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SOCIAL SECURITY'S FIXABLE FINANCING ISSUES

Shortfall in funds is not inevitable

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In 1982, an imminent shorfall in Social Security—the projected inability of Social Security's finances to meet the *next year's* benefit payments—prompted action by Congress. Adopting several of the recommendations of the bipartisan Greenspan Commission, Congress instituted a series of changes to the Social Security program that increased tax revenues dedicated to the program, and decreased the benefits Social Security pays out. These changes led to a balance (actually, a very small surplus) in the 75-year planning horizon that is traditionally used to grade the system's solvency.

Since then, another actuarial deficit has emerged, with revenues projected to fall short of benefits in 2041. Supporters of a major overhaul of Social Security have portrayed the emergence of this financing gap as driven predominantly by demographic trends. This is incorrect.

The key facts, which are developed in detail on the following pages, are below:

- The deterioration in the 75-year actuarial balance of Social Security that has occurred since 1983 has been caused overwhelmingly by economic developments, trends in disability incidence, and programmatic changes to Social Security.
- Sixty percent of the current shortfall would be eliminated by a reversal of two adverse economic trends that have emerged since 1983: sluggish growth in average (real) wages and erosion of the tac base due to rapid growth in the inequality of earnings.
- Reversing the demographic change most commonly identified with placing strain on the Social Security system—declining mortality rates—would eliminate less than 5% of the current shortfall.

Background

In 1983, following the recommendations of a bipartisan commission chaired by current Federal Reserve Chairman Alan Greenspan, Congress instituted a series of changes to the Social Security program. These changes increased the resources dedicated to the system through raises in the payroll tax and taxation of Social Security benefits and decreased benefit payments through explicit benefit cuts and a phased-in increase in the retirement age. The changes led to balance (more accurately, a very small surplus of 0.02% of taxable payroll) in the long-term (75-year) timeline that is traditionally used to evaluate Social Security's future tenability.

This planning horizon was long enough to take into account the large and relatively sudden increase in Social Security beneficiaries associated with the retirement of the baby-boom generation, as well as the sustained increase in life expectancy that would result in higher worker-to-retiree ratios even after the baby boom. In short, the major long-term demographic challenges facing Social Security in 1983 were fully accounted for in 1983, and the Trustees declared the system in 75-year balance.

In the intervening 22 years, an actuarial deficit has opened, with revenues dedicated to the system falling short of scheduled benefits. In 2005, this shortfall is equivalent to 1.92% of *taxable payroll*.[1]

The essential argument made by those who support radically overhauling Social Security through private accounts and the reduction of its guaranteed benefits is that demographic trends will result in fewer workers supporting each retiree, making the economic burden of caring for retirees too great for workers in the future. This falling worker-to-retiree ratio is identified as the primary cause of the long-run financing shortfall facing Social Security. However, this focus is misplaced; in fact, the lion's share of the current actuarial deficit is the result of unfavorable economic trends, especially slow real wage growth and a rapid increase in wage inequality that resulted.

The long-run problem

The annual Social Security Administration Trustees' reports provide a measure for the actuarial balance of the Social Security system over the 75-year planning period. In the 2005 report, the Trustees reported an actuarial deficit equal to 1.92% of taxable payroll. This means that a 1.92% increase in the payroll tax supporting Social Security (currently set at 12.4%) would make the system actuarially solvent until 2080.

In 1983, the system was in actuarial balance over the following 75 years. Between 1985 and 1997, the actuarial balance deteriorated markedly, going from rough balance to a deficit equal to 2.23% of taxable payroll. Since then, this deterioration has actually reversed, with the actuarial balance rising to the current level of 1.92% of taxable payroll in the most recent year.

