Social security's financial outlook: The 2013 update in perspective

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SOCIAL SECURITY’S FINANCIAL OUTLOOK: THE 2013 UPDATE IN PERSPECTIVE

By Alicia H. Munnell*

Introduction

The 2013 Trustees Report – unlike last year – contains no surprises. Last year’s report showed a big jump in the program’s 75-year deficit in the wake of the slow recovery from the recession and rising disability rolls. This year’s report shows essentially no change in the deficit – just a tiny uptick from 2.67 percent of taxable payroll to 2.72 percent – and the date of trust fund exhaustion continues to be 2033. While the deficit remains larger and the date of exhaustion nearer than before the recession, the story remains the same. The program faces a manageable shortfall over the next 75 years, which should be addressed soon to restore confidence in the nation’s major retirement 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 developments on the long-run solvency front – namely, the expiration of the 2-percentage-point reduction in the employee’s portion of the payroll tax and the President’s proposal to move to a “chained” Consumer Price Index (CPI) to adjust benefits.

The 2013 Report

Each year, the Social Security actuaries project the system’s financial outlook over the next 75 years. They make projections 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 payroll by 2035, where it remains for several decades before drifting up to 18 percent of taxable payrolls (see Figure 1).

Figure 1. Projected Social Security Income and Cost Rates, as a Percent of Taxable Payroll, 1990-2087


* 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. Rebecca Cannon Fraenkel 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. As the baby boomers retire and the ratio of workers to retirees moves from 3:1 to 2:1, costs increase 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.

Note that once the cost rate increases, it stays high. The baby boom is not “a pig in a python,” a large cohort just passing through and once the last member dies life will return to normal. In fact, the baby boom has little to do with the ultimate cost of Social Security. The population of the United States has been growing older from the dawn of the republic. The baby boom is noteworthy, however, because it explains the unprecedented speed at which the population will age over the next two decades.

With increasing costs and a steady tax rate, Social Security has faced a financing shortfall for the last thirty years. In addition, the program’s finances have been hurt by the recession and slow recovery. Through 2009, the cost rate was below the income rate and Social Security 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>
<thead>
<tr>
<th>Event</th>
<th>Trustees Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>First year outgo exceeds income excluding interest</td>
<td>2009 2010 2011 2012 2013</td>
</tr>
<tr>
<td>First year outgo exceeds income including interest</td>
<td>2016 2015 2010 2010 2010</td>
</tr>
<tr>
<td>Year trust fund assets are exhausted</td>
<td>2024 2025 2023 2021 2021</td>
</tr>
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<tr>
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<td>2037 2037 2036 2033 2033</td>
</tr>
</tbody>
</table>

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 2021 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 41 percent today to 36 percent because of the ongoing increase in the Full Retirement Age from 65 to 67 that was enacted in 1983.)

Over the next 75 years, Social Security’s long-run deficit is projected to equal 2.72 percent of covered payroll earnings. That figure means that if payroll taxes were raised immediately by 2.72 percentage points – 1.36 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 2087.

Solving the 75-year funding gap is not the end of the story in terms of required tax increases. Seventy-five years has been the historical planning period because it approximates the amount of time that the average adult spends in the system. Most observers think that a perfectly reasonable horizon. Once the
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.

Social Security’s financial shortfall initially looks more daunting when measured in dollars. The present discounted value of the difference between projected revenues and expenditures over the next 75 years amounts to $9.6 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 2.72 percent deficit discussed above.

The report also calculates the financing shortfall from now to infinity. This number amounts to $23.1 trillion. Most analysts think that 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 4.0 percent of taxable payroll (see Table 2).

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 5.1 percent of GDP today to 6.2 percent of GDP as the baby boom retires. It remains at this level even after the boomer retirement period because of the permanent decline in fertility rates discussed earlier (see Figure 3). 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 is projected to decline as a share of total compensation due to continued growth in health and retirement benefits.

**Table 2. Social Security’s Financing Shortfall**

<table>
<thead>
<tr>
<th>Period</th>
<th>Present value (trillions)</th>
<th>As a percent of</th>
<th>Taxable payroll</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2087</td>
<td>$9.6*</td>
<td>2.6%</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>2013-infinity</td>
<td>$23.1</td>
<td>4.0%</td>
<td>1.4%</td>
<td></td>
</tr>
</tbody>
</table>

* The $9.6 trillion is the difference between scheduled benefits and projected revenues; it excludes another $555 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 payrolls is 2.72 as reported earlier.


The 2013 Report in Perspective

Regardless of how Social Security’s 75-year deficit is measured, it is just about the same as last year’s: 2.72 percent versus 2.67 percent of taxable payroll.

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 on the next page).
In the 1983 Report, the Trustees projected a 75-year actuarial surplus of 0.02 percent of taxable payroll; the 2012 Trustees project a deficit of 2.72 percent. Table 3 shows the reasons for this swing of 2.74 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 2013 Report is 2013-2087. 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.

