

# **Long-Term Federal Budget Simulations**

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**Fall 2011 Update**

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## Interpreting Long-Term Simulations

- Long-term simulations provide illustrations—not precise forecasts—of the relative outcomes associated with alternative fiscal 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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# GAO's Fiscal Policy Simulations

## The First 10 Years (2012-2021)

- **Baseline Extended** follows the Congressional Budget Office's (CBO) August 2011 baseline projections, which generally reflect current law, for the first 10 years. Discretionary spending is based on the statutory caps set in Title I of the Budget Control Act<sup>a</sup>; it assumes that tax provisions scheduled to expire will actually do so and that fees for physicians treating Medicare patients would be cut in future years as scheduled under current law.
- The **Alternative** simulation follows the Baseline Extended simulation except for changes to the following assumptions to reflect historical trends:
  1. Expiring tax provisions other than the temporary Social Security payroll tax reduction are extended and the Alternative Minimum Tax (AMT) exemption amount is indexed to inflation for years 2012-2021
  2. Medicare spending is based on the Centers for Medicare & Medicaid Services Office of the Actuary's (CMS Actuary) projections that assume that physician payment rates grow with inflation (using the Medicare Economic Index) beginning in 2012 and that other policies that would restrain growth begin to phase out after 2019
- In both simulations, deficit reduction resulting from provisions in the Budget Control Act related to the Joint Select Committee on Deficit Reduction is applied to total annual deficits evenly over the first 10 years; it is not allocated to revenue, or discretionary or mandatory spending.

<sup>a</sup>The statutory caps do not constrain appropriations for military operations in Afghanistan and Iraq or for similar activities. In CBO's baseline, discretionary spending authority enacted in 2011 for these activities grows with inflation through 2021.



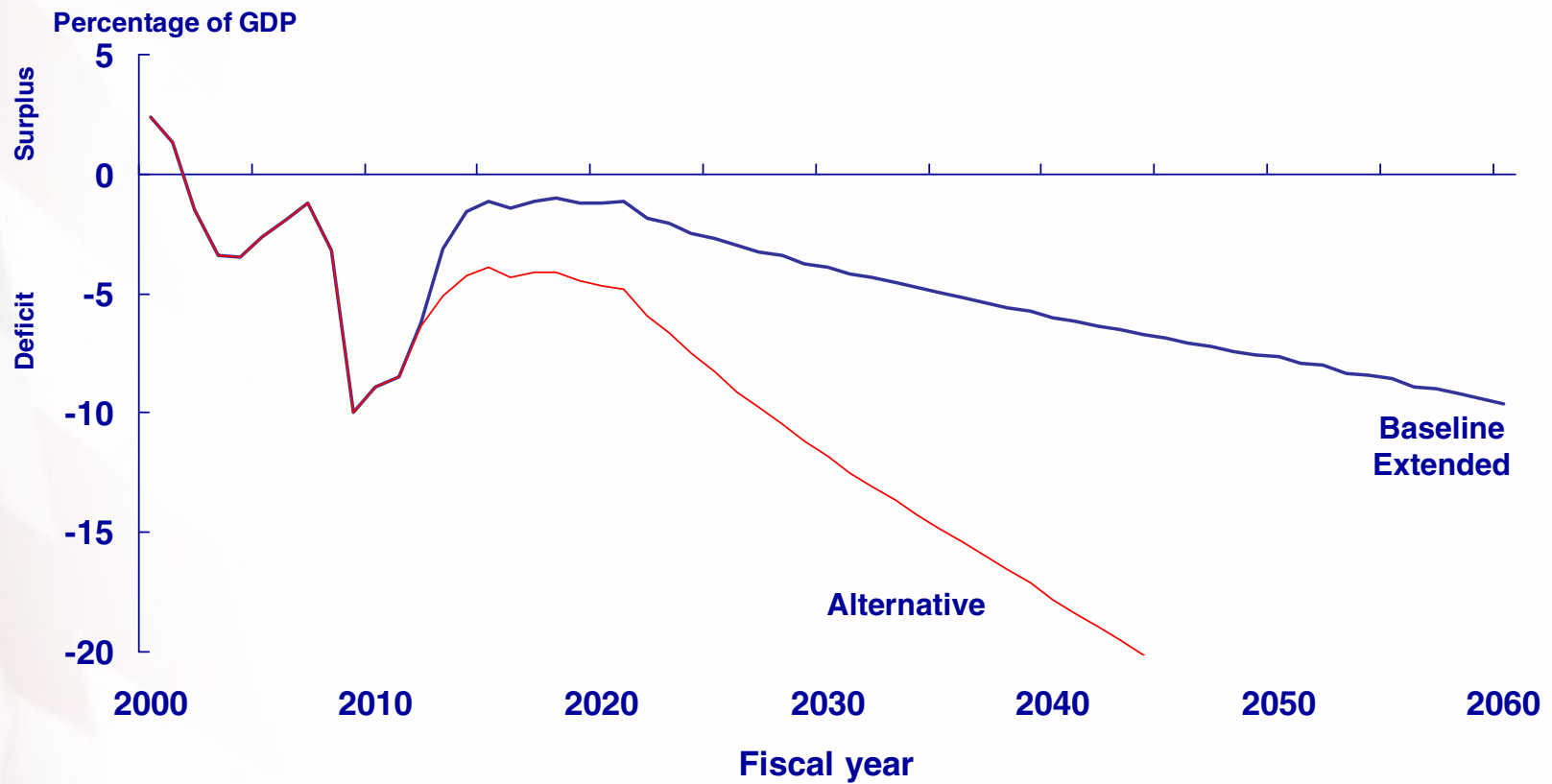
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# GAO's Fiscal Policy Simulations

