

# **CBO's Long-Term Projections of Labor Force Participation Rates**

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# **CBO's Baseline Budget Projections and Cost Estimates**

CBO prepares, and periodically updates, a budget baseline that serves as a benchmark for measuring the effects of proposed legislation. That baseline spans the next 10 years.

The baseline, which reflects the assumption that current laws governing spending and revenues generally remain unchanged, relies on CBO's forecasts of key economic factors, including labor force participation rates.

CBO is required to produce a formal cost estimate for nearly every bill approved by a full Congressional committee. The agency also fulfills thousands of requests for technical assistance as lawmakers draft legislation.



# CBO's Long-Term Projections

CBO provides the Congress with long-term budget projections that extend 20 years beyond the standard 10-year period. 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 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.

# Independent Analysis

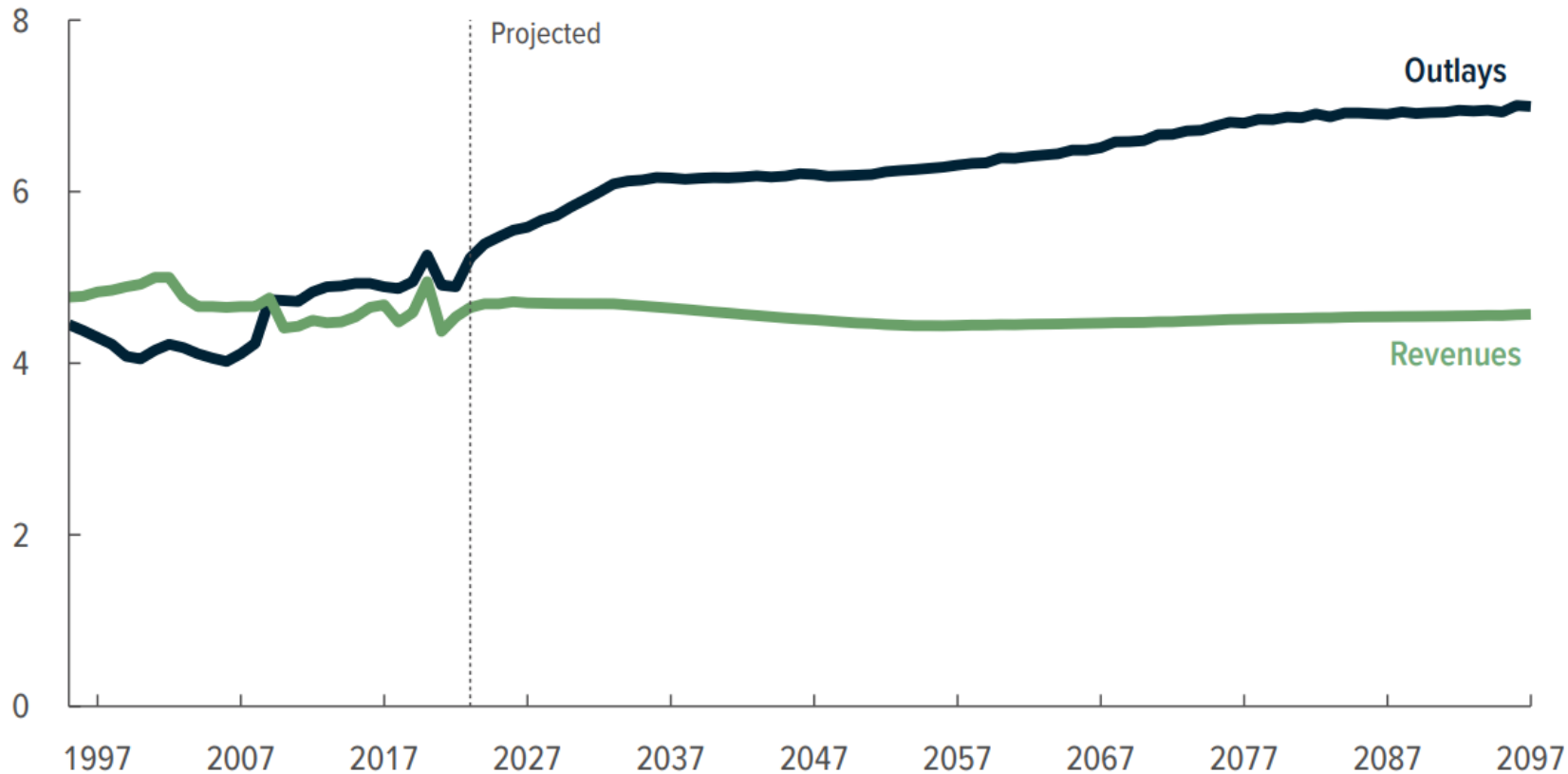
All of CBO's work reflects the agency's objective, impartial, and nonpartisan analytical assessments. Those assessments are based on several factors:

- A detailed understanding of federal programs and revenue sources;
- Careful reading of the relevant research literature;
- Extensive analysis of data collected and reported by the government's statistical agencies and by private organizations; and
- Consultation with numerous outside experts, including professors, think-tank analysts, representatives of industry groups, other private-sector experts, and employees of federal, state, and local governments.

