Long-Term Federal Budget Simulations

Spring 2014 Update

Interpreting Long-Term Simulations

- Long-term simulations provide illustrations—not precise forecasts—of the relative outcomes associated with different sets of broad fiscal policy assumptions.

- 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

From Fiscal Years 2014 to 2024

- The **Baseline Extended** simulation follows the Congressional Budget Office's (CBO) February 2014 baseline projections, which generally reflect current law. Discretionary spending reflects the caps and automatic enforcement procedures in effect through 2021 under current law; from 2022 to 2024 discretionary spending grows with inflation.[1] The Baseline Extended simulation also assumes that, as provided under current law, tax provisions that have expired, such as the research and experimentation tax credit, or are scheduled to expire, such as the expansion of the earned income tax credit, do so and that payment rates for physicians treating Medicare patients are cut in future years as scheduled under the sustainable growth rate (SGR) system.

- In the **Alternative** simulation, changes are made to the following assumptions to reflect historical trends:
  1. Discretionary and other mandatory spending are adjusted to reflect the assumption that automatic enforcement procedures are canceled.
  2. Expiring tax provisions, including those that expired at the end of 2013, are extended.
  3. 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 by 0.7 percent annually rather than being cut as scheduled under the SGR system and that other policies that would restrain Medicare cost growth begin to phase out after 2019.

[1]The Budget Control Act (BCA)established discretionary spending limits for 2012 through 2021. The BCA also established the Joint Select Committee on Deficit Reduction, which was tasked with proposing legislation to reduce the deficit by at least $1.2 trillion by fiscal year 2021. The Joint Committee did not enact legislation, which triggered automatic enforcement procedures to achieve the spending reductions. At the time that CBO published its projections, current law provided that the spending reductions were to be achieved through a combination of lowering the discretionary spending limits from 2016 to 2021 and sequestering mandatory spending, including Medicare, through fiscal year 2023. Subsequently, legislation was enacted extending the sequestration of mandatory spending until 2024.

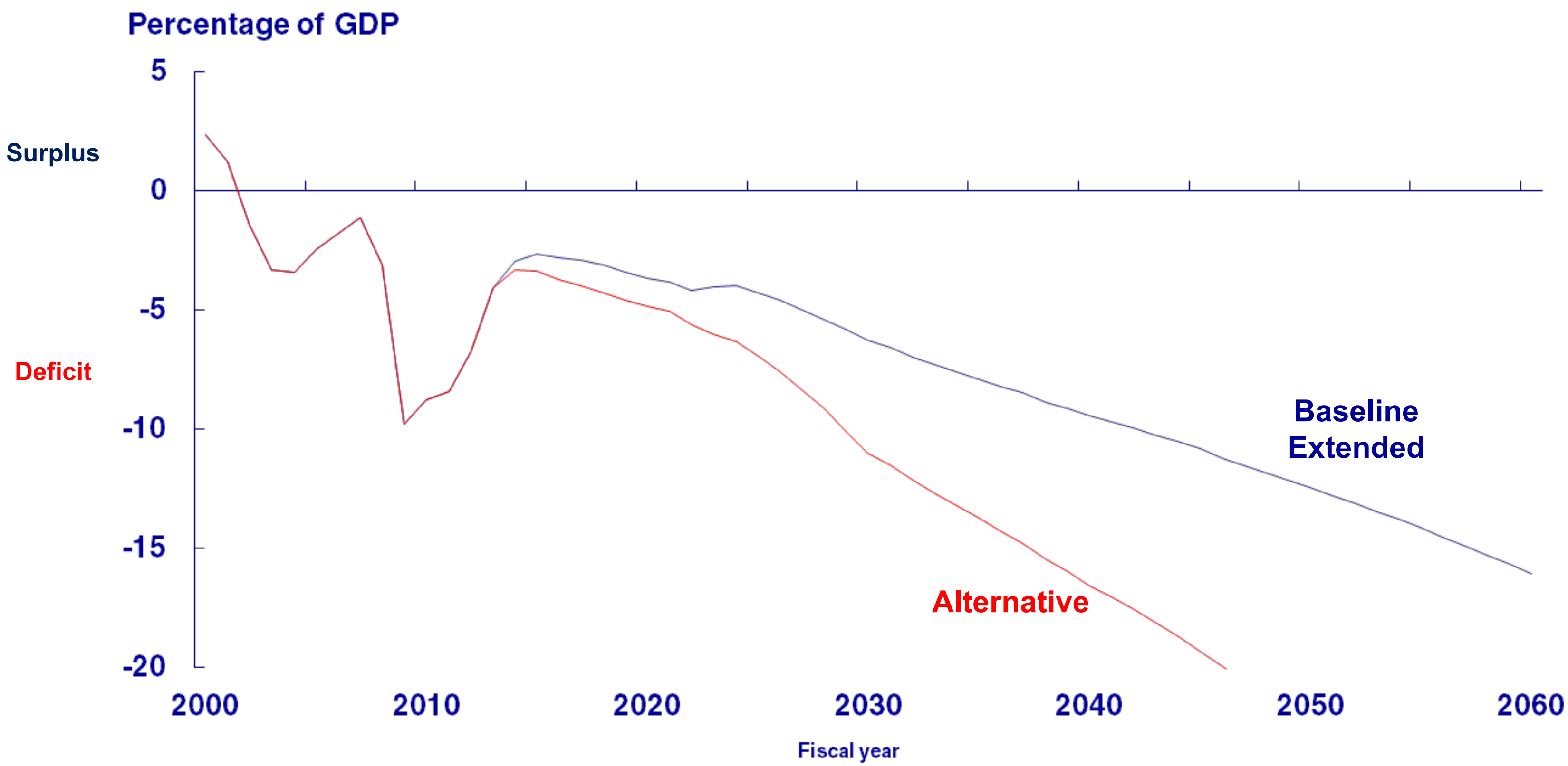
GAO's Fiscal Policy Simulations

The Longer Term (2025 to 2088)

