



The Federal Government's Long-Term Fiscal Outlook

January 2011 Update

GAO's Long-Term Fiscal Simulations

Since 1992, GAO has published long-term fiscal simulations showing federal deficits and debt levels under different sets of assumptions. GAO developed its long-term model in response to a bipartisan request from Members of Congress concerned about the long-term effects of fiscal policy. GAO's simulations provide a broad context for consideration of policy options by illustrating both the importance of taking action and the magnitude of the steps necessary to change the path. They are not intended to suggest particular policy choices but rather to help facilitate a dialogue on this important issue.

As in the past, GAO shows two simulations: "Baseline Extended" and an "Alternative."

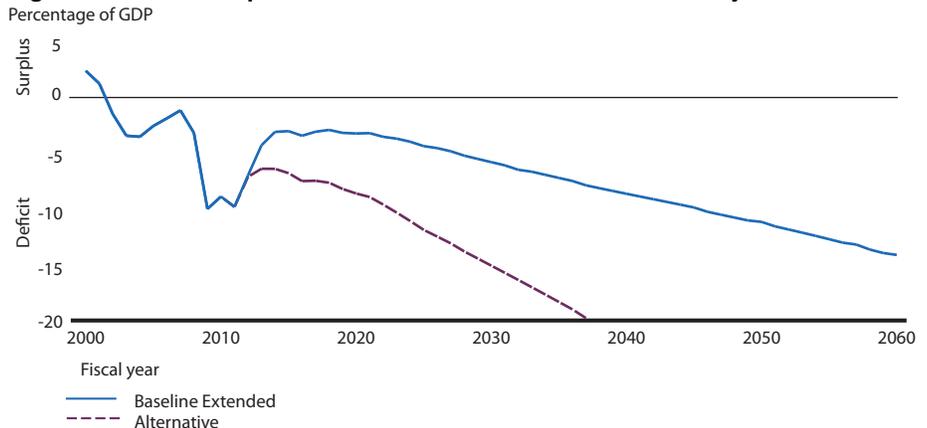
The **Baseline Extended** follows the Congressional Budget Office's (CBO) January 2011 baseline estimates for the first 10 years and then simply holds revenue and spending other than interest on the debt and the large entitlement programs (Social Security, Medicare, and Medicaid) constant as a share of gross domestic product (GDP). Revenue as a share of GDP over the entire period is higher than the historical average; discretionary spending is below average.

In the **Alternative** simulation, tax provisions other than the temporary Social Security payroll tax reduction are extended to 2021 and the alternative minimum tax (AMT) exemption amount is indexed to

(Continued on the following page.)

As the U.S. economy slowly recovers from the most severe recession in several decades, GAO's long-term simulations underscore the need to begin addressing the long-term federal fiscal outlook. The recent economic downturn and the federal government's response caused budget deficits in the last 3 years to rise to levels not seen since World War II. However, the structural imbalance between spending and revenue paths in the federal budget predates the financial crisis and economic downturn. GAO's long-term simulations show that even as the economy recovers and policies to stimulate the economy wind down, the outlook is for large and growing deficits. Absent policy changes, budget deficits decline slightly under GAO's Alternative simulation before returning to recent highs in little over 10 years and increasing continually thereafter (see fig. 1).

Figure 1: Federal Surpluses and Deficits under Two Fiscal Policy Simulations



Source: GAO.

Note: Data are from GAO's January 2011 simulations based on the Trustees' assumptions for Social Security and the Trustees' and the CMS Actuary's assumptions for Medicare.

In both simulations, the accumulation of large budget deficits leads to an unsustainable increase in debt over the long term. In GAO's Alternative simulation, for instance, debt held by the public exceeds the post-World War II high of 109 percent of GDP by 2021 and continues to grow thereafter. Debt at these levels also would limit budget flexibility, affecting the federal government's ability to respond to a future economic downturn or financial crisis. The longer action to deal with the nation's long-term fiscal outlook is delayed, the greater the magnitude of the changes needed and the risk that the eventual changes will be disruptive and destabilizing.