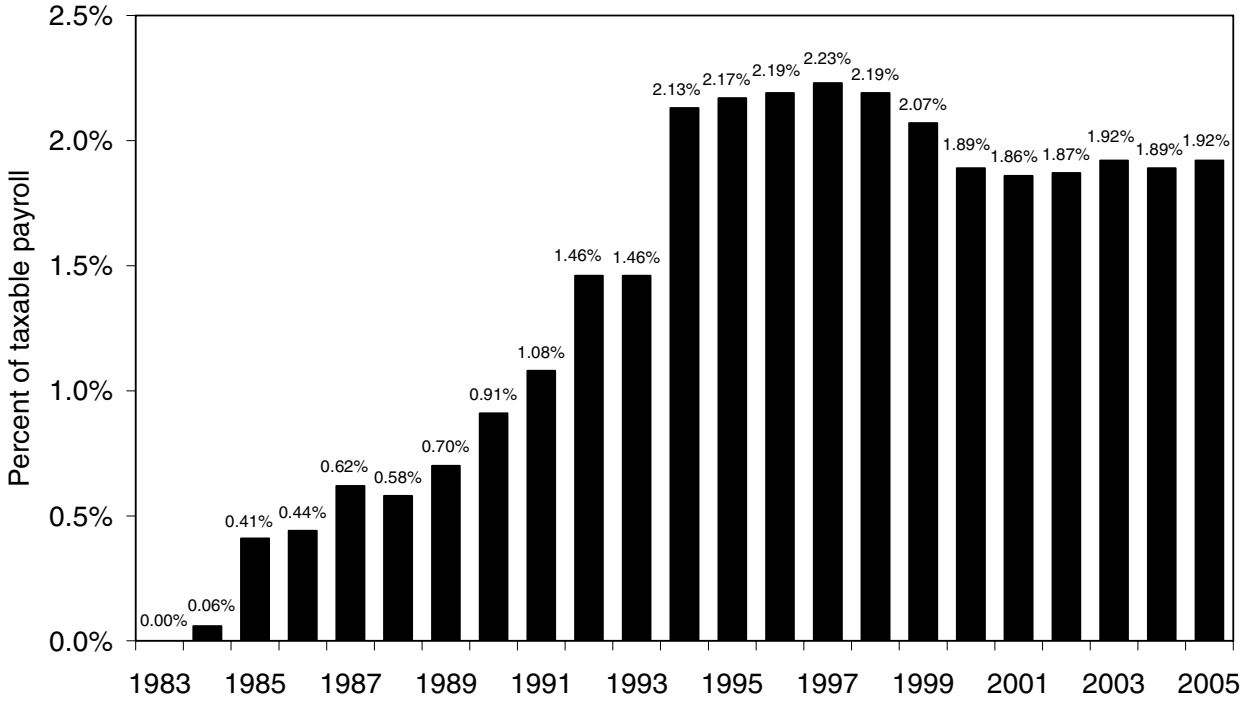
It should be noted that the non-partisan Congressional Budget Office (CBO), using slightly more optimistic economic projections (which are described in more detail below) and different modeling techniques, estimated in 2004 that the 75-year financing gap facing Social Security is 1.00% of taxable payroll, about *half* of the Trustees' estimate in that year.

What happened between 1983 and 2005?

In each year's Trustees reports, the contribution of various factors to the changing long-run actuarial position of Social Security is documented, including changes in demography, economic variables, and legislated changes to the program.

FIGURE 1

75-year Social Security financing shortfall
(share of taxable payroll)



