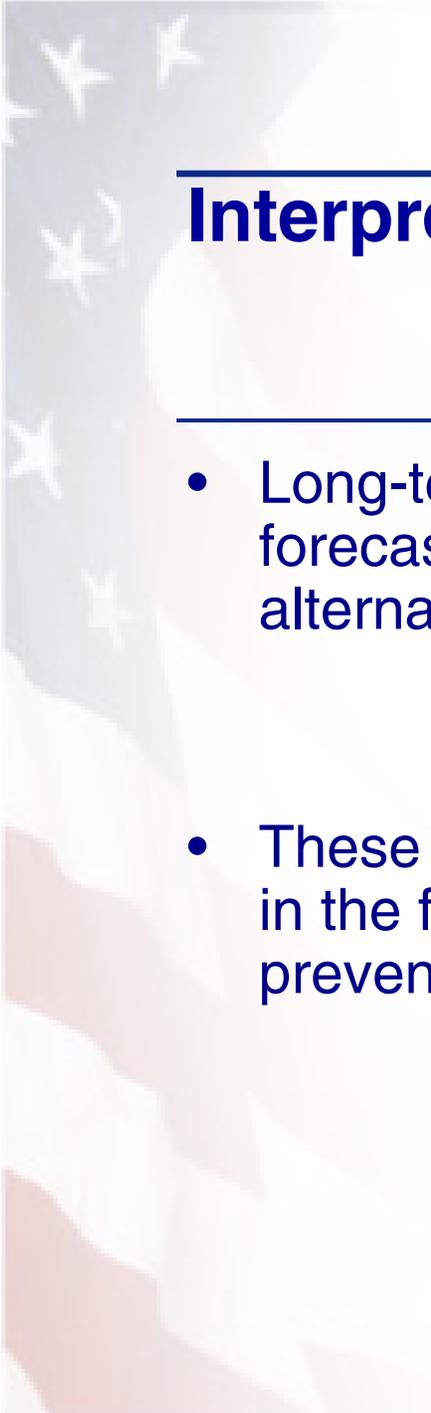


# **Long-Term Fiscal Simulations**

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**March 2009 Update**

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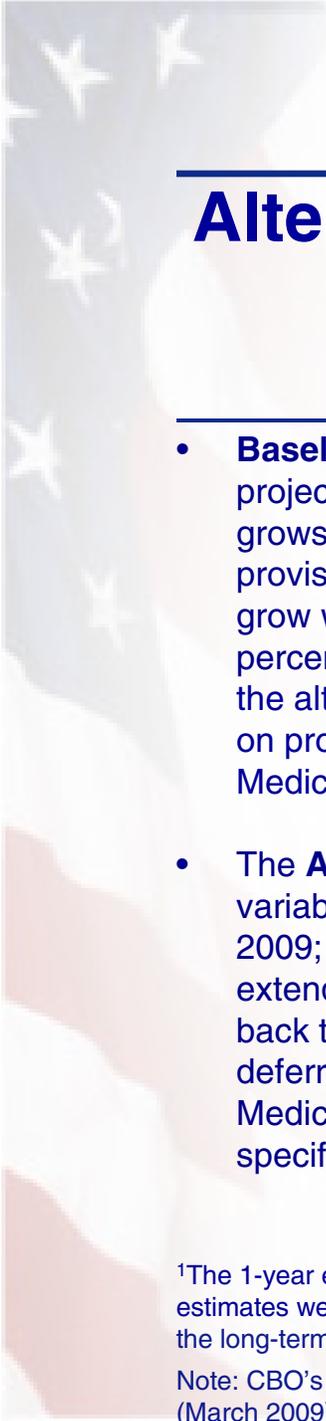


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## Interpreting Long-term Simulations

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- 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.



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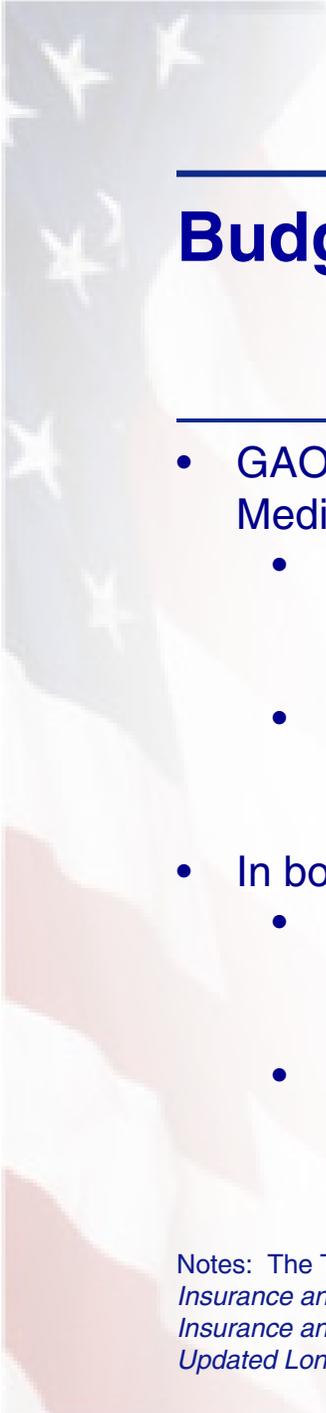
# Alternative Fiscal Policy Simulations

