

# Social Security's financial outlook: The 2016 update in perspective

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Chestnut Hill, Mass.: Center for Retirement Research at Boston College, June 2016

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# SOCIAL SECURITY'S FINANCIAL OUTLOOK: THE 2016 UPDATE IN PERSPECTIVE

BY ALICIA H. MUNNELL\*

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## Introduction

The 2016 Trustees Report contains no surprises. The program faces a 75-year deficit of 2.66 percent of taxable payrolls – virtually unchanged from last year – and the Old-Age, Survivors and Disability Insurance (OASDI) program trust funds continue to be scheduled for exhaustion in 2034. Largely because of the Bipartisan Budget Act of 2015, the life of the DI trust fund has been extended by seven years.

As chair of the Social Security Advisory Board's 2015 Technical Panel on Assumptions and Methods, I was particularly interested in the extent to which the Trustees adopted the Panel's recommendations. They did reduce the long-run assumptions of inflation and real interest rates from last year and boosted the assumption on immigration, as the Panel recommended. Personally, I am delighted that the Trustees did *not* adopt our proposals on mortality improvement given the slowdown seen since 2009.

This *brief* updates the numbers for 2016 and puts the current report in perspective. It also discusses the new mortality trends; the Bipartisan Budget Act of 2015; the growing enthusiasm for expanding Social Security; the importance of considering Social Security "legacy debt" separately when constructing financing packages; and the continuing absence of replacement rate data from the Trustees Report.

The bottom line remains the same. Social Security faces a manageable financing shortfall over the next 75 years, which should be addressed soon to share the burden more equitably across cohorts, to restore confidence in the nation's major retirement program, and to give people time to adjust to needed changes.

## The 2016 Report

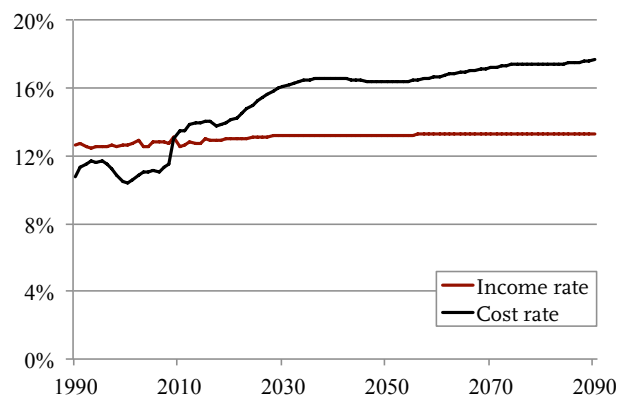
The Social Security actuaries project the system's financial outlook over the next 75 years under three sets of assumptions – high cost, low cost, and intermediate. Our focus is on the intermediate assumptions, which show the cost of the program rising rapidly to about 17 percent of taxable payrolls in 2035, where it remains for several decades before drifting up towards 18 percent of taxable payrolls (see Figure 1 on the next page). The increase in costs is driven by the demographics, specifically the drop in the total fertility rate after the baby-boom period. The combined effect of a slow-growing labor force and the retirement of baby boomers reduces the ratio of workers to retirees from 3:1 to 2:1 and raises costs commensurately. This increase in costs is not news; the actuaries have known about the drop in fertility

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and the whereabouts of the baby boom (those born from 1946-1964) for a long time. Nevertheless, the gap between the income and cost rates means that the system is facing a 75-year deficit.

FIGURE 1. PROJECTED SOCIAL SECURITY INCOME AND COST RATES, AS A PERCENTAGE OF TAXABLE PAYROLL, 1990-2090



Source: 2016 Social Security Trustees Report, Table IV.B1.

The 75-year cash flow deficit is mitigated somewhat by the existence of a trust fund, with assets currently equal to roughly three years of benefits. These assets are the result of cash flow surpluses, which began in response to reforms enacted in 1983. Before the Great Recession, these cash flow surpluses were expected to continue for several years, but the recession-induced decline in payroll taxes and uptick in benefit claims caused the cost rate to exceed the income rate in 2010 (see Table 1). This shift from

TABLE 1. KEY DATES FOR SOCIAL SECURITY TRUST FUNDS

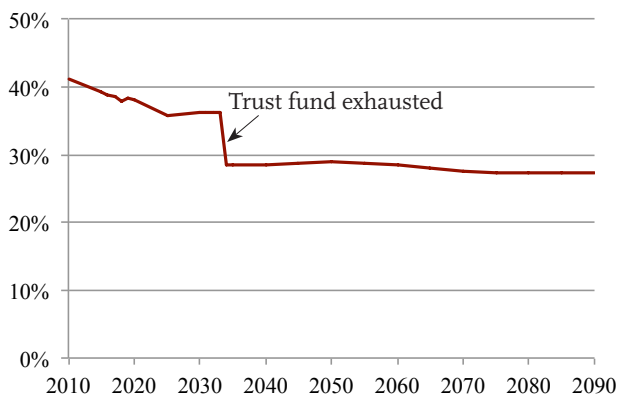
Event	Trustees Report				
	2012	2013	2014	2015	2016
First year outgo exceeds income excluding interest	2010	2010	2010	2010	2010
First year outgo exceeds income including interest	2021	2021	2020	2020	2020
Year trust fund assets are exhausted	2033	2033	2033	2034	2034

Source: 2012-2016 Social Security Trustees Reports.

