

CRS Insights

Uncertainty in Financial Projections of Social Security

Noah P. Meyerson, Analyst in Income Security (nmeyerson@crs.loc.gov, 7-4681)

May 14, 2015 (IN10275)

The [report of the Social Security Board of Trustees](#) contains the federal government's official financial projections for the Social Security program. Section 201(c) of the Social Security Act mandates the annual report and names the trustees: the commissioner of Social Security, the Secretary of the Treasury, the Secretary of Labor, the Secretary of Health and Human Services, and two members of the public. The trustees specify the assumptions about future demographic and economic trends used in the forecast and have final authority over the projections and the wording of the report. However, the Office of the Chief Actuary (OACT) of the Social Security Administration (SSA) advises the trustees on the assumptions, drafts report language, and develops and runs the computer models that produce the forecasts.

The financial outlook for Social Security has been the subject of much analysis and debate. Recently, three researchers—Gary King, Konstantin Kashin, and Samir Soneji—criticized OACT in [two academic papers](#) and in statements to the press, [suggesting](#) that the projections are unduly optimistic and that the projection process lacks transparency.

Analysts disagree about the specific assumptions and methods that should be used to project the future of Social Security, but there is general consensus among experts—both within and outside of government—about the general financial trajectory of the program. Under a variety of reasonable projection approaches, there is a significant long-term financial shortfall. The trustees project that the Social Security trust funds will be exhausted in 2033. Independently, the Congressional Budget Office (CBO) [projects](#) that exhaustion will occur in 2030. Those projections use the common analytic convention of combining Social Security's two trust funds: the Disability Insurance trust fund and the Old-Age and Survivors Insurance trust fund. Legally, the two funds are separate, and the trustees project that the Disability Insurance trust fund will be [exhausted in late 2016](#).

Uncertainty of Projections

The recent criticisms raise the larger question of the extent of uncertainty about the long-term projections. Policymakers often focus on the central, or "intermediate," scenario presented in the trustees report. But the trustees [note](#), "Significant uncertainty surrounds the estimates under the intermediate assumptions, especially for a period as long as 75 years." The trustees also present [two alternative scenarios](#), in which most assumptions are set to levels that would result in higher or lower costs. Under the "high-cost" scenario, the trust funds would be exhausted in 2028; under the "low-cost" scenario, they would never exhaust. The report also contains [sensitivity analyses](#), which show how changes in individual assumptions affect financial outcomes.

[According to the Trustees](#), "Actual future costs are unlikely to be as extreme as those portrayed by the low-cost or high-cost projections." In an attempt to quantify the uncertainty of the projections, OACT developed a model based on the historical variation in various economic and demographic variables, such as mortality and wage growth. [According to that model](#), there is an 80% chance that the trust funds will be exhausted between 2030 and 2040. A [similar analysis by CBO](#) estimated an 80% chance of exhaustion between 2028 and 2037. Those models do not account for all sources of uncertainty, but they strongly suggest that the likely range of outcomes is smaller than suggested by the trustees' high- and low-cost scenarios.

Effect of Alternative Life Expectancy Projections

The recent papers suggested that life expectancy will increase faster than is assumed by the trustees. Other independent experts, including past outside [technical panels](#) that are appointed every four years to review the assumptions and methods underlying the projections, have come to [similar conclusions](#). In its long-term

projections, CBO [assumes faster improvement in life expectancy](#) than the trustees do. Higher life expectancy results in additional Social Security spending, because people would collect benefits for a longer period. (OACT responded to the criticisms in [several](#) actuarial [notes](#).)

In statements to the press this month, Gary King suggested that the potential errors in the trustees projections are substantial and that Social Security "[is going to be insolvent before everyone thinks](#)," but the recent papers did not quantify the effect of alternative life expectancy projections.

Other analyses found that an assumption of higher life expectancy would result in noticeably higher spending but would not affect Social Security's general financial trajectory. King and Soneji [previously found](#) that their recommended projections of life expectancy would accelerate the exhaustion of the trust fund by two years. (OACT [responded](#) to several of the issues raised by King and Soneji in 2013.) Under the faster life expectancy improvement recommended by the 2011 technical panel, the Social Security trust funds would have been exhausted [one year earlier](#). The trustees report also estimates the effect of increasing the assumed long-term rate of mortality improvement by about 50%. [Such a change](#) would increase spending over the 75-year projection period by about 3% and would result in the trust funds being exhausted in 2032 rather than 2033.

Transparency

King et al. [wrote](#), "[OACT] withholds many aspects of its data and forecasting procedures from the public, the scientific community, and even other parts of SSA." Every four years, a [technical panel](#) of independent economists, actuaries, and demographers reviews the assumptions and methods underlying the projections, and those panels have recommended that OACT increase the amount of public documentation. The 2007 Panel [wrote](#), "Throughout this report we call for more transparency in the models and data the actuaries use, as well as the assumptions that drive their results." However, the 2011 technical panel also "[applaud\[ed\]](#)" OACT for "significant progress in increasing the transparency of its model and methods."

In addition to the documentation included in the main trustees report, OACT publishes [documentation](#) of the demographic and economic assumptions and the short-range and long-range projection methods. The projections in the trustees report are overseen by the trustees and their staffs. Finally, since 2006, OACT's projections have been audited by an independent accounting firm.