- In the **Baseline Extended** simulation, discretionary spending remains constant at the 2024 level–5.2 percent of gross domestic product (GDP) (lower than at any other point over the past 50 years). Revenue is held constant as a share of GDP at the 2024 level of 18.4 percent—implicitly assuming that action is taken to offset increased revenue from real bracket creep, tax-deferred retirement accounts, and an excise tax on high cost employer-sponsored health plans. Long-term Social Security and Medicare spending is based on intermediate projections by the Trustees of the Social Security and Medicare trust funds (Trustees), which generally follow current law. Long-term spending on Medicaid, the Children's Health Insurance Program (CHIP), and exchange subsidies is consistent with CBO's long-term assumptions for the number and age composition of enrollees and the Medicare Trustees' intermediate assumptions for excess cost growth.

- Several of the **Alternative** simulation's assumptions differ from those used in the Baseline Extended, including:
  1. Discretionary spending as a share of GDP gradually rises to the 20-year historical average of 7.3 percent after 2021.
  2. Revenue is brought back to its 40-year historical average of 17.4 percent of GDP after 2024.
  3. Medicare spending is based on the CMS Actuary projections that assume physician payment rates are not reduced as scheduled and that policies intended to restrain Medicare cost growth phase out over time.
  4. Spending on exchange subsidies is based on CBO's alternative assumption that a policy that would slow the growth of per-participant subsidies for health insurance coverage is not in effect and eligibility thresholds are modified to maintain the share of the population eligible for subsidies.
  5. Other mandatory spending is held constant as a share of GDP at the 2024 level of 2.2 percent.

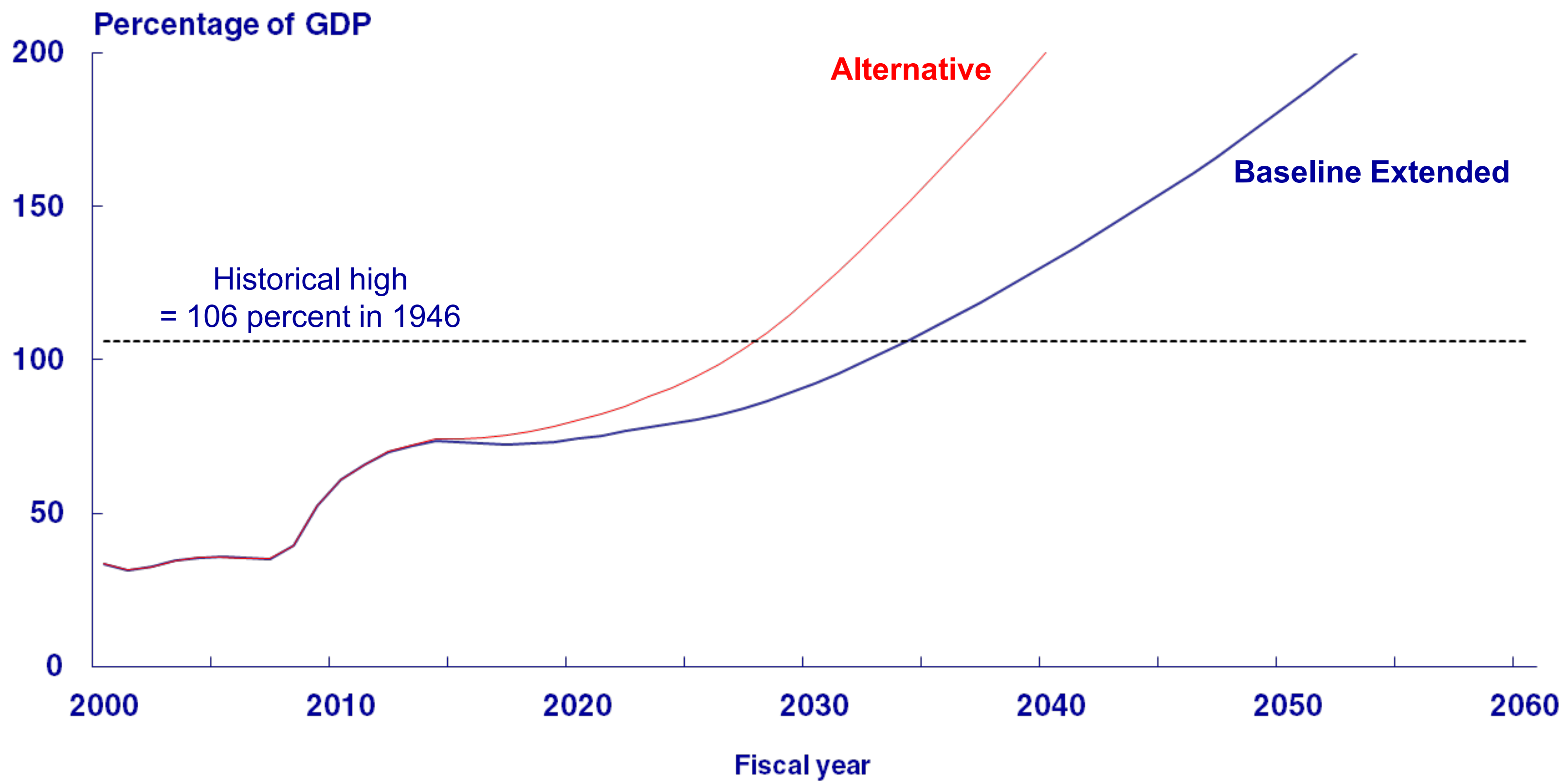
Federal Budget Surpluses and Deficits Under Two Fiscal Policy Simulations