The document was revised on March 22, 2011, to correct text on page 2. The corrected sentence now reads "Debt held by the public increases more rapidly in the near term in our Alternative simulation largely because expiring tax provisions are extended and discretionary spending grows with GDP, whereas in the Baseline Extended simulation, tax provisions expire as scheduled under current law and discretionary spending grows with inflation."

inflation through 2021; revenues are then brought back to the historical average as a share of GDP; discretionary spending other than Recovery Act provisions grows with GDP during the entire period—keeping it just below the 40-year historical average as a share of GDP.

Both simulations are run using two different projections for Social Security and the major health entitlements. For Baseline Extended, GAO uses (1) the Social Security and Medicare Trustees' (Trustees) 2010 intermediate projections and (2) the CBO long-term projections that are closest to current law. For the Alternative, projections for the major health entitlement programs are based on (1) the Centers for Medicare & Medicaid Services Office of the Actuary's (CMS Actuary) alternative projections, which assume that certain cost containment mechanisms intended to slow the growth of health care cost are not sustained, and (2) the CBO alternative long-term projections, which assume that some of the policies intended to restrain growth in health care spending do not continue after 2020. Medicare physician rates in both the CMS Actuary and CBO alternative projections are not reduced as in CBO's baseline.

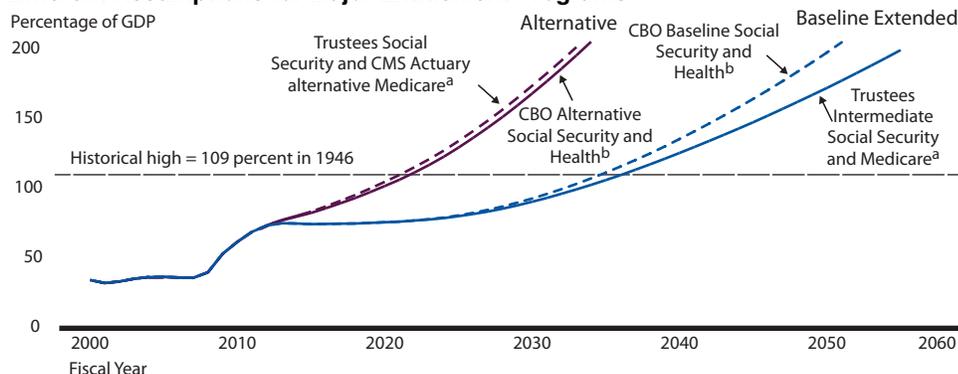
GAO also calculates the fiscal gap—the size of action that must be taken to stabilize debt at the current share of GDP.

Additional information on the federal fiscal outlook, federal debt, and the outlook for the state and local government sector is available at www.gao.gov/special.pubs/longterm/.

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The timing of deficits and the resulting debt buildup varies depending on the assumptions used. Debt held by the public increases more rapidly in the near term in our Alternative simulation largely because expiring tax provisions are extended and discretionary spending grows with GDP, whereas in the Baseline Extended simulation, tax provisions expire as scheduled under current law and discretionary spending grows with inflation. In both simulations, federal spending over the long term is driven largely by rising health care costs and an aging population, which increase spending for major federal social insurance programs (e.g., Social Security and Medicare). As in previous updates, GAO shows the Baseline Extended simulation using both Trustees and CBO estimates for long-term spending on Social Security and major health entitlement programs (Medicare, Medicaid, and others). In addition, GAO shows its Alternative simulation using different assumptions about the sustainability of certain health care cost containment provisions based on CBO and CMS Actuary alternative projections. As figure 2 shows, the results under either set of assumptions are unsustainable.

Figure 2: Debt Held by the Public under Two Fiscal Policy Simulations with Different Assumptions for Major Entitlement Programs



Source: GAO.

^aMedicaid, Children's Health Insurance Program (CHIP), and exchange subsidies spending in these simulations is based on CBO's June 2010 projections adjusted to reflect excess cost growth consistent with the Trustees' intermediate projections in the Baseline Extended and the CMS Actuary's alternative projections in the Alternative simulation.

^bFor these simulations, we use CBO's most recent long-term projections for Social Security and major health entitlements from CBO's *The Long-Term Budget Outlook* (June 2010) and *2010 Long-Term Projections for Social Security: Additional Information* (October 2010).

