Long-Term Fiscal Simulations

Fall 2009 Update

Interpreting Long-term Simulations

- Long-term simulations provide illustrations—not precise forecasts—of the relative fiscal outcomes associated with alternative policy paths.

- These simulations are not predictions of what will happen in the future as policymakers would likely take action to prevent damaging out-year fiscal consequences.

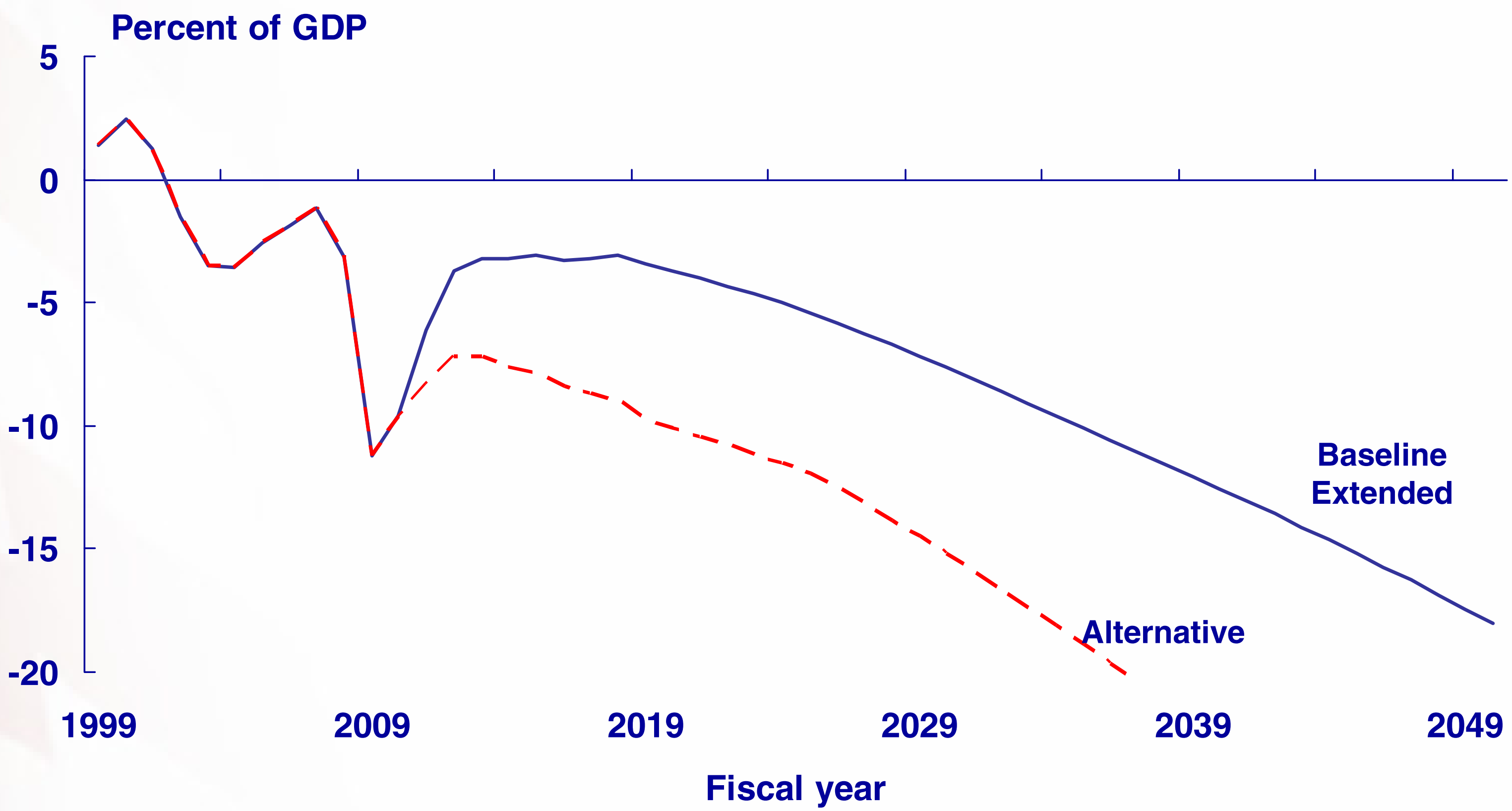
GAO's Fiscal Policy Simulations

- **Baseline Extended** follows the Congressional Budget Office's (CBO) August 2009 10-year baseline projections[1] that assume discretionary spending authority, except that passed for the stimulus, grows with inflation (Recovery Act spending provisions are assumed to be temporary) and tax provisions scheduled to expire will actually do so. After 2019, discretionary spending is assumed to grow with the economy, and revenue is held constant as a share of GDP at the 2019 level of 20.2 percent—implicitly assuming that action is taken to offset increased revenue from real bracket creep, the alternative minimum tax (AMT), and tax-deferred retirement accounts. Medicare spending is based on projections assuming the continuation of current law under which fees for physicians treating Medicare patients would be cut in future years.

