# Social Security's financial outlook: The 2005 update and a look back

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# JUST THE FACTS

**On Retirement Issues** 

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### CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

## Social Security's Financial Outlook: The 2005 Update and a Look Back

By Alicia H. Munnell\*

#### Introduction

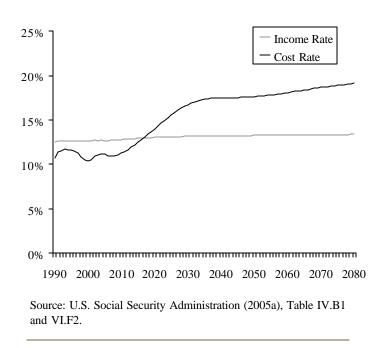
The Trustees of the Social Security system have just issued the 2005 Report. The projections used in this Report are prepared by Social Security's Office of the Actuary. The Report projects the system's financial outlook under three sets of cost assumptions – high, low and intermediate. This *Just the Facts* focuses on the intermediate assumptions and puts this year's numbers in perspective.

#### The 2005 Report

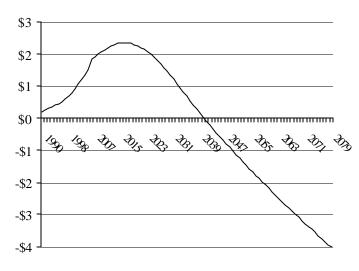
This week's Report shows no change in the economic and demographic trends that have been incorporated in earlier Reports. The population is aging due to fewer births and longer life spans, which will cause the number of Social Security beneficiaries per 100 workers to increase from 30 today to 54 in the future. Because of this increased ratio, the costs of what is essentially a pay-as-yougo system will rise (see Figure 1). After 2017, costs will exceed tax revenues. Today, however, Social Security is running a cash flow surplus of about \$70 billion. These surpluses began in the mid-1980s in response to reforms enacted in 1983.

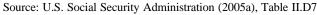
From 2017 to 2027, adding interest on trust fund assets to tax receipts produces enough revenues to cover benefit payments. From 2027 on, annual income will fall short of annual benefit payments, so the government will be required to draw down trust fund assets to meet benefit commitments. The trust funds will be exhausted in 2041 (see Figure 2). These dates have changed only slightly from last year's Report (see Table 1).

FIGURE I. PROJECTED SOCIAL SECURITY INCOME AND COST RATES AS PERCENT OF TAXABLE PAYROLL, 1990-2080



\* 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. Francesca Golub-Sas and Luke Delorme provided excellent research assistance. FIGURE 2. SOCIAL SECURITY TRUST FUND ASSETS, 1990-2080





Assuming no new legislation, what happens in 2041? This date is often described as the point at which Social Security is bankrupt, leaving the impression that there is no money at all. But tax revenues continue rolling in. So Social Security still has enough revenue to pay roughly 70 percent of currently legislated benefits (see Figure 3).

Over the next 75 years, Social Security's long-run deficit is projected to equal 1.92 percent of covered payroll earnings. That figure means that if the payroll tax rate were raised immediately by roughly 2 percentage points -1 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

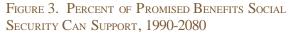
TABLE 1. KEY DATES FOR THE SOCIAL SECURITY TRUST FUND

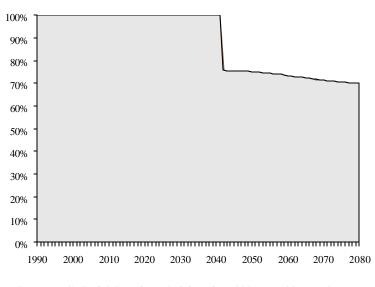
Event	2004 Report	2005 Report
First year outgo exceeds income excluding interest	2018	2017
First year outgo exceeds income including interest	2028	2027
Year trust fund assets are exhausted	2042	2041

Source: U.S. Social Security Administration (2005b).

through 2079. The size of the tax increase needed to make the system solvent is a useful way to gauge the shortfall over the 75-year period.

