

# SOCIAL SECURITY'S FINANCIAL OUTLOOK: THE 2014 UPDATE IN PERSPECTIVE

BY ALICIA H. MUNNELL\*

## Introduction

Whenever the Trustees report is late – end of July as opposed to April – the question arises whether the delay was driven by controversy and intrigue or by the inability to get six people (the Social Security Commissioner, the Secretaries of Treasury, of Health and Human Services, and of Labor, and two public trustees) in a room at the same time to sign the document. It looks like the delay was more administrative than substantive, given that this year's report looks very much like last year's. While the 2014 Trustees Report shows a small increase in the 75-year deficit from 2.72 percent of taxable payroll to 2.88 percent, the date of trust fund exhaustion continues to be 2033.

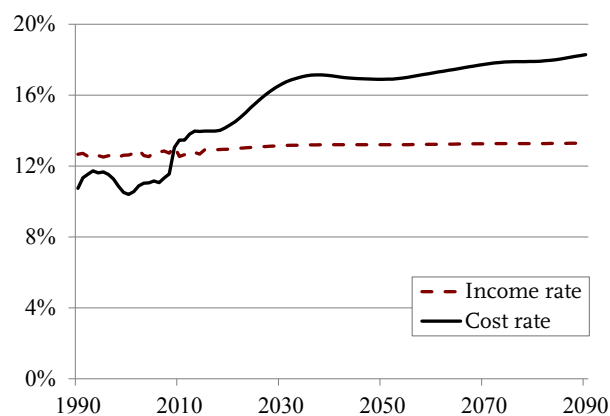
But the report is far from boring in that it confirms the Disability Insurance Trust Fund is on the verge of running out of money and that, as a result of delay, the cost of putting the entire program on firm footing is rising. Both developments highlight the need for early action both to restore confidence in the nation's major social insurance program and to give people time to adjust to needed changes.

This *brief* updates the numbers and puts the current report in perspective. It also discusses the projected exhaustion of the Disability Insurance Trust Fund in 2016 and questions whether workers should bear both the current and legacy burden of financing what is becoming an expensive pay-as-you-go retirement system.

## The 2014 Report

The Social Security actuaries project the system's financial outlook over the next 75 years under three sets of assumptions – high cost, low cost, and intermediate. As in previous reports, the intermediate assumptions show the cost of the program rising rapidly to about 17 percent of taxable payrolls in 2035, where it remains for several decades before drifting up to 18 percent of taxable payrolls (see Figure 1). The easiest way to start is to look at cash flows.

FIGURE 1. PROJECTED SOCIAL SECURITY INCOME AND COST RATES, AS A PERCENT OF TAXABLE PAYROLL, 1990-2088



Source: 2014 Social Security Trustees Report, Table IV.B1.

\* Alicia H. Munnell is director of the Center for Retirement Research at Boston College and the Peter F. Drucker Professor of Management Sciences at Boston College's Carroll School of Management. Mark Cafarelli provided excellent research assistance.

The increase in costs is driven by the demographics. Since Social Security is financed primarily on a pay-as-you-go basis, the retirement of baby boomers and the increase in the ratio of workers to retirees from 3:1 to 2:1 raises costs commensurately. This increase is not news; the actuaries have known the whereabouts of the baby boom (those born between 1946 and 1964) for a long time.

Through 2009, Social Security's cost rate was below its income rate and the program was running cash flow surpluses. These surpluses, which began in response to reforms enacted in 1983, were expected to continue for several more years. However, the recession-induced decline in payroll taxes and uptick in benefit claims caused the cost rate to exceed the income rate in 2010, and that pattern will continue (see Table 1).

TABLE 1. KEY DATES FOR SOCIAL SECURITY TRUST FUND

Event	Trustees Report				
	2010	2011	2012	2013	2014
First year outgo exceeds income excluding interest	2015	2010	2010	2010	2010
First year outgo exceeds income including interest	2025	2023	2021	2021	2020
Year trust fund assets are exhausted	2037	2036	2033	2033	2033

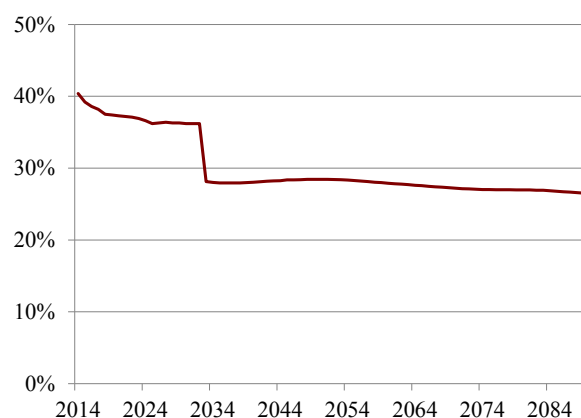
Source: 2010-2014 Social Security Trustees Reports.