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- **Baseline Extended** follows the Congressional Budget Office's (CBO) March 2009 10-year baseline projections that assume discretionary spending authority, except that enacted in the Recovery Act, grows with inflation; Recovery Act provisions are included but assumed to be temporary. 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 20.3 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. Discretionary spending other than Recovery Act provisions grows with the economy after 2009; Recovery Act provisions are included but assumed to be temporary. Expiring tax provisions are extended, except for expiring provisions enacted in the Recovery Act.<sup>1</sup> After 2019, revenue is brought back to its 40-year historical average level of 18.3 percent of GDP plus expected revenues from deferred taxes (i.e., taxes on withdrawals from retirement accounts). Throughout the simulation period, Medicare spending is based on projections assuming that physician payments are not reduced as specified under current law.

<sup>1</sup>The 1-year extension of the increased exemption amount for the AMT that is part of the Recovery Act was not extended because updated estimates were not available. While extending the AMT could reduce revenue by over \$600 billion over the first 10 years, it would not affect the long-term outlook in our simulation because we assume that revenue/GDP returns to its historical average over the long term.

Note: CBO's projections are from *A Preliminary Analysis of the President's Budget and an Update of CBO's Budget and Economic Outlook* (March 2009).



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## Budget Assumptions after the First 10 Years

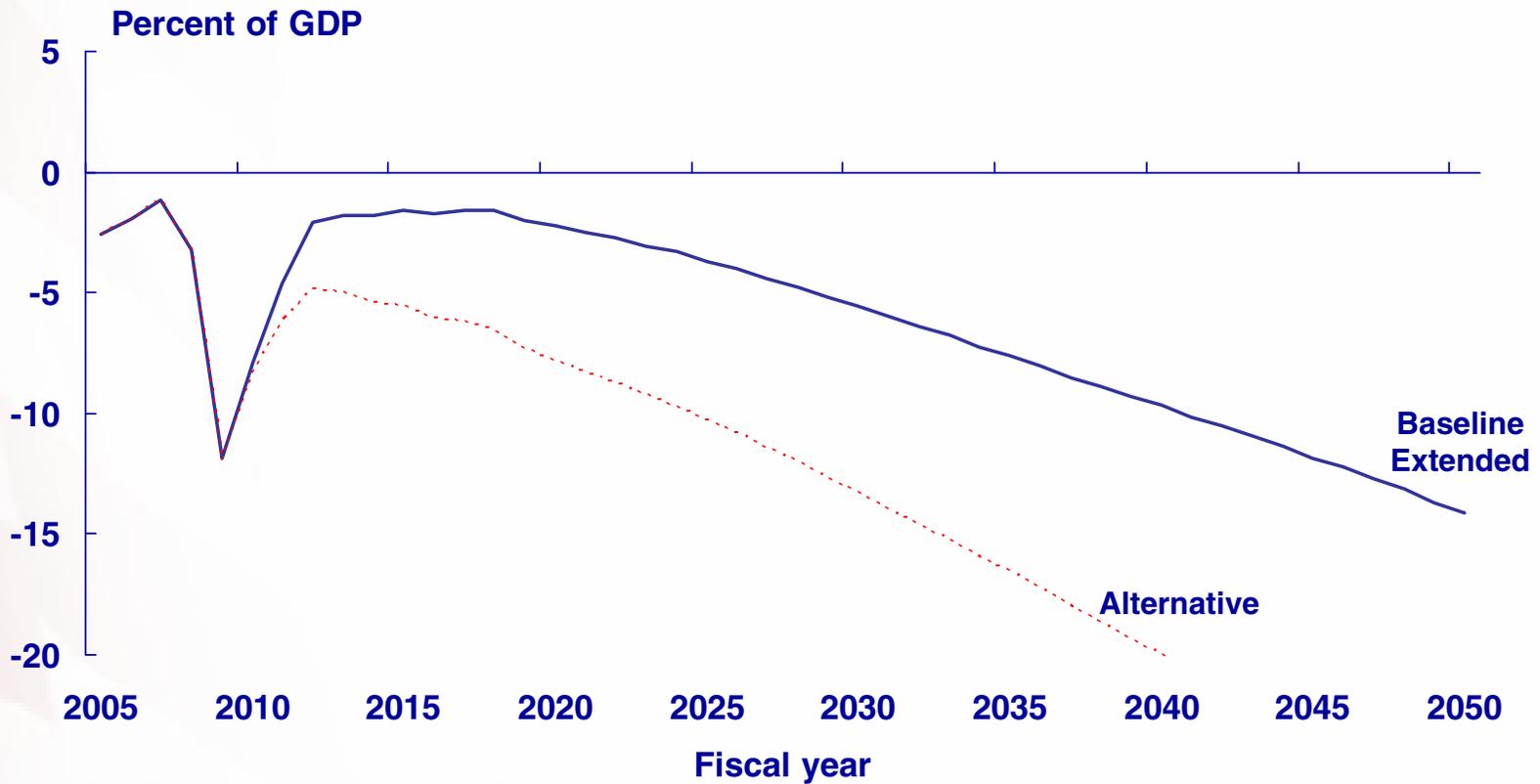
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- GAO uses two different sources for long-term projections for Social Security, Medicare, and Medicaid:
  - In the first set of simulations, Social Security and Medicare are based on the Trustees' 2008 estimates. Medicaid spending is based on CBO's projections but adjusted to reflect excess cost growth consistent with the Trustees.
  - In the second set of simulations, Social Security, Medicare, and Medicaid are based on CBO's most recent long-term projections.
- In both sets of simulations, we assume the following:
  - Social Security and Medicare benefits are paid in full after the trust funds are exhausted through borrowing from the general fund to meet any payroll tax shortfall.
  - Other mandatory spending is held constant as a share of GDP at the 2019 level.