Social Security's financing problem is somewhat more complicated than just described. Under current law, the tax rate is fixed while costs are rising. This pattern produces surpluses now and large deficits in the future. As a result of this profile, for each year the projection period moves forward, another year with a large deficit is added to the 75-year deficit. Assuming nothing else changes, this phenomenon will slightly increase the 75-year deficit each year (.07 percent of taxable payroll with today's deficits). Most policymakers believe that the system should not be left with a huge deficit in the 76th year.





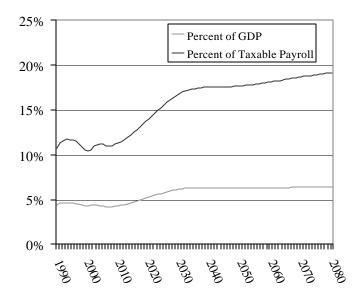
Source: U.S. Social Security Administration (2005a), Table VI.F2

A different pattern of costs emerges when Social Security outlays are projected as a percent of Gross Domestic Product (GDP) rather than as a percent of taxable payroll (see Figure 4). The cost of the program is projected to rise from 4.3 percent of GDP today to 6.3 percent of GDP in 2040, and to only 6.4 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 payroll keep rising is that taxable payroll are projected to decline as a share of total compensation due to continued projected growth in untaxed fringe benefits, such as health insurance.

#### The 2005 Report in Perspective

Social Security's 75-year deficit is essentially unchanged from that reported a year ago: 1.92 percent versus 1.89 percent of taxable payroll. But recent numbers are in sharp contrast to the projection of a 75-year balance in 1983 when Congress enacted the recommendations of the so-called Greenspan Commission. Almost immediately after the 1983 legislation, however, deficits appeared and increased sharply in the early 1990s (see Figure 5).

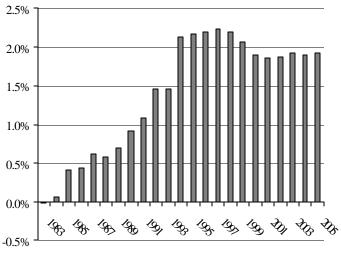
FIGURE 4. SOCIAL SECURITY COSTS AS PERCENT OF GROSS DOMESTIC PRODUCT AND TAXABLE PAYROLL, 1990-2080



Source: U.S. Social Security Administration (2005a), Figure II.D5, IV.B1.

Why did the balance deteriorate? In the 1983 Report, the Trustees projected a 75-year actuarial surplus of 0.02 percent of taxable payroll; the 2005 Trustees project a deficit of 1.92 percent. Table 2 shows the reasons for this swing of 1.94 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 1983-2058; the projection period for the 2005 Report is 2005-2079. 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.

Figure 5. Social Security's 75-Year Deficit as a Percent of Taxable Payroll, 1983-2005



Source: U.S. Social Security Administration (2005a), Table VI.B1.

The other major factors contributing to the increase in the deficit have been the change in methods of analysis used by the actuaries and unexpected increases in disability rolls. With respect to disability, the number of awards per 1,000 workers rose from 3 in 1983 to over 5 today.<sup>1</sup> Another contributor to the increased actuarial deficit over the past 22 years has been a worsening of economic assumptions — primarily a decline in assumed productivity

Table 2.	REASONS FOR	CHANGE IN SOCIAL	L Security 75-
Year Dei	FICIT AS A PER	CENT OF PAYROLL,	1983-2005

Item	Change
Balance in 1983	0.02
Changes due to:	
Valuation Period	-1.29
Disability Data and Assumptions	-0.66
Projection Methods and Data	-0.60
Economic Data and Assumptions	-0.29
Legislation/Regulation	0.16
Demographic Data and Assumptions	0.74
Total Change in Balance*	-1.94

#### Balance in 2005

Source: Author's calculations based on earlier analysis by John Hambor, recreated and updated from Social Security Trustees Reports, 1983-2005. Note: Total includes 0.01 percent that could not be attributed to listed categories.

-1.92

growth. Offsetting the negative factors has been a reduction in the actuarial deficit due to changes in demographic assumptions — primarily higher mortality for women.