## The Long Term (2022-2085)

- In the **Baseline Extended**, discretionary spending is assumed to grow with the economy after 2021. Revenue is held constant as a share of gross domestic product (GDP) at the 2021 level of 20.9 percent—implicitly assuming that action is taken to offset increased revenue from real bracket creep and tax-deferred retirement accounts. Long-term Social Security and Medicare spending is based on projections by the Trustees of the Social Security and Medicare trust funds (Trustees). Long-term Medicaid spending is based on CBO's long-term projections adjusted to reflect excess cost growth consistent with the Trustees' projections.
- The **Alternative** simulation follows the Baseline Extended simulation except for changes to the following assumptions to reflect historical trends:
  1. Discretionary spending as a share of GDP gradually rises to the 20-year historical average after 2021.
  2. Revenue is brought back to its 40-year historical average level of 18.0 percent of GDP.
  3. Medicare spending is based on the Centers for Medicare & Medicaid Services Office of the Actuary's (CMS Actuary) projections that assume that policies that would restrain growth begin to phase out after 2019.
  4. Long-term Medicaid spending is consistent with the CMS Actuary's projections for excess cost growth.
- In both simulations, deficit reduction resulting from provisions in the Budget Control Act related to the Joint Select Committee on Deficit Reduction remains a constant share of GDP over the long term.