The demographic and economic projections that CBO uses in its Social Security analysis are consistent with those that it uses to produce its baseline projections and for other purposes.

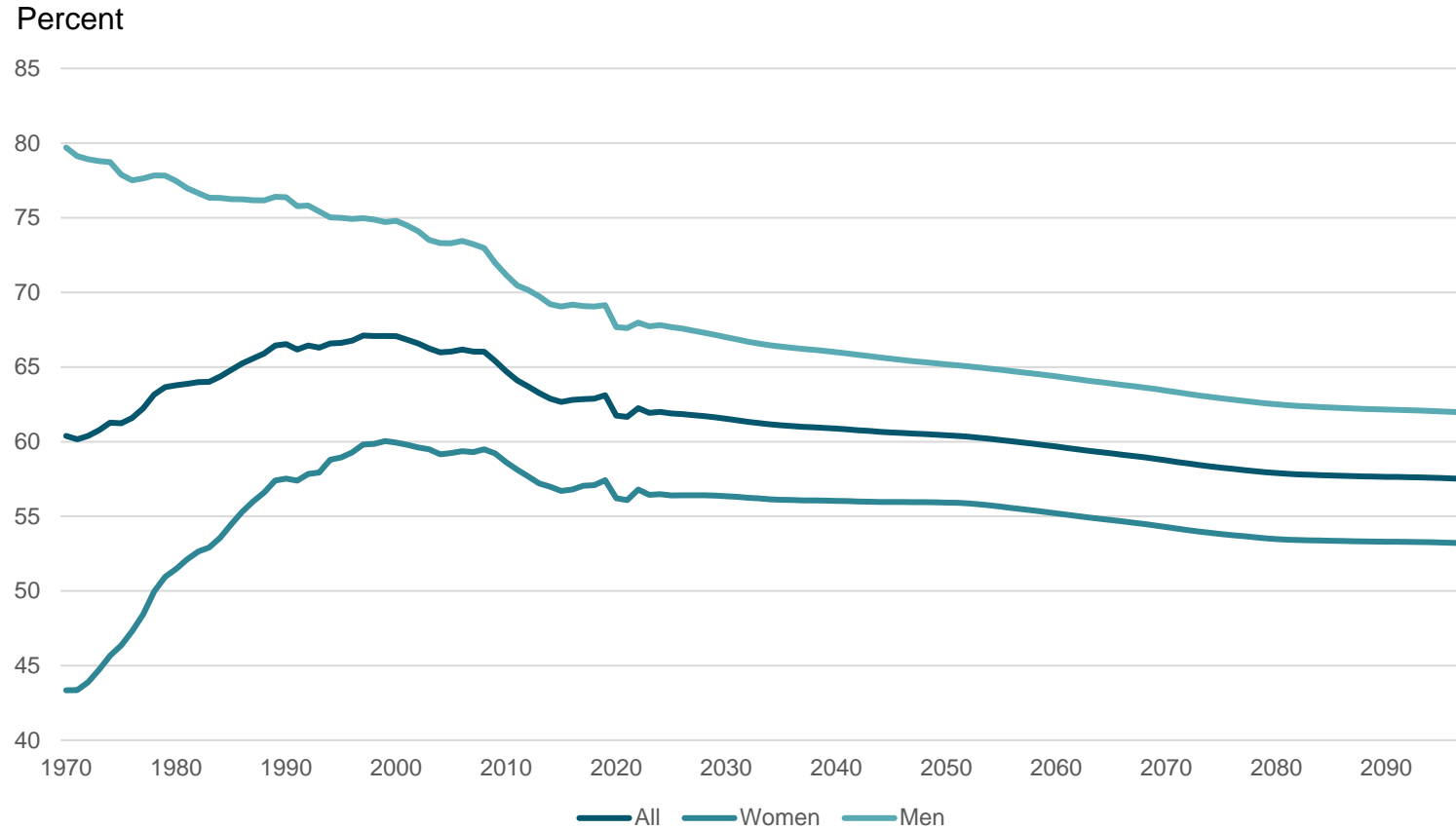
# Social Security Outlays and Revenues, With Scheduled Benefits

Percentage of Gross Domestic Product



In CBO's projections, the gap between Social Security's outlays and revenues widens over the long term. Total spending on the program in 2023 is equal to 5.2 percent of GDP; by 2097, spending on the program reaches 7.0 percent of GDP. Over the same period, revenues remain at about 4.6 percent of GDP.