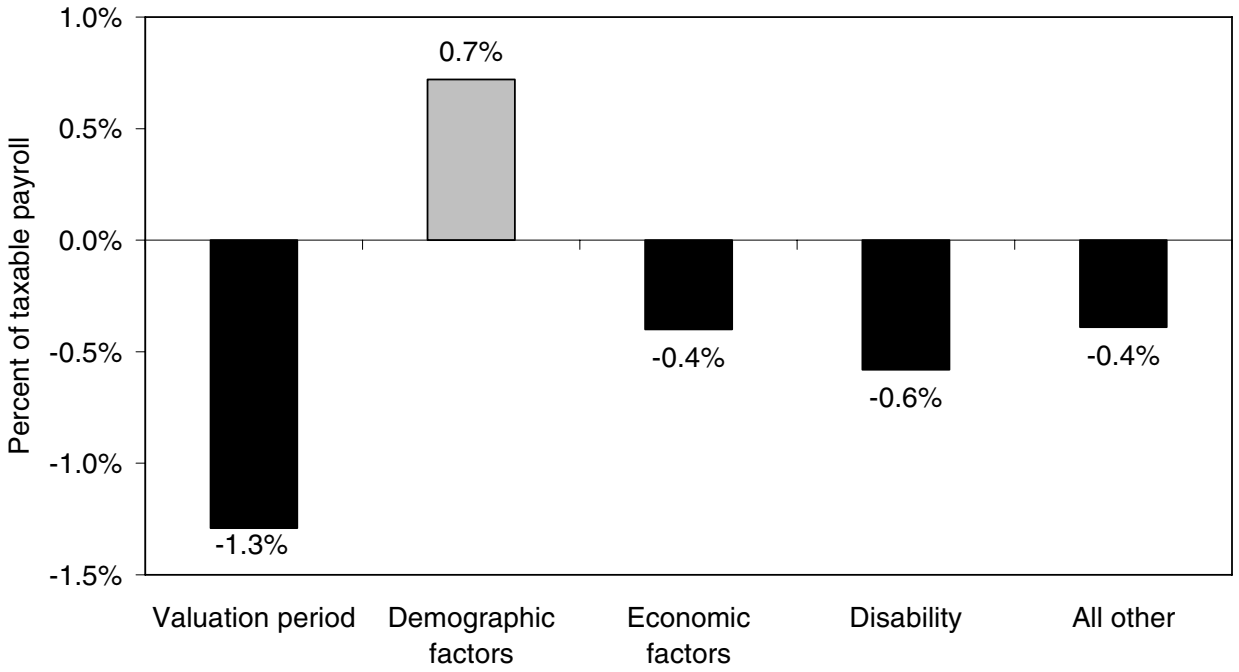
Source: Social Security Administration (SSA) Trustees' Reports, 1983-2005.

Figure 2 breaks down the change in the 75-year actuarial balances between 1983 and 2005, based directly on the SSA Trustees' reports. The biggest component of the widening financing gap is the change in the *valuation period*, which contributes well over half (1.3% of taxable payroll) to the deterioration of the actuarial balance since 1983. The valuation period effect on the actuarial balance reflects that, with each new report, the 75-year planning bracket includes one more year further out in the future, while excluding the most recent year analyzed in the previous year's report. Social Security currently runs surpluses, and will continue to do so until at least 2017, collecting more tax revenue than is paid out in benefits. This surplus is specifically dedicated to paying off benefits during the baby-boomers' retirement when Social Security's dedicated tax collections will fall short of benefits paid out. Changing the valuation period essentially means trading one year of surpluses for one year of deficits in the 75-year window, worsening the actuarial balance over the new time period.

The *demographic factors* documented by the SSA reports capture the influence of fertility rates, mortality rates, and immigration on the system. Falling mortality rates put pressure on the system's finances as retirees live longer, while falling fertility rates put pressure on its finances by providing fewer workers in the future. Falling immigration would have the same effect. However, Figure 2 shows that demographic factors have actually improved the actuarial balance of the system since 1983. Essentially, small declines (relative to

FIGURE 2

Change in 75-year actuarial balance of Social Security, 1983-2005, by reason for change*



* Total = 1.94.

Source: Social Security Trustees' Reports, 1983-2005.

those predicted in 1983) in mortality rates and stable fertility rates have been trumped by larger than anticipated immigration flows. As a result, demographic factors have actually improved the 75-year outlook by 0.7% of taxable payroll.

Economic factors capture a range of influences, the most important being the rate of real wage growth in the economy. Real wage growth (driven predominantly by productivity growth) has fallen substantially behind what was forecast beginning in 1983; this is the main reason why economic factors have contributed to the deterioration of the actuarial balance since then, contributing -0.4% of taxable payroll to the decline in the actuarial balance.

