Congressional Budget Office

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Answers to Questions for the Record From Chairman Johnson Following a Hearing by the House Ways and Means Subcommittee on Social Security on Understanding Social Security's Solvency Challenge

On September 21, 2016, the House Ways and Means Subcommittee on Social Security convened a hearing at which Keith Hall, Director of the Congressional Budget Office, testified about CBO's long-term projections (www.cbo.gov/publication/51988). After the hearing, Chairman Johnson submitted questions for the record. This document provides CBO's answers.

Question: The Congressional Budget Office has made changes to assumptions that have significantly changed the projected actuarial balance from one year to the next. This seems to be different than the Trustees' approach where it's more about gradual changes. Can you please discuss why CBO takes this approach?

Answer: CBO produces independent and impartial analyses of budgetary and economic issues and considers it a priority to ensure that the agency's current-law budgetary and economic projections reflect the middle of the distribution of possible outcomes. The agency reviews historical data, the forecasts of other government agencies, and the academic literature, and it consults with its panels of advisers and other experts in the process of developing its projections.

CBO strives to update its projections as new information becomes available. Such updates sometimes can lead to substantial changes from one year to the next in CBO's projections of the 75-year actuarial balance for Social Security's trust funds, but CBO believes its approach provides the Congress with projections that incorporate the most current thinking. When the agency decides that relatively large revisions are warranted by new information and analysis, it explains the basis for those revisions.

Question: CBO and the Trustees are looking at the same, or at least very similar, historical data on earnings growth, but come to very different conclusions about the share of earnings that will be subject to payroll taxes. Can you please explain why this is? Please also provide the dollar values equivalent to 90 percent of covered earnings for each of the next 10 years.

Answer: The differences between CBO's and the Social Security Trustees' projections of the share of earnings that will be subject to payroll taxes are found in the two agencies' projections of growth in earnings for higher-income people. CBO's projections of the share of earnings below the maximum taxable amount ($118,500 in 2016) are made on the basis of its projections of the entire distribution of compensation; those projections underlie the agency's revenue projections. (CBO revisits its projections as part of the development of each baseline forecast; the next revision will occur in January 2017.)

In CBO's current-law projections, the portion of earnings subject to the Social Security payroll tax falls from 82 percent in 2015 to below 78 percent by 2026 and remains near that level thereafter. Those projections reflect an expectation that earnings will grow faster for higher-income people than for others during the next decade. Specifically, CBO expects that the earnings share of the top 1 percent will continue to rise, as suggested by extrapolating the 30-year trend from 1978 to 2008 for the next few years and then projecting that trend for the remainder of the upcoming decade.[1] CBO's projections also reflect trends in the cost of health insurance and incorporate expected responses to future taxes on health insurance.

In contrast, the Trustees estimate that the portion of earnings covered by Social Security on which payroll taxes are collected will increase slightly between 2016 and 2025 before settling at 82.5 percent and remaining constant thereafter. The Trustees' projections suggest that the growth rate they anticipate for people's earnings will be similar, whether those earnings are above or below the taxable maximum.

CBO estimates that if lawmakers wished to raise the amount of covered earnings subject to the payroll tax from the current 82 percent to 90 percent, the taxable maximum would need to be set at $316,400 in 2017 and to rise to $565,000 by 2026 (see Table 1). If asked to estimate the effects of a proposal that increased the taxable maximum in that way, the staff of the Joint Committee on Taxation would provide the revenue estimate. They project that to subject 90 percent of covered earnings to the payroll tax, the taxable maximum would need to be set to $245,000 in 2017.

Question: Does CBO look at the recommendations put forth by the Social Security Advisory Board's Technical Panels?

Answer: The reports of the Social Security Advisory Board's Technical Panels on Assumptions and Methods are among the many sources CBO consults in developing its Social Security projections. CBO's analysts attend panel meetings and review reports, and CBO has incorporated various recommendations of those panels and of the Trustees into its analyses, including projections of total fertility rates, mortality rates, and rates of disability incidence.

