscal scenario. The alternative that would reduce other spending would keep revenues and health care entitlement spending the same as they are under CBO's extended alternative fiscal scenario.

Income taxes include corporate and individual taxes.