The rise in the *incidence of disability payments* has contributed even more to the deterioration of the actuarial balance than economic factors, -0.6% of taxable payroll since 1983. Disability incidence rates rose by about 20% between the early 1980s and the late 1990s. The precise reasons for the increase in disability incidence remain largely unexplained.[2]

Programmatic and legislative changes (grouped as the "all other" category in Figure 2) have contributed -0.4% of taxable payroll to the change in the actuarial balance since 1983. Some examples of programmatic and

legislative changes include the 1986 change in income tax rates that reduced Social Security income[3] and a change in how the assets of the Trust Fund are treated in the actuarial balance provided in the 1991 report.

The change in the valuation period is responsible for the bulk of the deterioration of the 75-year financial outlook for Social Security. Changes in the demographic outlook (birth and death rates plus immigration) have actually mitigated this deterioration over the past couple of decades. It is certainly true that some of the effects of the change in the valuation period are essentially reflecting demographic trends, as the deficits that appear decades down the road are directly related to the relative distribution of workers (paying revenue into the system) and retirees (receiving benefits) that will prevail then. However, a portion of the deficit arising from the change in the valuation period is also driven by economic events: wage growth is projected to be much slower in coming decades than in the past.

Another important issue that has emerged since 1983 is the erosion of wage and salary income subject to Social Security taxes. As the rest of this Issue Brief demonstrates, this erosion of the tax base for Social Security is responsible for much of the current shortfall, and is not addressed in the Trustees' estimates above because earnings over the cap are no longer projected to be subject to tax.

Comparing methods of projection: the Social Security Administration versus the Congressional Budget Office

There is a quick way to get a rough idea about how sensitive to economic assumptions the projected funding gap really is. Each year's Trustees' report forecasts the ultimate values for economic variables that the Trustees believe will characterize the future. These economic variables determine (along with assumptions about demography and disability) the solvency of Social Security over the 75-year window. One example of how important very small changes in these assumptions are for the system's solvency can be seen by comparing the SSA projections of Social Security's finances with projections made by the non-partisan Congressional Budget Office (CBO).

The CBO assumes slightly higher real wage growth and interest rates and slightly lower inflation and unemployment than the SSA, as well as assuming that a smaller share of total compensation to workers will be paid in non-cash benefits. **Table 1** compares the CBO and SSA assumptions and their results on the 75-year actuarial balance. It should be noted that all but one of the CBO assumptions improves the 75-year outlook (the exception being that their projection of lower inflation rates worsens the system's solvency). The effect of these slight changes in the economic forecasts reduces the 75-year shortfall forecast for 2004 from 1.89% (in the Trustees' estimates) to 1.53% (according to the CBO)—a decrease of about one-fifth.[4]

Adopting economic assumptions from 1983: real wage growth and earnings inequality

Two of the most striking trends characterizing the U.S. economy from 1983 to 1996 were historically sluggish growth in real wages and a pronounced increase in the inequality of labor earnings. This section details the effects these two trends have had on the Social Security financing gap. The bottom line is that, if the 1983 assumptions regarding these two economic variables alone were adopted today, the 75-year funding shortfall facing Social Security would be cut by 60%.

TABLE 1
CBO versus SSA economic assumptions and effects on the 75-year outlook for Social Security

	CBO	SSA	Effect of CBO assumptions on forecast of funding shorfall
Real earnings growth	1.3%	1.1%	+
Real interest rate	3.3	3.0	+
Inflation	2.2	2.8	-
Unemployment rate	5.2	5.5	+
75-year actuarial balance (as percent of taxable payroll)	1.53%	1.89%	

Source: Social Security Administration Trustees' Report (2005) and Congressional Budget Office (2004).