Total Fertility Rates. In 2016, CBO lowered its projection of the total fertility rate for the 2016–2090 period from 2.0 to 1.9 children per woman. CBO's projection is consistent with that recommended by the technical panel.[2] Through 2015, CBO used the total fertility rate as projected by the Social Security Trustees. (That rate is the average number of children that a woman would have in her lifetime if, at each age of her life, she experienced the birthrate observed or assumed for that year and if she survived her entire childbearing period.) Fertility

1. See testimony of Keith Hall, Director, Congressional Budget Office, before the Subcommittee on Social Security of the House Committee on Ways and Means, *Comparing CBO's Long-Term Projections With Those of the Social Security Trustees* (September 21, 2016), pp. 7–8, www.cbo.gov/publication/51988.

2. See 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), p. 9, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

Table 1.

CBO's Estimate of the Taxable Maximum Required to Subject 90 Percent of Covered Earnings to the Social Security Payroll Tax, by Year

Nominal Dollars

Year	Taxable Maximum
2017	316,400
2018	338,200
2019	359,200
2020	382,200
2021	407,200
2022	434,100
2023	463,700
2024	495,400
2025	529,100
2026	565,000

Source: Congressional Budget Office.

rates often decline during recessions and rebound during recoveries. However, after the 2007–2009 recession, the U.S. fertility rate (which in 2007 was 2.1) dropped, and it has remained below 1.9 since then. For that reason—along with evidence that women are delaying childbearing to later ages—CBO lowered its projection this year.

Mortality Rates. CBO also has followed the technical panel's recommendations on mortality rates. Since 1995, the technical panels (and many demographers) have argued that mortality rates will probably decline more rapidly than the Trustees project.[3] In 2013, CBO first projected that mortality rates would improve more quickly than the Trustees projected. Specifically, CBO projected that mortality rates would improve at the average pace observed since 1950 and that the rate of improvement would be the same at all ages and for both sexes.[4] In 2016, CBO began to follow the recommendation of the 2015 technical panel and projected that mortality rates are likely to improve more quickly for younger people than for older people.[5]

Rates of Disability Incidence. CBO's current projections for disability incidence match those of the Trustees and the most recent technical panel.[6] In 2016, CBO reduced its projection of the rate of disability incidence from 5.6 per 1,000 to 5.4 per 1,000 people because recent data show that the rate has been lower than previously projected and because of the technical panel's recommendation.

3. See 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), p. 13–20, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

4. See Congressional Budget Office, *The 2013 Long-Term Budget Outlook* (September 2013), pp. 106–107, www.cbo.gov/publication/44521; and 2011 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2011), pp. 55–64, http://go.usa.gov/xkd2c (PDF, 6.4 MB).

5. See Congressional Budget Office, *The 2016 Long-Term Budget Outlook* (July 2016), p. 104, www.cbo.gov/publication/51580; and 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), p. 18, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

6. See Social Security Administration, *The 2016 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (June 2016), pp. 134–136, www.ssa.gov/oact/tr/2016; and 2015 Technical Panel on Assumptions and Methods, *Report to the Social Security Advisory Board* (September 2015), pp. 29–44, http://go.usa.gov/cJYR5 (PDF, 3.4 MB).

Table 2.

U.S. Population by Age Group for 2014 as Projected by CBO in Various Years

Year	All Ages	Age 19 or Under	Age 20 Through 64	Age 65 or Older
		Reported Population (Millions of people)[a]		
2014	322.9	84.9	192.3	45.7
		Population Projected by CBO for 2014 (Millions of people)		
2006	323.5	85.4	194.2	43.9
2007	324.0	85.5	194.5	44.1
2008	326.9	87.0	195.5	44.4
2009	326.4	87.1	194.7	44.6
2010	326.4	87.1	194.7	44.6
2011	324.3	86.4	192.9	45.0
2012	325.2	86.3	193.5	45.4
2013	324.0	85.3	193.1	45.5
2014	324.5	85.1	193.5	45.9
		Percentage Difference Between Projected and Reported Population for 2014		
2006	0.2	0.6	1.0	-3.9
2007	0.4	0.7	1.1	-3.4
2008	1.3	2.5	1.7	-2.8
2009	1.1	2.6	1.3	-2.4
2010	1.1	2.6	1.3	-2.4
2011	0.4	1.8	0.3	-1.5
2012	0.7	1.6	0.6	-0.7
2013	0.3	0.5	0.4	-0.4
2014	0.5	0.2	0.6	0.4

Sources: Congressional Budget Office; Social Security Trustees.

CBO and the Social Security Trustees used the same population projections from 2006 through 2010. From 2011 onward, CBO's projections differed from those of the Trustees.

a. Population as of January 1, 2014.