- The **Alternative** simulation follows Baseline Extended except for changes to the assumptions for three variables:
    1. Discretionary spending other than Recovery Act provisions grows with the economy after 2009; as in the Baseline Extended, Recovery Act spending provisions are assumed to be temporary.
    2. Expiring tax provisions are extended and the AMT is indexed to inflation for years 2009-2019. After 2019, revenue is brought back to its 40-year historical average level of 18.3 percent of GDP.
    3. Throughout the simulation period, Medicare spending is based on projections assuming that physician payments are not reduced as specified under current law.

[1]CBO's projections are from *The Budget and Economic Outlook: An Update* (August 2009).

Federal Budget Surpluses and Deficits
Under Different Fiscal Policy Simulations



Source: GAO's Fall 2009 analysis based on the Trustees' assumptions for Social Security and Medicare.

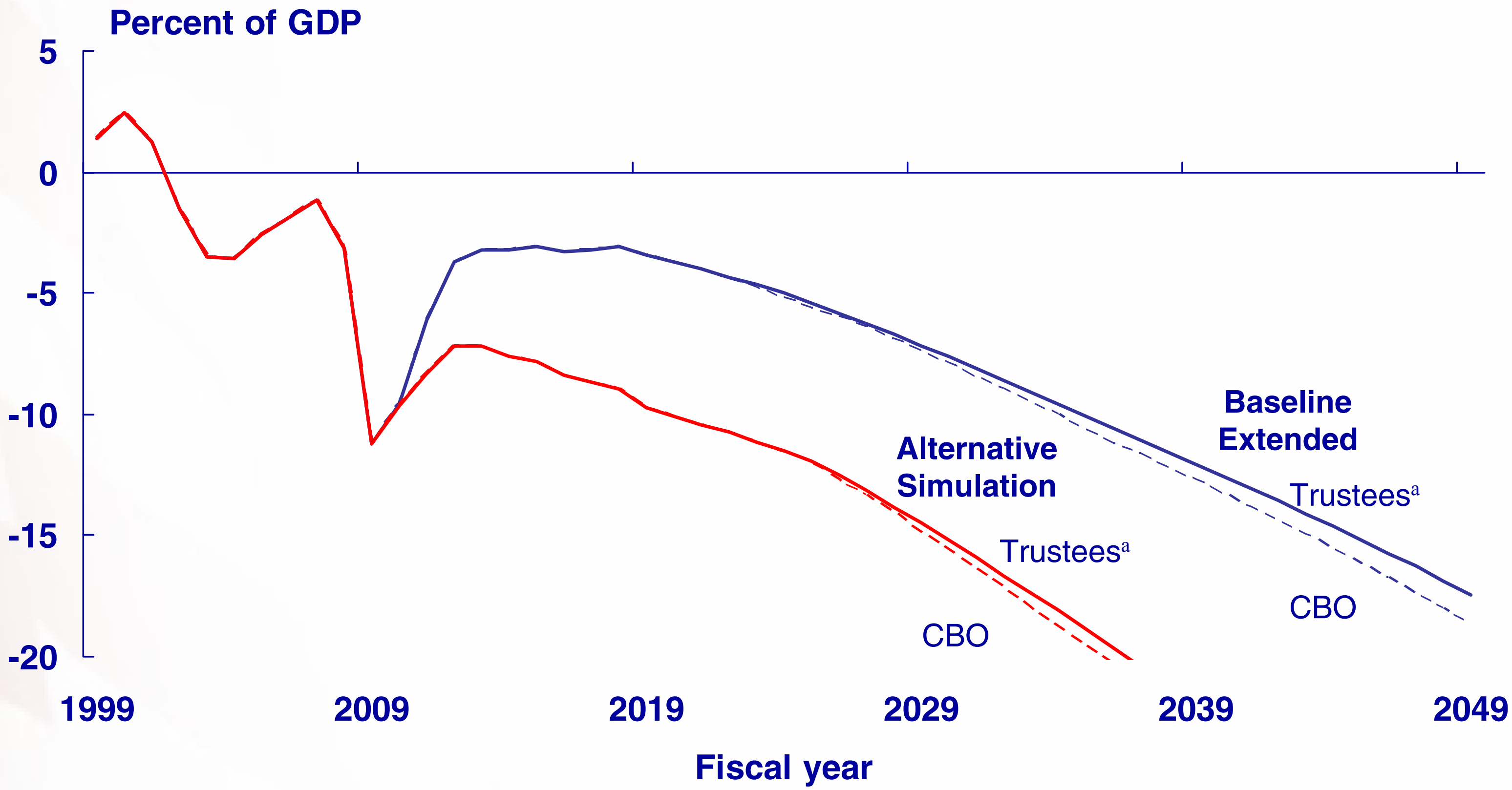
Note: We also run simulations using CBO's projections for Social Security and Medicare as described in the next slide. The results, which appear on slide 6, are not materially different.