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 is then projected to be exhausted in 2034.

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 39 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 REVENUES, 2016-2090



Source: Social Security Actuarial Note, Number 2016.9.

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 plus the assets in the trust fund. This calculation shows that Social Security’s long-run deficit is projected to equal 2.66 percent of covered payroll earnings. That figure means that if payroll taxes were raised immediately by 2.66 percentage points – 1.33 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 2090.

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 percentage of payroll, any solution that solves the problem for 75 years will more or less solve the problem permanently. But, during this period of transition, 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 – \$11.4 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 2.66 percent-of-payroll deficit discussed above (see Table 2).

TABLE 2. SOCIAL SECURITY’S FINANCING SHORTFALL, 2016-2090

Period	Present value (trillions)	As a percentage of	
		Taxable payroll	GDP
2016-2090	\$11.4	2.5*	0.9%

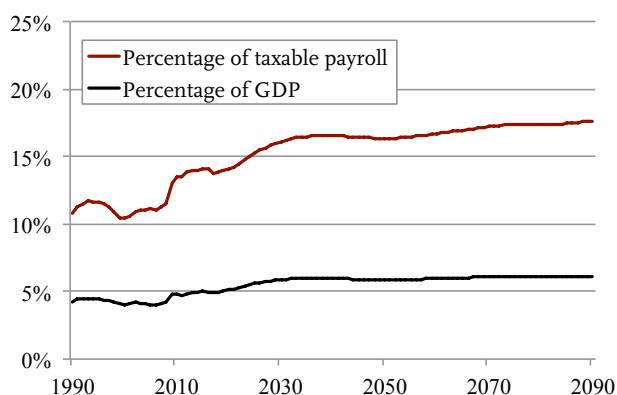
\* Adding \$743 billion required for a one-year reserve cushion brings the deficit to 2.66 percent.

Source: 2016 Social Security Trustees Report, Table IV.B6.

The Trustees also report Social Security’s shortfall as a percentage of Gross Domestic Product (GDP). The cost of the program is projected to rise from about 5 percent of GDP today to about 6 percent of GDP as the baby boom retires (see Figure 3). The reason why costs as a percentage of GDP more or less stabilize – while costs as a percentage 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 PERCENTAGE OF GDP AND TAXABLE PAYROLL, 1990-2090

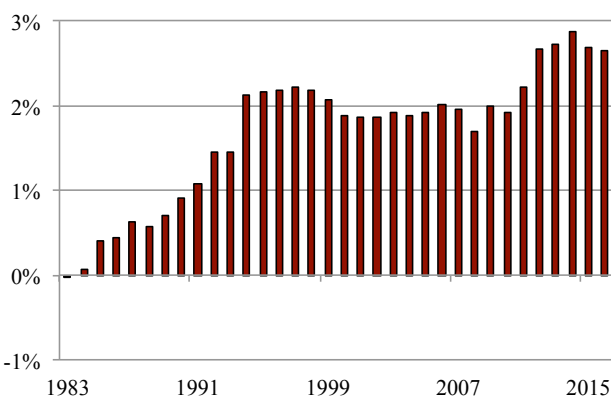


Source: 2016 Social Security Trustees Report, Figures II.D5 and IV.B1.

## The 2016 Report in Perspective

The continued 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, however, deficits appeared and increased markedly in the early 1990s (see Figure 4).

FIGURE 4. SOCIAL SECURITY’S 75-YEAR DEFICIT AS A PERCENTAGE OF TAXABLE PAYROLL, 1983-2016



Source: 2016 Social Security Trustees Report, Table IV.B1.

In the 1983 Report, the Trustees projected a 75-year actuarial surplus of 0.02 percent of taxable payroll; the 2016 Trustees project a deficit of 2.66 percent. Table 3 shows the reasons for this swing. 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 2016 Report is 2016-2090. Each time the valuation period moves out one year, it picks up a year with a large negative balance.