Notes: The Trustees' 2008 estimates are from *The 2008 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* and *2008 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* that were both issued on March 25, 2008. CBO's estimates are from *Updated Long-Term Projections for Social Security* (August 2008) and *The Long-Term Budget Outlook* (December 2007).

# Unified Deficits as a Share of GDP

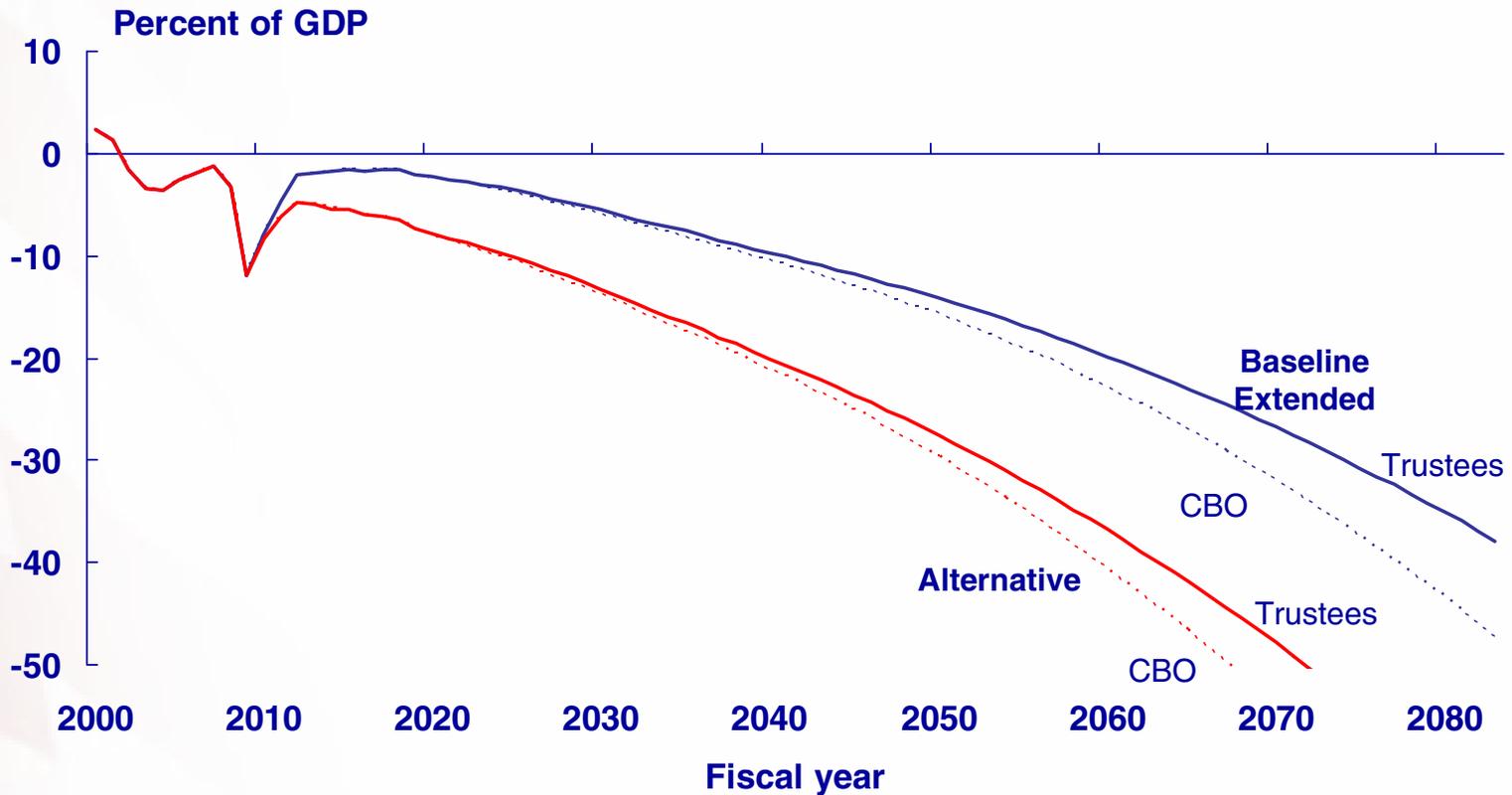
## Under Two Different Fiscal Policy Simulations Based on the Trustees' Assumptions for Social Security and Medicare