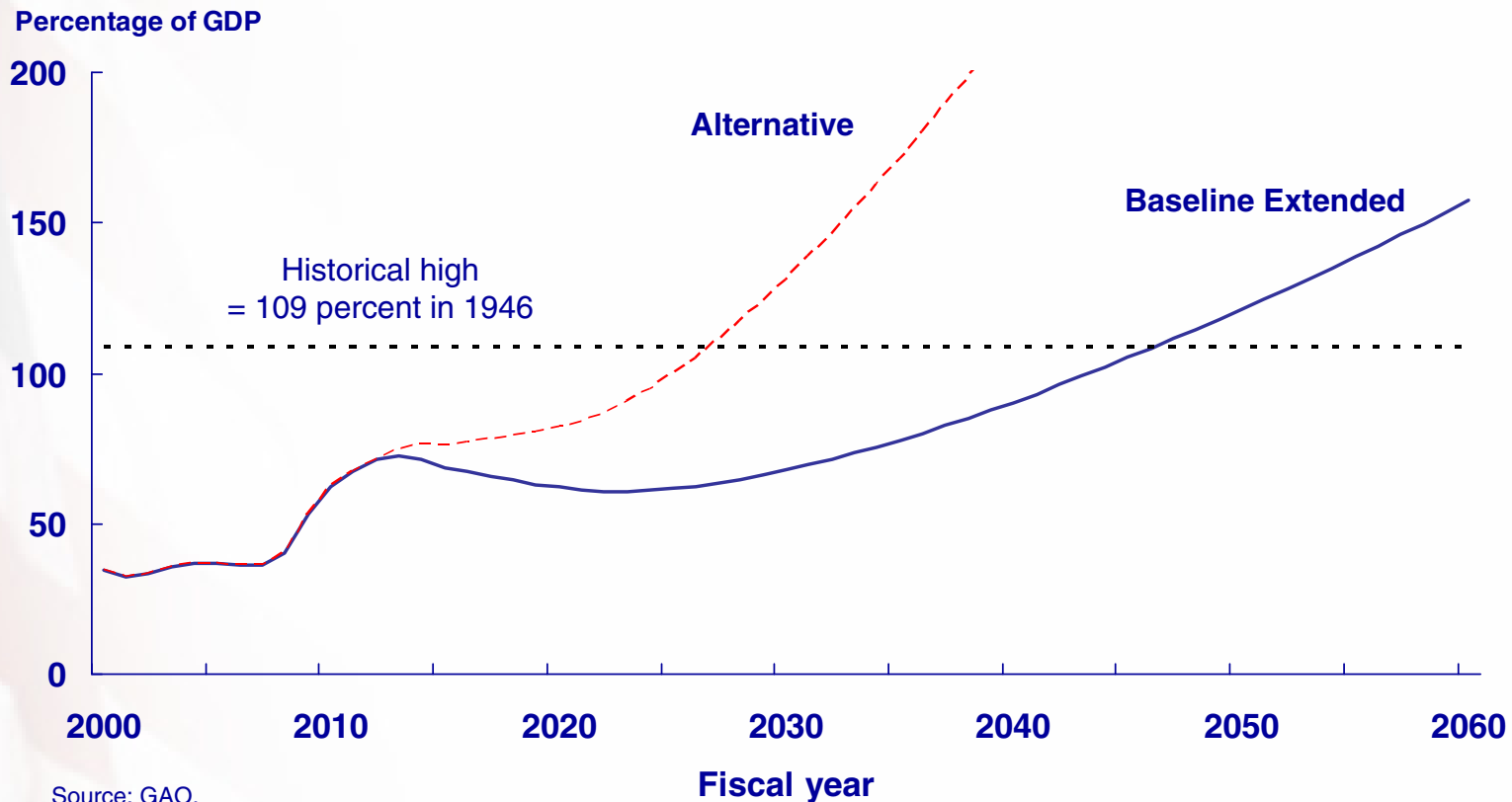
# Federal Budget Surpluses and Deficits under Two Fiscal Policy Simulations



Source: GAO.

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

# Debt Held by the Public under Two Fiscal Policy Simulations



Source: GAO.

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



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## **Rising Health Care Costs and an Aging Population Have Already Begun to Affect the Federal Budget**

