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CBO's Long-Term Social Security Projections

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CBO's long-term Social Security projections are based on a detailed **microsimulation model** that starts with data about individuals from a representative sample of the population and projects economic and demographic outcomes for that sample through time.

CBO's Long-Term Model (CBOLT) has four components:

The **demographic model** projects the population by age and sex, using annual projections of the number of births, deaths, immigrants, and emigrants.

The microsimulation model projects year-to-year changes in demographic characteristics and economic outcomes for individuals in a representative sample of the population.

The **long-term budget model** projects federal outlays, revenues, deficits, and debt beyond CBO's standard 10-year budget window.

The **policy growth model** simulates how demographics, fiscal policy, and economic factors affect the U.S. economy and, in turn, the federal budget.

Projections of economic and demographic variables are **key inputs** into that model.

CBO consults a variety of sources—including its own analysis of historical data, forecasts made by other government agencies, panels of advisers, and academic literature—when creating its projections.

CBO regularly reviews its projections, sometimes in light of revised and recent data and sometimes in light of recent analyses.

Economic projections are extensions of CBO's 10-year economic forecast, which underlies the agency's budget projections.

Those projections reflect not just historical averages but also trends that many economic forecasters expect will continue.

Demographic variables that underlie CBO's extended baseline:

Fertility Rate

Immigration Rate

Mortality Rate

Economic variables that underlie CBO's extended baseline:

Labor Force Participation Rate

Unemployment Rate

Growth of Total Factor Productivity

Growth of Average Hours Worked

Share of Earnings Below the Taxable Maximum

Inflation

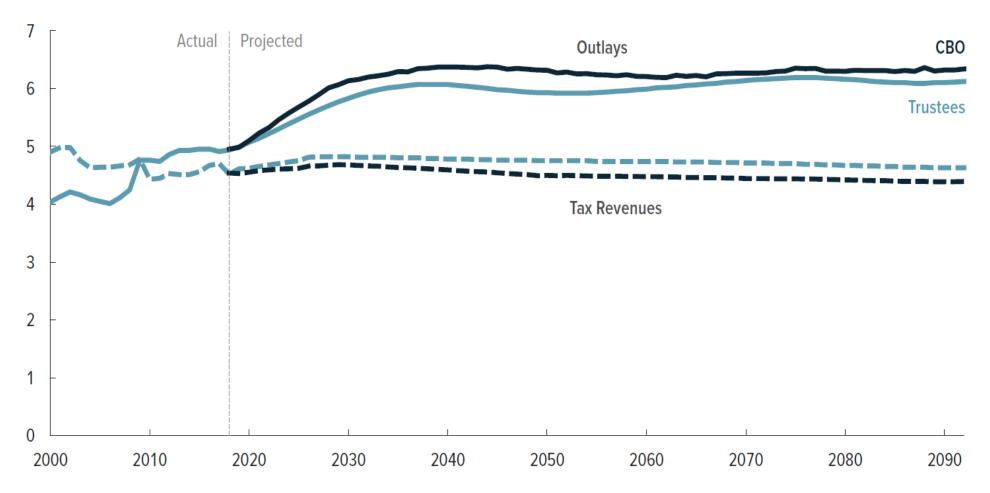
Interest Rates

Although long-term projections of any variable are uncertain, projections of Social Security finances are more sensitive to changes in some inputs than others.

One way to illustrate the effect that different projections of underlying factors have on Social Security projections is to compare CBO's projections with the Social Security Trustees' projections.

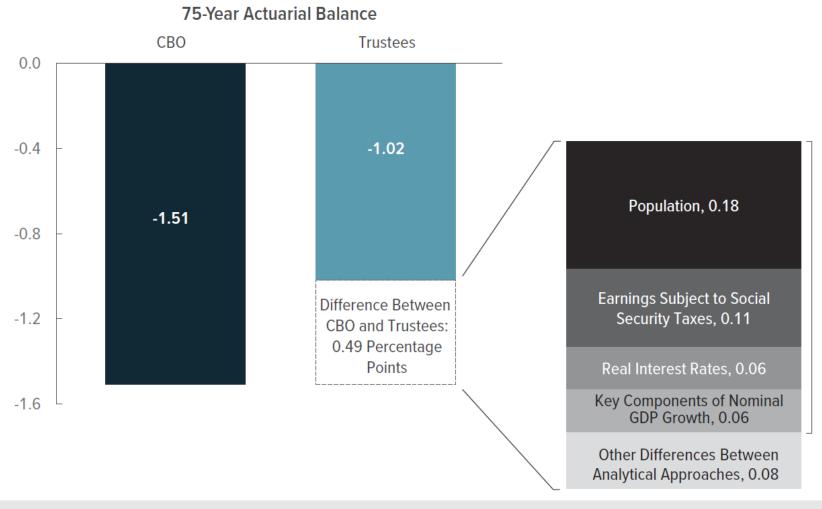
CBO's and the Social Security Trustees' Projections of Social Security Tax Revenues and Outlays

Percentage of Gross Domestic Product



Distribution of the Differences Between CBO's and the Social Security Trustees' Projections

Percentage of Gross Domestic Product



Differences in projections of four major factors account for four-fifths of the difference.

The largest effects are from differences in population and differences in earnings subject to Social Security taxes.

Underlying population estimates are projections of fertility, mortality, and immigration.

Earnings subject to Social Security taxes depend on the share of earnings above and below the taxable maximum, the share of total compensation paid as earnings, and total compensation as a share of GDP.