Comparison of Simulations with Different Social Security, Medicare and Medicaid Assumptions

- We show the long-term outlook under two sets of simulations using different sources for long-term projections for Social Security, Medicare and Medicaid
  - In the first set of simulations, Social Security and Medicare are based on the Trustees' 2009 projections. Medicaid spending is based on CBO's projections but adjusted to reflect excess cost growth consistent with the Trustees.
  - In the second set of simulations, we use CBO's most recent long-term projections for Social Security, Medicare and Medicaid. However, the outcome is not materially different from our simulations using Trustees' 2009 projections.
- In both sets of simulations we assume
  - After the trust funds are exhausted, Social Security and Medicare benefits are paid in full through borrowing from the general fund to meet any payroll tax short fall
  - Other mandatory spending is held constant as a share of GDP at the rate implied in CBO's baseline for 2019

Federal Budget Surpluses and Deficits

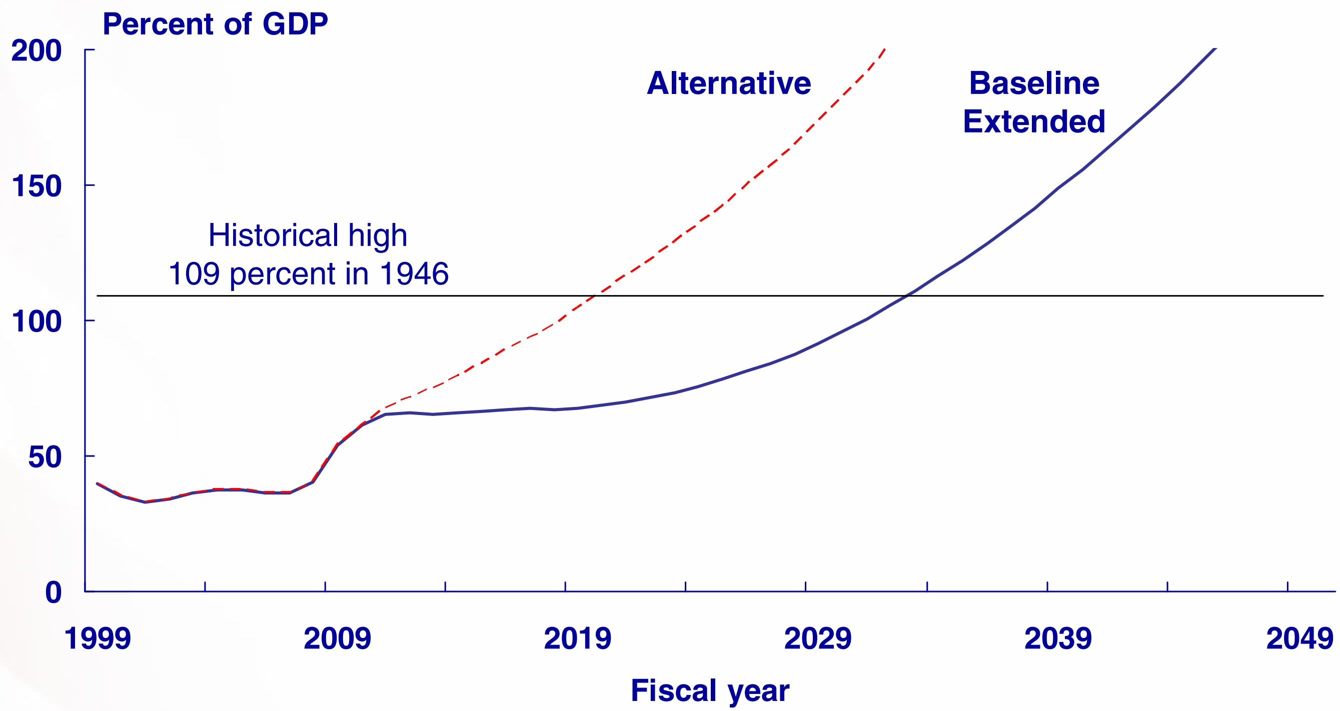
Under the Two Fiscal Policy Simulations Using Different Social Security, Medicare and Medicaid Assumptions