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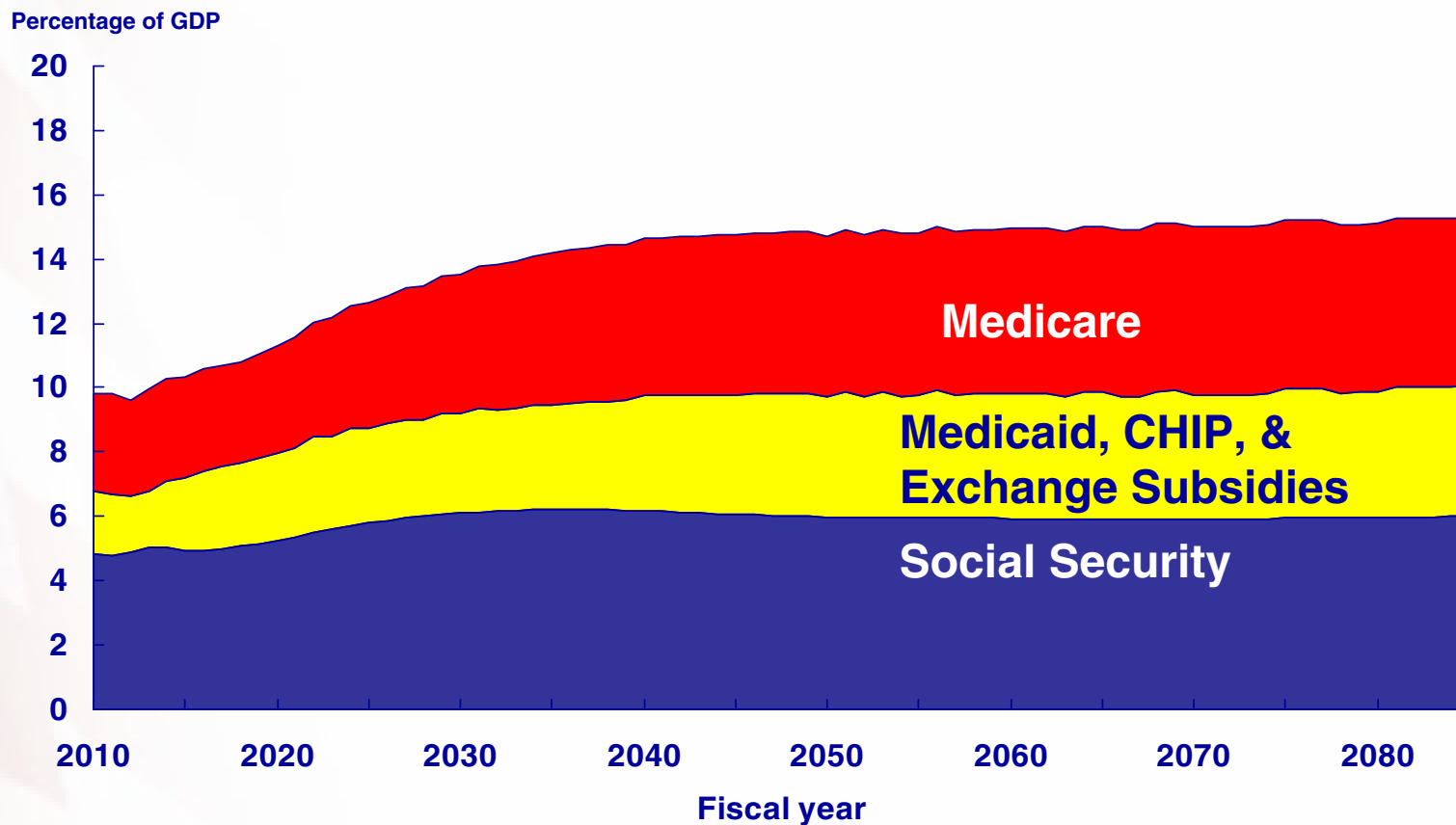
2008	Oldest members of the baby-boom generation became eligible for early Social Security retirement benefits
2008	Medicare Hospital Insurance outlays exceeded cash income
2010	Social Security runs first cash deficit in more than a quarter century
2011	Oldest members of the baby-boom generation become eligible for Medicare
2027	Debt held by the public under GAO's Alternative simulation exceeds the historical high reached in the aftermath of World War II

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Source: GAO.