Source: GAO.

Note: Data are from GAO's Spring 2014 simulations based on the Trustees' assumptions for Social Security and the Trustees' and CMS Actuary's assumptions for Medicare.

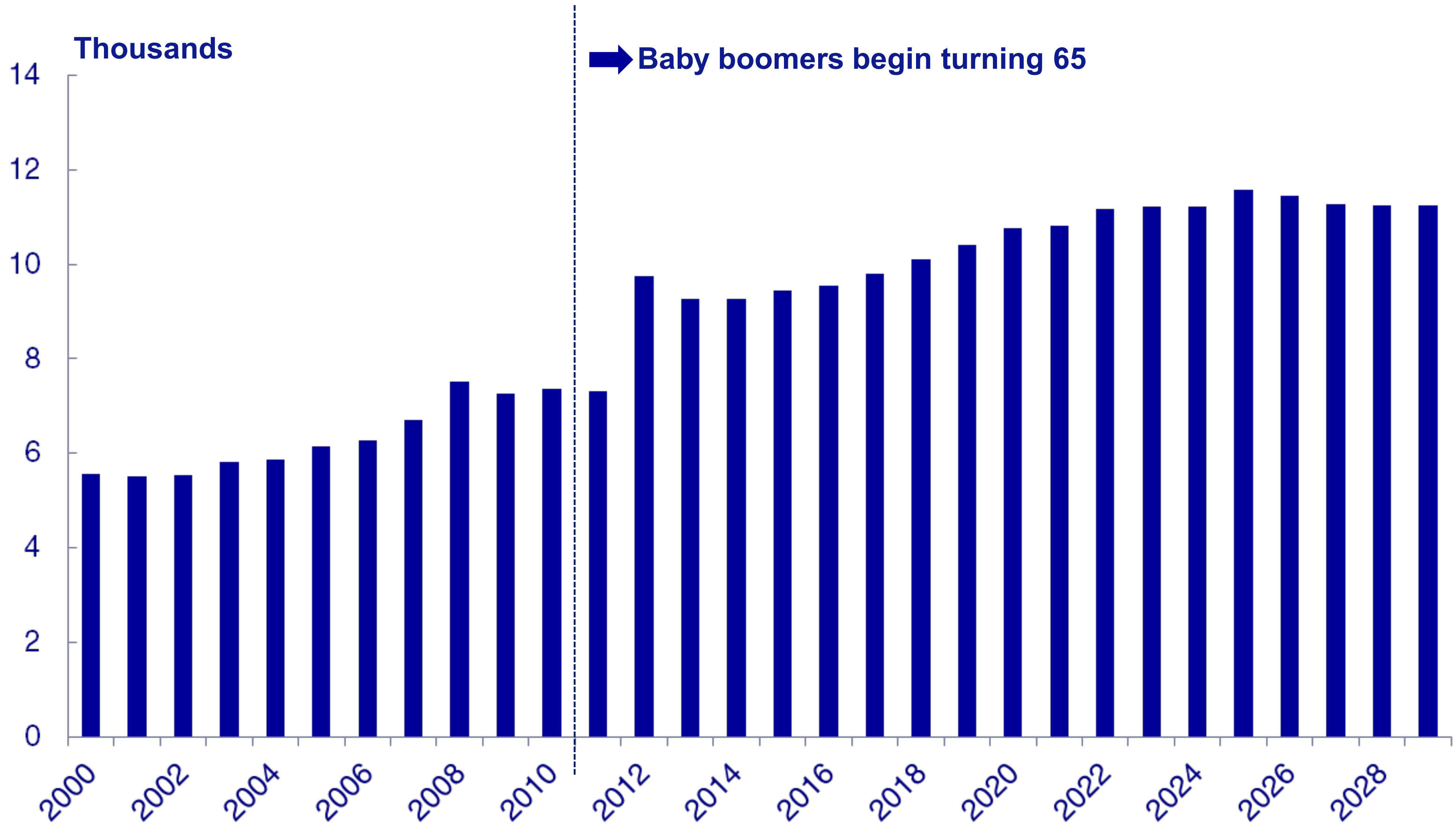
Debt Held by the Public
Under Two Fiscal Policy Simulations



Source: GAO.