Source: GAO's Fall 2009 analysis

[a]Some adjustments are made to the Trustees' assumptions. Social Security outlays are adjusted to reflect wage growth consistent with GAO's assumptions for GDP. For Medicaid, we use CBO's June 2009 projections but adjust them so that excess cost growth is consistent with the Trustees' assumptions for Medicare.

Debt Held by the Public Under Two Fiscal Policy Simulations

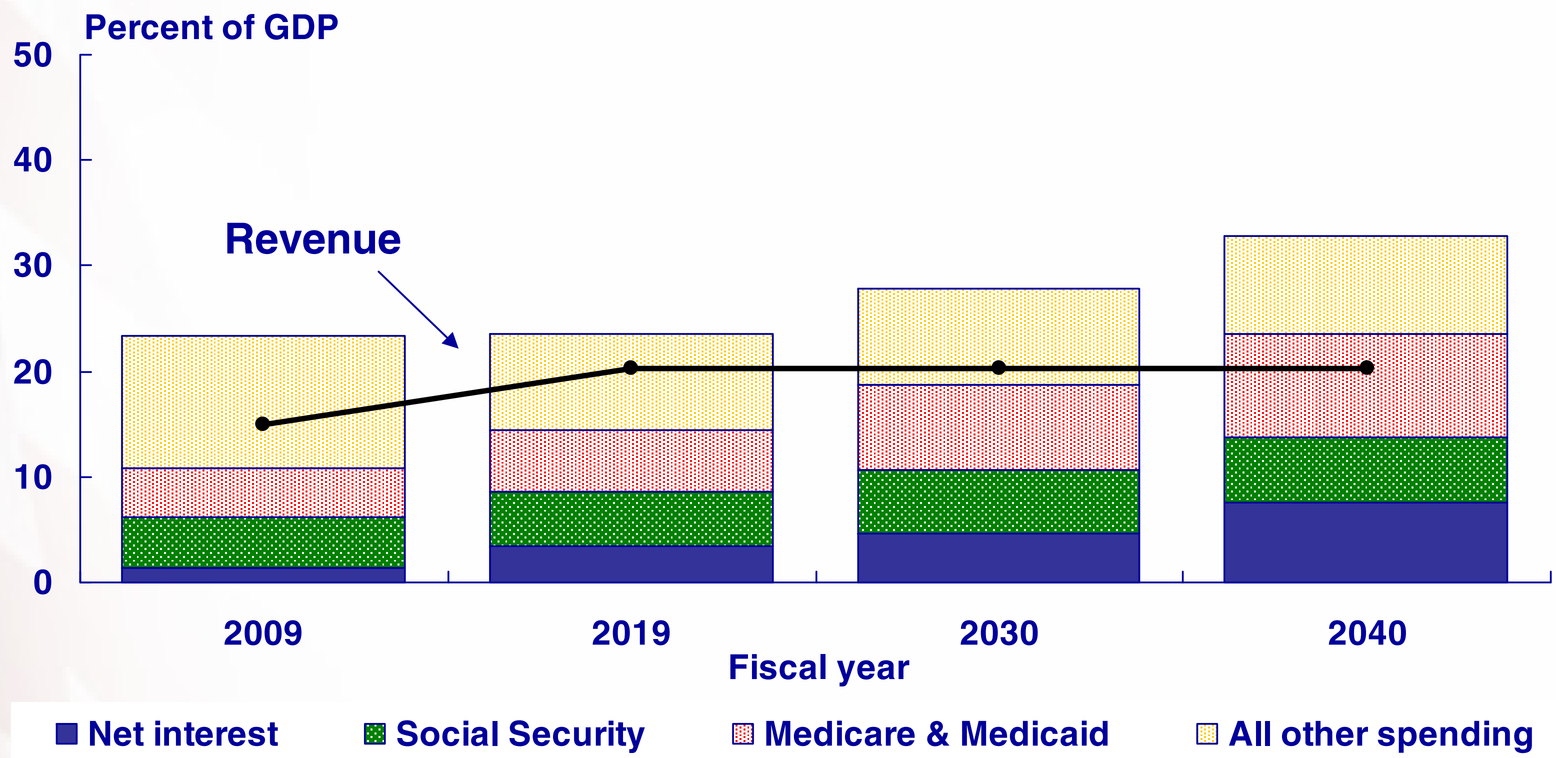