# Spending on Social Security, Medicare, Medicaid, CHIP, and Exchange Subsidies

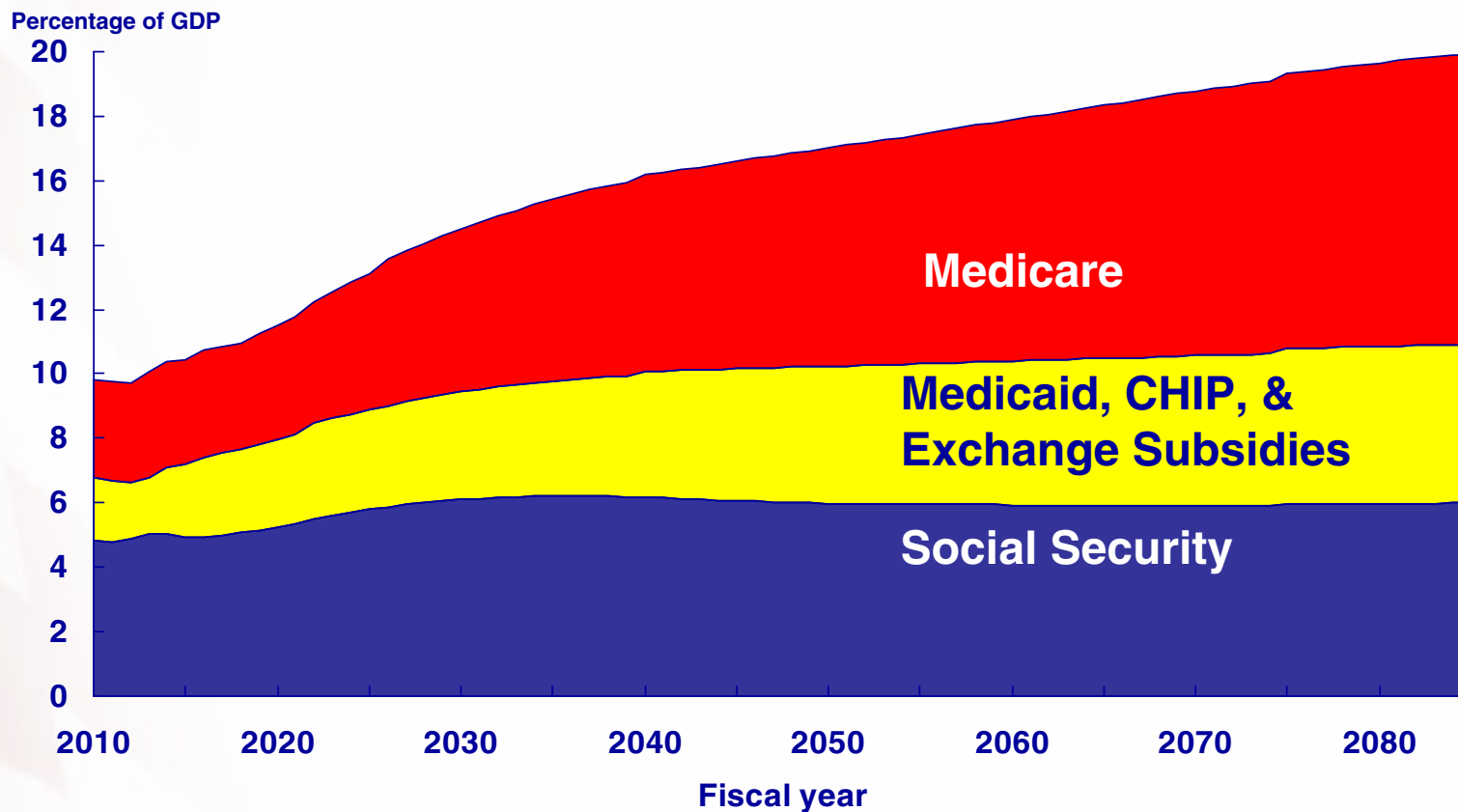
under Baseline Extended Simulation



Source: GAO.

Note: Social Security and Medicare projections are based on CBO's August 2011 baseline through 2021 and the Trustees' 2011 intermediate assumptions thereafter. Projections for Medicaid, the Children's Health Insurance Program (CHIP), and state health insurance exchange subsidies are based on CBO's short-term estimates (from August 2011) and long-term projections (from June 2011) of outlays for those programs, adjusted to reflect excess cost growth consistent with the 2011 Trustees' intermediate assumptions. This figure does not take into account any changes to these programs that may result from the provisions in the Budget Control Act related to the Joint Select Committee on Deficit Reduction.

# Spending on Social Security, Medicare, Medicaid, CHIP, and Exchange Subsidies under Alternative Simulation



Source: GAO.

Note: Projections for Social Security are based on CBO's August 2011 baseline through 2021 and the Trustees' 2011 intermediate assumptions thereafter. Projections for Medicare are based on the CMS Actuary's alternative assumptions. Projections for Medicaid, the Children's Health Insurance Program (CHIP), & state health insurance exchange subsidies are based on CBO's short-term estimates (from August 2011) and long-term projections (from June 2011) of outlays for those programs, adjusted to reflect excess cost growth consistent with the 2011 Trustees' intermediate assumptions. This figure does not take into account any changes to these programs that may result from the provisions in the Budget Control Act related to the Joint Select Committee on Deficit Reduction.



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# Appendix I:

## Assumptions Underlying GAO Simulations

# Key Budget Assumptions Underlying All Simulations

Model inputs	Baseline Extended	Alternative
Revenue	CBO's August 2011 baseline through 2021; thereafter remains constant at 20.9 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 alternative minimum tax (AMT) exemption amount is indexed to inflation for years 2012-2021; thereafter total revenue is phased into the 40-year historical average of 18.0 percent of GDP
Discretionary spending	CBO's August 2011 baseline through 2021, which is based on discretionary caps in Title I of the Budget Control Act; thereafter remains constant at 6.1 percent of GDP (CBO's projection in 2021)	Same as Baseline Extended through 2021; thereafter gradually phases into 7.5 percent (the 20-year historical average)
Other mandatory spending	CBO's August 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)
Additional deficit reduction related to the Budget Control Act <sup>a</sup>	Follows CBO's August 2011 baseline through 2021, which applies savings evenly from 2013—2021; does not allocate savings to revenue, or discretionary or mandatory spending; thereafter deficit reduction held constant as a share of GDP	Same as Baseline Extended

Source: GAO analysis.