Rising health care costs and the aging of the U.S. population have already begun to affect the federal budget, and their effect is expected to increase in coming decades as more members of the baby boom generation continue to retire and more people become eligible for federal health programs. (See table 1.) For example, the Social Security program, which has historically run large cash surpluses that helped reduce the government's need to borrow from the public to finance other programs, paid more in benefits than it received in tax income in fiscal year 2010 for the first time in more than 25 years. While the near-term shortfall in Social Security is largely due to the economic slowdown, which reduced revenue and increased enrollment for disability benefits, CBO now projects that the program will continue running cash deficits into the future. This will contribute to the government's borrowing needs, putting additional pressure on the rest of the budget.

Table 1: Challenges Affecting the Federal Budget in the Near Term

2008	Oldest members of the baby boom generation became eligible for early Social Security retirement benefits
2008	Medicare Hospital Insurance outlays exceeded cash income
2010	Social Security runs first cash deficit in more than 25 years
2011	Oldest members of the baby boom generation become eligible for Medicare
2021	Debt held by the public under GAO's Alternative simulation exceeds the historical high reached in the aftermath of World War II

Source: GAO.

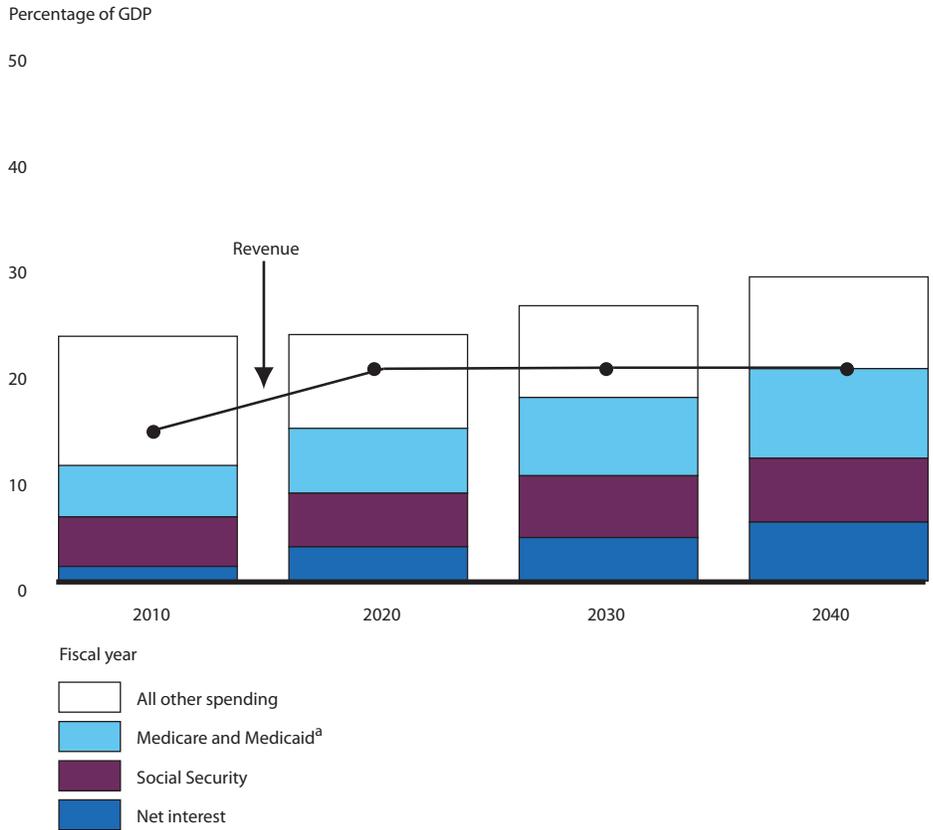
Meanwhile, federal health care spending continues to grow faster than GDP. The Patient Protection and Affordable Care Act contained a number of provisions designed to control the growth of health care costs.¹ The full implementation and effectiveness of these cost control provisions, which are reflected in the Baseline Extended simulation, would markedly improve the long-term outlook. However, the Trustees, CBO, and the CMS Actuary have expressed concerns about the sustainability of certain cost control measures over the long term. For example, they have questioned whether a provision that would restrain spending growth by reducing the payment rates for certain Medicare services based on productivity gains observed throughout the economy is sustainable over the long term. These concerns are reflected in our more pessimistic Alternative simulation, which, consistent with CBO and CMS Actuary alternative projections, assumes a breakdown in certain of these cost control mechanisms after 2020 and a return to historical rapid health care spending growth rates.