Source: GAO's March 2009 analysis.

Notes: As shown in next slide, simulation results using CBO's projections for Social Security and Medicare are not materially different.

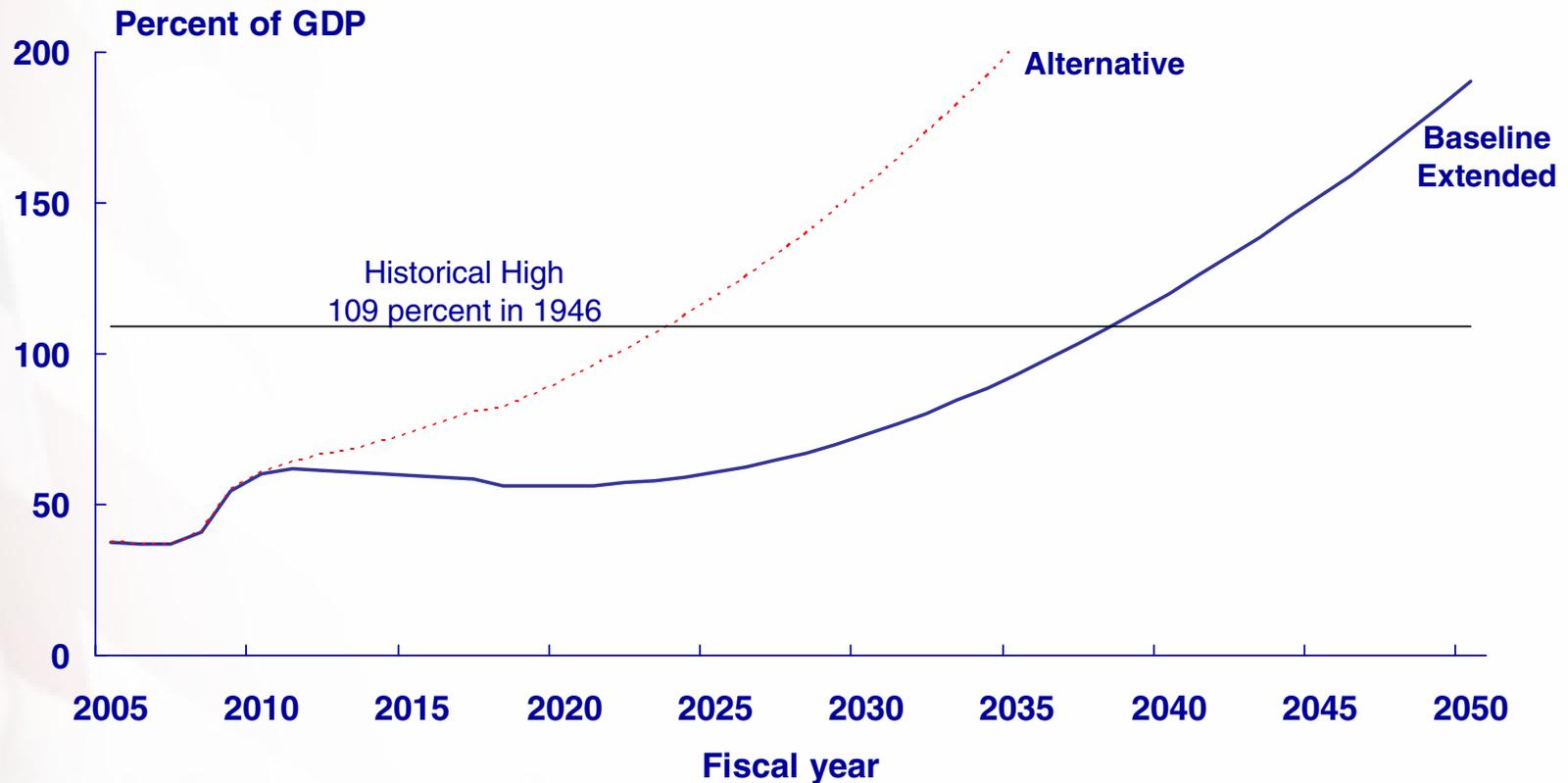
# Unified Surpluses and Deficits as a Share of GDP Under the Two Fiscal Policy Simulations Using Different Social Security, Medicare and Medicaid Assumptions



Source: GAO's March 2009 analysis.