Note: Data are from GAO's Spring 2014 simulations based on the Trustees' assumptions for Social Security and the Trustees' and CMS Actuary's assumptions for Medicare.

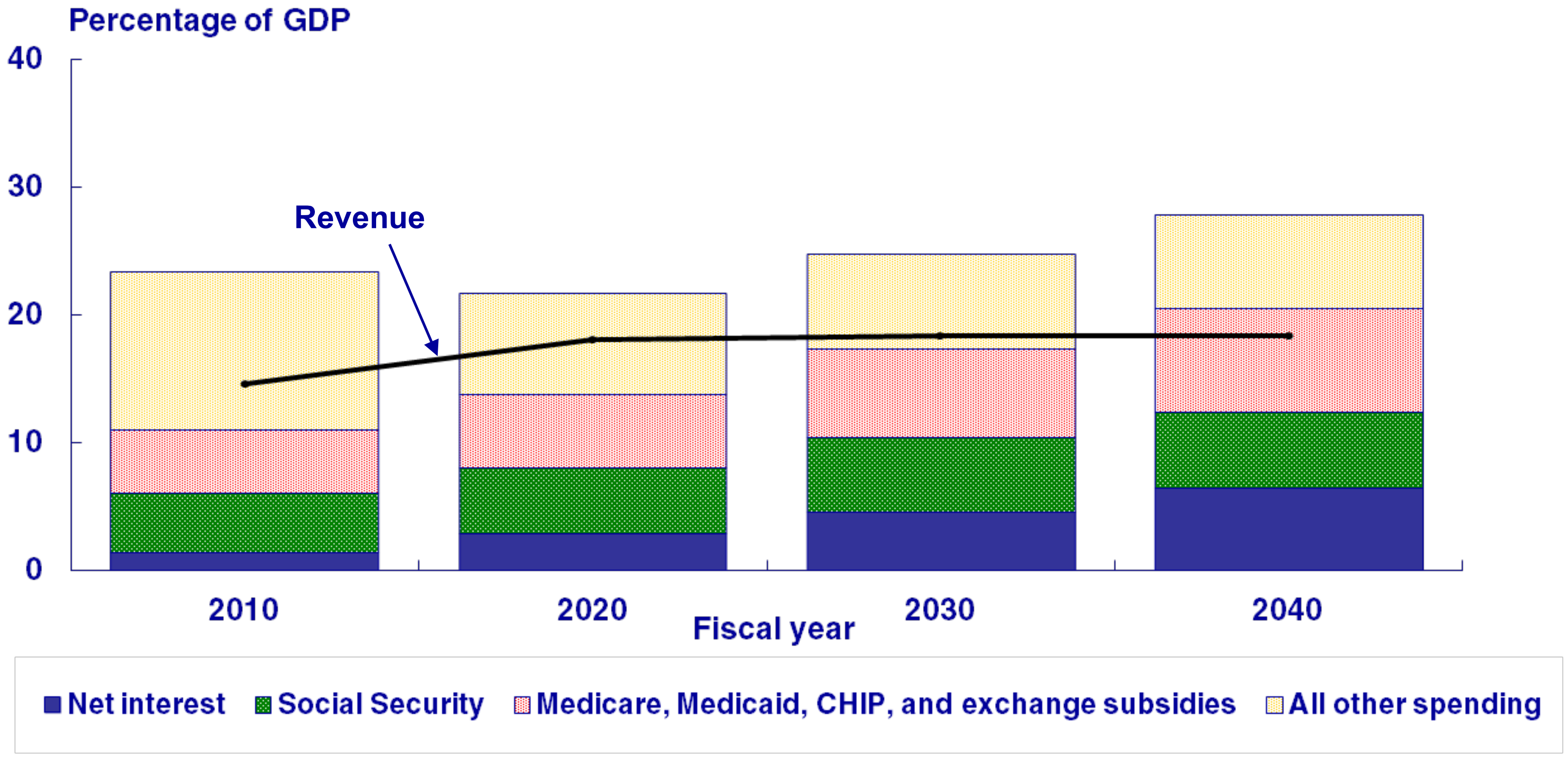
Daily Average Number of People Turning 65 Each Year



Source: GAO analysis of U.S. Census Bureau data.