Slow real-wage growth

In 1983, the SSA Trustees forecast that real-wage growth in the far future for the U.S. economy would be 1.5% per year. By 2005, they have ratcheted down their real wage forecast to 1.1%. Table 1 demonstrated that the 75-year balance of Social Security is greatly influenced by economic trends. Given that the system was in balance in 1983 and is not today, it is useful to examine how much of the deterioration would have occurred if the economic assumptions used in the 1983 report were applied to the system today. This is not, it should be emphasized, an argument that the 1983 assumptions are more appropriate (although they may well be); rather, it is just an illustration that the Trustees' estimate of the shortfall facing Social Security is not rooted in the inevitability of demography. In fact, from 1995 to 2005, real wage growth in the U.S. economy has actually proceeded at 1.4%, which has been a large contributor to the improvement in the Trustees' forecast since the mid-1990s.

The 2005 Trustees' report includes a section on the sensitivity of the 75-year actuarial projections to changes in a range of variables. This sensitivity analysis shows that a 0.1% change in real wage growth essentially improves the actuarial balance by a little over 0.1% of taxable payroll. Therefore, if the 1983 forecast for real wage growth was still valid, 0.4% of taxable payroll would be cut from the total shortfall—more than one-fifth of the current total.

Inequality and the erosion of Social Security's tax base

As part of the 1983 changes, the earnings cap on Social Security taxes (and benefits) was set at a level that covered 90% of all earnings. By design, the cap has risen in tandem with average wages throughout the economy. In 2005, the earnings cap is $90,000.

Since 1983, however, earnings at the top end of the distribution have risen much faster than average earnings, so that the earnings cap no longer covers 90% of economy-wide earnings. Over the past four years, the cap has covered an average of 85% of earnings. Further, it is projected that the cap will eventually cover only 83.2% of earnings each year. The Social Security 75-year shortfall is expressed as a share of "taxable payroll" that by definition excludes earnings above the cap. This erosion of the taxable base of Social Security, driven by rising earnings inequality, has greatly exacerbated the long-run outlook of the system.

If the cap was reset today to maintain coverage of 90% of labor earnings, this would eliminate 0.75% of taxable payroll from the Trustees' estimated 75-year shortfall. Adding this 0.75% effect from earnings polarization to the 0.4% effect of slow real wage growth creates a combined effect of 1.15% of taxable payroll. Hence, more than 60% of the currently estimated total shortfall of 1.92% can be attributed to just these two unanticipated trends in labor income since 1983.

It is important to realize that this erosion of the taxable base of Social Security is not reflected in each year's estimate of the 75-year shortfall. Yearly estimates just take the taxable base as a given. Figure 2, for example, which documents the contribution of various factors to the rising shortfall, does not address the size of the taxable base of Social Security, and no estimate as to the effect of the erosion of this base on the widening shortfall is provided by the SSA.

However, a rough estimate of this effect is possible. If the Social Security earnings cap had covered 90% of all earnings throughout the 1983-2005 period, the Trust Fund today would have over $330 billion in additional assets.[5] These additional assets alone would cut 0.15% of taxable payroll from the 75-year actuarial deficit. Adding this lost revenue (0.15% of taxable payroll) from the 1983-2005 period to the revenue that would be gained if the cap again covered 90% of future wage earnings (0.75% of taxable payroll) implies that the erosion of the tax base of Social Security is responsible for almost half of the entire shortfall, or 0.9% of taxable payroll.

Adopting demographic assumptions from 1983: falling mortality rates

A commonly heard refrain from those discussing the financial problems of Social Security is "the problem is that people are living longer." This has become widely accepted as an explanation for the financing gap facing Social Security. It is, however, almost wholly incorrect. There has been only an extremely small change in the assumed rate of decline in the mortality rate for the Social Security beneficiary population since the 1983 changes. The mortality rate (adjusted for age and sex of the population) was projected to decline 0.66% annually in the 1983 report, versus an only slightly greater rate of 0.72% annually in the 2005 report.