Source: GAO's Fall 2009 analysis based on the Trustees' assumptions for Social Security and Medicare.

Note: Some of the increase in debt has been used to purchase financial assets as part of programs to stabilize financial markets and stimulate the economy. The value of these financial assets has not been subtracted from the total debt held by public in our simulations.

Potential Fiscal Outcomes

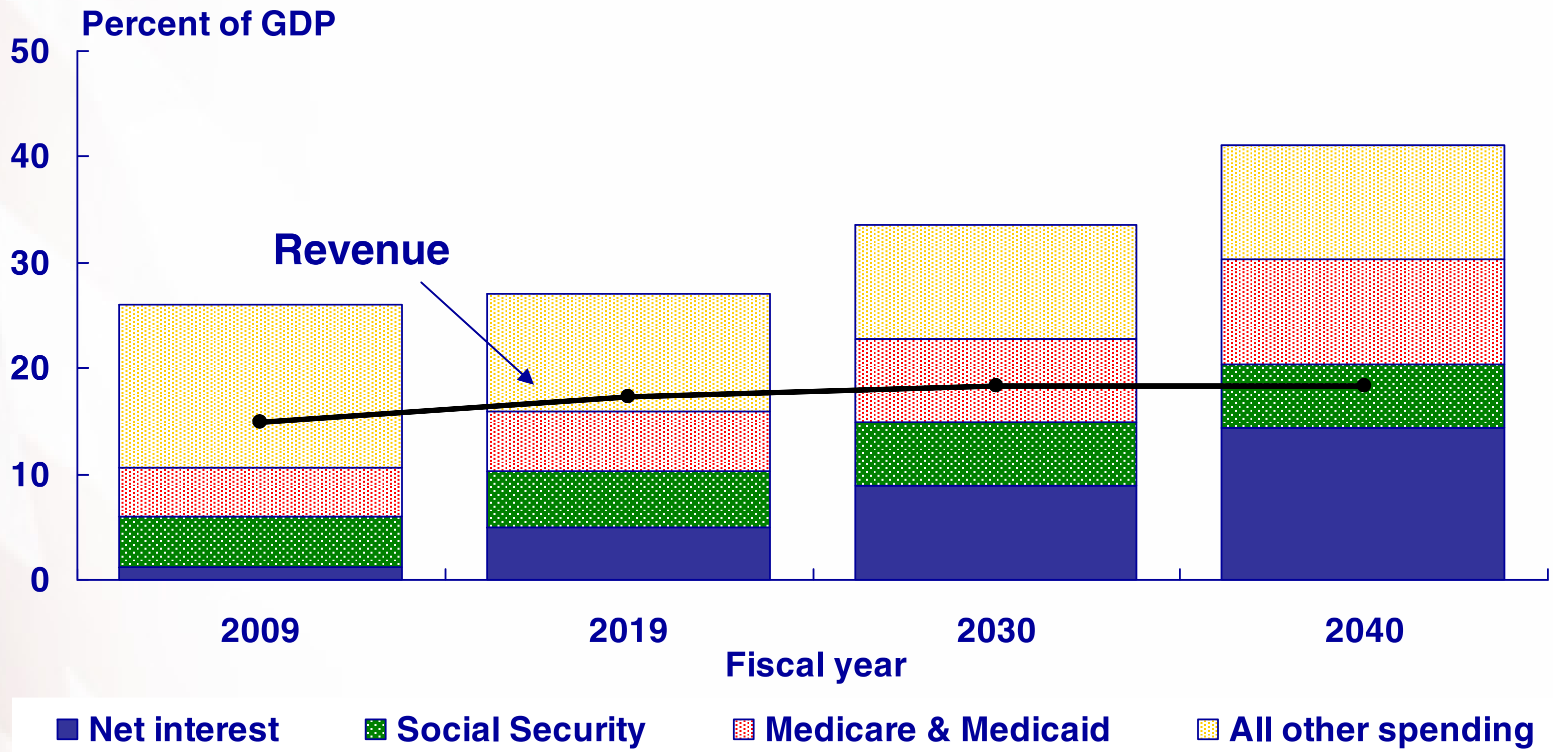
Revenues and Composition of Spending Under Baseline Extended Simulation