Potential Fiscal Outcomes

Revenues and Composition of Spending in the Baseline Extended Simulation

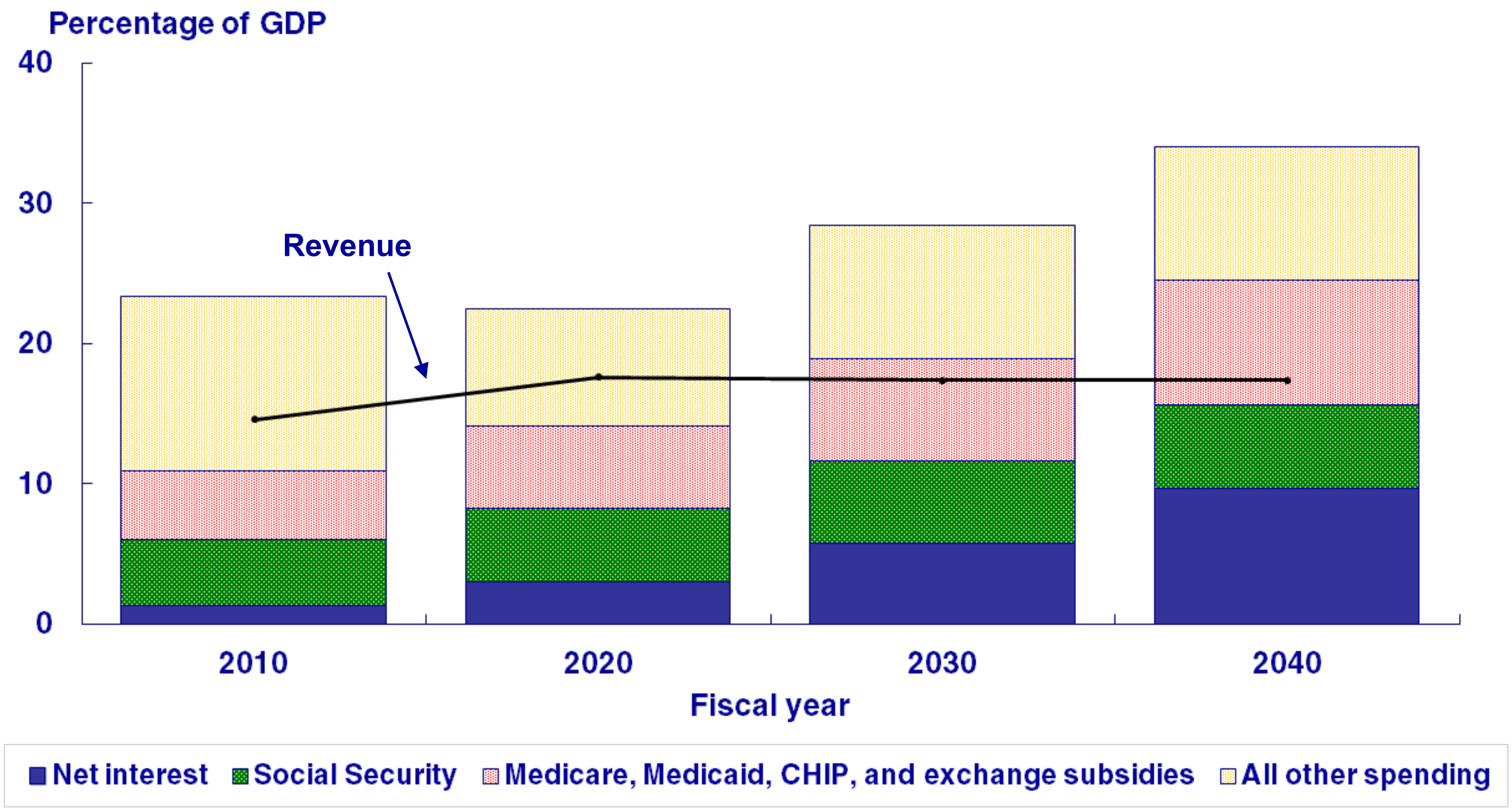


Source: GAO.

Note: Data are from GAO's Spring 2014 simulation based on the Trustees' assumptions for Social Security and Medicare.

Potential Fiscal Outcomes

Revenues and Composition of Spending in the Alternative Simulation



Source: GAO.

Note: Data are from GAO's Spring 2014 simulations based on the Trustees' assumptions for Social Security and CMS Actuary's assumptions for Medicare.

Federal Fiscal Gap (2014 to 2088)

	Fiscal gap	Average percentage change required to close gap			
		If action is taken today		If action is delayed until 2024	
	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	3.8	20.8	17.8	24.9	20.9
Alternative	7.7	43.2	31.1	51.8	35.9

Source: GAO.

Notes: Data are from GAO's Spring 2014 simulations based on the Trustees' assumptions for Social Security and the Trustees' and CMS Actuary's assumptions for Medicare. The fiscal gap is the amount of spending reductions or tax increases on average over the 75-year period to keep debt held by the public as a share of GDP in 2088 from exceeding its level at the beginning of 2014 (roughly 72.1 percent of GDP).

Total Federal Revenue and Discretionary Spending:
Historical Averages and GAO's Long-Term Assumptions

Percentage of GDP

	20-year historical average	40-year historical average	Baseline Extended assumptions	Alternative assumptions
Total revenue	17.2	17.4	18.4	17.4
Total discretionary spending	7.3	8.3	5.2	7.3

Sources: CBO and GAO.

Note: The Baseline Extended revenue and spending assumptions are held constant from year 2024 through the end of the simulation period. The Alternative revenue assumption is gradually phased in over several years from 2024 and thereafter held constant through the remainder of the simulation period. The Alternative discretionary spending assumption is gradually phased in from 2021 through 2030 and then held constant as a share of GDP through the remainder of the simulation period.