# Debt Held by the Public as a Share of GDP

## Under Two Different Fiscal Policy Simulations Based on the Trustees' Assumptions for Social Security and Medicare

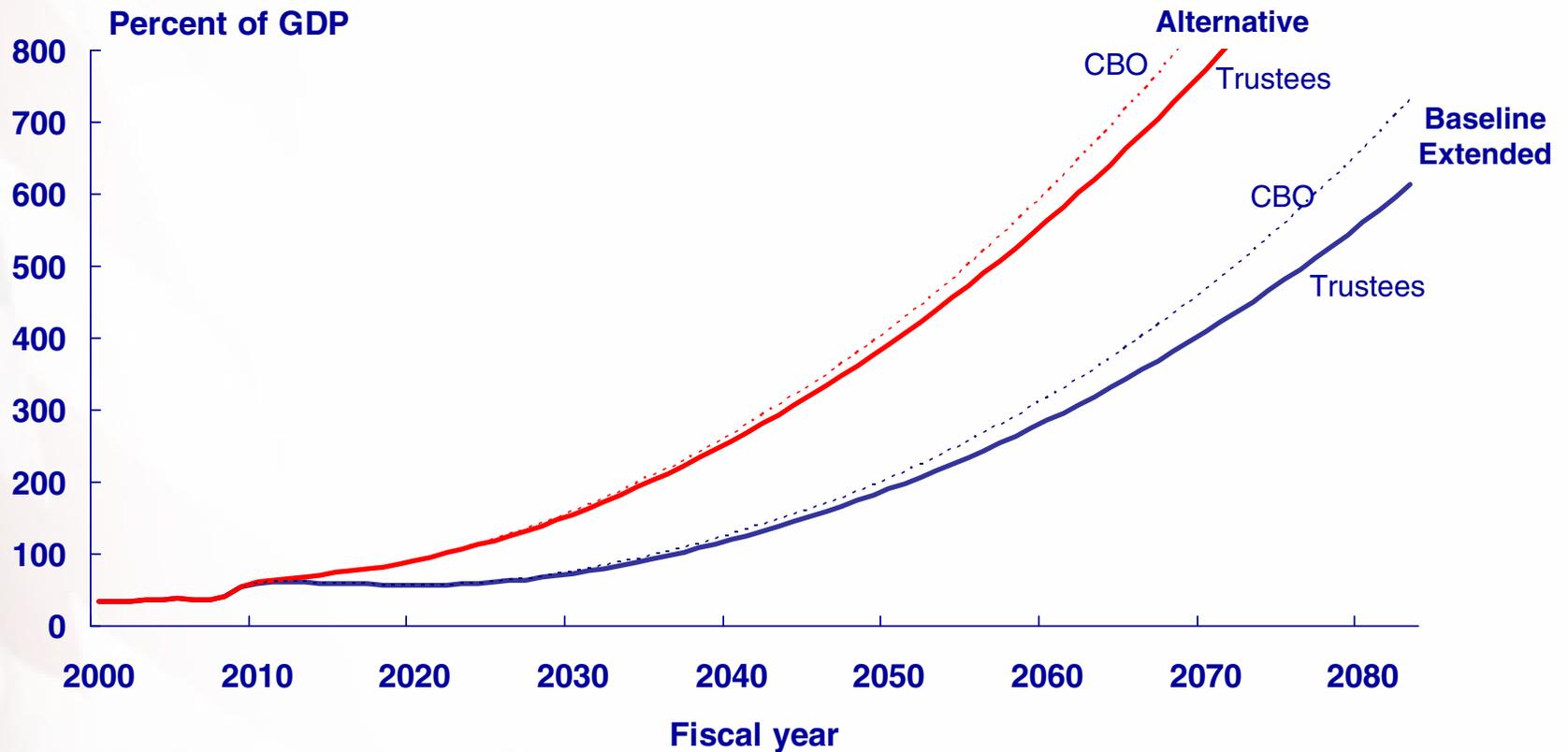


Source: GAO's March 2009 analysis.

Notes: As shown in next slide, simulation results using CBO's projections for Social Security and Medicare are not materially different.