Source: GAO's Fall 2009 analysis based on the Trustees' assumptions for Social Security and Medicare.

Potential Fiscal Outcomes

Revenues and Composition of Spending Under Alternative Simulation



Source: GAO's Fall 2009 analysis based on the Trustees' assumptions for Social Security and Medicare.

Federal Fiscal Gap (2009-2083)

Under GAO's Simulations Based on the Trustees' Assumptions for Social Security and Medicare

	Fiscal gap		Average percent change required to close gap			
			If action is taken today		If action is delayed until 2019	
	Trillions of present value 2009 dollars	Percent of GDP	If solely through increases in revenue	If solely through decreases in non-interest spending	If solely through increases in revenue	If solely through decreases in non-interest spending
Baseline Extended	36.9	5.0	25.3	20.7	31.1	24.9
Alternative	62.1	8.5	47.4	32.8	57.9	39.4

Source: GAO's Fall 2009 analysis based on the Trustees' assumptions for Social Security and Medicare.

Note: The fiscal gap is the amount of spending reductions or tax increases that would be needed for debt as a share of GDP to equal today's ratio at the end of the 75-year period.

Key Budget Assumptions for Simulations Based on the Social Security and Medicare Trustees' Assumptions

Model inputs	Baseline Extended	Alternative
Revenue	CBO's August 2009 baseline through 2019; thereafter remains constant at 20.2 percent of GDP (CBO's projection in 2019)	CBO's estimates assuming expiring tax provisions are extended through 2019 and the AMT is indexed to inflation for years 2009-2019; thereafter phases into 40-year historical average of 18.3 percent of GDP.
Social Security spending	CBO's August 2009 baseline through 2019; thereafter based on 2009 Social Security Trustees' intermediate projections adjusted to reflect wage growth implied in GAO's simulations	Same as Baseline Extended
Medicare spending	CBO's August 2009 baseline through 2019; thereafter 2009 Medicare Trustees' intermediate projections that assume per enrollee Medicare spending grows on average 1 percent faster than GDP per capita over the long term	CBO's projections adjusted for the Centers for Medicare and Medicaid Services' alternative assumption of 0 percent physician payment updates in the first 10 years
Medicaid spending	CBO's August 2009 baseline through 2019; thereafter CBO's June 2009 long-term projections adjusted to reflect excess cost growth consistent with the 2009 Medicare Trustees' intermediate projections	Same as Baseline Extended
Other mandatory spending	CBO's August 2009 baseline through 2019; thereafter remains constant as a share of GDP at 2.1 percent of GDP (implied by CBO's projections in 2019)	Baseline Extended adjusted for extension of certain tax credits through 2019; thereafter remains constant at 2.1 percent of GDP (same as Baseline Extended)
Discretionary spending	CBO's August 2009 baseline through 2019; thereafter remains constant at 7.0 percent of GDP (CBO's projection in 2019)	Nonstimulus spending increases at the rate of economic growth after 2009 (i.e., remains constant at 8.6 percent of GDP); stimulus spending is included but assumed to be temporary