Offsetting the negative factors has been a reduction in the actuarial deficit due to changes in demographic assumptions – primarily higher mortality for women – and methodological changes. Regulatory and legislative changes have also had a positive impact on the system’s finances. The passage of health care reform (comprised of the Patient Protection and Affordable Care Act and the accompanying 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.

### Significant Developments

Two issues are worthy of comment this year – the impending exhaustion of the Disability Insurance (DI) program in 2016 and developments on the long-run solvency front – namely, the restoration of the 2-percentage-point reduction in the employee’s portion of the payroll tax and the President’s proposal to move to a “chained” indexed CPI.

#### 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 im-

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### Table 3. Reasons for Change in Social Security’s 75-Year Deficit as a Percent of Payroll, 1983-2013

<table>
<thead>
<tr>
<th>Item</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuarial balance in 1983</td>
<td>0.02%</td>
</tr>
<tr>
<td>Changes in actuarial balance due to:</td>
<td></td>
</tr>
<tr>
<td>Valuation period</td>
<td>-1.74</td>
</tr>
<tr>
<td>Economic data and assumptions</td>
<td>-0.71</td>
</tr>
<tr>
<td>Disability data and assumptions</td>
<td>-0.78</td>
</tr>
<tr>
<td>Demographic data and assumptions</td>
<td>0.22</td>
</tr>
<tr>
<td>Methods and programmatic data</td>
<td>0.16</td>
</tr>
<tr>
<td>Legislation/regulation</td>
<td>0.15</td>
</tr>
<tr>
<td>Other factors*</td>
<td>-0.04</td>
</tr>
<tr>
<td>Total change in actuarial balance</td>
<td>-2.74</td>
</tr>
<tr>
<td>Actuarial balance in 2013</td>
<td>-2.72</td>
</tr>
</tbody>
</table>

* Discrepancies due to rounding.

Source: Author’s calculations based on earlier analysis by John Hambor, recreated and updated from 1983-2013 Social Security Trustees Reports.
pact 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

<table>
<thead>
<tr>
<th>Event</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year OASI Trust Fund assets are exhausted</td>
<td>2039</td>
<td>2040</td>
<td>2038</td>
<td>2035</td>
<td>2035</td>
</tr>
<tr>
<td>Year DI Trust Fund assets are exhausted</td>
<td>2020</td>
<td>2018</td>
<td>2018</td>
<td>2016</td>
<td>2016</td>
</tr>
</tbody>
</table>

*Source: 2009-2013 Social Security Trustees Reports.*

### Long-Run Solvency

Two developments occurred this year on the long-run solvency front – restoration of the payroll tax cut and a proposal to move to a chained CPI.

**Expiration of the Payroll Tax Cut.** After a one-year postponement, Congress finally let the “temporary” 2-percentage-point reduction in the Social Security payroll tax rate for employees and the self-employed expire. Although this cut had no direct financial implications for Social Security’s short- or long-term outlook, because the Treasury made up for this reduction by reimbursing the trust funds with general revenues, it did raise important political questions. Financing Social Security, even in part, through a general revenue transfer from the Treasury was a big departure from an earmarked tax equally split between employers and employees. It broke the link between contributions and benefits. It also made Social Security’s financing shortfall look bigger. To solve the long-run deficit in the program, Congress would have had to find money not only to cover the program’s deficit but also to cover the 2-percentage point reduction in the payroll tax. The expiration of the payroll tax cut is unquestionably good for the program, albeit some question its macro-economic impact.

**A Chained CPI Proposal.** In an effort to show a willingness to compromise on so-called entitlement programs, the President proposed in his 2014 Budget to replace the current index used to adjust Social Security benefits – the Consumer Price Index for all wages earners (CPI-W) – with a “chained” CPI. (The new index would also be used to adjust the tax brackets in the personal income tax.) A chained index better reflects the extent to which consumers can substitute less expensive for more expensive items as prices rise. If Social Security were currently using the appropriate index to adjust benefits, the chained CPI would better measure the effect of rising prices on consumption. The problem is that the current CPI is almost certainly not the right index for retirees, who spend a disproportionate share of their income on health care. An experimental index for the elderly (CPI-E) has increased 0.2 percentage points per year faster than the CPI-W. Therefore, the shift to a chained CPI-W further understates the inflation experienced by retirees.

The chained-CPI proposal met with enormous opposition, because it would have the largest impact on the oldest and poorest. Moreover, it cannot be viewed as anything more than a political statement – not a serious plan to fix Social Security. Any serious plan would recognize the need for additional revenues. As noted above, after the Trust Fund is exhausted, the program will be able to pay only 27 percent of pre-retirement earnings for the typical 65-year-old – a level not seen since the 1950s. Proposing a chained CPI may send a political signal of a willingness to deal, but it may also make the task of eliminating the Social Security deficit more difficult by tainting a proposal that might otherwise be part of a larger package.
Conclusion

The 2013 Trustees Report confirms what has been evident for two decades – namely, Social Security is facing a long-term financing shortfall which now equals 0.9 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.

References

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.

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