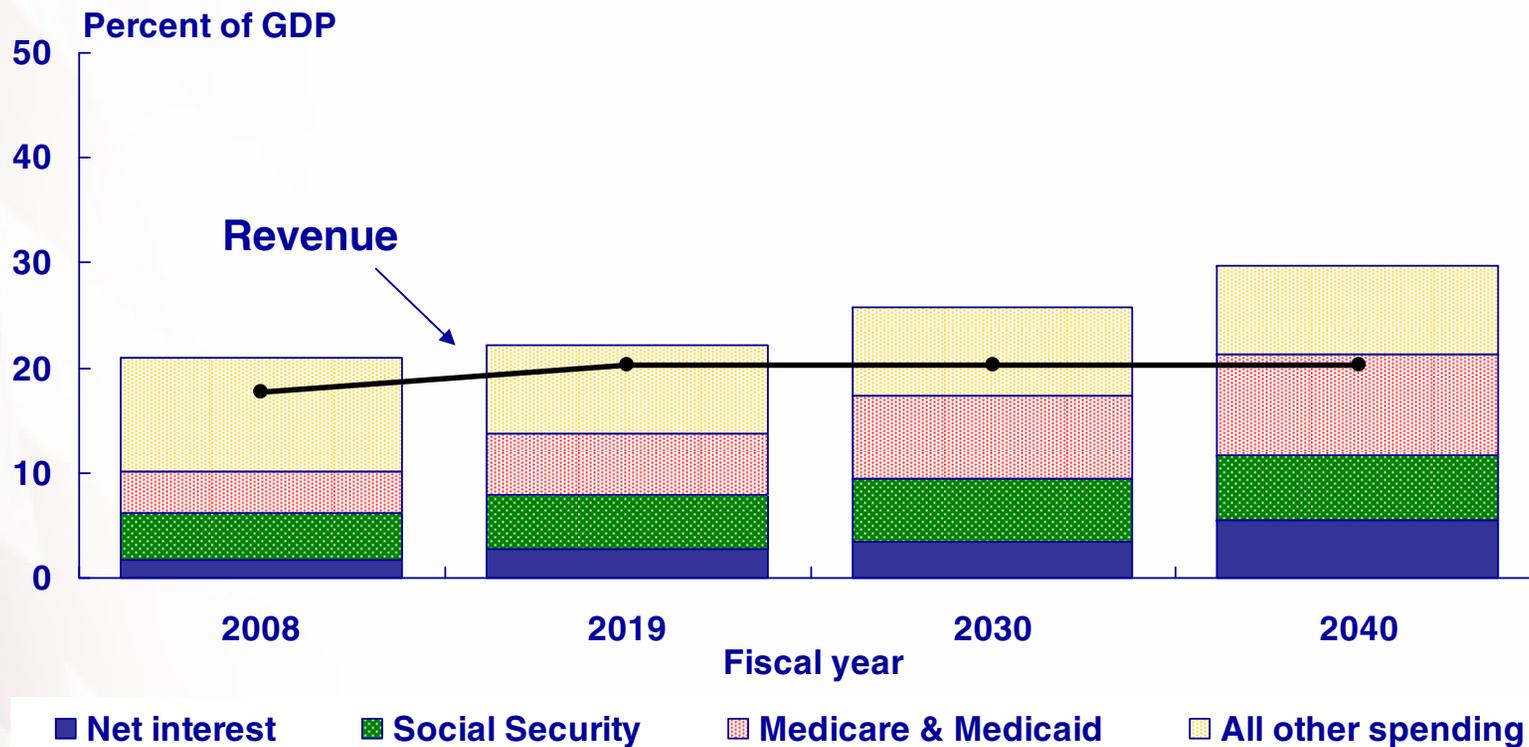
# Debt Held by the Public as a Share of GDP

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



Source: GAO's March 2009 analysis.

