

Social Security: Summary of Program Solvency and Projections

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Summary

On May 1, 2006, the Social Security Board of Trustees released its annual report to Congress on the status of the Social Security trust funds. The Social Security trust funds, under the latest forecast, continue to face *long-range* financing problems. On a combined basis, the Old-Age, Survivors, and Disability Insurance (OASDI) trust funds are projected to be depleted in 2040 (which is one year earlier than the projection from the 2005 report).¹ At that point, annual tax revenue would cover only 74% of program costs. Over the full 75-year projection period, the trust funds are projected to have an actuarial deficit equal to 2.02% of taxable payroll (compared to 1.92% in last year's report), and program expenditures are projected to exceed income by an average of 15%. This report will be updated annually, after the release of the annual report.

The Social Security Board of Trustees

Each year the Social Security Board of Trustees issues a report to Congress on the operations and status of the Social Security trust funds. The six-member Board of Trustees includes the Secretary of the Treasury, the Secretary of Labor, the Secretary of Health and Human Services, the Commissioner of Social Security, and two public representatives. Public Trustees are appointed by the President and confirmed by the Senate for four-year terms. The Secretary of the Treasury serves as the Managing Trustee; the Deputy Commissioner of the Social Security Administration is designated as the secretary of the Board.

¹ Any reference to the combined Social Security OASDI trust fund assumes the merged operations of the separate federal Old-Age and Survivors Insurance (OASI) trust fund and the federal Disability Insurance (DI) trust fund and treats them as if they were one collective (OASDI) fund. In reality, the two trust funds have distinct dedicated primary revenue sources in their respective portions of federal payroll taxes, and operate separately. The two trust funds and their respective programs are closely linked, however, and collectively make up what is commonly referred to as "Social Security."

Short-Range and Long-Range Projections

The Trustees traditionally report on both the short-range (10-year) and long-range (75-year) operations of the OASI and DI trust funds. Since there is uncertainty in long-term projections, the Trustees provide estimates based on three alternative sets of economic and demographic assumptions: low cost (alternative I); intermediate cost (alternative II), and high cost (alternative III). The *intermediate* projections represent the Trustees' "best estimate." These intermediate projections are the projections used in assessing the short-range adequacy of social security financing. While the three sets of long-range projections highlight that there is uncertainty in these estimates, this approach does not provide any indication of the probability that the future financial status of the trust fund are within or outside the range of these estimates.

The standard long-range projection methodology (low-cost, intermediate, and highcost projections) uses a *deterministic* model of outcomes where certain assumptions are made regarding important demographic and economic factors affecting the trust fund balance. The deterministic model uses separate, specified assumed values for each of the assumptions. In recent years, the annual report has begun to provide *stochastic* projections that attempt to model the probability of alternative trust fund outcomes. The stochastic approach is built on thousands of independent simulations where the value of the assumptions are allowed to vary. The distribution of these simulation outcomes are then used to determine: the probability of solvency occurring within a range of years; or the probability of key trust fund indicators falling within a particular numerical range. While the trustees report provides these stochastic estimates, they are found in an appendix of the report and the model is viewed as being in its early stages of development.

Summarizing the trust fund operations over a 75-year period may lead to misperceptions about program sustainability for even longer periods. The trustees' report now includes some measures of trust fund obligations beyond the 75-year period which assume that most of the demographic and economic trends continue indefinitely. Summary measures of program obligations through an infinite horizon are now a part of the trustees' report. However, the focus of discussion surrounding the trustees' report is on trust fund estimates for the 75-year period using the intermediate assumptions. The remainder of this report will highlight the current report findings using these intermediate assumptions.

Understanding Trust Fund Financing

In July of 2006, Social Security provided cash benefits for 49 million Americans. Over 162 million Americans paid taxes in support of those benefits. The combined OASDI trust funds receive income from the payroll taxes workers pay on their wages and self-employment income. A smaller amount is financed by part of the income tax some recipients pay on their Social Security benefits. In addition, the trust fund receives interest from its current assets. This income is used to pay for current benefits and program administration. Income in excess of outgo is credited to the trust fund. These trust fund assets are a primary indicator of the program's financial status. The trustees' report details these transactions and makes projections about future years' transactions and the status of the trust funds. When assets at the beginning of any year are equal to or in excess of expected expenditures, the trust fund is thought to have an 'adequate' balance. If this ratio of assets to expected expenditures reaches zero, the trust fund is said to be insolvent. This means that fully-scheduled current law social security benefits could not be provided without some infusion of additional revenues.²