¹Pub. L. No. 111-148, 124 Stat. 119 (Mar. 23, 2010), *as amended by* Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152, 124 Stat. 1029 (Mar. 30, 2010).

Figures 3 and 4 look more broadly at how the different assumptions in the Baseline Extended and Alternative simulations affect revenue and the composition of federal spending. In the Baseline Extended, discretionary spending is lower as a share of the economy and revenues are higher than the 40-year historical averages. In the Alternative, discretionary spending and revenue as a share of the economy are close to the 40-year historical averages. In both of these simulations a greater share of federal spending will need to be financed through borrowing over time and interest on the federal debt held by the public will account for a growing share of the economy. The figures illustrate some of the difficult trade-offs that policymakers will have to consider in order to rebalance the federal government's fiscal position.

Figure 3 shows revenue and the composition of spending under the Baseline Extended simulation. In this simulation, by 2030 there will be little room for "all other spending," which consists of what many think of as "government," including national defense, homeland security, investment in highways and mass transit and alternative energy sources, plus the smaller entitlement programs such as Supplemental Security Income, Temporary Assistance for Needy Families, and farm price supports.

Figure 3: Potential Fiscal Outcomes under the Baseline Extended Simulation: Revenues and Composition of Spending



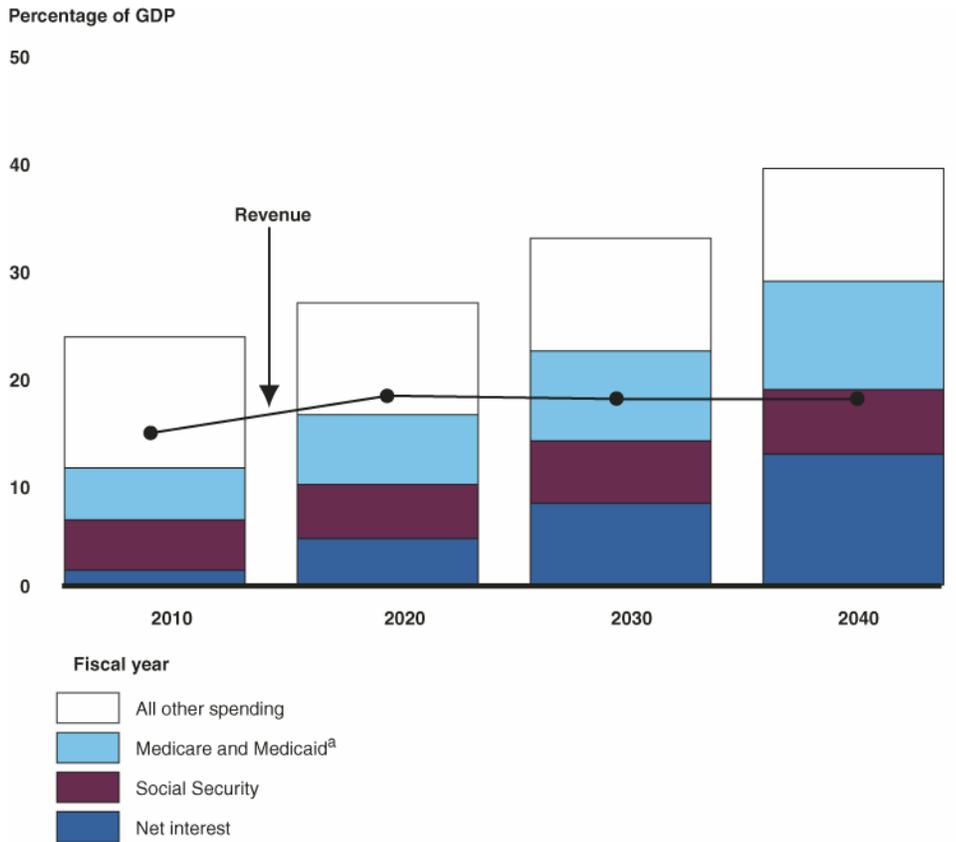
Source: GAO.

Note: Data are from GAO's January 2011 simulations based on the Trustees' assumptions for Social Security and Medicare.

^aThis also includes spending for insurance exchange subsidies and CHIP.