# Labor Force Participation Rates, 1970 to 2097



The aging of the population continues to be the main driver of the decline in labor force participation in CBO's projections, but it is not the only factor affecting those projections. Some factors, such as increases in educational attainment and life expectancy, tend to increase labor force participation and thus partially offset the effects of the aging of the population. But other factors, along with aging, push down CBO's projections of labor force participation.

# Quantifying the Effect of Aging on Labor Force Participation

To assess the importance of aging in its projections of the overall labor force participation rate, CBO calculated what the rate would be if in each year of the projection period the age-and-sex composition of the population remained the same as it was in 2023.

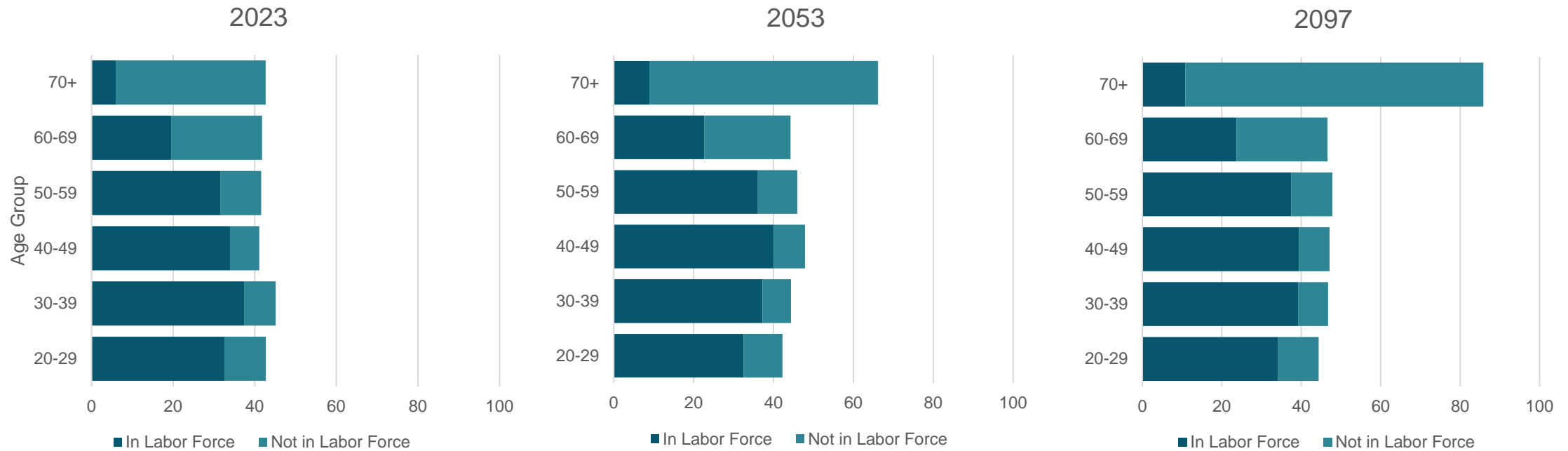
Under that hypothetical scenario, the labor force participation rate would increase from 61.9 percent in 2023 to 63.7 percent in 2053—3.4 percentage points higher than the labor force participation rate in that year in CBO’s projections.

Thus, CBO estimates that aging causes the labor force participation rate to drop by 3.4 percentage points over the 2023–2053 period—double the 1.7 percentage-point decline in the rate over that period in CBO’s projections.



# Number of People in and out of the Labor Force, by Age Group and Year

Millions of People





# How CBO Projects Labor Force Participation

CBO projects rates of labor force participation by using a model that is an extension of those used by Stephanie Aaronson et al. (2006), Kudlyak (2013), Stephanie Aaronson et al. (2014), and Daniel Aaronson et al. (2014).

That model is a cohort model that estimates labor force participation rates by age-sex-education-race/ethnicity subgroups. CBO treats age groups within each sex-education-race/ethnicity subgroup as a separate system of equations and estimates cohort effects that are constrained across the age group equations within each system. Those constraints keep the values of the estimated cohort effects the same for all age groups within each system.

## How CBO Projects Labor Force Participation (Continued)

Each age group equation includes an age group–specific fixed effect, cohort fixed effects, and an array of time-varying covariates.

CBO separates cyclical variation in labor force participation rates from underlying structural trends through the time-varying covariates to identify the potential labor force participation rate—that is, the rate that would occur if the economy’s output was at its maximum sustainable amount and other inputs were at their potential rates.

# **CBO Is Revisiting How It Projects Labor Force Participation**

In the future, will the relationships between labor force participation and age, education, and immigration status be similar to those in the past?

Will the relationships between labor force participation and changes to tax policy and transfer programs be similar to those in the past?

Will the relationships between data about earnings from payrolls and survey measures of labor force participation be similar to those in the past?

Can a more parsimonious and tractable model than CBO's current one produce more accurate projections?