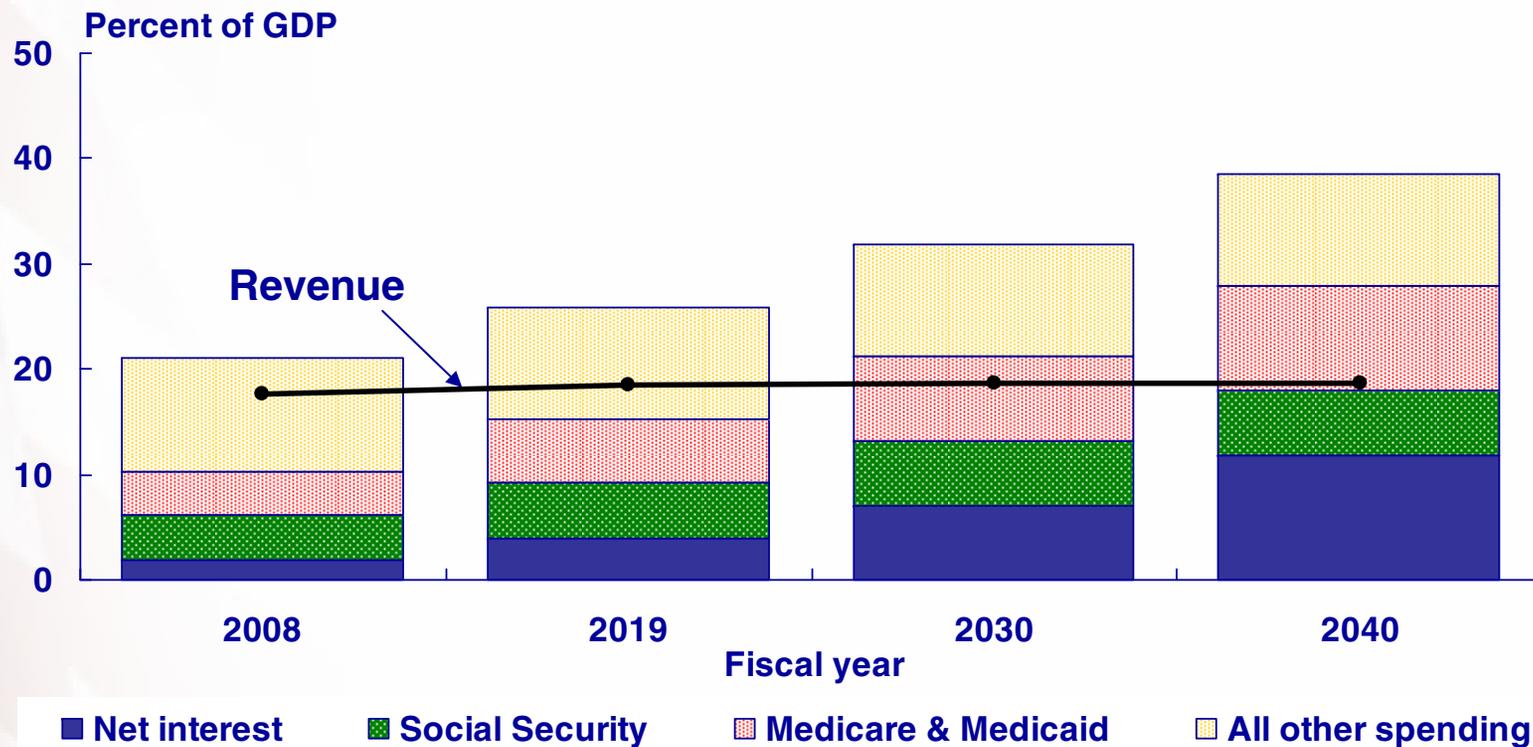
# Revenues and Composition of Spending as a Share of GDP under Baseline Extended Simulation Based on the Trustees' Assumptions for Social Security and Medicare



Source: GAO March 2009 analysis.

Notes: Simulation results using CBO's projections for Social Security and Medicare are not materially different.

# Revenues and Composition of Spending as a Share of GDP under Alternative Simulation Based on the Trustees' Assumptions for Social Security and Medicare



Source: GAO's March 2009 analysis.

Notes: Simulation results using CBO's projections for Social Security and Medicare are not materially different.

# Federal Fiscal Gap (2009-2083)

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

	Fiscal gap		Change required to close gap	
	Trillions of present value 2009 dollars	Percent of GDP	Percent increase in revenue	Percent decrease in noninterest spending
Baseline Extended	33.7	4.3	21.5	18.0
Alternative	62.9	8.1	43.6	30.9

Source: GAO's March 2009 analysis.

Notes: The fiscal gap is the amount of spending reduction or tax increases that would be needed to keep debt as a share of GDP at or below today's ratio over a certain time period, such as 75 years as shown above. Results from simulations using CBO's projections for Social Security and Medicare are not materially different.

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

Model inputs	Baseline Extended	Alternative
Revenue	CBO's March 2009 baseline through 2019; thereafter remains constant at 20.3 percent of GDP (CBO's projection in 2019)	CBO's estimates assuming expiring tax provisions other than those enacted in the Recovery Act are extended through 2019; thereafter equal to 40-year historical average of 18.3 percent of GDP plus revenue from tax-deferred retirement plans
Social Security spending	CBO's March 2009 baseline through 2019; thereafter based on 2008 Social Security Trustees' intermediate projections	Same as Baseline Extended
Medicare spending	CBO's March 2009 baseline through 2019; thereafter 2008 Medicare Trustees' intermediate projections that assume per enrollee Medicare spending grows on average 1 percent faster than GDP per capita over the long term	2008 Trustees intermediate projections adjusted for the Centers for Medicare & Medicaid Services' alternative assumption of 0 percent physician payment updates in the first 10 years
Medicaid spending	CBO's March 2009 baseline through 2019; thereafter CBO's December 2007 long-term projections adjusted to reflect excess cost growth consistent with the 2008 Medicare Trustees' intermediate projections	Same as Baseline Extended
Other mandatory spending	CBO's March 2009 baseline through 2019; thereafter remains constant as a share of GDP at 2.1 percent of GDP	Baseline Extended adjusted for extension of certain tax credits through 2019; thereafter remains constant at 2.2 percent of GDP
Discretionary spending	CBO's March 2009 baseline through 2019; thereafter remains constant at 6.4 percent of GDP	Discretionary spending other than Recovery Act provisions increases at the rate of economic growth after 2009 (i.e., remains constant at 8.5 percent of GDP); Recovery Act provisions are included but assumed to be temporary

Source: GAO.