Appendix I:

Assumptions Underlying GAO Simulations

Key Budget Assumptions

Model inputs	Baseline Extended simulation	Alternative simulation
Revenue	CBO's February 2014 baseline that assumes tax provisions expire as scheduled under current law and growth of real income causes a greater proportion of taxpayers' income to be taxed in higher brackets through 2024; thereafter remains constant at 18.4 percent of GDP (CBO's projection in 2024)	CBO's estimates that assume expiring tax provisions are extended through 2024; thereafter phases into the 40-year historical average of 17.4 percent of GDP
Discretionary spending	CBO's February 2014 baseline through 2024, which reflects the caps and automatic enforcement procedures established by the Budget Control Act and revised by subsequent legislation;[a] thereafter remains constant at 5.2 percent of GDP (CBO's projection in 2024)	Follows the caps established by the Budget Control Act and revised by subsequent legislation through 2021 but not the lower caps triggered by the automatic enforcement procedures;[a] thereafter it gradually phases up to 7.3 percent of GDP (the 20-year historical average)
Other mandatory spending	CBO's February 2014 baseline through 2024, which incorporates the reductions in spending scheduled to occur under the automatic enforcement procedures established by the Budget Control Act and revised by subsequent legislation;[a] thereafter remains constant at 2.2 percent of GDP (implied by CBO's projection in 2024)	CBO's February 2014 baseline adjusted to exclude the effects of the automatic enforcement procedures established by the Budget Control Act and revised by subsequent legislation through 2024;[a] thereafter remains constant as a share of GDP at 2.2 percent (the level reached in 2024)

Source: GAO.

Notes: CBO's projections are from *The Budget and Economic Outlook: 2014 to 2024* (Feb. 4, 2014).

[a]The BCA established discretionary spending limits for 2012 through 2021. The BCA also established the Joint Select Committee on Deficit Reduction, which was tasked with proposing legislation to reduce the deficit by at least $1.2 trillion by fiscal year 2021. The Joint Committee did not enact legislation, which triggered automatic enforcement procedures to achieve the spending reductions. At the time that CBO published its projections, current law provided that the spending reductions were to be achieved through a combination of lowering the discretionary spending limits from 2016 to 2021 and sequestering mandatory spending, including Medicare, through fiscal year 2023. Subsequently, legislation was enacted extending the sequestration of mandatory spending until 2024.

.

Key Budget Assumptions (continued)

Model inputs	Baseline Extended simulation	Alternative simulation
Social Security spending	CBO's February 2014 baseline through 2024; thereafter phases into the 2013 Social Security Trustees' intermediate projections	Same as Baseline Extended
Medicare spending	CBO's February 2014 baseline through 2024 that assumes cuts in physician payment rates will occur as scheduled under current law at the time[a] and the automatic enforcement procedures established by the Budget Control Act and revised by subsequent legislation reduce spending;[b] thereafter phases into the 2013 Medicare Trustees' intermediate projections in which cost containment mechanisms, including those enacted in the Patient Protection and Affordable Care Act, reduce excess cost growth to 0.2 percentage points on average over the long term[c]	Based on CMS Actuary's alternative scenario that assumes physician payment rates grow by 0.7 percent annually over the next 10 years[a]; Medicare physician spending growth then gradually transitions to a long-term growth rate equal to the per capita increase in overall health spending; spending reductions scheduled under current law do not occur[b] and policies that would restrain Medicare cost growth are applied fully through 2019 but begin to phase out thereafter; excess cost growth averages 0.8 percentage points over the long term[c]
Medicaid, the Children's Health Insurance Program (CHIP), and exchange subsidies spending	CBO's February 2014 baseline through 2024; thereafter growth in spending for these programs is consistent with CBO's September 2013 long-term assumptions for the number and age composition of enrollees and the 2013 Trustees' intermediate assumptions for excess cost growth; excess cost growth averages 0.7 percentage points over the long term[c]	CBO's February 2014 baseline through 2024; thereafter growth in spending for these programs is consistent with CBO's September 2013 long-term assumptions for the number and age composition of enrollees under CBO's alternative assumption that a policy that would slow the growth of per-participant subsidies for health insurance coverage is not in effect and eligibility thresholds are modified to maintain the share of the population eligible for subsidies; as in Baseline Extended, excess cost growth averages 0.7 percentage points over the long term[c]

Source: GAO.

Notes: CBO's projections are from *The Budget and Economic Outlook: 2014 to 2024* (Feb. 4, 2014) and CBO's *The 2013 Long-Term Budget Outlook* (Sept. 17, 2013). Trustees projections are from *The 2013 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* and *The 2013 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 31, 2013. Projections from the CMS Actuary are based on "Projected Medicare Expenditures under Illustrative Scenarios with Alternative Payment Updates to Medicare Providers" (May 31, 2013). We assume that Social Security and Medicare benefits are paid in full regardless of the amounts available in the trust funds.

[a]When CBO prepared its baseline, physician payment rates were scheduled to be reduced by roughly 24 percent in 2014 and smaller amounts in subsequent years under the sustainable growth rate (SGR) system. However, in April 2014, legislation was enacted to delay the reduction in payment rates for one year. Since 2003, Congress has taken a series of legislative actions to override scheduled reductions in physician payment rates that would otherwise occur under current law at the time. The CMS Actuary's assumption of 0.7 percent reflects the average annual update to physician fee payments over the 10-year period preceding the projections.

[b]In addition to limits on discretionary budget authority, the Budget Control Act required reductions in nonexempt mandatory spending, including Medicare, through 2021. The Bipartisan Budget Act extended these reductions to 2023.