Solvency

Under the intermediate forecast, the trustees project that, on a combined basis, the balance of the Social Security trust funds will peak in 2026 but will be depleted in 2040, one year earlier than estimated in last year's report. **Figure 1** illustrates the projected and eventual decrease in Social Security holdings. **Table 1** shows other important dates related to trust fund financing under the intermediate projections. The DI trust fund by itself is projected to become insolvent in 2025 and the OASI trust fund by itself is projected to become insolvent in 2042. Because the OASI trust fund, as measured by income, outgo and balances, is much larger than the DI trust fund — when all combined (OASDI) operations are considered — the year of exhaustion converges at 2040.



Figure 1. Projected Balances of the Social Security Trust Funds, Intermediate Projections, Calendar Years 2006-2040

Source: The 2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.

² For a discussion of the legal rights of beneficiaries to full current law benefits when there is trust fund exhaustion, see CRS Report RL32822, Social Security Reform: Legal Analysis of Social Security Benefit Entitlement Issues, Kathleen Swendimen and Thomas Nicola.

2017	OASDI outgo exceeds <i>tax income</i> ^a
2027	OASDI outgo exceeds <i>tax income</i> + <i>interest income</i> ^a
2025	DI trust fund is exhausted
2040	OASDI trust funds are exhausted
2042	OASI trust fund is exhausted

Table 1. Important Trust Fund Related Dates

Source: The 2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.

a. Tax income (Social Security payroll tax and the income tax on benefits) is revenue from sources outside the government. Interest income (interest earned on assets held by the trust funds) is paid by the government *to* the government (that is, a transfer of funds from one government account to another). Beginning in 2017, money will have to be drawn from the general fund of the Treasury to meet benefit payments and administrative costs.

Under the intermediate forecast, the combined trust fund expenditures would begin to exceed tax revenue in 2017, as shown in **Figure 2**. Despite the tax revenue deficit at this time, the combined trust fund assets continue to grow through 2026, bringing their balance to slightly under \$6 trillion.

Figure 2. Projected Income (Excluding Interest) and Outgo of the Social Security Trust Funds, Intermediate Projections, Calendar Years 2006-2040



Source: The 2006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.

This increase is the result of continued growth in the trust fund's net interest. In 2027 and thereafter, the reserve balance would begin to be drawn down until the trust funds assets do not fully cover expected costs in 2040. At that point, *annual* tax revenue would be sufficient to cover only about 74% of program costs. Under the current law projection, expected tax revenues would continue to decline as a share of program costs

such that at the end of the 75-year projection period, 2080, these revenues would equal just 70% of costs.

Over the full 75-year projection period, on average, trust fund expenditures are projected to exceed income by 15%. Expressed another way, the long-range trust fund deficit is projected to be 2.02% of taxable payroll (compared with 1.92% of taxable payroll as projected in the 2005 report). The system's long-range financing problems reflect projected costs associated with the aging of the population (the first members of the baby boom generation will reach early retirement age in 2008) and with projected increases in life expectancy and decreases in birth rates. Over the next 25 years, the number of people aged 65 and older is projected to increase by 90%. In contrast, the number of workers whose taxes will finance future benefits is projected to increase by only 14%. As a result, the number of workers supporting each recipient is projected to decline from 3.3 today to 2.2 in 2030. After 2030, the ratio gradually declines even further.

An additional way in which the trustees express the long-term concerns for the program is by providing an estimation of how large a cash infusion would be needed to retain solvency, in lieu of other reform options comprising of revenue increases or benefit reductions. In the 2006 report, the trustees estimate that the present value of future infusions necessary to keep the system solvent beyond 2040 to the end of the 75-year long-range projection period would be \$4.6 trillion. To sustain solvency for the infinite horizon, the present value of future revenue infusions is much higher, \$13.4 trillion.³

³ The present value calculations used to determine the size of the unfunded obligation of the trust funds can be thought of as the lump-sum amount that, if invested today, given an assumed rate of return, would grow to cover the program's costs at the end of the projection period. These types of measure attempt to account for the time value of money (interest earned) and are dependent on the assumptions used in their calculation (i.e., the interest assumptions). It is not a simple measure of the cumulative gap between trust fund income and outgo.