April 2007, Number 7-6

CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

SOCIAL SECURITY'S FINANCIAL OUTLOOK: THE 2007 REPORT IN PERSPECTIVE

By Alicia H. Munnell*

Introduction

The Trustees of the Social Security system have just issued the 2007 report. The report includes projections for the system over the next 75 years, prepared by Social Security's Office of the Actuary. The bottom line is that the long-run outlook has remained virtually unchanged for the last thirteen years — the system has a 75-year deficit equal to about 2 percent of taxable payrolls and the trust fund faces exhaustion in the early 2040s, after which the system will be able to pay only 75 percent of promised benefits. The clear message of the persistent deficits is that the financing shortfall should be eliminated so that people can be assured they receive the income they need in retirement.

The 2007 Report

As usual, the actuaries project the system's financial outlook under three sets of cost assumptions — high cost, low cost, and intermediate. This *brief* focuses on the intermediate assumptions.

Since demographics tend to change slowly, the 2007 Report shows no change in the basic trends that have been incorporated in earlier reports. The population is aging due to fewer births and longer life spans, which will cause the number of Social Security beneficiaries per 100 workers to increase from 30 today to 53 in the future. Because of this increased ratio, the costs of the system will rise (see Figure 1).

Today, however, the cost rate is below the income rate, and Social Security is running cash flow surpluses — including interest — of about \$190 billion per year. These surpluses began in the mid-1980s in response to reforms enacted in 1983 and will continue until 2017. Beginning in 2017, the cost rate starts to exceed the income rate and Social Security will have to tap the interest on trust fund assets to cover benefits. And beginning in 2027, taxes and interest will fall short of annual benefit payments, so the government will be required to draw down trust fund





* Alicia H. Munnell is the Director of the Center for Retirement Research at Boston College and the Peter F. Drucker Professor in Management Sciences at Boston College's Carroll School of Management. FIGURE 2. SOCIAL SECURITY TRUST FUND ASSETS, 1990-2041 (TRILLIONS OF 2007 DOLLARS)



Sources: 2007 Social Security Trustees Report, Tables V.BI, VI.A4, and VI.F8.

assets to meet benefit commitments. The trust funds will be exhausted in 2041 (see Figure 2). These dates have changed only slightly over the last few years (see Table 1).

Assuming no new legislation, what happens in 2041? This date is often described as the point at which Social Security is bankrupt, giving an image that there is no money at all. But tax revenues continue rolling in. So there is still enough revenue to pay 75 percent of currently legislated benefits in 2041. Relying on only current tax revenues means that the replacement rate — benefits relative to pre-retirement earnings — for the typical worker would drop from 36 percent to 27 percent (see Figure 3). (Note that the replacement rate for those claiming at age 65 is already scheduled to decline from 40 percent today to 36 percent because of the increase in the Normal Retirement Age from 65 to 67 enacted in 1983.)

Over the next 75 years, Social Security's long-run deficit is projected to equal 1.95 percent of covered

TABLE 1. KEY DATES FOR THE SOCIAL SECURITY TRUST FUND

T I	Trustees Report			
Event	2004	2005	2006	2007
First year outgo exceeds income excluding interest	2018	2017	2017	2017
First year outgo exceeds income including interest	2028	2027	2027	2027
Year trust fund assets are exhausted	2042	2041	2040	2041

Source: U.S. Social Security Administration. "Status of the Social Security and Medicare Programs: A Summary of the 2005 and 2007 Annual Reports."

payroll earnings. That figure means that if the payroll tax rate were raised immediately by roughly 2 percentage points — I percentage point 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 2081.

A lasting fix for Social Security would require additional changes. Solutions that focus just on the next 75 years typically involve the build up of Trust Fund assets in the near term and the sale of those assets to pay benefits in the out years. Since the trust funds have no further bonds to sell in the 76th year, the program is suddenly short of money. Lasting solvency would require either a pay-as-you-go system with substantially higher payroll tax rates/lower benefits or the build up of a trust fund larger than that required for 75-year solvency, the interest from which could cover some of the costs. Realistically then, any solution aimed solely at the 75-year shortfall is only a first step towards long-run solvency.





The challenge of Social Security's shortfall looks considerably less daunting when Social Security outlays are projected as a percent of Gross Domestic Product (GDP) rather than as a percent of taxable payrolls (see Figure 4). The cost of the program is projected to rise from 4.3 percent of GDP today to 6.2 percent of GDP in 2030, and to only 6.3 percent by the end of the 75-year projection period. The reason why costs as a percent of GDP more or less stabilize while costs as a percent of taxable payrolls keep rising is that taxable payrolls are projected to decline as a share of total compensation due to continued projected growth in fringe benefits, such as health insurance. Figure 4. Social Security Costs as a Percent of Gross Domestic Product and Taxable Payroll, 1990-2085



Source: 2007 Social Security Trustees Report, Figures II.D5 and IV.B1.

The 2007 Report in Perspective

Although Social Security's 75-year deficit has remained virtually unchanged for the last thirteen years, the recent numbers are 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 5).