Source: GAO.

Note: CBO's projections are from *The Budget and Economic Outlook: An Update* (August 2009) and *The Long-Term Budget Outlook (June 2009).* The Trustees' projections are from *The 2009 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* and *2009 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds,* which were both issued on May 12, 2009.

Key Budget Assumptions That Change in Simulations Using CBO's Entitlement Spending Projections

Model inputs	Baseline Extended	Alternative
Social Security spending	CBO's August 2009 baseline through 2019; thereafter CBO's August 2009 projections based on the 2009 Social Security Trustees' demographic projections and CBO's own economic assumptions.	Same as Baseline Extended
Medicare spending	CBO's August 2009 baseline through 2019; thereafter based on CBO's June 2009 long-term projections. Per enrollee Medicare spending grows on average 1.5 percentage points faster than GDP per capita over the long term.	Based on CBO's projections that assume physician payment rates grow with inflation (using the Medicare Economic Index)[a]
Medicaid spending	CBO's August 2009 baseline through 2019; thereafter CBO's June 2009 long-term projections. Per enrollee Medicaid spending grows on average 0.6 percentage points faster than GDP per capita over the long term.	Same as Baseline Extended

Source: GAO analysis.

Note: CBO's projections are from *CBO's Long-Term Projections for Social Security* (August 2009) and *The Long-Term Budget Outlook* (June 2009).

[a]This is slightly higher than the assumption used in GAO's Alternative simulation using the Trustees' assumptions. In the Trustees' analysis, expenditures under the Medicare Economic Index assumption—which CBO bases its projections on—are 17.2 percent higher than current law by 2018. Expenditures under the 0 percent update used in GAO's Alternative simulation (based on Trustees' data) are only 12.2 percent higher than current law.

Total Federal Revenue and Discretionary Spending: Historical Averages and GAO's Simulations after 2019

Percent of GDP

	20-year historical average	40-year historical average	Baseline Extended	Alternative
Total Revenue	18.4	18.3	20.2	18.3[a]
Discretionary spending	7.6	8.9	7.0	8.6

Source: Congressional Budget Office and GAO.

[a]Note: Simulation values represent GAO's ultimate assumptions (year 10 and beyond).

Key Economic Assumptions Used in Both Sets of Simulations

Model inputs	All Simulations
Labor: growth in hours worked	2009 Social Security Trustees' intermediate projections
Nonfederal saving: gross saving of the private sector and state and local government sector	Increases gradually over the first 10 years to 18.5 percent of GDP (the average nonfederal saving rate from 1949-2008)
Current account balance (percent of GDP)	From 2009-2019, 2008 share of GDP plus one-third of any change in gross national saving from 2008; thereafter equal to 2019 nominal level plus one-third of any change in gross national saving from 2008 (that is, a declining share of GDP)
Total factor productivity growth	1.4 percent through 2019 (CBO's August 2009 short-term assumption); 1.4 percent thereafter (long-term average from 1950-2008)
Inflation (percent change in GDP price index)	CBO August 2009 baseline through 2019; 1.7 percent thereafter (CBO's projection in 2019)
Interest rate (on publicly held debt)	Rate implied by CBO's August 2009 baseline net interest payment projections through 2019; 5.3 percent thereafter (the rate implied in 2019)

Source: GAO.

Note: GDP in GAO's simulations does not incorporate the negative effect of long-term deficits on the economy. GDP is derived using a textbook growth model in which national saving remains stable over the long term. The same GDP is used in each budget simulation.