Note: CBO's March 2009 projections are from *A Preliminary Analysis of the President's Budget and an Update of CBO's Budget and Economic Outlook* and the Trustees' projections are from *The 2008 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* and *2008 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*, which were both issued on March 25, 2008.

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

Model inputs	Baseline Extended	Alternative
Social Security spending	CBO's March 2009 baseline through 2019; thereafter CBO's August 2008 projections that assume full benefits as calculated under current law are paid regardless of the amounts available in the trust funds. These projections are based on the 2008 Social Security Trustees' demographic projections and CBO's own economic assumptions.	Same as Baseline Extended
Medicare spending	CBO's March 2009 baseline through 2019; thereafter CBO's December 2007 projections based on current law. Per enrollee Medicare spending grows on average 1.7 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) <sup>a</sup>
Medicaid spending	CBO's March 2009 baseline through 2019; thereafter CBO's December 2007 long-term projections based on current law. Per enrollee Medicaid spending grows on average 0.9 percentage points faster than GDP per capita over the long term.	Same as Baseline Extended

Source: GAO.

Notes: CBO's projections are from *Updated Long-Term Projections for Social Security* (August 2008) and *The Long-Term Budget Outlook* (December 2007).

<sup>a</sup>This is slightly higher than the assumption used in GAO's alternative using the 2008 Trustees' assumptions. In the Trustees' analysis, expenditures under the Medicare Economic Index are 22.5 percent higher than current law by 2017, whereas expenditures under the 0 percent update are only 16.8 percent higher.

# Federal Revenue and Discretionary Spending as Shares of GDP: Historical Averages and Assumptions after 2019 in Both Sets of GAO's Simulations

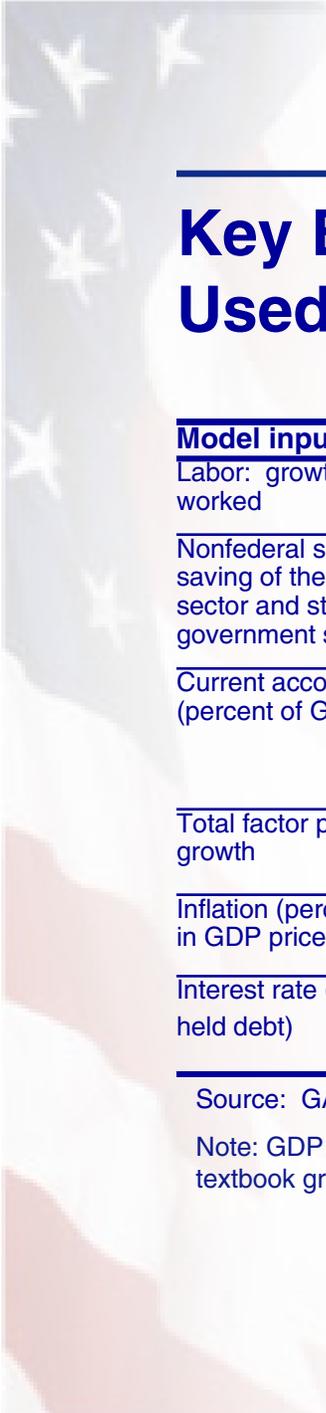
Percent of GDP

	20-year historical average	40-year historical average	Baseline Extended	Alternative
Total revenue	18.4	18.3	20.3	18.7 <sup>a</sup>
Discretionary spending	7.6	8.9	6.4	8.5

<sup>a</sup>Average over the period from 2020 to 2083 represents a return to the 40-year historical revenue average of 18.3 percent of GDP plus expected revenues from deferred taxes (i.e., taxes on withdrawals from retirement accounts).

Sources: CBO and GAO.

Note: Simulation values represent GAO's assumptions for year 10 and beyond and are the same regardless of whether we use the Trustees' or CBO's projections for Social Security and Medicare.



# Key Economic Assumptions Used in Both Sets of Simulations

<b>Model inputs</b>	<b>All simulations</b>
Labor: growth in hours worked	2008 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 1950 to 2008)
Current account balance (percent of GDP)	From 2009 to 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
Total factor productivity growth	1.4 percent through 2019 (CBO's March 2009 short-term assumption); 1.4 percent thereafter (long-term average from 1950 to 2008)
Inflation (percent change in GDP price index)	CBO March 2009 baseline through 2019; 1.6 percent thereafter (CBO's projection in 2019)
Interest rate (on publicly held debt)	Rate implied by CBO's March 2009 baseline net interest payment projections through 2019; 5.0 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.