This shift from annual surplus to deficit means that Social Security is tapping the interest on trust fund assets to cover benefits sooner than anticipated. And in 2020 taxes and interest will fall short of annual benefit payments, so the government will be required to draw down trust fund assets to meet benefit commitments. The trust fund will be exhausted in 2033.

The exhaustion of the trust fund does not mean that Social Security is "bankrupt." Payroll tax revenues keep rolling in and can cover about 75 percent of currently legislated benefits over the remainder of the projection period. Relying on only current tax revenues, however, means that the replacement rate – benefits relative to pre-retirement earnings – for the typical age-65 worker would drop from 36 percent to 27 percent (see Figure 2) – a level not seen since the 1950s. (Note that the replacement rate for those claiming at age 65 is already scheduled to decline

from about 40 percent today to 36 percent because of the ongoing increase in the Full Retirement Age from 65 to 67 that was enacted in 1983.)

FIGURE 2. REPLACEMENT RATE FOR THE MEDIUM EARNER AT AGE 65 FROM EXISTING TAX REVENUES, 2014-2088



Source: 2014 Social Security Trustees Report, Tables IV.B1 and V.C7.

Moving from cash flows to the 75-year deficit requires calculating the difference between the present discounted value of scheduled benefits and the present discounted value of future taxes. This calculation shows that Social Security's long-run deficit (plus a buffer) is projected to equal 2.88 percent of covered payroll earnings. That figure means that if payroll taxes were raised immediately by 2.88 percentage points – 1.44 percentage points each for the employee and the employer – the government would be able to pay the current package of benefits for everyone who reaches retirement age at least through 2088.

At this point in time, solving the 75-year funding gap is not the end of the story in terms of required tax increases. Once the ratio of retirees to workers stabilizes and costs remain relatively constant as a percent of payroll, any solution that solves the problem for 75 years will more or less solve the problem permanently. But the United States is in a period of transition. The ratio of retirees to workers is rising and the cost rate is increasing. Any package that restores balance only for the next 75 years will show a deficit in the following year as the projection period picks up a year with a large negative balance. Policymakers generally recognize the effect of adding deficit years to the valuation period, and many advocate a solution that involves "sustainable solvency," in which the ratio

of trust fund assets to outlays is either stable or rising in the 76th year. Realistically, eliminating the 75-year shortfall should probably be viewed as the first step toward long-run solvency.

Some commentators report Social Security’s financial shortfall over the next 75 years in terms of dollars – \$10.6 trillion. Although this number appears very large, the economy will also be growing. So dividing this number – plus a one-year reserve cushion – by taxable payroll over the next 75 years brings us back to the 2.88 percent deficit discussed above (see Table 2).

TABLE 2. SOCIAL SECURITY’S FINANCING SHORTFALL

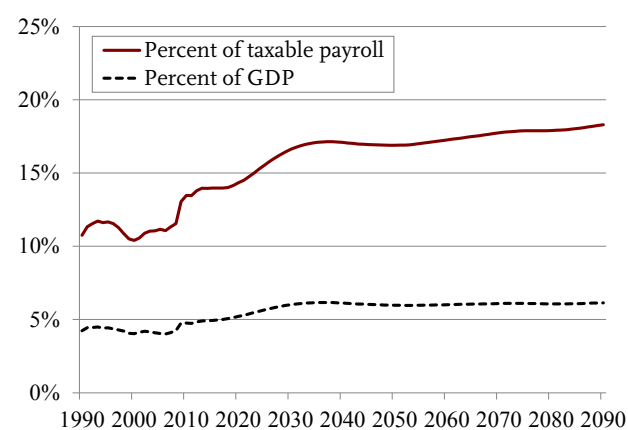
Period	Present value (trillions)	As a percent of	
		Taxable payroll	GDP
2014-2088	\$10.6	2.7%*	1.0%

\* Adding \$582 billion for a one-year reserve cushion brings the deficit to 2.88 percent.

Source: 2014 Social Security Trustees Report.

Social Security’s shortfall looks less daunting when outlays are shown as a percent of Gross Domestic Product (GDP). The cost of the program is projected to rise from 4.9 percent of GDP today to 6.2 percent of GDP as the baby boom retires (see Figure 3). The reason why costs as a percent of taxable payroll keep rising is that taxable payroll is projected to decline as a share of total compensation due to continued growth in health and retirement benefits.