Notes: CBO's projections are from *The Budget and Economic Outlook: An Update* (August 2011) and *CBO's 2011 Long-Term Budget Outlook* (June 2011).

<sup>a</sup>The Budget Control Act created the Joint Select Committee on Deficit Reduction and tasked it with proposing reductions that will amount to at least \$1.5 trillion in budgetary savings over 10 years. If legislation based on the Committee's proposals fails to reduce the deficit by at least \$1.2 trillion, automatic procedures will reduce federal spending by the amount needed to reach this goal. Additional deficit reduction in our simulations is based on the latter amount—the amount tied to enforcement.

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

Model inputs	Baseline Extended	Alternative
Social Security spending	CBO's August 2011 baseline through 2021; thereafter based on 2011 Social Security Trustees' intermediate projections	Same as Baseline Extended
Medicare spending	CBO's August 2011 baseline through 2021 that assumes cuts in physician payment rates will occur as scheduled under current law; thereafter 2011 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) <sup>a</sup> and policies that would restrain spending growth begin to phase out after 2019
Medicaid, Children's Health Insurance Program (CHIP), and exchange subsidies spending	CBO's August 2011 baseline through 2021; thereafter CBO's June 2011 long-term projections adjusted to reflect excess cost growth consistent with the 2011 Medicare Trustees' intermediate projections	CBO's August 2011 baseline through 2021; thereafter CBO's June 2011 projections under its alternative fiscal scenario in which a policy that would slow the growth of per-participant subsidies for health insurance coverage is assumed not to be in effect and eligibility thresholds are assumed to be modified to maintain the share of the population eligible for subsidies.

Source: GAO analysis.

Notes: CBO's projections are from *The Budget and Economic Outlook: An Update* (August 2011) and *CBO's 2011 Long-Term Budget Outlook* (June 2011). Trustees' projections are from *The 2011 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* and *The 2011 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 13, 2011. Projections from the CMS Actuary are based on "Projected Medicare Expenditures under an Illustrative Scenario with Alternative Payment Updates to Medicare Providers" (May 13, 2011). We assume that Social Security and Medicare benefits are paid in full regardless of the amounts available in the trust funds.

<sup>a</sup>Since 2003, Congress took 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 1.0 percent per year over this period. Growth in MEI is projected to average 1.9 percent from 2012 to 2020. Thus, the assumption used by CMS implies physician payment rates will grow almost two times faster than they have since 2003.