TABLE 3. REASONS FOR CHANGE IN THE ACTUARIAL DEFICIT, 1983-2016

Item	Change
Actuarial balance in 1983	0.02%
<b>Changes in actuarial balance due to:</b>	
Valuation period	-1.92
Economic data and assumptions	-0.85
Disability data and assumptions	-0.69
Other factors*	-0.03
Methods and programmatic data	0.39
Demographic data and assumptions	0.23
Legislation/regulation	0.19
Total change in actuarial balance	-2.68
Actuarial balance in 2016	-2.66

\* Discrepancies due to rounding.

Source: Author's calculations based on earlier analysis by John Hambor, recreated and updated from 1983-2016 *Social Security Trustees Report*.

A worsening of economic assumptions – primarily a decline in assumed productivity growth and the impact of the Great Recession – has also contributed to the increase in the deficit. Another contributor to the increased actuarial deficit over the past 33 years has been increases in disability rolls.

Offsetting the negative factors has been a reduction in the actuarial deficit due to methodological improvements and changes in demographic assumptions – primarily higher mortality for women. Legislative and regulatory changes have also had a positive

impact on the system's finances. For example, the passage of the Affordable Care 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.

Between 2015 and 2016, in the absence of any other changes, the OASDI deficit would have increased by 0.06 percentage points as a result of including the large negative balance for 2090 in the calculation. But a number of other changes also occurred. First, the Bipartisan Budget Act of 2015 reduced the deficit by 0.03 percentage points by closing unintended loopholes and requiring medical reviews by qualified professionals in the disability program. Second, changes in economic assumptions increased the deficit by 0.07 percentage points. (The 0.07 percentage points was the net of 0.02 percentage points from lowering inflation, 0.08 percentage points from lowering the real interest rate, and 0.02 percentage points from changing some starting values, offset by a 0.05 percentage-point improvement from raising the real-wage differential because of declining health insurance contributions.) Finally, some methodological improvements, many pertaining to immigration, reduced the deficit by 0.11 percentage points. The net impact of all these changes reduced the 75-year deficit from 2.68 to 2.66 percent of taxable payrolls.

## Current Issues

Several issues are worthy of comment this year – the Trustees' response to the Technical Panel recommendations, the impact of the Bipartisan Budget Act of 2015, the swing in sentiment among Democrats to expand Social Security, the need to consider separate treatment of Social Security's "legacy debt" in constructing financial packages, and the continued absence of replacement rate information.

### *Response to the 2015 Technical Panel*

The Technical Panel made a large number of recommendations in terms of assumptions and methods as well as presentation. The Trustees accepted the Panel's recommendation to lower the inflation assumption and the real interest rate assumption, although they did not go as far as the Panel would have liked. The Trustees did not get rid of the projec-

tions over infinite horizons, which involve enormous uncertainty, nor did they restore some measure of replacement rates (see discussion below). Both these changes would have enhanced the final report.

One area where the Trustees may wisely not have accepted the Panel's recommendation is the anticipated rate of improvement in mortality. The Panel endorsed the Trustees' basic methodology, which assumes that mortality improves more slowly at older ages and bases projections on trends in specific causes of death. However, it recommended that the Trustees increase the overall rate of improvement in age-sex-adjusted mortality for the next 75 years from 0.78 percent to 1.0 percent, on par with the average experience of the last 50 years. Data since 2009, however, suggest that the rate of mortality improvement is moving in precisely the opposite direction. At the time of the Panel's deliberations, only limited data were available suggesting an overall slowdown, but more recent evidence indicates that a slowdown is indeed underway. No one knows whether this slowdown is temporary or permanent but, at this point, it seems prudent for the Trustees to stand pat and not switch to a faster rate of mortality improvement.

### *The Bipartisan Budget Act of 2015*

After years of drought, the Congress passed some meaningful Social Security legislation in 2015 as part of the Bipartisan Budget Act.

*Extended life of DI trust fund.* The legislation reallocated payroll tax revenues between the OASI and DI portions of the program to avoid the exhaustion of the DI trust fund. Specifically, it increased the portion allocated to the DI program by 0.57 percentage points (for a total of 2.37 percentage points out of the total combined 12.4 percent tax) for the years 2016-2018, after which the allocation returns to its prior distribution. This change is projected to extend the date of exhaustion of the DI trust fund from 2016 to 2022. In addition, changes in the Trustees assumptions extended the date by one more year to 2023. In any event, hopefully the need to revisit the financing of the DI program may serve as an action-forcing event to restore balance to the entire Social Security program.

*Required medical review for DI applicants.* The legislation also tightened up the criteria for evaluating DI applicants by requiring the medical portion of the case review and any related residual functional capacity assessment to be completed by a qualified physician, psychiatrist, or psychologist. This change is expected to modestly reduce DI spending.