FIGURE 3. SOCIAL SECURITY COSTS AS A PERCENT OF GDP AND TAXABLE PAYROLL, 1990-2088

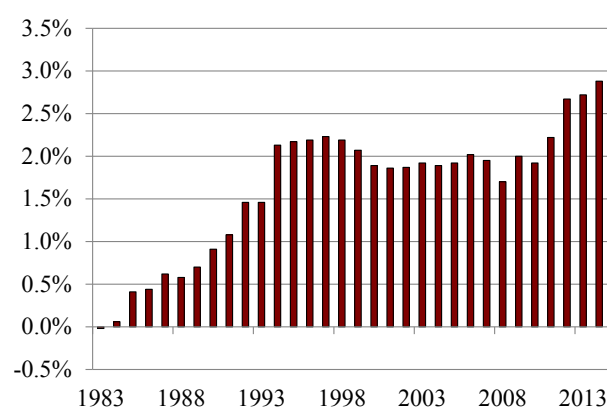


Source: 2014 Social Security Trustees Report.

## The 2014 Report in Perspective

The recent shortfall is in sharp contrast to the projection of a 75-year balance in 1983 when Congress enacted the recommendations of the National Commission on Social Security Reform (often referred to as the Greenspan Commission). Almost immediately after the 1983 legislation, deficits appeared and increased markedly in the early 1990s (see Figure 4).

FIGURE 4. SOCIAL SECURITY’S 75-YEAR DEFICIT AS A PERCENT OF TAXABLE PAYROLL, 1983-2014



Source: 2014 Social Security Trustees Report, Table VI.B1.

In the 1983 Report, the Trustees projected a 75-year actuarial surplus of 0.02 percent of taxable payroll; the 2014 Trustees project a deficit of 2.88 percent. Table 3 (on the next page) shows the reasons for this swing of 2.90 percent of taxable payroll. Leading the list is the impact of changing the valuation period. That is, the 1983 Report looked at the system’s finances over the period 1983-2057; the projection period for the 2014 Report is 2014-2088. Each time the valuation period moves out one year, it picks up a year with a large negative balance.

A worsening of economic assumptions – primarily a decline in assumed productivity growth and the impact of the recent recession – has also contributed to the increase in the deficit. Another contributor to the increased actuarial deficit over the past 25 years has been persistent increases in disability rolls.

Three sets of positive developments have offset the negative factors. First, improvements in methodology and programmatic data have reduced the long-term deficit by 0.11 percentage points. Second, the passage of health care reform (comprised of the Patient Protection and Affordable Care Act and the accompany-

TABLE 3. REASONS FOR CHANGE IN SOCIAL SECURITY'S 75-YEAR DEFICIT AS A PERCENT OF PAYROLL, 1983-2014

Item	Change
Actuarial balance in 1983	0.02 %
<b>Changes in actuarial balance due to:</b>	
Valuation period	-1.80
Economic data and assumptions	-0.88
Disability data and assumptions	-0.69
Other factors*	-0.04
Methods and programmatic data	0.11
Legislation/regulation	0.14
Demographic data and assumptions	0.26
Total change in actuarial balance	-2.90
Actuarial balance in 2014	-2.88

\* Discrepancies due to rounding.

Source: Author's calculations based on earlier analysis by John Hambor, recreated and updated from 1983-2014 *Social Security Trustees Reports*.

ing Health Care and Education Reconciliation Act) in 2010 was assumed to reduce Social Security's 75-year deficit by 0.14 percent, mainly through an expected increase in taxable wages as a number of provisions slow the rate of growth in the cost of employer-sponsored group health insurance. And, third, changes in demographic assumptions – primarily higher mortality for women – have had a large positive impact on the outlook.

## Big Issues

Two issues are worthy of comment – the impending exhaustion of the Disability Insurance (DI) program in 2016 and rising costs of long-run solvency.

### *Exhaustion of the Disability Insurance Program*

Although the outlook for Social Security is usually reported on a consolidated basis, the program consists of two trust funds – one for Old-Age and Survivors Insurance (OASI) and one for Disability Insurance

(DI). Much of the acceleration in the exhaustion date for Social Security has come from the DI portion of the program. The actuaries have always anticipated higher rates of disability with the aging of the baby boom, but they did not foresee: 1) a significant increase in disability rates at young ages, and 2) the impact of the economic recession. In recent years, these factors have sharply increased outlays and accelerated the projected exhaustion date of the DI trust fund.

Under the intermediate projections, the DI trust fund will be exhausted in 2016 (see Table 4). Since Social Security is precluded from spending money it does not have, it would have to cut benefits by about 20 percent to accord with DI payroll tax revenues. Congress is unlikely to allow such a circumstance to arise. In 1994, the last time the program was about to run out of money, Congress reallocated 0.6 percentage points of the payroll tax from the OASI program to the DI program. Congress is likely to reallocate payroll tax revenues this time as well. Of course, reallocation is not manna from heaven; the OASI program will look much worse, and the outlook for Social Security as a whole will remain unchanged.