Figure 4 shows revenue and the composition of spending under our Alternative simulation. In this simulation, roughly 89 cents of every dollar of federal revenue will be spent on net interest costs, Social Security, Medicare, and Medicaid by 2020. By about 2030, net interest payments on the federal government's accumulating debt held by the public will be almost 8 percent of GDP and would be the largest single expenditure in the federal budget.

Figure 4: Potential Fiscal Outcomes under the Alternative Simulation: Revenues and Composition of Spending



Source: GAO.

Note: Data are from GAO's January 2011 simulations based on the Trustees' assumptions for Social Security and the CMS Actuary's assumptions for Medicare.

^aThis also includes spending for insurance exchange subsidies and CHIP.

The Longer Action Is Delayed, the Larger the Changes Necessary

There are many ways to describe the federal government's long-term fiscal challenge. One method for capturing the challenge in a single number is to measure the "fiscal gap." The fiscal gap represents the difference, or gap, between revenue and noninterest spending in present value terms over a certain period, such as 75 years, that would need to be closed in order to achieve a specified debt level (e.g., today's debt to GDP ratio) at the end of the period. From the fiscal gap, one can calculate the size of action needed—in terms of tax increases, spending reductions, or, more likely, some combination of the two—to close the gap. That is, one can calculate the size of action needed for debt held by the public as a share of GDP to equal today's ratio at the end of the period. For example, under our

Alternative simulation, the fiscal gap is 9.6 percent of GDP (or nearly \$99.4 trillion in present value dollars) (see table 2).² This means that on average over the next 75 years revenue would have to increase by more than 50 percent or noninterest spending would have to be reduced by about 35 percent (or some combination of the two) to keep debt held by the public at the end of the period from exceeding its level at the beginning of 2011 (roughly 62 percent of GDP). Even more significant changes would be needed to reduce debt to the level it was at just a few years ago or the 40-year historical average.

Table 2: Federal Fiscal Gap under GAO’s Simulations Based on the Trustees’ Assumptions, 2011–2085

	Fiscal gap		Average percentage change required to close gap			
			If action is taken today		If action is delayed until 2021	
	Trillions of present value 2011 dollars	Percentage of GDP	Solely through increases in revenue	Solely through decreases in noninterest spending	Solely through increases in revenue	Solely through decreases in noninterest spending
Baseline Extended	31.9	3.1	14.9	13.1	17.4	15.2
Alternative	99.4	9.6	53.5	35.2	62.9	40.2

Source: GAO.

Note: Data are from GAO’s January 2011 simulations based on the Trustees’ assumptions for Social Security and the Trustees’ and CMS Actuary’s assumptions for Medicare.

Policymakers could phase in the policy changes over time allowing for the economy to fully recover and for people to adjust to the changes. However, the longer action to deal with the nation’s long-term fiscal outlook is delayed, the greater the risk that the eventual changes will be disruptive and destabilizing. Under our Alternative simulation, waiting even 10 years would increase the fiscal gap to more than 11 percent of GDP—meaning a revenue increase of about 63 percent or a noninterest spending cut of about 40 percent or some combination of the two would be required to bring debt held by the public back to today’s level by 2085. Even more significant changes would be needed to reduce debt to the level it was at just a few years ago or the 40-year historical average.

²Present value calculations take into account the time value of money by discounting future revenue and spending to reflect the equivalent amount needed today in current dollars. These calculations are sensitive to changes in interest rates, and a portion of the increase in the fiscal gap since our Fall 2010 update (GAO-11-201SP) is caused by a small decline in our long-term interest rate assumption. More information on interest rates and other economic assumptions in our simulations can be found on page 11.

Changes since the Last Update

This update incorporates CBO's most recent baseline projections that were released in January 2011.³ Reflected in this baseline is legislation enacted in 2010 that temporarily extended unemployment benefits and many expiring tax provisions and temporarily reduced employees' share of the Social Security payroll tax.⁴ This legislation reduces revenues and increases spending in our Baseline Extended simulation in 2011 and 2012, resulting in an increase in near-term debt held by the public. We assume in the Baseline Extended simulation that these temporary provisions expire as scheduled under current law. Consistent with past updates, we assume in our Alternative simulation that expiring tax provisions are extended for the first 10 years. The exception is the temporary payroll tax reduction, which expires as scheduled in both simulations.

