CBO’s 2023 Long-Term Budget Projections

Presentation at the American Enterprise Institute: Methodologies in Fiscal, Economic, and Health Spending Projections

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For information about the event, see www.aei.org/events/methodologies-in-fiscal-economic-and-health-spending-projections.
CBO’s Long-Term Projections

Each year, the Congressional Budget Office provides the Congress with its projections of what the federal budget and the economy would look like over the next 30 years if current laws generally remained unchanged. Those projections show the estimated effects of demographic trends, economic developments, and health care costs on federal spending, revenues, deficits, and debt over the next 30 years.

CBO also publishes an annual report that provides long-term projections for the Social Security system. Those projections span 75 years—the same projection period that the Social Security trustees use in their annual report.

CBO’s projections are highly uncertain, especially in later years. Economic conditions that differed from those CBO projects and fiscal policy that differed from current law could yield noticeably different results.
Primary deficits, which exclude net interest costs, equal 3.3 percent of gross domestic product (GDP) in both 2023 and 2053. Combined with rising interest rates, those large and sustained primary deficits cause net outlays for interest to almost triple in relation to GDP.
In CBO’s projections, debt rises in relation to GDP over the next three decades, exceeding any previously recorded level—and it is on track to continue growing after 2053.
CBO’s Approach to Economic Forecasting

CBO’s approach involves projections of:

▪ Potential (maximum sustainable) output in a Solow-type growth model and

▪ Actual output in a standard macroeconometric model.

The estimate of potential output is mainly based on estimates of:

▪ The potential labor force,

▪ The flow of services from the capital stock, and

▪ Potential total factor productivity (TFP) in the nonfarm business sector.

In CBO’s projections, real potential GDP (the maximum sustainable output of the economy, adjusted to remove the effects of inflation) grows more slowly throughout the 2023–2053 period than it has, on average, over the past 30 years. That slower growth is explained by slower growth in the potential labor force and in potential labor force productivity.
In at least two ways, climate change affects CBO’s projections of economic growth in future decades.

First, climate change has affected recent productivity trends. Because CBO’s projections are based in part on those recent trends, they implicitly account for a portion of the future effects of climate change.

Second, the agency explicitly estimates a certain amount of additional impact on the growth of TFP from future changes in the climate.

In all, climate change reduces CBO’s projection of GDP in 2053 by 1.0 percent.
How Climate Change Is Expected to Change the Level of Real GDP in 2050

Percentage of Real GDP

-0.2
-0.4
-0.6
-0.8
-1.0
-1.2

Weather Patterns: Continuation of Recent Effect
Hurricanes: Continuation of Recent Effect

Weather Patterns: Increasing Effect
Hurricanes: Increasing Effect

Continuation of Recent Effect of Climate Change on GDP Growth Rate, Relative to the Benchmark Climate
Impact of Increasing Effect of Climate Change on GDP Growth
Total Accumulated Effect of Climate Change on GDP Growth Rate, Relative to Benchmark Climate
Schematic of CBO’s Methodology

Step 1
- Weather-output relationships from econometric models
- Various climate-change scenarios
- Additional modeling assumptions

Step 2
- Meta-analysis
- Central climate-change scenario
- Projected effect of changes in non-hurricane-related weather patterns on real GDP in 2050

Step 3
- CBO’s estimates of changes in hurricane damage due to climate change in 2050
- Central climate-change scenario
- Macroeconomic model of the effect of damage on GDP
- Projected effect of changes in hurricane damage on real GDP in 2050

Step 4
- Projected effect of climate change on real GDP in 2050, relative to the benchmark climate

Step 5
- Estimate of the role of recent trends in climate on GDP
- Effect of climate change on real GDP in 2050 not previously incorporated in CBO’s economic growth projection
In most years, growth in outlays is projected to outpace growth in revenues, resulting in widening budget deficits.
Rising interest rates and mounting debt cause net outlays for interest to increase from 2.5 percent of GDP in 2023 to 6.7 percent in 2053.

Outlays for the major health care programs rise from 5.8 percent of GDP to 8.6 percent as the average age of the population increases and health care costs grow.

The aging of the population also pushes up outlays for Social Security, which increase from 5.1 percent of GDP to 6.2 percent.
CHIP = Children’s Health Insurance Program.

Outlays for Medicare are net of premiums and other offsetting receipts. “Marketplace Subsidies” refers to outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.

Composition of Outlays for the Major Health Care Programs

Spending on Medicare is projected to account for more than four-fifths of the increase in spending on the major health care programs over the next 30 years.

CHIP = Children’s Health Insurance Program.
How CBO Projects Spending on Health Care

CBO’s 10-year baseline budget projections provide a benchmark for estimates of the costs of legislative proposals. Those projections are based, in part, on detailed modeling of the health care system.

The agency uses a more aggregate and mechanical approach to project spending for the two decades that follow that initial 10-year projection period.
How CBO Projects Spending on Medicare in the First Decade of the Projection Period

CBO’s analysts start with the most recent data on Medicare spending available.

They then use the following pieces to build the projections:

- Medicare population (based on CBO’s projections of the total population, by age and sex, and on data on Medicare participation),
- Price (Medicare’s payment rates),
- Changes in the composition of the Medicare population, by age and sex,
- Anticipated policy changes, and
- Growth in Medicare spending that cannot be explained by those four factors.
How CBO Projects Spending on Medicare in the Second and Third Decades of the Projection Period

Growth in Health Outlays

- Growth in CBO’s Beneficiary Cost Index
- Growth in Potential Nominal GDP per Person
- Additional Cost Growth
CBO’s Estimate of Additional Cost Growth

The estimates of additional cost growth in CBO’s projections move linearly from the rates at the end of the 10-year budget period to the estimated rates at the end of the 30-year projection period.

CBO’s estimate of additional cost growth in health care overall in 2053 is 0.6 percent. It is 0.1 percent for Medicare Part A, 0.2 percent for Medicare Part B, and 0.6 percent for Medicare Part D.

To estimate additional cost growth in the health care sector, CBO uses essentially the same method that the Centers for Medicare & Medicaid Services’ Office of the Actuary uses to produce the 75-year projections of Medicare spending for its annual report to the Congress, although CBO uses its own estimates of key parameters.
Relevant CBO Publications in 2023