TABLE 4. KEY DATES FOR SOCIAL SECURITY TRUST FUNDS

Event	2010	2011	2012	2013	2014
Year OASI Trust Fund assets are exhausted	2040	2038	2035	2035	2034
Year DI Trust Fund assets are exhausted	2018	2018	2016	2016	2016

Source: 2010-2014 *Social Security Trustees Reports*.

### *The Burden of Long-Run Solvency*

The second issue is the burden of restoring long-run solvency. In 1994, the required increase was about 2 percent of taxable payrolls, in 2014 it is almost 3 percent, and in 2034, once the baby boom has retired and the trust fund exhausted, it will be about 4 percent – where it would remain if life expectancy did not continue to increase. The cost goes up because the 75-year projection period includes fewer low-cost years and more steady-state high-cost years.

A little arithmetic quickly shows that current and future workers are paying a lot for their Social Security benefits. If Social Security were financed on a funded basis like 401(k) plans, the average worker

would have to contribute less than 10 percent annually to generate a fund adequate to pay benefits equal to 36 percent of earnings. (This calculation assumes the Social Security Trustees' ultimate real interest rate of 2.9 percent, and that individuals begin contributing at age 25 and retire at age 65.) Instead, workers and their employers under the pay-as-you-go system will be facing a tax of 16 percent just for retirement benefits.

We have ended up with a mostly pay-as-you-go system, because we gave away to early cohorts the trust fund that otherwise would have accumulated. Many of the early beneficiaries had fought in World War I and had suffered losses in the Great Depression, so the decision to pay benefits far in excess of contributions to those early retirees may have been justified on public policy grounds. But the cost of that decision was to forego the buildup of a trust fund whose accumulated interest could have covered a substantial part of today's benefits.

A legitimate question is whether current and future workers should be asked to pay the higher payroll tax resulting from the decision to give away the trust fund or whether they should be asked to pay simply what they would have to contribute in a funded system. This issue is important because the payroll tax, with no deductions or exemptions, places a significant burden on low-wage workers. One could argue that the legacy burden should be borne by the general population in proportion to the ability to pay – that is, this portion of the Social Security financing problem could be transferred to the personal income tax. Of course, transferring the legacy debt to the personal income tax does not eliminate the burden; the average income tax rate would have to increase by about 4.6 percentage points (from about 19.0 percent to 23.6 percent). Such an increase would be extremely difficult in today's political environment. Nevertheless, the legacy debt must be paid one way or another, and the income tax is a more equitable mechanism than the payroll tax.

## Conclusion

The 2014 Trustees Report confirms what has been evident for two decades – namely, Social Security is facing a long-term financing shortfall which now equals 1.0 percent of GDP. The changes required to fix the system are well within the bounds of fluctuations in spending on other programs. For example, defense outlays went down by 2.2 percent of GDP between 1990 and 2000 and up by 1.8 percent of GDP between 2000 and 2010.

While Social Security's shortfall is manageable, it is also real. The long-run deficit can be eliminated only by putting more money into the system or by cutting benefits. There is no silver bullet. Despite the political challenge, stabilizing the system's finances should be a high priority to restore confidence in our ability to manage our fiscal policy and to assure working Americans that they will receive the income they need in retirement.

CENTER for  
RETIREMENT  
RESEARCH  
at BOSTON COLLEGE

---

## About the Center

The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and educational tools and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

## Affiliated Institutions

The Brookings Institution  
Massachusetts Institute of Technology  
Syracuse University  
Urban Institute

## Contact Information

Center for Retirement Research  
Boston College  
Hovey House  
140 Commonwealth Avenue  
Chestnut Hill, MA 02467-3808  
Phone: (617) 552-1762  
Fax: (617) 552-0191  
E-mail: [crr@bc.edu](mailto:crr@bc.edu)  
Website: <http://crr.bc.edu>

*The Center for Retirement Research thanks Alert1 Medical Systems, Charles Schwab & Co. Inc., Citigroup, ClearPoint Credit Counseling Solutions, Fidelity & Guaranty Life, Goldman Sachs, Mercer, National Council on Aging, Prudential Financial, Security 1 Lending, State Street, TIAA-CREF Institute, and USAA for support of this project.*

---

© 2014, by Trustees of Boston College, Center for Retirement Research. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that the author is identified and full credit, including copyright notice, is given to Trustees of Boston College, Center for Retirement Research.

The research reported herein was supported by the Center's Partnership Program. The findings and conclusions expressed are solely those of the author and do not represent the views or policy of the partners or the Center for Retirement Research at Boston College.