[c]Excess cost growth refers to the annual growth rate of health care spending per enrollee in excess of the annual growth rate of potential GDP, adjusted for demographic characteristics.

Key Economic Assumptions Used in Both Sets of Simulations

Model inputs	All simulations
Real GDP growth	CBO's February 2014 baseline through 2024; thereafter averages 2.1 percent based on the intermediate assumptions of the 2013 Social Security and Medicare Trustees reports
Inflation (percentage change in GDP price index)	CBO's February 2014 baseline through 2024; 2 percent thereafter (CBO's projection in 2024)
Interest rate (on debt held by the public)	Rate implied by CBO's February 2014 baseline net interest payment projections through 2024; phasing to 5.2 percent by 2030 and then constant thereafter (CBO's September 2013 long-term projection)

Source: GAO.

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

Appendix II:

Simulations Using CBO's Entitlement Spending Projections

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

Model inputs	Baseline Extended simulation	Alternative simulation
Social Security spending	CBO's February 2014 baseline through 2024; thereafter based on CBO's September 2013 long-term projections for Social Security	Same as Baseline Extended
Medicare spending	CBO's February 2014 baseline through 2024; thereafter based on CBO's September 2013 long-term projections under its extended-baseline scenario that assumes policies that would restrain spending growth are not in effect after 2029 and excess cost growth averages 1.1 percentage points per year over the long term[a]	Based on CBO's projections under its alternative fiscal scenario that assumes physician payment rates do not decline as scheduled under current law; spending reductions under the BCA do not occur and policies to restrain growth are not in effect after 2023.
Medicaid, CHIP, and exchange subsidies spending	CBO's February 2014 baseline through 2024; thereafter based on CBO's September 2013 long-term projections under its extended-baseline scenario which follows current law and assumes that excess cost growth averages 0.7 percentage points per year over the long term for Medicaid and CHIP and transitions to the underlying rate for private insurance premiums after 2029 for exchange subsidies[a]	CBO's February 2014 baseline through 2024; thereafter CBO's September 2013 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.

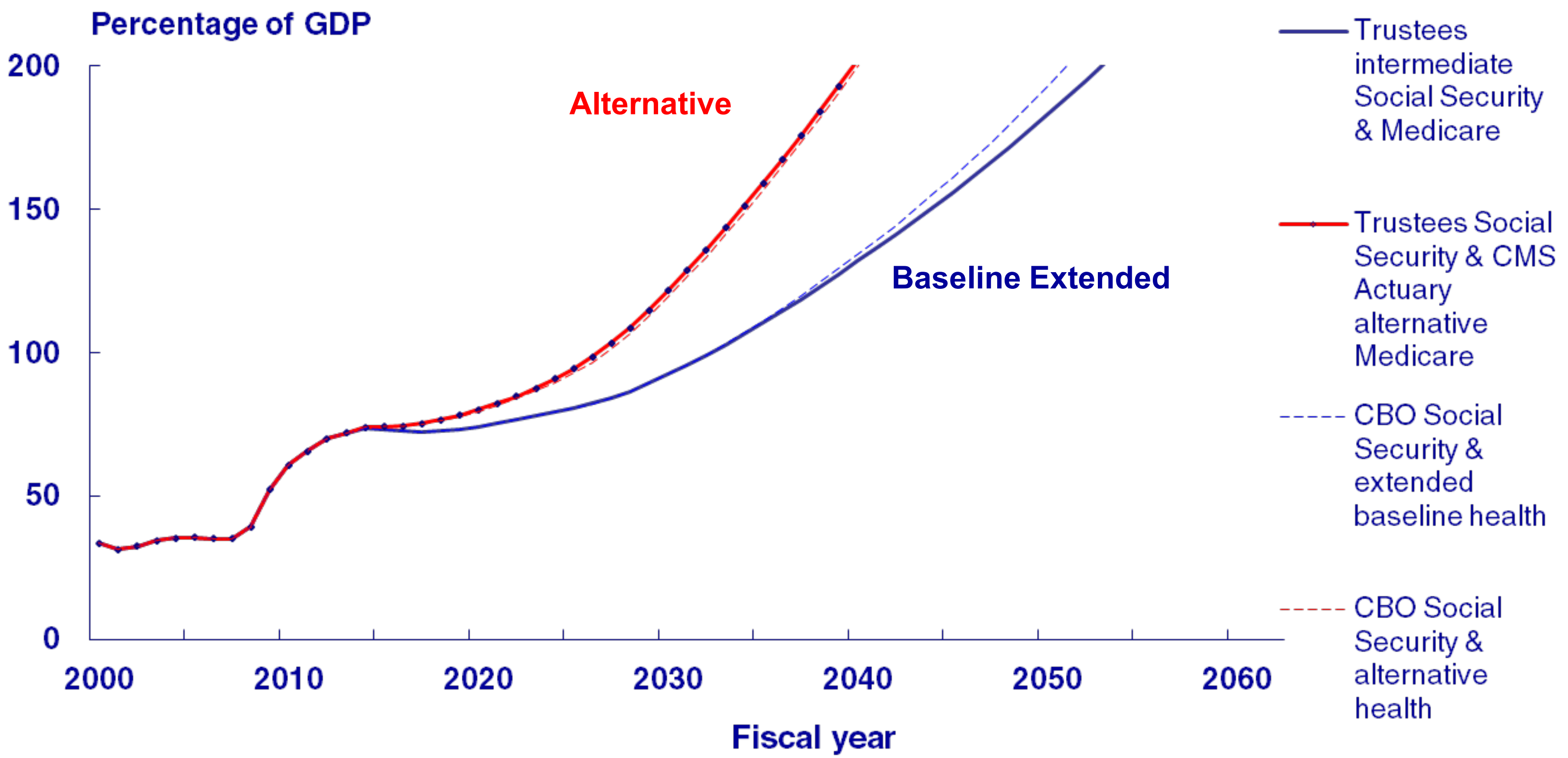
Source: GAO.