Concluding Observations

The United States is slowly recovering from the most severe recession since World War II. The economic downturn along with the federal government's response to it and other actions taken to stabilize financial markets contributed to a rapid build up in federal debt held by the public—increasing from roughly 36 percent of GDP at the end of 2007 to roughly 62 percent at the end of 2010—adding to the size and urgency of the federal government's long-term fiscal challenge. While the economy is still recovering and in need of careful attention, our long-term simulations continue to underscore the need to change the longer-term fiscal trajectory. Absent policy changes, our simulations indicate that the federal government faces a rapid and unsustainable growth in debt. Addressing the long-term fiscal challenge will not be either easy or quick. It will likely require difficult decisions affecting both federal spending and revenue. However, delaying action increases the magnitude of the changes needed and hence the probability that the changes will be more drastic and therefore more disruptive to individuals and the economy as a whole. Policymakers could develop a plan in the short term that could be phased in over time to allow for the economy to fully recover and for people to adjust to the changes. However, with the passage of time, the window to develop and implement such a plan narrows.

³This report is available at www.cbo.gov.

⁴Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Pub. L. No. 111-312, 124 Stat. 3296 (Dec. 17, 2010).

Key Assumptions in Our Federal Simulations

Table 3 lists the key assumptions incorporated in the Baseline Extended and Alternative simulations for the simulations based on the Trustees' assumptions for Social Security and the Trustees' and CMS Actuary's assumptions for Medicare.

Table 3: Assumptions for Baseline Extended and Alternative Simulations Based on the Trustees' assumptions for Social Security and the Trustees' and CMS Actuary's Assumptions for Medicare

Model inputs	Baseline Extended	Alternative
Revenue	CBO's January 2011 baseline through 2021; thereafter remains constant at 20.8 percent of GDP (CBO's projection in 2021)	CBO's estimates assuming expiring tax provisions other than the temporary Social Security payroll tax reduction are extended through 2021 and the 2011 AMT exemption amount is indexed to inflation for years 2012-2021; thereafter is phased into the 40-year historical average of 18.0 percent of GDP
Social Security spending	CBO's January 2011 baseline through 2021; thereafter based on 2010 Social Security Trustees' intermediate projections adjusted to reflect wage growth implied in GAO's simulations	Same as Baseline Extended
Medicare spending	CBO's January 2011 baseline through 2021 that assumes cuts in physician payment rates will occur as scheduled under current law; thereafter 2010 Medicare Trustees' intermediate projections	Based on CMS Actuary's alternative scenario that assumes that physician payment rates grow with inflation (using the Medicare Economic Index) ^a and policies that would restrain spending growth begin to phase out after 2019
Medicaid, CHIP, and exchange subsidies spending	CBO's January 2011 baseline through 2021; thereafter CBO's June 2010 long-term projections adjusted to reflect excess cost growth consistent with the 2010 Medicare Trustees' intermediate projections	CBO's January 2011 baseline through 2021; thereafter CBO's June 2010 projections adjusted to reflect excess cost growth consistent with CMS Actuary's alternative scenario and CBO's alternative assumption that a policy that would slow the growth of subsidies for health insurance coverage is not in effect
Other mandatory spending	CBO's January 2011 baseline through 2021; thereafter remains constant as a share of GDP at 2.2 percent of GDP (implied by CBO's projection in 2021)	Baseline Extended adjusted for extension of certain tax credits through 2021; thereafter is phased back to 2.2 percent of GDP by 2025 (same as Baseline Extended)
Discretionary spending	CBO's January 2011 baseline through 2021; thereafter remains constant at 6.7 percent of GDP (CBO's projection in 2021)	Discretionary spending other than Recovery Act spending grows with GDP after 2011 (i.e., remains constant at 8.6 percent of GDP); Recovery Act provisions included but assumed to be temporary

Source: GAO.

Notes: CBO's projections are from *The Budget and Economic Outlook: Fiscal Years 2011 to 2021* (January 2011) and *The Long-Term Budget Outlook* (June 2010). Trustees projections are from *The 2010 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* and *The 2010 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*, which were both issued on August 5, 2010. Projections from the CMS Actuary are based on "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers" (August 5, 2010). We assume that Social Security and Medicare benefits are paid in full regardless of the amounts available in the trust funds.