This small increase in the forecast for future declines in the mortality rate plays a very small role in determining Social Security's financing gap. If the 1983 assumption on age- and sex-adjusted mortality was adapted today, this would cut only 0.08% of taxable payroll from the actuarial shortfall—or, less than 5% of the total—would be eliminated. To put this number in perspective, adapting the 1983 number for the assumed rate of *consumer price inflation* would have three times the impact on the actuarial balance (+0.24%) than adapting the assumptions regarding the age- and sex-adjusted mortality rate.[6]

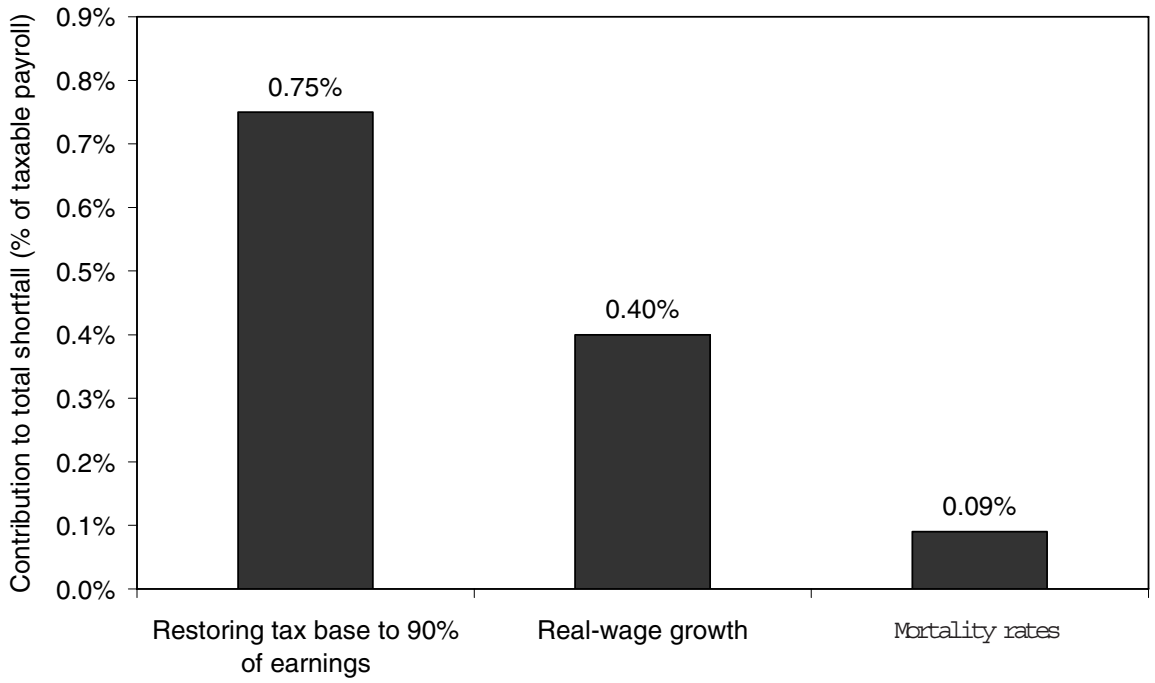
Given this, the policy prescription most often favored by those identifying longer life expectancy as the primary culprit in widening the financing gap, an increase in the retirement age, seems particularly poorly targeted. With rising life expectancy contributing so little to Social Security's financing problems, it seems odd to put the onus for narrowing the financing gap on increasing the retirement age.

Economics versus demographics

Figure 3 demonstrates the effect of adopting the above-mentioned assumptions made in the 1983 Trustees' report on the current 75-year shortfall. To be clear, the numbers in Figure 3 are not directly comparable to those in Figure 2. Figure 2 shows the reasons for the emergence of an actuarial deficit between 1983 and 2005 and does

FIGURE 3

Pushing 1983 assumptions forward changes to the current shortfall if 1983 assumptions still adopted*



* Total = 1.92.