Why did the balance deteriorate? In the 1983 Report, the Trustees projected a 75-year actuarial surplus of 0.02 percent of taxable payrolls; the 2007 Trustees

Figure 5. Social Security's 75-Year Deficit as a Percent of Taxable Payrolls, 1983-2007



project a deficit of 1.95 percent. Table 2 shows the reasons for this swing of 1.97 percent of taxable payrolls. 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 1983-2058; the projection period for the 2007 Report is 2007-2081. Each time the valuation period moves out one year, it picks up a year with a large negative balance. That is the reason that policymakers insist on looking beyond the 75-year projection period when considering ways to restore solvency.

TABLE 2. REASONS FOR CHANGE IN THE ACTUARIAL DEFICIT AS A PERCENT OF PAYROLL, 1983-2007

Item	Change
Actuarial balance in 1983	0.02%
Changes in actuarial balance due to:	
Valuation period	- I.4I
Disability data and assumptions	-0.64
Projection methods and data	-0.48
Economic data and assumptions	-0.33
Legislation/regulation	0.16
Demographic data and assumptions	0.74
Other factors*	-0.01
Total change in actuarial balance	-1.97
Actuarial balance in 2007	-1.95

* Discrepancies due to rounding.

Sources: Author's calculations based on earlier analysis by John Hambor, recreated and updated from U.S. Social Security Trustees Reports, 1983-2007.

The other major factors contributing to the increase in the deficit have been unexpected increases in disability rolls and the change in methods of analysis used by the actuaries. With respect to disability, the number of awards per 1,000 workers rose from 3 in 1983 to over 5 today, according to data from the Social Security Administration. Another contributor to the increased actuarial deficit over the past 24 years has been a worsening of economic assumptions — primarily a decline in assumed productivity growth. Offsetting the negative factors has been a reduction in the actuarial deficit due to changes in demographic assumptions — primarily higher mortality for women.

Unfunded Liabilities

Most of the discussion in the Trustees Report focuses on Social Security's financial shortfall as a percent of either taxable payrolls or GDP. The notion is that any number associated with a program as significant as Social Security over a 75-year period will look very large. But the economy will also be growing over those 75 years, so the most sensible way to look at the shortfall is its size relative to the nation's ability to pay.

Nevertheless, the Trustees Report includes the amount of the financing shortfall in dollars, and these numbers often appear in the press. One very large number is \$4.7 trillion. This number is the present discounted value of the difference between projected revenues and expenditures over the next 75 years. (Dividing this number — plus a one-year reserve cushion — by taxable payrolls over the next 75 years brings us back to the 1.95 percent deficit discussed above). An even larger number that sometimes appears is \$13.6 trillion. This number represents the present discounted value of the difference between revenues and benefits from now to infinity. Infinity is a very long time, and most analysts think this number places too much weight on what may happen in the very distant and uncertain future. Nevertheless, dividing even this infinite shortfall by the present discounted value of taxable payrolls over the infinite horizon produces a shortfall equal to 3.5 percent of taxable payrolls (see Table 3).

TABLE 3. SOCIAL SECURITY'S FINANCING SHORTFALL

	Present	As a percent of	
Period discounted value (trillions)		Taxable payrolls	GDP
2007-2081	\$4.7*	1.8	0.7
2007-infinity	\$13.6	3.5	I.2

* The \$4.7 trillion is the difference between scheduled benefits and projected revenues; it excludes \$361 billion required to bring the trust fund to 100 percent of annual cost by the end of the period. If this latter number were included, the deficit relative to payrolls is 1.95 as reported earlier.

Source: 2007 Social Securitys Trustees Report, Tables IV.B5 and IV.B6.

Both unfunded liability measures increased in the 2007 Report to reflect the interest costs of postponing the date of restoring balance for one year. The numbers as a percent of taxable payrolls and as a percent of GDP, however, actually declined slightly because the present value of future payroll and GDP increased slightly more than the unfunded obligations.

Conclusion

The 2007 Trustees report reconfirms what has been evident for two decades — namely, Social Security is facing a long-term financing shortfall. Changes in the underlying assumptions will not eliminate the problem. This problem can be solved only by putting more money into the system or by cutting benefits. There is no silver bullet.

References

- U.S. Social Security Administration. 2005 and 2007. Status of the Social Security and Medicare Programs: A Summary of the 2005 and 2007 Annual Reports. Washington, DC: U.S. Government Printing Office.
- U.S. Social Security Administration. 2007. *The 2007 Annual Report of the Board of Trustees of the Federal Old Age, Survivors and Disability Insurance Trust Funds*. Washington, DC: U.S. Government Printing Office.

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 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

American Enterprise Institute The Brookings Institution Center for Strategic and International Studies 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 Website: http://www.bc.edu/crr

The Center for Retirement Research thanks its research partners for support of this project: AARP, AIM Investments, CitiStreet, Fidelity Investments, John Hancock, Nationwide Mutual Insurance Company, Prudential Financial, Standard & Poor's, State Street, and TIAA-CREF Institute.

- For more information on Social Security, check out:



© 2007, 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.