*Closed unintended loopholes.* The two loopholes eliminated were "spouse then worker" and "claim and suspend." "Spouse then worker" allowed married individuals to claim a spousal benefit at 66 and *switch* to their own retired worker benefit at a later date. The availability of this benefit option has had real value for couples and, therefore, increased the cost of the Social Security program, while serving no public policy objective.

"Claim and suspend" allowed a husband who reaches the Full Retirement Age to claim and immediately suspend his benefits, enabling his wife to

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*The Bipartisan Budget Act's elimination of Social Security claiming loopholes is a very positive development.*

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receive a spousal benefit based on his earnings record. The husband was then free to continue working and receive

delayed retirement credits, which increases not only his own monthly benefit but also his wife's survivor benefit.

Eliminating these loopholes is a very positive development. Social Security – the backbone of our retirement system – is not supposed to be a complicated program where those "in the know" get a much better deal than the average guy. Now the rules are clear, and people will get their intended benefit.

### *Mood Shift*

President Obama, Hillary Clinton, and other Democrats are rallying around the notion of expanding Social Security. Even Donald Trump has vowed not to cut it back. These positions represent a sea change from the traditional discussion focused on the rising cost of the program and the need to reduce spending. The shift is the result of the progressive wing of the Democratic party transforming the debate and the recognition that a lot of Americans simply do not have any other source of retirement savings.

The expansion is unlikely to take the form of an across-the-board raise for all participants. Targeted changes are more likely, such as increased benefits



for widows, for those who take time out of the labor force to care for children, and for those with a history of very low wages. In addition, some have suggested a bump-up in benefits at, say 85, an age when many have exhausted their other resources.

Expanding Social Security is going to force a discussion of alternative sources of financing because low- and middle-income workers cannot bear an increase in their payroll taxes that will ultimately amount to 3 or 4 percent of their wages.

### *Long-Run Solvency and Legacy Debt*

With or without an expansion of the Social Security program, current and future workers will be paying a lot for their 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. Instead, workers under the pay-as-you-go system will be facing a tax of 14 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 this "legacy debt." 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 income tax is a more equitable mechanism than the payroll tax to pay off a debt that has nothing to do with today's workers.

### *Replacement Rate Data Still Missing*

In the 2014 Report, the Chief Actuary noted in his "Statement of Actuarial Opinion" that the Trustees had eliminated data on benefit replacement rates. The deleted table showed for hypothetical workers at different earnings levels and for different claiming ages both historical and projected benefits adjusted for inflation and benefits as a percentage of pre-retirement earnings. Figure 5 shows a portion of this table from the 2013 Report.

These data are important. First, they are useful to individuals who need to plan for their own retirement and to companies contemplating establishing a retirement plan for their workers. Second, they show how changes in the law affect retirement security. The Technical Panel argued for restoring replacement rate information to the Trustees Report.

The Trustees did not restore the replacement rate data in the 2016 Report. Fortunately, replacement rate data can be found in a recently released Social Security Actuarial Note (Number 2016.9).

FIGURE 5. PORTION OF REPLACEMENT RATE TABLE IN 2013 TRUSTEES REPORT

Table V.C7.—Annual Scheduled Benefit Amounts for Retired Workers  
With Various Pre-Retirement Earnings Patterns  
Based on Intermediate Assumptions, Calendar Years 2013-90

Year attain age 65	Retirement at normal retirement age			Retirement at age 65		
	Age at retirement	CPI-indexed 2013 dollars	Percent of earnings	Age at retirement	CPI-indexed 2013 dollars	Percent of earnings
<b>Scaled medium earnings:</b>						
2015 .....	66:0	18,935	41.2	65:0	17,668	39.5
2020 .....	66:2	20,198	39.6	65:0	18,622	37.1
2030 .....	67:0	23,538	40.9	65:0	20,400	36.3
2040 .....	67:0	26,404	41.0	65:0	22,885	36.3
2050 .....	67:0	29,497	41.1	65:0	25,561	36.4
2060 .....	67:0	32,835	41.1	65:0	28,456	36.4
2070 .....	67:0	36,500	41.1	65:0	31,634	36.4
2080 .....	67:0	40,589	41.0	65:0	35,177	36.4
2090 .....	67:0	45,274	41.0	65:0	39,236	36.3

Source: 2013 Social Security Trustees Report, Table V.C7.

## Conclusion

The 2016 Trustees Report confirms what has been evident for two decades – namely, Social Security is facing a long-term financing shortfall which equals about 1 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.

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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.

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*The Center for Retirement Research thanks BlackRock, Capital Group, Citigroup, Fidelity & Guaranty Life, Goldman Sachs, MassMutual Financial Group, Mercer, Prudential Financial, State Street, and TIAA Institute for support of this project.*

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