Notes: CBO's projections are from *The Budget and Economic Outlook: Fiscal Years 2014 to 2024* (Feb. 4, 2014) and CBO's *The 2013 Long-Term Budget Outlook* (Sept. 17, 2013). CBO assumes that full benefits are paid regardless of the amounts available in the trust funds.

[a]Excess cost growth refers to the annual growth rate of health care spending per enrollee in excess of the annual growth rate of potential GDP, adjusted for demographic characteristics.

Debt Held by the Public

Comparison of Simulations with Different Assumptions for Major Entitlement Programs

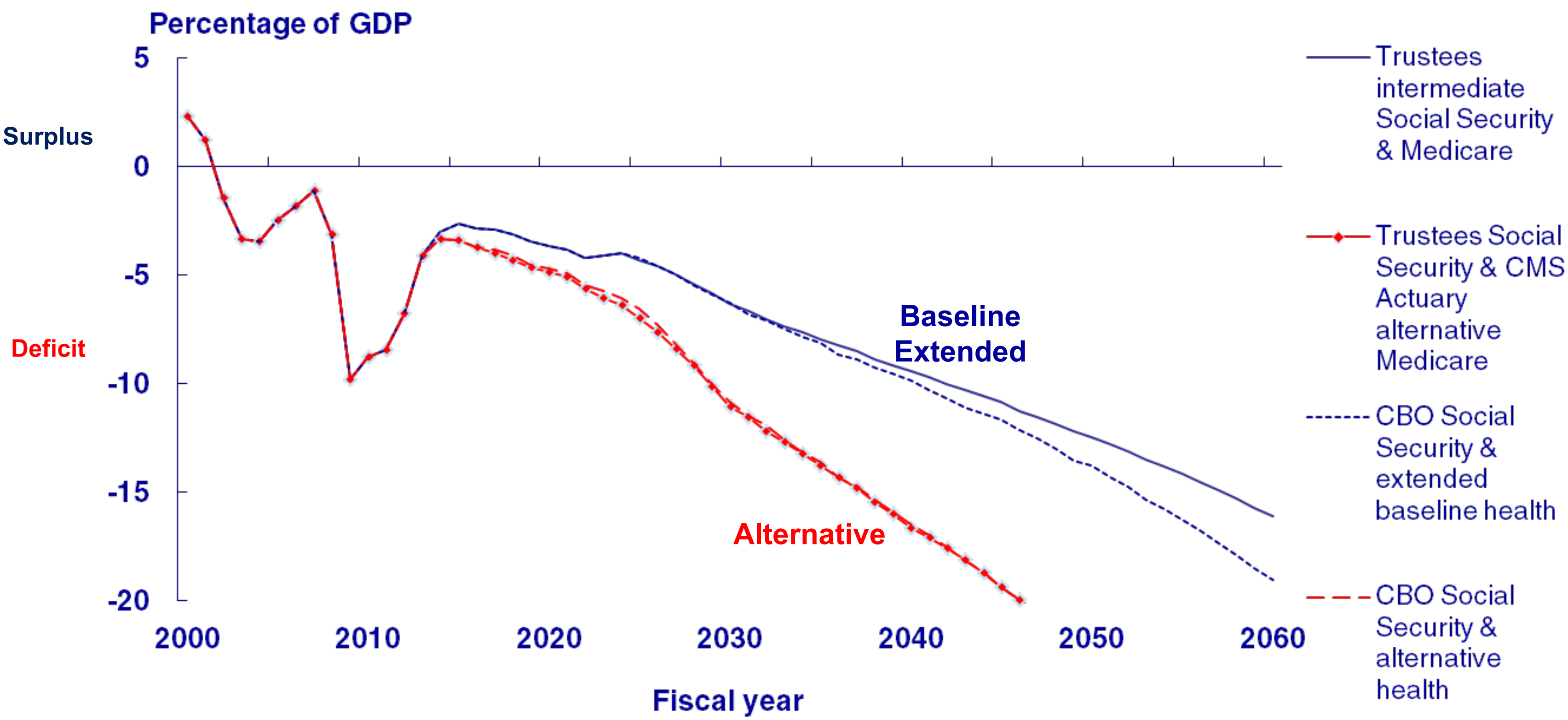


Source: GAO.

Note: Data are from GAO's Spring 2014 simulations.

Federal Budget Surpluses and Deficits

Comparison of Simulations with Different Assumptions for Major Entitlement Programs



Source: GAO.

Note: Data are from GAO's Spring 2014 simulations.