Source: Author's calculations based on SSA Trustees' Reports and SSA Office of the Actuary Memo: "Estimated OASDI Long-Range Financial Effects of Several Provisions Requested by the Social Security Advisory Board," http://www.ssab.gov/financing/2004_update.pdf.

not address the size of Social Security's taxable base. Figure 3 documents the effect of adopting assumptions made by the Trustees in 1983 on the current shortfall, including the stability of the tax base.[7]

As highlighted above, if 90% of wage income was still covered under the earnings cap, then 0.75% of the 1.92% shortfall would be wiped out. If real wage growth averaged 1.5%, as forecast in 1983, rather than the 1.1% forecast by recent Trustees' reports, then 0.40% of the shortfall would be eliminated. If death rates declined at the rate forecast in the 1983 report instead of that forecast in the 2005 report, only 0.09% of the shortfall would be eliminated. Clearly, the Social Security shortfall has been driven at least as much by economics as by demographics. This insight should inform any suggested fix to the Social Security financing problems.

Conclusion and policy implications

Since the major overhaul of Social Security engineered in 1983, the 75-year financial outlook of the system has gone from actuarial balance to an actuarial deficit equivalent to 1.92% of taxable payroll according to the SSA (or 1.0% of taxable payroll according to the CBO).

Proponents of drastically overhauling the Social Security system often portray this deterioration in Social Security's 75-year outlook as the inevitable march of demographic trends that will require radical changes in the structure of the program. This is false. Changing *economic* trends—specifically, sluggish wage growth and rapidly increasing earnings inequality—have been responsible for the bulk of the financing shortfall of Social Security.

Advocates of Social Security privatization are likely to claim that this is a distinction without a difference. From a policy standpoint, however, the difference is significant. A shortfall was caused primarily by demographic trends would lend credence to arguments that major changes are inevitable. However, a shortfall fueled primarily by economic trends, as this one is, can be remedied by policy adjustments that address those causes. Luckily, since 1996, real-wage growth in the U.S. economy has actually started to look more like that which was assumed in the 1983 projections, leading to a shrinking financing gap.

The spillage of earnings over the legislated cap is the result of policy choices than can be corrected. Setting the cap so that it covers 90% of all wage earnings now and into the future would, by itself, eliminate almost a third of the 75-year financing shortfall.

While a deficit in the 75-year planning horizon of Social Security has emerged, it has not been driven by demographic changes. Further, this deficit has shrunk over the past 10 years, as economic trends have been slightly more favorable. Policy prescriptions for narrowing the financing gap should focus on its proximate causes: slow real wage growth and inequality.

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Endnotes

1. *Taxable payroll* is the tax base from which Social Security is funded, consisting essentially of all labor earnings falling under a legislated cap.

2. Some possible reasons mentioned in a 1996 report to Congress from the SSA mention public awareness about the possibilities for disability incidence insurance awards, poor labor market conditions for those who could be eligible for disability insurance, and "spillover" effects from efforts to reach out to all persons potentially eligible for disability (SSA 1996).

3. This occurred because Social Security benefits are taxed and the proceeds earmarked for the system.

4. The CBO forecast for the 75-year actuarial shortfall is actually 1.0% of taxable payroll, but about 60% of the difference between their forecast and the SSA is due to modeling differences, not differences in economic forecasts.

5. Note that this estimate requires some assumptions regarding the composition of compensation that would have prevailed between 1983 and 2005 had the cap maintained coverage of 90% of earnings. Specifically, it must be assumed that workers did not choose to take their compensation in other forms (like non-wage labor compensation, including health care and pension benefits, or, through corporate profits) not subject to the Social Security payroll tax in response to the higher cap coverage.

6. Higher inflation (holding real wages constant) actually improves Social Security's actuarial picture over the 75-year horizon. While high inflation immediately increases tax payments, it increases benefit payments only in the future. The forecast for inflation in the 2004 report (2.8%) is lower than in the 1983 report (4%), which hurts the actuarial outlook.

7. Again, this is not an argument that these are necessarily the most appropriate assumptions (although, in the case of real wage growth, at least, they may be more accurate than what the Trustees currently forecast). Rather, these assumptions are meant to demonstrate the degree to which the Social Security shortfall results far more from economic surprises than demographic ones.