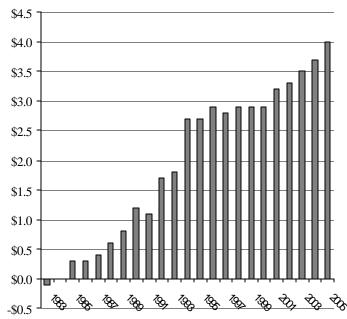
#### Unfunded Liabilities

The previous discussion has focused on Social Security's financial shortfall as a percent of either taxable payroll 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.

Sometimes the press, however, reports Social Security's shortfall in dollar terms. One very large number is \$4.0 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 payroll over the next 75 years brings us back to the 1.92 percent deficit discussed above). Figure 6 shows how the 75-year unfunded liability has changed over time.

Figure 6. Social Security's Unfunded Obligations for the 75-Year Projection Period, 1983-2005

Trillions



Source: Goss et al (2004) and U.S. Social Security Administration (2005a), Table IV.B6

An even larger number that sometimes appears is \$11.1 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 many 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 payroll over the infinite horizon produces a shortfall equal to 3.5 percent of taxable payroll (see Table 3).

#### TABLE 3. SOCIAL SECURITY'S FINANCING SHORTFALL

Period	Present Discounted Value (Trillions)	As a percent of	
		Taxable payrolls	GDP
2005-2079	\$4.0*	1.8	0.6
2005-Infinity	\$11.1	3.5	1.2

Source: U.S. Social Security Administration (2005a), Table IV.B6

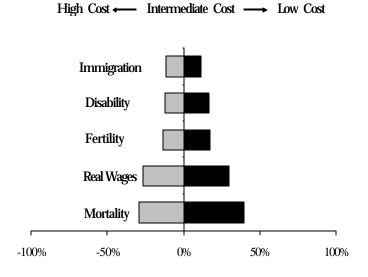
\*Note: The \$4.0 trillion is the difference between scheduled benefits and projected revenues; it excludes another \$301 billion required to bring the trust fund to 100 percent of annual cost by the end of the period. If this latter amount were included, the deficit relative to payroll is 1.92 as reported earlier.

Both unfunded liability measures increased in the 2005 Report – from \$3.7 trillion in 2004 to \$4.0 trillion in 2005 for the 75-year period and from \$10.4 to \$11.1 trillion in 2005 for the period to infinity. In both cases, this increase is primarily due to the inflation and real interest rate impact of postponing the date of restoring balance for one year. The numbers as a percent of taxabe payroll and as a percent of GDP remained virtually unchanged, however, because the present value of future payroll and GDP increased along with the unfunded obligations.

#### Conclusion

The 2005 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 are unlikely to eliminate the problem (See Figure 7). Although future rates of immigration, disability, mortality, and real wage growth are uncertain, switching any of the individual assumptions to the Trustees "low cost" scenario closes only part of the gap. Therefore, this problem can be solved only by putting more money into the system or by cutting benefits. There is no silver bullet.

FIGURE 7. IMPACT OF HIGH COST AND LOW COST ASSUMPTIONS AS PERCENTAGE OF SOCIAL SECURITY 75-YEAR SHORTFALL



Source: Author's calculations based on U.S. Social Security Administration (2005a), Table V1.D1, V1.D2, V1.D3, V1D4, VI.D7

#### Endnotes

1 Social Security Administration (2004).

#### References

- Goss, Stephen, Alice Wade and Jason Schultz. 2004. *Unfunded Obligation and Transition Cost for the OASDI Program.* Washington, D.C.: U.S. Social Security Administration.
- U.S. Social Security Administration. 2005a. "The 2005 Annual Report of the Board of Trustees of the Federal Old Age, Survivors and Disability Insurance Trust Funds."
- U.S. Social Security Administration. 2005b. "Status of the Social Security and Medicare Programs: A Summary of the 2005 Annual Reports."
- U.S. Social Security Administration. 2004. "Applications for Disability Benefits & Benefit Awards." Available at http://www.ssa.gov/ OACT/STATS/table6c7.html.

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