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

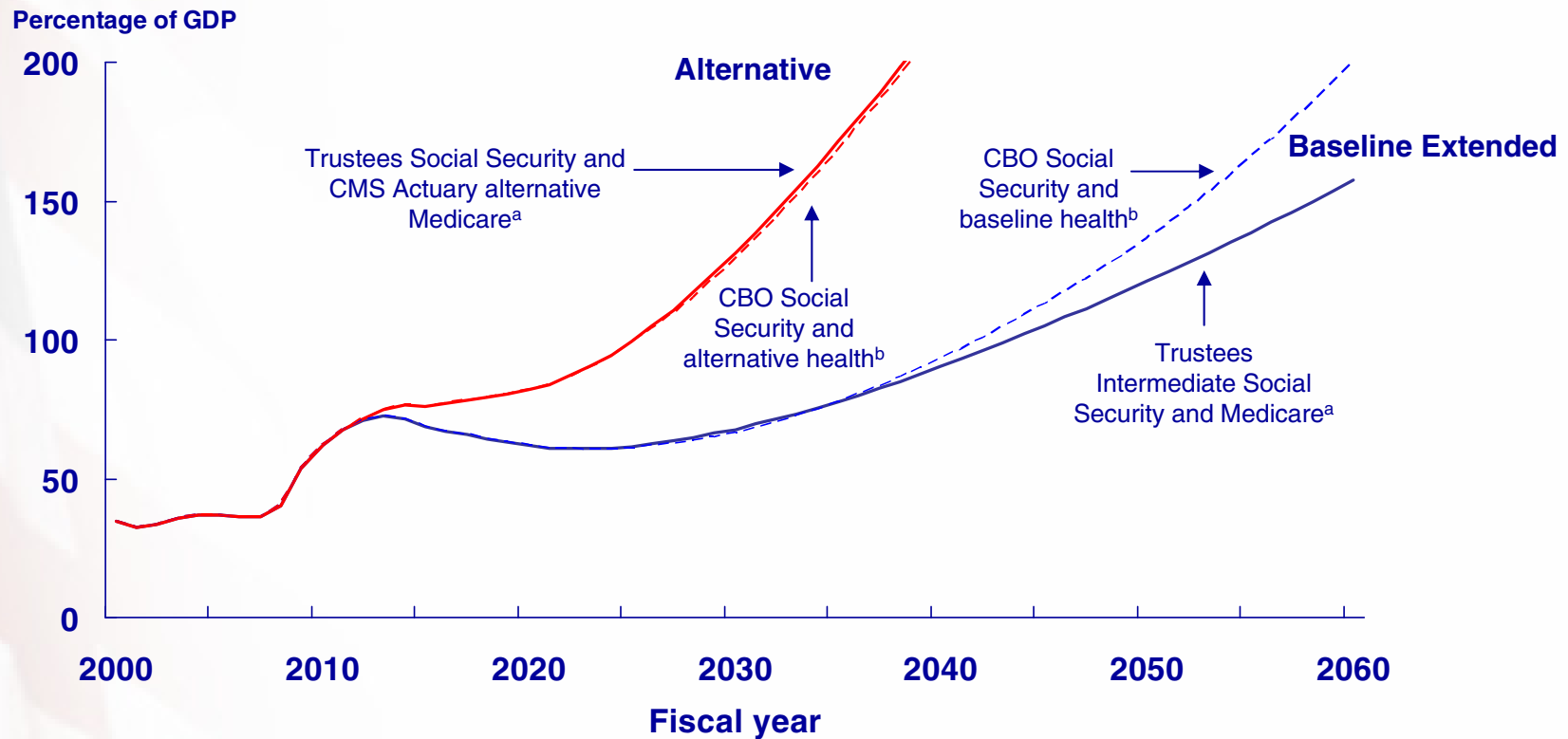
Model inputs	Baseline Extended	Alternative
Social Security spending	CBO's August 2011 baseline through 2021; thereafter based on CBO's June 2011 long-term projections for Social Security	Same as Baseline Extended
Medicare spending	CBO's August 2011 baseline through 2021; thereafter based on CBO's June 2011 long-term projections	Based on CBO's projections under its alternative fiscal scenario that assume physician payment rates are maintained at 2011 levels through 2021 and that policies to restrain growth are not in effect after 2021
Medicaid, CHIP, and exchange subsidies spending	CBO's August 2011 baseline through 2021; thereafter CBO's June 2011 long-term projections under its Extended-Baseline Scenario..	CBO's August 2011 baseline through 2021; thereafter CBO's June 2011 projections under its alternative fiscal scenario in which an indexing factor that would slow the growth of subsidies for health insurance coverage is assumed not to be in effect

Source: GAO analysis.

Notes: CBO's projections are from *CBO's 2011 Long-Term Budget Outlook* (June 2011). CBO assumes that full benefits are paid regardless of the amounts available in the trust funds.

# Debt Held by the Public

## Comparison of Simulations with Different Social Security, Medicare, and Medicaid Projections



Source: GAO.

<sup>a</sup>Medicaid, CHIP, and exchange subsidies spending is based on CBO's June 2011 projections adjusted to reflect excess cost growth consistent with Trustees' intermediate projections in the Baseline Extended simulation and the CMS Actuary's alternative projections in the Alternative simulation.

<sup>b</sup>For these simulations, we use CBO's most recent long-term projections for Medicare; for Medicaid, CHIP, and exchange subsidies; and for Social Security from CBO's *The Long-Term Budget Outlook* (June 2011).



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# Key Economic Assumptions Used in Both Sets of Simulations

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<b>Model inputs</b>	<b>All simulations</b>
Real GDP growth	CBO August 2011 baseline through 2021; thereafter averages 2.1 percent based on the intermediate assumptions of the 2011 Social Security and Medicare Trustees reports
Inflation (percentage change in GDP price index)	CBO August 2011 baseline through 2021; 2.0 percent thereafter (CBO's projection in 2021)
Interest rate (on publicly held debt)	Rate implied by CBO's August 2011 baseline net interest payment projections through 2021; 5.2 percent thereafter (CBO's June 2011 long-term projection)

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Source: GAO.

Note: GDP in GAO's simulations does not incorporate the negative effect of long-term deficits on the economy.