Question: CBO has been making demographic and economic assumptions for years. Based on data from the past 10 years, please provide a table comparing your projected values for each assumption to what actually happened over that time period.

Answer: When CBO first started to publish long-term Social Security projections, it used population forecasts provided by the Social Security Trustees. More recently, CBO has made its own demographic projections—for immigration starting in 2011, mortality in 2013, and fertility in 2016. Those projections are inputs to CBO's population projections, which summarize overall demographic trends.

In 2006, both CBO and the Trustees estimated that the U.S. population in 2014 (the latest year of historical population data published by the Trustees) would be 323.5 million. That figure was 0.2 percent higher than the Trustees' most recently reported historical population for 2014 of 322.9 million people (see Table 2). In 2006, the projected population between the ages of 20 and 64 was 1.0 percent larger and the projected number of people age 65 or older was 3.9 percent smaller than the reported historical numbers for those age groups.

Table 3.

GDP for 2015 as Projected by CBO in Various Years

Year	Projected GDP for 2015 (Billions of dollars)	Percentage Difference From Actual GDP, 2015
Actual GDP, 2015	18,037	
2005	19,861	10
2006	20,178	12
2007	19,791	10
2008	19,896	10
2009	19,077	6
2010	18,621	3
2011	18,441	2
2012	17,899	-1
2013	17,913	-1
2014	18,357	2
2015	18,204	1

Source: Congressional Budget Office, using data from the Bureau of Economic Analysis.

As part of its July 2013 comprehensive revision to the national income and product accounts, the Bureau of Economic Analysis added intellectual property products to its definition of *investment*. Primarily as a result of that change, the level of nominal GDP was raised for the entire historical period. All GDP values in this table reflect the value of GDP that CBO projected for 2015 in January of each year. Values for 2005 through 2013 have not been adjusted to account for the July 2013 revision.

GDP = gross domestic product.

CBO's projection of nominal gross domestic product (GDP) is a summary measure of its economic forecast, and its long-term projections of GDP are consistent with its 10-year forecasts. (The agency regularly evaluates the quality of its 10-year economic forecasts in comparison to the economy's actual performance. The most recent such analysis was published in February 2015.)[7] In 2005, CBO published a projection of GDP for calendar year 2015 that turns out to have been about 10 percent higher than the actual amount reported by the Bureau of Economic Analysis for that year (see Table 3).[8] The difference between CBO's earlier projection and the actual figure can be traced mainly to the effects of the 2007–2009 recession and to the slower-than-average growth in the economy and inflation in the recession's aftermath.

Question: Like the Social Security Trustees, CBO publishes estimates of Social Security's 75year actuarial balance. However, unlike the Trustees, CBO does not publicly release its estimate of Social Security's 75-year open-group unfunded obligation. Why does CBO not publicly release this information? Are you able to provide this estimate? If so, please provide it for the 75-year period beginning in 2016.

7. See Congressional Budget Office, *CBO's Economic Forecasting Record: 2015 Update* (February 2015), www.cbo.gov/publication/49891.

8. See Bureau of Economic Analysis, "Current-Dollar and 'Real' Gross Domestic Product; October 28, 2016" (accessed November 15, 2016), www.bea.gov/national/xls/gdplev.xls (Excel, 46 KB).

Answer: The open-group unfunded obligation (or open-group liability) is the difference between the present value of the program's expenditures and the sum of the present value of noninterest receipts over the next 75 years and the current balance in the combined Old-Age and Survivors Insurance and Disability Insurance Trust Funds. (A present value is a single number that expresses a flow of current and future income or payments in terms of an equivalent lump sum received or paid at a specific time.) If that amount is positive, the system has an unfunded obligation. The open-group unfunded obligation differs from the actuarial balance in that it does not include an end-of-period requirement of a reserve that equals one year of costs (which is part of the calculation for the 75-year actuarial balance). CBO's current estimate of the 75-year open-group unfunded obligation for Social Security is 1.48 percent of GDP. CBO does not typically publish its estimate of that measure because it is only slightly smaller than CBO's estimate of the actuarial deficit for the same period.

Unlike the Trustees, CBO does not report the open-group unfunded liability measure in dollars. CBO typically does not present any long-run projections either in nominal dollars or in present-value dollars because those quantities are difficult to interpret out of context. Instead, CBO reports long-term projections, including projections of Social Security, as a percentage of GDP.