^aSince 2003, Congress has taken a series of legislative actions to prevent reductions in physician payment rates that would otherwise occur under law. Physician fee updates set by Congress have averaged 0.6 percent per year over this period. Growth in MEI has averaged 2.1 percent since 2003.

Thus, the assumption used by CMS implies physician payment rates will grow more than three times faster than they have since 2003.

As in previous updates, GAO also shows the long-term outlook using CBO assumptions for Social Security, Medicare, and Medicaid. Table 4 shows the CBO assumptions incorporated into the simulations that were used in the comparison shown in figure 2.

Table 4: Key Assumptions Underlying GAO’s Simulations Using CBO’s Spending Projections for Major Entitlement Programs

Model inputs	Baseline Extended	Alternative
Social Security spending	CBO’s January 2011 baseline through 2021; thereafter based on CBO’s October 2010 long-term projections for Social Security	Same as Baseline Extended
Medicare spending	CBO’s January 2011 baseline through 2021; thereafter based on CBO’s June 2010 long-term projections	Based on CBO’s projections under its alternative fiscal scenario that assume physician payment rates grow with inflation (using the Medicare Economic Index) ^a and that policies to restrain growth are not in effect after 2020
Medicaid, CHIP, and exchange subsidies spending	CBO’s January 2011 baseline through 2021; thereafter CBO’s June 2010 long-term projections under its Extended-Baseline scenario	CBO’s January 2011 baseline through 2021; thereafter CBO’s June 2010 projections under its alternative fiscal scenario in which a policy that would slow the growth of subsidies for health insurance coverage is assumed not to be in effect

Source: GAO.

Notes: CBO’s projections are from *The Long-Term Budget Outlook* (June 2010) and *CBO’s 2010 Long-Term Projections for Social Security: Additional Information* (October 2010). CBO assumes that full benefits are paid regardless of the amounts available in the trust funds.

^aSince 2003, Congress has taken a series of legislative actions to prevent reductions in physician payment rates that would otherwise occur under law. Physician fee updates set by Congress have averaged 0.6 percent per year over this period. Growth in MEI has averaged 2.1 percent since 2003. Thus, the assumption used by CBO implies physician payment rates will grow more than three times faster than they have since 2003.

Table 5 shows the key economic assumptions that underlie all of our simulations. GDP is held constant across simulations and does not respond to changes in fiscal policy. Also, the implied interest rate on federal debt held by the public in our simulations, which is extrapolated from CBO's most recent baseline projections, is held constant over the long term even when deficits climb. Our long-term interest rate assumption is down slightly from prior updates, reflecting CBO's revised estimates in which interest rates remain low because of high unemployment and continual strong demand for U.S. debt and other assets. Together these assumptions reduce the size of net interest payments and could cause our simulations to understate the size of future deficits and the rate of debt accumulation.

Table 5: Key Economic Assumptions Underlying All of GAO's Long-Term Federal Simulations

Model inputs	All simulations
Labor: growth in hours worked	2010 Social Security Trustees' intermediate projections
Nonfederal saving: gross saving of the private sector and state and local government sector	Decreases gradually over the first 10 years to 18.6 percent of GDP (the average nonfederal saving rate from 1950 to 2010)
Current account balance (percentage of GDP)	From 2011 to 2021, 2010 share of GDP plus one-third of any change in gross national saving from 2010; the nominal level is held constant over the long term
Total factor productivity growth	1.2 percent through 2021 (CBO's January 2011 short-term assumption); 1.4 percent thereafter (long-term average from 1950 to 2010)
Inflation (percentage change in GDP price index)	CBO January 2011 baseline through 2021; 2.0 percent thereafter (CBO's projection in 2021)
Interest rate (on publicly held debt)	Rate implied by CBO's January 2011 baseline net interest payment projections through 2021; 4.9 percent thereafter

Source: GAO.

A more detailed description of the federal model and key assumptions can be found at www.gao.gov/special.pubs/longterm/simulations.html.

This product is part of a body of work on the long-term fiscal challenge. Related products can be found at www.gao.gov/special.pubs/longterm/longtermproducts.html.

GAO also has an ongoing body of work to assist Congress and the Treasury in addressing debt management challenges, which can be accessed at <http://www.gao.gov/special.pubs/longterm/past/#debt>

We conducted our work from January 2011 to March 2011 in accordance with all sections of GAO's Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the

engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions.