

A Summary of Saving Social Security: A Balanced Approach

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Social Security is one of America's most successful government programs. It has helped millions of Americans avoid poverty in old age, upon becoming disabled, or after the death of a family wage earner. As President Bush has emphasized, "Social Security is one of the greatest achievements of the American government, and one of the deepest commitments to the American people."² Despite its successes, however, the program faces two principal problems.

First, Social Security faces a long-term deficit, even though it is currently running short-term cash surpluses. Addressing the long-term deficit would put both the program itself and the nation's budget on a sounder footing.

Second, there is broad agreement that benefits should be increased for some particularly needy groups – such as those who have worked at low pay over long careers and widows and widowers with low benefits. The history of Social Security is one of steady adaptation to evolving issues, and it is time to adapt the program once again.

Restoring long-term balance to Social Security is necessary, but it is not necessary to destroy the program in order to save it. Social Security's projected financial difficulties are real and addressing those difficulties sooner rather than later would make sensible reforms easier and more likely. The prospects are not so dire, however, as to require undercutting the basic structure of the system. In other words, our purpose is to save Social Security both from its financial problems and from some of its "reformers."

In this paper we review the financial position of Social Security, present a plan for saving it, and discuss why Social Security revenue should not be diverted into individual accounts. Our approach recognizes and preserves the value of Social Security in providing a basic level of benefits for workers and their families that cannot be decimated by stock market crashes or inflation, and that lasts for the life of the beneficiary. And it eliminates the long-term deficit in Social Security without resorting to accounting gimmicks, thereby putting the program and the federal budget on a sounder financial footing. Our plan combines revenue increases and benefit reductions—the same approach taken in the last major Social Security reform, that of the early 1980s,

when Alan Greenspan chaired a bipartisan commission on Social Security. That commission facilitated a reform including adjustments to both benefits and taxes. Such a balanced approach was the basis for reaching a consensus between President Ronald Reagan and congressional Republicans on one hand and congressional Democrats led by House Speaker Thomas P. O'Neill on the other. Our hope is to move discussion toward a basis for such a compromise.

Social Security's Long-Term Deficit

Social Security faces a long-term deficit, requiring some type of reform to put the system on a sounder financial footing. According to the most recent projection done by the Office of the Chief Actuary of Social Security, from its current balance of roughly \$1.5 trillion, the trust fund is projected to first rise and then fall, reaching zero in 2042. At that time revenue from payroll taxes and the income taxation of benefits would still be sufficient to cover about three-quarters of projected expenditure. That fraction then declines slowly to slightly less than 70 percent in 2080. Thus, although some observers refer to the “bankruptcy” of Social Security, in fact a substantial revenue flow would still be dedicated to Social Security even after the trust fund is exhausted – and concerns that there will be nothing from Social Security for future generations are misplaced. Even so, everyone agrees that a serious political problem arises when the trust fund reaches zero: at that point, the system cannot pay all promised benefits out of the existing revenue structure.

Some observers have argued that the problem arrives much sooner than that, when the flow of revenue from taxes first falls short of annual expenditure in 2018. We see no basis for attaching any significance to such a date, however, and are unaware of any rigorous presentation of an argument for why that date represents a crisis.

Another description of the financial picture comes from considering an “actuarial balance” figure. This measure reflects the degree to which the current trust fund and projected revenue over some period are sufficient to finance projected costs. The period conventionally chosen is seventy-five years. When the projection shows insufficient resources to pay scheduled benefits over that period, the Office of the Chief Actuary

calculates what level of additional resources would be sufficient to close the gap and leave the trust fund with a projected balance (considered a “precautionary balance”) equal to projected expenditure for one additional year after the end of the period. This measure of the actuarial deficit, presented as a percentage of taxable payroll over the next seventy-five years, is the key traditional criterion for evaluating Social Security’s finances.³ In the 2004 trustees’ report, the actuarial imbalance was 1.89 percent of taxable payroll. One interpretation of this number is that it indicates what payroll tax increase would be sufficient to finance benefits over the seventy-five-year horizon (and leave a precautionary balance as defined above), provided the increase began immediately and remained in force for the full seventy-five years. Reporting the imbalance in this way is not meant to recommend that the payroll tax rate be raised by this amount. Rather, it is a way of summarizing the magnitude of the financial difficulties at hand. People may disagree about whether a shortfall of 1.9 percent of taxable payroll is a large problem or a small one, but it is a straightforward way to present the problem.

One of the primary goals of a Social Security reform plan should be to achieve seventy-five-year actuarial balance. But this should not be accomplished through the “magic asterisk” approach of simply assuming transfers from the rest of the budget (discussed in the next section). Nor should one adopt the deceptive approach of using the higher expected returns on stocks relative to bonds to eliminate the projected deficit.

Many factors have contributed to the change from projected balance at the time of the 1983 reform to the current imbalance. Since there are many ways to attribute the change to specific factors, any particular one is somewhat arbitrary. Rather than attempt an accounting of the contribution to the long-term deficit from all the different factors, we simply focus on three important contributing factors: improvements in life expectancy, increases in earnings inequality, and the burden of the legacy debt resulting from Social Security’s early history. These factors interact with one another, further underscoring the arbitrary nature of such classifications. Nonetheless, each of these three factors, examined by itself, has an adverse effect on Social Security’s financing—and motivates a component of our reform plan.

Increasing Life Expectancy

Life expectancy at age 65 has increased greatly since the creation of Social Security. It has risen by four years for men and five years for women since 1940 and is expected to continue rising in the future. Increasing life expectancy contributes to Social Security's long-term deficit. Because Social Security pays a benefit that continues as long as the beneficiary is alive, any increase in life expectancy at the age at which benefits commence increases the cost of Social Security, unless there is an offsetting decrease in the monthly benefit level. The last major reform of the program, in 1983, increased the full benefit age gradually over two six-year periods (2000-05 and 2017-22), in anticipation of increased life expectancy, which effectively reduced monthly benefits for those affected by the change. But the 1983 reform did not include any ongoing adjustment for life expectancy after 2022. So, as time goes on and life expectancy continues its steady increase, the projected cost of Social Security steadily rises.

Although demographers, actuaries, and other experts agree that mortality rates will continue to decline well into the future, there is heated debate in academic and actuarial circles about how rapid an improvement to expect. This is not an appropriate place to assess that dispute, but the debate underscores the fact that projections of mortality improvements are subject to considerable uncertainty. Indeed, this uncertainty is one of our motivations for proposing that Social Security be indexed to future mortality levels, so that rather than try to make adjustments now based on today's mortality projections, such adjustments will be made automatically as time goes on and actual improvements in mortality become known. Such improvements have historically varied from year to year, and indeed even from decade to decade. Thus one should expect to see significant deviations in the future from current mortality projections even if those projections are accurate on average over long periods.

One might think that any adverse financial effect on Social Security from increased life expectancy would be substantially diminished by longer careers, as people choose to spend part of their longer expected lives continuing to work. That is not the case, however, for two reasons. First, it seems unlikely that longer life expectancy will be

associated with significant increases in career lengths. Second, even if people did extend their careers, the effect on Social Security would be relatively modest because the system is roughly actuarially fair. Working longer (and claiming benefits later) does not have much effect on Social Security's financing because annual benefits are increased when the initial benefit claim is postponed. The bottom line is that increased life expectancy, whether or not it is accompanied by longer careers, imposes financial costs on Social Security.

The steady increases in life expectancy that have occurred since the 1983 reform of Social Security are not a total surprise. Indeed, the actuarial projections done at the time of the reform assumed steadily improving life expectancy. But the target in 1983 was to restore actuarial balance for the following seventy-five years, not forever. Now we are twenty years into that seventy-five-year projection period, and with the 75-year projection period now including an additional twenty years, financing difficulties are again on the horizon. (This is a reflection of what is called the "terminal" or "cliff" problem. Under Social Security's current structure, the years beyond the 75-year projection horizon have larger cash flow imbalances than earlier years. Extending the horizon, as a new projection is done, then worsens the projected balance.) Since ongoing increases in life expectancy contribute to the terminal year effect, and since that terminal year effect helps to explain the re-emergence of a 75-year deficit since 1983, life expectancy increases are one cause of the long-term deficit in Social Security.

In thinking about how Social Security should be modified to deal with increases in life expectancy, it is helpful to examine how a worker would sensibly react to a change in life expectancy, if that worker relied only on his or her own resources, and how different types of pension systems would adjust to such a change. On learning that he or she will live longer than previously expected, an individual worker could adjust in any of three ways to the resulting need to finance consumption over a longer life: by consuming less before retirement (that is, saving more), consuming less during retirement, or working longer. A sensible approach would likely involve all three.

Social Security benefits are higher for those who start them at a later age, and are higher for each additional year of work that raises the worker's average indexed monthly

earnings. The current system thus already allows for one response to increases in life expectancy: working longer in order to enjoy higher annual benefits.

The other two elements of individual adjustment can be thought of as corresponding to an increase in the payroll tax rate (consuming less and saving more before retirement) and a reduction in benefits for any given age at retirement (consuming less during retirement). Both responses thus involve reductions in consumption, one before retirement and the other after. Our approach includes both of these, given that Social Security already provides the opportunity for higher benefits from more work.

Automatic adjustment of benefits and taxes for ongoing increases in life expectancy would enhance the financial soundness of Social Security, but they still leave open a key question, namely, the extent to which the adjustment should be divided between taxes and benefits. Sweden's approach and a proposal from President Bush's commission allocate all of the adjustment for longer life expectancy to benefit cuts. We consider that an extreme approach, and instead propose a balanced combination of benefit and tax adjustments.

Specifically, under our proposal, in each year the Office of the Chief Actuary would calculate the net cost to Social Security from the improvement in life expectancy observed in the past year for a typical worker at the full benefit age. This would be done by comparing the cost of benefits for different cohorts, using successive mortality tables.⁴ Half of this "net cost of increased life expectancy" would be offset by a reduction in benefits, which would apply to all covered workers age 59 and younger. (Once a worker reaches age 60, the rules for his or her benefits would be finalized and would not change further in response to ongoing life expectancy changes.) An accompanying payroll tax change would roughly balance the actuarial effects of the benefit reductions over a seventy-five-year period.⁵

The first benefit adjustment would occur for those first eligible to receive benefits in 2012, and the first adjustment to the payroll tax rate would also occur in 2012, with further changes each year thereafter. (As a result, benefits for those age 55 and older in 2004 would be unaffected.) Each tax rate change would affect all earnings below the maximum taxable earnings base from then on. Since the already-legislated increases in the full benefit age are supposed to reflect improvements in life expectancy, the

adjustment of benefits from this provision would be decreased to the extent that scheduled increases in the full benefit age already reduce benefits in the relevant years. To do otherwise would be to compensate twice for the same change in life expectancy.

It is worth emphasizing that our proposal would *not* change either the full benefit age or the earliest eligibility age. Indeed, we do not support any simple principle for adjusting Social Security based on an expectation of how much longer people should work in response to lower mortality rates. The reason is that the age at which it is sensible for a worker to retire depends on more than just life expectancy. It depends as well on how a worker's ability to work, interest in work, and the availability of jobs vary as mortality decreases. It also depends on the extent to which, because of higher earnings, workers are more interested in retiring earlier. Furthermore, the diversity in the labor force and the appropriateness (in some cases the need) for some workers to take early retirement also underscore the importance of preserving early retirement options. And future declines in mortality will widen the variance in ages at death, which is also exacerbated by the income-related difference in the rate of decline in mortality rates. These factors, if anything, *increase* the importance of providing an option of early retirement for those with shorter life expectancy.

Implementing this proposal would reduce the seventy-five-year actuarial deficit by 0.55 percent of taxable payroll, or slightly less than a third of the currently projected deficit. Moreover, the change would attenuate the terminal-year effect of moving from one seventy-five-year projection period to the next.

Increasing Earnings Inequality

A second factor affecting Social Security's financing is earnings inequality. Here we examine two aspects of earnings inequality: the increase in the share of earnings that is untaxed because earnings are above the maximum taxable earnings base, and the widening difference in life expectancy between lower earners and higher earners.

These changes, by themselves, have made Social Security less progressive on a lifetime basis over the past twenty years. But many factors affect the overall progressivity of Social Security, and it is not our intent to address all of them. For example, the

increased tendency of women to have substantial careers outside the home has diminished the relative importance of the spousal benefit. The spousal benefit has tended historically to reduce Social Security's progressivity, because it has accrued disproportionately to spouses in high-income families; the decline in the relative importance of the spousal benefit therefore makes Social Security more progressive as a whole.⁶ Although some of these other factors are also important, we focus on just the effect of earnings inequality, which we believe particularly warrants a policy response.

Over the past two decades, earnings have risen most rapidly at the top of the earnings distribution, that is, among those workers who already were receiving the highest earnings. Economists have explored a variety of explanations for this increase in earnings inequality. The leading explanation involves technological changes that have increased the return to skill, although social norms also seem to play an important role.

The increase in the share of earnings accruing to the top of the income distribution affects Social Security's financing because the Social Security payroll tax is imposed only up to a maximum taxable level (\$87,900 in 2004). The increasing inequality in earnings in recent years implies that a much larger fraction of aggregate earnings is not subject to the payroll tax than in the past. In other words, when the earnings distribution changes so that more of total earnings goes to those earning more than the taxable maximum, the fraction of total earnings subject to Social Security tax decreases.

The fraction of aggregate earnings that was above the maximum taxable earnings base has risen substantially since the early 1980s, from 10 percent in 1983 to 15 percent in 2002. The increase in the fraction of earnings not subject to tax reflects the fact that earnings growth at the top of the income distribution has been much more rapid than the growth of average earnings. Surprisingly, the fraction of workers with earnings at or above the maximum taxable earnings base has remained roughly constant since the early 1980s. In each year since the early 1980s, about 6 percent of workers have had earnings at or above the taxable maximum. Thus the increase in earnings that escape the payroll tax does not reflect an increase in the fraction of workers with earnings above the maximum, but rather an increase in the average earnings of those workers relative to other workers. For example, in 1983 the average earnings of workers with earnings more

than the taxable maximum were five times the average earnings of all other workers; by 2001 that ratio had risen to more than seven.

To offset this effect, we would raise the maximum taxable earnings base so that the percentage of aggregate earnings covered is closer to that which prevailed in 1983. The large increase since 1983 in the share of earnings that is untaxed because those earnings are above the taxable maximum does not reflect a policy decision, but rather the outcome of changes in earnings patterns in the economy over the past quarter century. One could argue that policymakers implicitly agreed in 1983 that only about 10 percent of earnings should escape taxation by virtue of being above the maximum. Thus one reasonable approach would gradually increase the maximum until the 1983 share is restored. But this would generate so much revenue as to result in a large imbalance between our proposed revenue and benefits adjustments in this category. Therefore, in order to achieve a closer balance between the two, we adopt instead the more moderate approach of returning the share of earnings above the taxable maximum about halfway to its 1983 level, that is, to 13 percent, which is approximately its average over the past two decades. We also phase in this reform over an extended period to allow workers time to adjust to the change. In particular, each year after the plan is adopted, the maximum taxable earnings base would increase by 0.5 percentage point more than the percentage increase in average wages, until 2063, when it is projected that 87 percent of covered earnings will be subject to payroll taxation.⁷

Increasing the maximum taxable earnings base would affect only the 6 percent of workers in each year with earnings at or above the current maximum. Moreover, although it would raise their payroll tax payments, it would raise their subsequent benefits as well. (The increase in benefits associated with earnings in the relevant range would, however, only partly offset the increase in revenue, because of the progressivity of Social Security's benefit formula.) Gradually returning the share of untaxed earnings to 13 percent would reduce the seventy-five-year actuarial imbalance by 0.25 percent of payroll, or about one-eighth of the existing deficit.

The second piece of our earnings inequality adjustment involves differential trends in life expectancy. The trend to longer life expectancy and its impact on Social Security are widely known. Somewhat less well known, but also bearing implications for the program, is the fact that people with higher earnings and more education tend to live longer than those with lower earnings and less education. Even less well known is that these mortality differences by earnings and education have been expanding significantly over time.

This increasing gap in mortality rates by level of education has two implications for Social Security. First, to the extent that projected improvements in life expectancy reflect disproportionate improvements for higher earners (a reasonable supposition since higher earners tend to have more education than lower earners), the adverse effect on Social Security's financing is larger than if the projected improvement occurred equally across the earnings distribution. The reason is that higher earners receive larger annual benefits in retirement; a disproportionate increase in their life expectancy therefore imposes a larger burden on Social Security than an equivalent increase in life expectancy for other beneficiaries. Second, when one thinks of the progressivity of Social Security on a lifetime basis, rather than an annual basis, the changing pattern of mortality tends to make Social Security less progressive than it would be without such a change, since it means that higher earners will collect benefits for an increasingly larger number of years, and thus enjoy larger lifetime benefits, relative to lower earners.

In response to the increase in earnings inequality and the growing spread in life expectancies between higher earners and lower earners, our plan would increase the progressivity of the Social Security benefit formula.

A worker's monthly Social Security benefits are based on a primary insurance amount (PIA), which is itself computed by applying a three-tiered formula to the worker's average indexed monthly earnings. In the highest tier of the PIA calculation, which is relevant only for relatively high earners, benefits are increased by 15 cents for every extra dollar in AIME. To respond to the effect of increasing differences in mortality rates, we would gradually reduce this 15 cents in benefits on each dollar in the top tier by 0.25 cent a year for newly eligible beneficiaries in 2012 and thereafter, until it reaches 10 cents in 2031. This benefit adjustment, which was also adopted by one of the

three plans proposed in 2001 by the President's Commission to Strengthen Social Security, reduces the 75-year deficit by 0.18 percent of payroll.

This reduction would affect approximately the highest-earning 15 percent of all workers. If the change had been fully in effect in 2003, for example, it would have affected only those whose AIME exceeds \$3,653, or almost \$44,000 a year. Social Security data suggest that only about 15 percent of newly retired and disabled workers have consistently had earnings at or above this level over their lifetime. Furthermore, the change would have larger effects on higher earners than on those whose earnings just barely put them in the 15-cent tier. For example, reducing the 15-cent rate to 10 cents would ultimately reduce benefits by 1.6 percent for those with an AIME of \$4,167 (and therefore career-average annual earnings of \$50,000), but would reduce benefits by 8.7 percent for those with the maximum AIME of \$7,250 (and therefore career-average annual earnings of \$87,000).

The Legacy Debt Burden

A third important influence on the future financing of Social Security reflects, somewhat ironically, the past. That is the fact that the benefits paid to almost all current and past cohorts of beneficiaries exceeded what could have been financed with the revenue they contributed. This history imposes a legacy debt on the Social Security system. That is, if earlier cohorts had received only the benefits that could be financed by their contributions plus interest, the trust fund's assets today would be much greater. Those assets would earn interest, which could be used to finance benefits. The legacy debt reflects the absence of those assets and thus directly relates to Social Security's funding level. In this section we use the legacy debt as an alternative lens through which to view Social Security's financing challenges.

The decision, made early in the history of Social Security, to provide the first generations of beneficiaries benefits disproportionate to their contributions represented sound policy. It was a humane response to the suffering imposed by World War I, the Great Depression, and World War II on Americans who came of age during those years, and it helped to reduce unacceptably high rates of poverty among them in old age.

Moreover, the higher benefits not only helped the recipients themselves but also relieved part of the burden on their families and friends, and on the taxpayers of that era, who would otherwise have contributed more to their support. Thus the decision to grant generous Social Security benefits to workers who had contributed little or nothing to Social Security during their careers provided crucial assistance to more people than just those workers themselves.

But whatever the rationales for and positive effects of those decisions, all workers covered by Social Security now face the burden of financing them. To measure that burden and explore in detail how it accumulated, one can examine how much each cohort paid and is projected to pay in Social Security taxes (in present value) and how much that cohort received and is projected to receive in benefits (again in present value).

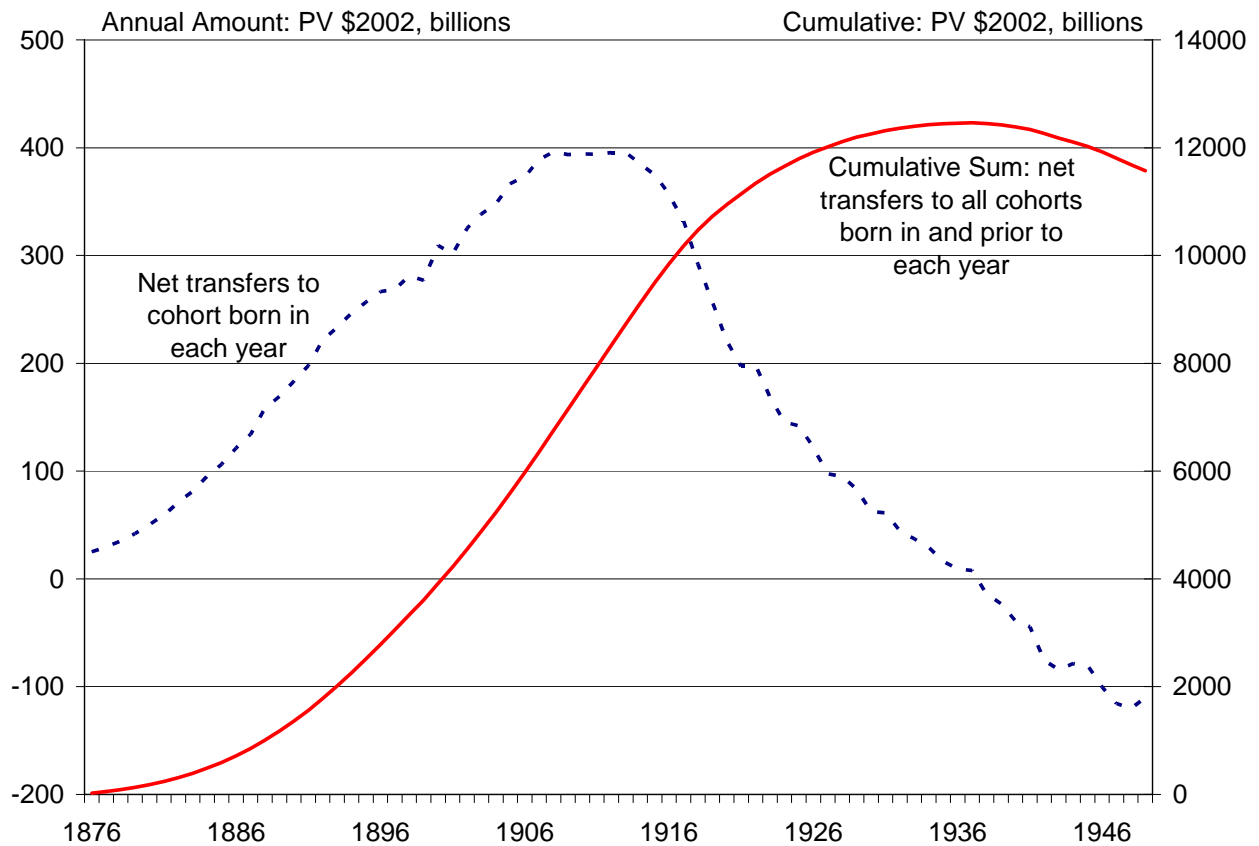
Figure 1 shows, for each cohort born from 1876 to 1949, the difference between what that cohort paid or will pay in taxes to Social Security, and what it received or is projected to receive in benefits, in present value. The dotted line in Figure 1 shows that the earliest cohorts received more from Social Security than they paid into it. Because the program as a whole was small in those early years, however, the total net transfer was not very large, either for each cohort individually or for all the early cohorts cumulatively (depicted by the solid line). As the program grew, however, it continued to provide more generous benefits than could have been financed by previous contributions (plus a market rate of interest), and the cumulative transfer grew rapidly. Following the 1983 reforms, all cohorts starting with that born in 1936 are now scheduled to pay in more than they receive in present value, thereby reducing the legacy debt that is passed on to the future.

The effect of the early generosity is that the “rate of return” received on contributions by younger workers is lower than a market interest rate, and a “legacy cost” is borne because of this difference between the return on contributions under Social Security and the market interest rate.

Nothing anyone can do today can take back the benefits that were given to Social Security’s early beneficiaries, and most Americans would be unwilling to reduce benefits for those now receiving them or soon to receive them. Those two facts largely determine the size of the legacy debt. For example, on one reasonable assumption, namely, that

benefits will not be reduced for anyone age 55 or over in 2004, the legacy debt amounts to approximately \$11.6 trillion.

Figure 1: Legacy debt



Because the size of the legacy debt is mostly already determined, the only remaining issue is how to finance it across different generations, and different people within generations, in the future. To be sure, the legacy debt does not have to be paid off immediately. Indeed, some of it need never be paid off, just as there is no need ever to pay off the entire public debt. But any ongoing legacy debt, like other outstanding public debt, incurs a cost for continuing to finance it, which, if not paid as it accrues, increases the debt. And just as a continuously rising public debt-to-GDP ratio would eventually become unsustainable (as holders of the debt come to doubt whether they will be repaid

in full), so, too, the legacy debt cannot grow faster than taxable payroll indefinitely without disrupting the functioning of Social Security.

That workers today bear a cost of financing the legacy debt does not necessarily mean that Social Security is a bad deal for those workers. Many workers, no doubt, are pleased that their parents and grandparents received higher benefits than their contributions would have paid for. And, just as in the past, some current workers benefit from the fact that Social Security reduces the need for them to support their parents directly. Also, Social Security provides today's workers with life insurance, disability insurance, and an inflation-indexed annuity, and does so at a remarkably low administrative cost—far lower than the private financial market could match. Moreover, the mandatory nature of Social Security avoids the problem of adverse selection that can arise in private insurance markets. (Adverse selection stems from the fact that those who expect to benefit more from insurance are more likely to buy it; this raises the average cost of insurance to the insurer, leading to price increases and possibly a vicious cycle of ever-fewer participants and ever-higher prices.) Finally, Social Security's mandatory character also protects individuals and their families from myopically undersaving and underinsuring themselves. Thus, although younger workers will receive less in benefits from Social Security than they would have in the absence of the legacy debt, they still stand to inherit a system that will provide them with valuable benefits, some of which cannot be duplicated in the market.

We propose changing the way in which the program's legacy debt is financed, in three ways: through universal coverage under Social Security; through a legacy tax on earnings above the maximum taxable earnings base, with the tax rate beginning at 3 percent and gradually increasing over time; and through a universal legacy charge that would apply to workers and beneficiaries in the future.

Universal Coverage

About 4 million state and local government employees are not covered by Social Security.⁸ It is unfair to workers who are covered by Social Security (including the great majority of state and local government workers) that many state and local government workers are not included in the program and so do not bear their fair share of the cost of the system's past generosity. On average, state and local government workers are well paid. It therefore seems appropriate that they pay their fair share, along with other higher earners, of Social Security's redistributive cost (the cost of relatively more generous benefits for low earners) as well as the cost of more generous benefits to earlier cohorts.

Pension systems for state and local government workers are generous, on average, compared with those available to privately employed workers. Such generosity can be maintained for current workers while revising the system's parameters for newly hired workers. Of course, state and local governments would need several years to design suitable changes in their systems, and so any requirement that newly hired workers be included in Social Security should only begin some time after legislation is enacted requiring such inclusion. We propose three years, which was the phase-in period adopted in 1983 for inclusion of newly hired federal workers in Social Security.

Moreover, inclusion in Social Security would result in a net benefit to some state and local government workers and their families. The clearest beneficiaries are some of those workers who leave state and local government employment before retirement to take jobs in the private sector that are covered by Social Security. Eligibility for Social Security disability benefits does not begin until a worker has held Social Security-covered employment for a given number of years. For example, a worker who has been in uncovered work for ten years would not have Social Security disability coverage for at least five years after beginning covered work. Since many employers do not provide such coverage, many of these workers would thus find themselves without any disability coverage. This gap in coverage can be a source of great financial hardship in the event of disability during the early years of a new job.

Coverage under Social Security would also help workers who leave state and local government jobs before their retirement benefits vest. Even those with vested

benefits who leave early in their careers may benefit from being covered under Social Security, since the real value of their state or local government pension typically declines with any inflation that occurs until they reach retirement age; such a decline does not occur under Social Security. After retirement, many (but not all) state and local government plans do provide automatic adjustment of benefits for inflation, but in many cases these increases are capped at 3 percent, whereas Social Security has no such cap.

In addition, the retirement and survivor provisions of some state and local government pension plans do not offer all the protections, to workers and their families, provided by Social Security. For example, in the event of death before retirement, some systems offer only a lump sum that reflects the employee's past contributions plus a modest return, and some only refund the contributions, without any return. Instead, Social Security provides annuitized benefits to the deceased worker's young children and, upon retirement, to his or her spouse. After retirement, workers in state and local government plans can choose between single life and joint life annuities, implying that some surviving spouses (those whose spouse chose the single life annuity) will no longer receive benefits once the worker dies. Thus Social Security coverage offers elements of real value to state and local government workers, over and above what their current pension plan offers.

We therefore propose that all state and local government workers hired in and after 2007 be required by law to be included in Social Security.⁹ This change would reduce the seventy-five-year actuarial deficit by 0.19 percent of taxable payroll, or roughly 10 percent of the deficit itself.

A Legacy Tax on Earnings above the Maximum Taxable Earnings Base

Estimates suggest that, in an actuarially balanced system, roughly 3 to 4 percentage points of the 12.4 percent payroll tax would be devoted to financing the program's legacy debt.¹⁰ Yet those with earnings above the maximum taxable earnings base do not bear a share of this legacy cost proportional to their total earnings. Thus we propose a tax on earnings above the taxable maximum; the tax rate would begin at 3

percent (1.5 percent each on employer and employee) and gradually increase over time, along with the universal charge to be described next, reaching 4 percent in 2080. By itself, this change would reduce the seventy-five-year actuarial deficit by an estimated 0.55 percent of taxable payroll, but there is a significant interaction between this provision and the proposed increase in the maximum earnings subject to taxation.

How onerous would this legacy tax be? It is worth noting that the 2.9 percent payroll tax for the Hospital Insurance component of Medicare already applies to all earnings. The tax we propose is approximately equal to this tax. Furthermore, the legacy tax would be smaller than the 4.6-percentage-point reduction in the top marginal income tax rate since the beginning of 2001. Both these considerations suggest that the tax would not have substantial adverse effects on either the higher earners to whom it would apply or the economy as a whole.

A Universal Legacy Charge on Payroll Taxes and Benefits

The legacy debt arises from decisions that we as a society made decades ago, and it is fitting that future workers and beneficiaries should contribute a fair share toward financing that debt. The final element of our proposal therefore involves a universal legacy charge on both benefits and tax rates, which would apply to all workers and newly eligible beneficiaries from 2023 forward. We select this starting date because the increases in the full benefit age continue until 2022. After 2023 we smoothly increase the legacy charge, since the growth rate in taxable payroll declines thereafter, calling for an increasing offset to the legacy cost.

The benefit adjustment would reduce initial benefits by 0.31 percent a year for newly eligible beneficiaries in 2023 and later. The benefit reduction would increase for newly eligible beneficiaries in 2024 to 0.62 percent relative to current law, and so on.¹¹ This benefit reduction spreads part of the legacy cost over all retirees thereafter.

The revenue adjustment would raise the payroll tax rate by 85 percent of the benefit reduction percentage from this component of our plan. (The logic for this 85 percent factor is the same as that for the life expectancy component of the plan; that is, benefits for newly eligible beneficiaries equal 85 percent of total benefits over a seventy-five-year horizon, whereas all earnings within that horizon are subject to the higher tax

rate.) The result is that the tax rate would increase by 0.26 percentage point (0.13 each on employer and employee), or 85 percent of 0.31, each year starting in 2023. Between them the tax and benefit universal legacy cost offsets would reduce the seventy-five-year actuarial deficit by an estimated 0.97 percent of taxable payroll

Taken together, this approach to financing the legacy debt represents a balance between burdening near-term generations and burdening distant generations with the entire debt, between burdening workers and burdening future retirees, and between burdening lower-income workers and burdening higher-income workers. The phased-in nature of the universal legacy cost adjustment also helps the Social Security system to adjust to the reduced fertility rates that have occurred since the 1960s.

The Estate Tax as an Alternative Revenue Source

Throughout its history, all Social Security tax revenue has been linked to benefits in some way, either through the payroll tax (with earnings subject to tax being the basis for benefits) or through the taxation of benefits. The third component of our proposal would set a precedent in that earnings above the taxable maximum would be subjected to partial taxation but would not affect the calculation of benefits.¹² An alternative deviation from the historical pattern could come from dedicating some other source of revenue to Social Security. Given that unified federal budget deficits are projected for the foreseeable future, however, any reform proposal should devote only dedicated revenue to Social Security rather than an unspecified source of general revenue. Moreover, any such dedicated revenue that makes use of existing revenue sources should have a strong likelihood of being eliminated otherwise, so that it does not make the problem of reducing the federal deficit even more difficult.

One possible source of dedicated revenue for Social Security is a reformed estate tax. Such revenue could substitute for one or more of the specific revenue proposals in our plan. The idea of using an estate tax to finance benefits for elderly persons and disabled workers is not new. Indeed, it is over 200 years old, Thomas Paine having proposed it in 1797.¹³

The Center on Budget and Policy Priorities estimates that retaining the estate tax in its 2009 form (that is, with a \$3.5 million per person exemption and a 45 percent top

rate) rather than allowing it to be repealed altogether would result in only 0.5 percent of estates—the largest 5 of every 1,000—being subject to taxation in 2010. The total number of estates taxed at all in a given year would be approximately 10,000, and these estates would enjoy lower estate tax rates and a higher exemption than today. More important for our purposes, the revenue raised by retaining the estate tax in its 2009 form rather than repealing it would address about 20 percent of the seventy-five-year actuarial deficit in Social Security. A reform that closed loopholes in the estate tax would add to its revenue potential at any given tax rate and could be used to replace one or more of our proposed reforms.

Summary and Conclusions

Our three-part proposal would restore seventy-five-year actuarial balance to Social Security, as summarized in Table 1. These proposals were designed to achieve actuarial balance while also achieving “sustainable solvency” by ensuring a stable Social Security trust fund ratio at the end of the projection period, thereby addressing the terminal-year problem. Moreover, they also provide the revenues to finance the proposed benefit increases for needy groups.

Table 1. Summary of Effects of Proposed Reforms
Percent

Proposed reform ^a	Effect on actuarial balance	
	As share of taxable payroll	As share of actuarial deficit ^b
Adjustments for increasing life expectancy		
Adjust benefits	0.26	13
Adjust revenue	0.29	15
Subtotal	0.55	29
Adjustments for increased earnings inequality		
Increase taxable earnings base	0.25	13
Reduce benefits for higher earners	0.18	9
Subtotal	0.43	22
Adjustments for fairer sharing of legacy cost		
Make Social Security coverage universal	0.19	10
Impose legacy tax on earnings over taxable maximum	0.55	29

Impose legacy charge on benefits and revenue	0.97	51
Subtotal	1.71	89
Reforms to strengthen social insurance functions ^c		
Enhanced benefits for lifetime low earners	-0.14	-7
Increased benefits for widows	-0.08	-4
Hold-harmless provisions for disabled workers and young survivors	-0.21	-11
Completion of inflation protection of benefits ^d	0.0	0
Subtotal	-0.43	-22
Interactions of above reforms	-0.26	-14
Total effect	2.00	104
Alternative: reform existing estate tax ^e	0.60	31

Source: Authors' calculations.

a. See text for details of specific proposed reforms.

b. The seventy-five-year deficit is currently estimated to be 1.9 percent of taxable payroll over that period. Numbers may not sum to totals because of rounding.

c. These reforms and their separate impacts on actuarial balance are described below.

d. Not included in the package of reforms officially scored by the Office of the Chief Actuary, but should have *de minimis* actuarial effect.

e. This reform could be enacted in place of one of the other proposed reforms that affect primarily higher earners.

Strengthening Social Security's Effectiveness as Social Insurance

Our plan for restoring long-term balance also provides financing for provisions that would buttress Social Security's protections for the most vulnerable beneficiaries. Our goal is to ensure that Social Security continues to provide an adequate base of inflation-protected income in time of need and to cushion family incomes against the possibility of disability, death of a family wage earner, or having one's career not turn out as well as expected. That is one of the reasons that our plan combines benefit reductions and revenue increases, rather than relying excessively on benefit reductions.

Even the relatively modest benefit reductions that workers would experience under our plan, however, would be too much for Social Security's most vulnerable beneficiaries to bear. Three groups that would be particularly affected are workers with low lifetime earnings over a long career, widows and widowers with low benefits, and disabled workers and young survivors. We propose ways to mitigate or in some cases eliminate any adverse consequences for these groups from the benefit cuts needed to

restore long-term balance. In addition, we propose augmenting the program's protection against unexpected inflation, to shelter all beneficiaries from its potentially serious effects.

Provisions for Workers with Low Lifetime Earnings

Workers with low lifetime earnings receive meager benefits under Social Security despite the progressive benefit formula. For example, a worker claiming retirement benefits at age 62 in 2003 who has had steadily growing earnings ending at about \$15,500 a year would receive an annual benefit of under \$7,000. (By "steadily growing," we mean that the worker's wage grew each year at the same rate as average wages in the economy.) That is about 25 percent below the official poverty threshold for a single elderly person. A worker who works 2,000 hours a year at the current minimum wage of \$5.15 has annual earnings of \$10,300. Such a worker who has had steadily increasing earnings over his or her career and claims Social Security benefits at age 62 in 2003 would receive an annual benefit of less than \$6,000.

Low lifetime earnings can arise from a variety of causes. Some people labor at full-time, low-paying jobs over an entire career. Others are in and out of the formal work force at different points in their lives, and therefore their average lifetime earnings (counting the years they are not in the paid work force as zero earnings) are relatively low. Finally, some workers have relatively low lifetime earnings as counted by Social Security simply because most of their career is spent in jobs currently not covered by the program. In designing reforms to improve Social Security's protections against poverty, it is important to distinguish among these various reasons for having low lifetime earnings; in particular, we should avoid giving windfalls to workers whose lifetime earnings are understated by Social Security simply because they worked outside Social Security for some extended period.

In 1993, taking into account all sources of income, 9 percent of retired Social Security beneficiaries lived in poverty. Of these poor beneficiaries, 10 percent had worked for forty-one or more years in employment covered by Social Security, and more

than 40 percent had worked between twenty and forty years. Many policymakers remain concerned, as do we, that workers who have had such substantial connections to the work force throughout their careers nonetheless face poverty in retirement.

Before 1982, Social Security included a minimum benefit for low earners, which supplemented what they received under the regular benefit formula. This benefit, however, was not well targeted to workers with low-paying employment over a career: it also provided significant benefits to workers with higher wages who had not worked many years in jobs covered by Social Security. That minimum benefit was eliminated for beneficiaries becoming entitled in 1982 and thereafter. A more targeted special minimum benefit, created in 1972, still exists but is phasing out because the value of regular Social Security benefits, which are indexed to wages, is increasing more rapidly than the special minimum benefit, which is indexed to prices. Indeed, under the intermediate cost assumptions of the 2000 Trustees' Report, the special minimum benefit will no longer be payable to any retired workers becoming eligible in 2013 or later.¹⁴

In light of the declining role of the special minimum benefit under current law, various reforms have proposed strengthening the minimum benefit within Social Security, including the reform plan proposed in 2001 by Representatives Jim Kolbe (R-AZ) and Charlie Stenholm (D-TX),¹⁵ and the plans proposed by the President's Commission to Strengthen Social Security.¹⁶ Analysis undertaken at the Social Security Administration suggests that a minimum benefit would provide some benefit to a substantial fraction of workers, even though only a modest number of workers would receive the full minimum benefit. Researchers studied the effect of a minimum benefit that would provide 60 percent of income at the poverty level for workers with twenty years of covered earnings and 100 percent of the poverty level for workers with forty or more years.¹⁷ For workers reaching age 62 between 2008 and 2017, this minimum benefit would provide at least some benefit supplement to 21 percent of men and 49 percent of women. The full minimum benefit would be provided to only a small fraction of these beneficiaries: 3 percent of retired men and 6 percent of retired women. The effect is more pronounced among lower earners, however. More than two-thirds of both men and women with average indexed monthly earnings of less than \$1,200 (in 1998 dollars)

would receive some benefit from the proposal. Roughly one-tenth of low-income retired workers would receive the full minimum benefit.

We propose a benefit enhancement for low earners that is quite similar to the Kolbe-Stenholm proposal and the approach adopted by the President's Commission to Strengthen Social Security. Our low-earner enhanced benefit would apply to workers with at least twenty years of covered earnings at retirement; for such workers with steadily rising earnings that amount to \$10,300 in 2003, the benefit at age 62 would be increased, to equal 60 percent of the poverty threshold in 2012. The benefit enhancement would increase with each additional year of covered earnings, so that benefits would equal 100 percent of the poverty threshold in 2012 for newly eligible workers with at least thirty-five years of covered and steadily rising earnings that amount to \$10,300 in 2003.¹⁸ For such workers, the benefit increase would amount to almost 12 percent.¹⁹

After 2012, the benefit enhancement would increase in line with retirement benefits for an average earner under our plan. Because the official poverty threshold increases in line with prices, whereas retirement benefits for the average worker tend to grow faster than prices under our plan, the minimum benefit would tend to increase relative to the official poverty threshold over time. As a result, Social Security would become increasingly effective at ensuring that people who have worked their entire careers will not live in poverty in old age. This proposal would cost 0.14 percent of payroll over the next seventy-five years.

Provisions for Widows and Widowers

A second area in which Social Security should be strengthened is its financial protection of widows and widowers. Widows typically suffer a 30 percent drop in living standards around the time they lose their husband.²⁰ This decline represents a challenge for a wide variety of widows, pushing some into poverty. Indeed, whereas the poverty rate for elderly married couples is only about 5 percent, that for elderly widows is more than three times as high.²¹

Social Security's spousal and survivor benefits were designed decades ago, when work and family patterns were very different from what they are now. With increasing

female labor force participation and evolving family structures, many have come to question this basic structure of benefits. A number of panels and commissions have reviewed this issue but failed to come up with an overall reform that attracted wide support. The reason is that all of the proposed reforms would have helped some groups but, because any improvements must be paid for, would have hurt others. And the fact that most of the affected groups include both high-income and low-income individuals makes it almost impossible to do good for some without also harming many vulnerable beneficiaries. Rather than tackle the full array of issues involved in reforming Social Security's benefit structure for families, we propose only a partial adjustment in the area where the most agreement exists and where the need for reform may be the most urgent: improving survivor benefits.

Consider a retired husband and wife covered by Social Security. Should either die, the survivor will receive a benefit that is some fraction of the total benefits the couple was receiving while both were alive. In the current system, this "survivor replacement rate" varies with the couple's earnings history. In the case of a one-earner couple, the survivor receives two-thirds of what the couple was receiving, apart from any changes as a result of actuarial reductions and delayed retirement credits. In contrast, for married earners both of whom have identical earnings histories, the replacement is only one-half.

Several reforms have suggested raising the survivor benefit so that it equals at least three-quarters of the couple's combined benefits. The goal would be to increase the benefits of widows, who are generally recognized as making up the majority of survivors. One approach, proposed by Richard Burkhauser and Timothy Smeeding of Syracuse University, would finance this increase in the survivor replacement rate by reducing the spousal benefit.²² Such a reduction would have little or no effect on two-earner couples, since both members qualify for their own retirement benefit and therefore rely little, if at all, on the spousal benefit. But the reduction in the spousal benefit would have significant effects on one-earner couples, who do rely heavily on that benefit. In other words, the increase in the survivor benefit would benefit all couples, but the method of financing that increase would place a large burden on one-earner couples. The package as a whole thus would redistribute from single-earner couples to two-earner couples. Such an

approach would also reduce benefits for many divorced spouses, a group with a high poverty rate. To avoid increasing their poverty rate, benefits for divorced spouses could be made larger than benefits for still-married spouses, but that seems unlikely to be politically acceptable and would have some adverse incentives. Another approach, implicitly followed by the President's Commission to Strengthen Social Security, would finance the increase in the survivor replacement rate out of the program's general resources.

Our alternative proposal makes use of two approaches. For survivors with low benefits, we rely on resources from the program as a whole. For survivors with higher benefits, we take a different approach.

We propose that the survivor benefit for couples with modest benefits be raised to 75 percent of the combined couple's benefit. To limit the cost of the proposal and target its benefits toward reducing poverty, this enhancement would be capped at what the survivor would receive as a worker with the average primary insurance amount for all retired workers. (President Bush's Commission to Strengthen Social Security also would have imposed this limit.) This targeted proposal would cost 0.08 percent of payroll and be financed by the program as a whole.

For higher-income couples we also endorse a survivor replacement rate of 75 percent, financed by reducing the couple's own combined benefits while both are alive and using the funds to raise the benefit for the survivor. (Here and below, we use the word "endorse" to indicate changes we would support but that are not officially scored in our plan.) In other words, for survivors who would receive the average PIA or more, and therefore would have received a capped benefit or would not be affected by the above proposal, we support a redistribution of the couple's expected benefits toward the survivor and away from the time when both members of the couple are alive. For these couples, the goal would be to produce no expected effect on the couple's combined lifetime benefits.²³ Such an approach would merely involve redistribution across time for the couple.²⁴

A related issue involves Supplemental Security Income and Medicaid. Increasing survivor benefits or other Social Security benefits in very old age could disqualify some people from the SSI program, by increasing their income above the threshold for

eligibility in the program. In most states, access for the elderly to Medicaid is tied to SSI eligibility; disqualification from the SSI program could thus result in the loss of Medicaid benefits.²⁵ Reforms to the SSI eligibility rules are required to avoid this steep implicit tax on increased Social Security benefits.

Provisions for Disabled Workers and Young Survivors

Two groups of vulnerable beneficiaries deserving protection from the adverse effects of restoring long-term solvency to Social Security are disabled workers and the young survivors of deceased workers. Despite Social Security's protections, disabled workers and their families have higher poverty rates and are more financially vulnerable than the general population.²⁶ For example, those who become disabled at young ages typically have substantially less in assets than retired workers—and less than workers who become disabled later in their careers. But even workers who become disabled late in their careers tend to have less in assets than retired workers; whether this differential reflects smaller accumulations of assets while working or the adverse financial effects of disability is unknown, but probably both are relevant.

Given the financial vulnerabilities of disabled workers despite Social Security's benefits, various reforms to the disability program seem worthy of further examination. An extensive study of these issues should be undertaken by a nonpartisan group, either appointed by Congress or formed by the National Academy of Social Insurance, perhaps upon congressional request. In the absence of a more exhaustive study, we merely propose that, in the aggregate, disabled workers as a group be held harmless from the benefit reductions that would otherwise apply under our plan over the next seventy-five years. Our reform plan thus imposes no net reduction in benefits for the disabled beneficiary population as a whole relative to the scheduled benefit baseline over the next seventy-five years.

We do not propose simply maintaining the current benefit formula for disabled workers, however, for two reasons. First, it would add to the tensions already associated with application for disability benefits for those nearing or passing the earliest eligibility

age for retirement benefits; the incentive to claim disability benefits arises because, unlike retirement benefits, disability benefits are not actuarially reduced at those ages. For example, consider a worker age 62. If such a worker claims retirement benefits, those benefits are reduced because the worker is claiming before the full benefit age. If the worker succeeds in qualifying for disability benefits, however, his or her benefits are not reduced. Under the current system, there is thus an incentive for workers to claim disability benefits rather than early retirement benefits. If retirement benefits were further reduced but disability benefits were not, this incentive would be strengthened, and concerns about gaming of the system would become more worrisome. To avoid exacerbating that tension and to better target disability benefits to the most needy disabled workers, we propose redistributing benefits toward workers who become disabled very young and therefore are deprived of the opportunity to enjoy the rising earnings that are typical of American workers.

A second reason not to simply maintain the current benefit formula for the disabled is that workers who become disabled at younger ages should not be locked into lower real benefits than workers who become disabled at older ages to the degree that occurs under the current system. Imagine disability benefits as replacing the retirement benefits that would have occurred had one not become disabled, as well as providing a bridge to retirement. Then one can see how the current rules leave those who became disabled at young ages far behind where they might have been if the disability had not occurred or had occurred later. In calculating the PIA for a retired worker, past earnings are indexed to the average wage up to the year when the worker turns 60. Then the PIA formula is applied to this indexed earnings level. After disability benefits start, however, benefits only keep pace with prices, as they do for retired workers after age 62. Thus, for a given cohort of workers, the continued growth of productivity in the economy raises retirement benefits for workers who are not disabled, but workers who have been disabled do not share in these productivity gains. From the perspective of social insurance, the result is an inadequate benefit for workers who become disabled at a young age.

Table 2 shows this effect for a 25-year-old average-earning worker in 2003 who continues to earn the average wage until becoming disabled. If this worker becomes

permanently disabled at age 30, he or she will receive an inflation-adjusted benefit of less than \$16,000 for the rest of his or her life. (Most disability beneficiaries do in fact remain permanently eligible for benefits once they have begun receiving them.) Had the same worker become disabled at age 55 instead, he or she would have enjoyed twenty-five years of additional real wage growth and would therefore receive slightly more than \$20,000 a year in benefits.

Table 2. Disability Benefits for Average-Earning Workers Age 25 in 2003 by Age at Disability^a

Age at disability	Year in which worker becomes entitled to disability benefits	Real benefit level (2003 dollars)
30	2008	15,408
35	2013	16,326
40	2018	17,203
45	2023	18,089
50	2028	19,062
55	2033	20,104

Source: *2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*, March 2003, table VI.F11.

a. Data are estimates based on retirement benefits for medium earners turning 62 in the indicated year and subsequently claiming benefits at the full benefit age.

To allow workers who become disabled at younger ages to share partially in the benefits of aggregate productivity growth that occurs after their disability, we propose indexing disability benefits *after* they have been initially claimed to a combination of wage and price growth rather than to price increases alone. The determination of initial disability benefits would continue to rely on wage indexation, as under current law.

Specifically, to raise real benefit levels over time for workers who become disabled earlier in their careers, our plan includes a “super” cost-of-living adjustment for disability benefits. The super-COLA would have the effect, relative to the current structure of disability benefits, of increasing benefits for those who become disabled at younger ages compared with those who become disabled at older ages. The size of the super-COLA is chosen so that disabled workers as a whole would be held harmless from the benefit reductions in our plan over the next seventy-five years. In particular, the super-COLA would increase disability benefits by 0.9 percentage point a year more than

the overall inflation rate. (Although the actuarial evaluation was based on using this figure each year, the actual super-COLA in each year would depend on wage and price growth. The expected value of the super-COLA given the 2003 Trustees' projections for wages and prices is inflation plus 0.9 percentage point.)

This approach has several advantages relative to the alternative of not applying any benefit changes to disabled beneficiaries. First, it retains the close connection between disability benefits and retirement benefits; as under current law, disabled beneficiaries would transfer seamlessly to retired worker status at the full benefit age. Second, as noted above, making no changes whatsoever to disability benefits while reducing retired worker benefits would create even stronger incentives for workers to apply for disability rather than retirement benefits before the full benefit age. Our approach attenuates this problem by redistributing lifetime benefits within the disabled population toward workers who become eligible for disability benefits at younger ages, even while holding disabled workers as a whole harmless from our changes. It strikes us as implausible that younger workers would apply for disability benefits, and thereby forgo substantial future labor earnings, just to offset part or all of the reductions that would otherwise apply to their retirement benefits. Finally, the redistribution seems to us valuable even in the absence of other changes, since workers who become disabled at younger ages seem more needy and are locked into lower real annual benefits than workers who become disabled at later ages.

Two other implications of our approach should be noted. First, workers who become disabled in the near future would receive higher lifetime benefits than under current law, since they would experience little reduction in their initial benefit level and then receive a super-COLA. Second, workers who become disabled at older ages in the distant future would receive lower lifetime benefits than under the scheduled benefit baseline. In other words, this approach holds the disabled worker beneficiary population as a whole harmless from the benefit reductions we would impose over the next seventy-five years, but it does not necessarily hold each cohort of disabled workers harmless.

We would apply the same system of super-COLAs to benefits for young survivors. Together with the super-COLAs for disabled workers, this change would cost 0.21 percent of payroll over the next seventy-five years. That is precisely the effect over

the same period of the other provisions of our plan on benefits that apply to all disabled workers and young survivors.

The result is that our proposal to restore long-term balance to Social Security over the next seventy-five years does not rely on any net reduction in benefits for these vulnerable beneficiary groups. Rather, we hold both disabled workers and young survivors as a whole harmless from the benefit reductions that would otherwise apply over the next seventy-five years.

Closing Gaps in the Protection of Benefits against Inflation

Our fourth reform to strengthen the social insurance differs from the previous three: we endorse enhancing Social Security's protections against unexpected inflation, thus providing improved insurance to all beneficiaries. (Again, we "endorse" rather than "propose" this reform because this element of our plan was not officially scored by the Social Security actuaries. It should have de minimis actuarial effects, however.)

Social Security benefits were first indexed for inflation in 1972; legislation enacted in 1977 introduced some changes in the system of indexation. The result is that moderate inflation now has little effect on either real benefits or the fiscal position of Social Security. However, a gap remains in the indexing of Social Security, such that a return to very high inflation would have adverse effects on some generations, while saving money for Social Security. We propose to fill this gap in a revenue-neutral way.

The gap in indexing comes about from the way in which benefits are adjusted for inflation after the determination of the AIME. For any year after the year a worker turns 62, benefits are increased by the inflation rate from the year of turning 62 until that year. But the AIME is based on average indexed career earnings until the year a worker turns 60, and the key components of the benefit formula are indexed in the same way. Thus there is a two-year gap, between ages 60 and 62, in the protection against inflation.

If inflation happened to be particularly severe in some two-year period, workers age 60 at the start of that period would experience a significant decline in their inflation-adjusted benefits. For example, a repeat of the inflation rates of 1980 and 1981 (which resulted in Social Security cost-of-living adjustments of 14.3 percent and 11.2 percent,

respectively) would reduce real benefits for that unfortunate cohort by almost 25 percent. Although inflation above the level used in the actuarial projection would reduce real costs for Social Security, there is no reason to subject workers to the risk of an unknown level of inflation during those two years. Thus we propose that the indexing of benefits for inflation start from the year in which a worker turns 60 rather than the year in which a worker turns 62.

By itself, such a change would increase benefits and thus the actuarial imbalance. To preserve projected revenue neutrality, we combine this change in indexing with an across-the-board percentage reduction in benefits meant to leave all workers in the same position relative to expected inflation. The goal is neither to make nor to lose money for Social Security, and neither to increase nor to decrease lifetime projected benefits, but rather to remove an element of risk that arises from the lack of indexing during these years. This rule applies to disabled workers as well as retirees, since the gap is present in both cases.

Summary

Social Security reform should do more than merely restore long-term financial balance to the program. It should also improve Social Security's protection of some of the most vulnerable beneficiaries: low earners, widows and widowers, and disabled workers and survivors. Because restoring long-term financial solvency to the program is likely to require some benefit reductions, balancing those reductions with selective improvements in critical areas seems essential, to cushion the impact of these reductions on the most vulnerable. Our plan therefore not only achieves long-term solvency, but also strengthens Social Security's social insurance protections for these beneficiaries. Table 1 above shows the cost of these provisions.

Implications for Benefits and Revenue

In evaluating reform plans, it is important to be clear about the baseline against which the proposed benefits and revenue are compared. In presenting our proposals

above, we compared all our proposed benefit changes against the scheduled benefit baseline, which reflects what would be paid in the future under the current benefit formula and current projections if all benefits are paid. The proposed tax changes were described relative to the current tax structure, even though that structure is insufficient to finance scheduled benefits. This combination seemed the most straightforward way to explain the proposed changes to ensure that they were properly understood.

Actuarial Effects

Figure 2 shows the projected path of the trust fund ratio under current law and under our reform plan. (The trust fund ratio is the ratio of the assets of the Social Security trust fund to the program's expenditure in a given year.) As the figure illustrates, our plan achieves a positive trust fund ratio throughout the next seventy-five years and leaves the trust fund ratio stable at the end of that period, under the 2003 intermediate cost projections used by the Office of the Chief Actuary.

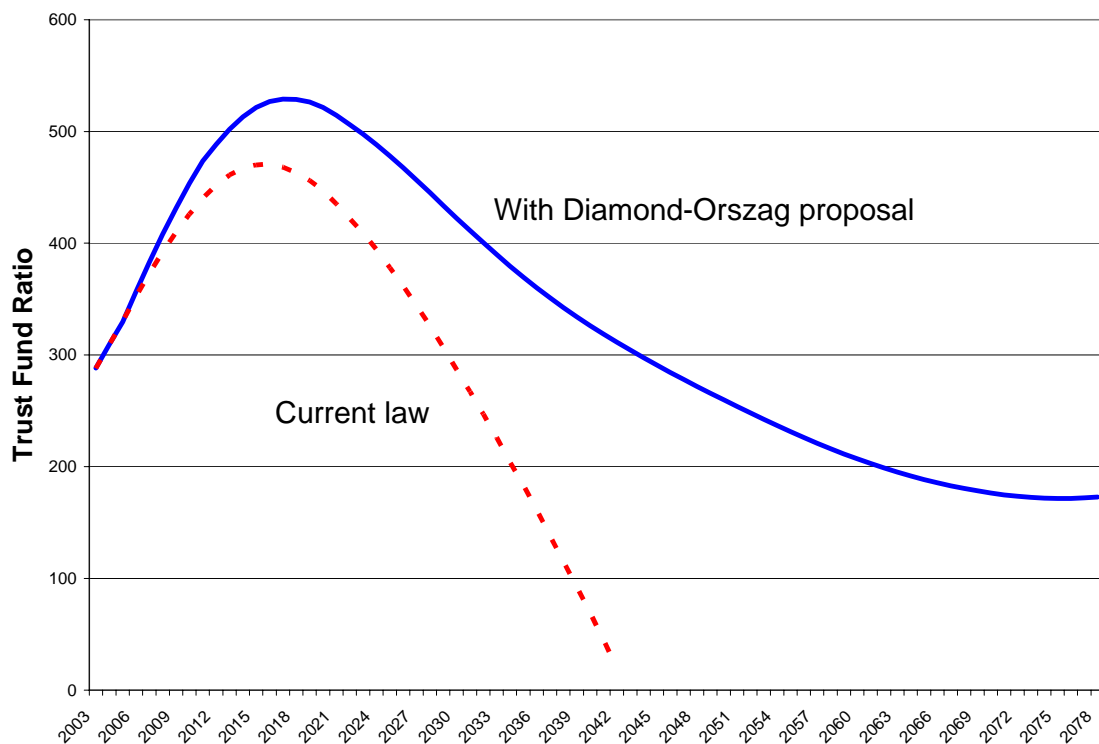
Figure 2: Trust Fund Ratio in percentages

Note that under our plan the trust fund ratio peaks somewhat higher and somewhat later than under current law and then begins a steady decline. This decline is relatively rapid at first, as the continued financing of benefits to baby-boomer retirees draws the trust fund down. Over time, however, as the baby-boomers die and our changes to both taxes and benefits are slowly phased in, the decline in the ratio slows. By the end of the projection period, the trust fund ratio is again beginning to rise.

Combined Effects

As we emphasized, our plan combines benefit reductions and tax changes to restore long-term solvency to Social Security.

Table 3 shows the overall benefit reductions that our plan would impose on a worker with average earnings. For lower earners the reductions in annual benefits would be smaller than shown because of the low-earner benefit enhancement. For higher earners



the reductions would be larger than shown, because the income inequality adjustment to the top PIA factor would apply to them and not to lower earners.

Table 3. Benefit Reductions under Proposed Reform for Average Earners

Age at end of 2004	Change in benefits from scheduled benefit baseline (percent)	Inflation-adjusted benefit at full benefit age relative to 55-year-old ^a
55	0.0	100
45	-0.6	110
35	-4.5	118
25	-8.6	125

Source: Authors' calculations.

a. For a retired worker with scaled medium preretirement earnings pattern. This scaled earnings pattern allows wages to vary with the age of the worker but ensures that lifetime earnings are approximately equal to those of a worker with the average wage in every year of his or her career.

As the table also shows, real benefits under our plan would continue to rise from one generation to the next, despite the reductions from baseline, because benefit increases due to ongoing productivity gains are projected to more than offset our modest benefit reductions. An average-earning worker age 25 today would receive an annual benefit at the full benefit age that is roughly 25 percent more than a 55-year-old average-earning worker today. Because of the minimum benefit, low earners have less of a benefit reduction (and some have an increase) while medium earners are having the effects just described. Also higher earners would experience larger benefit reductions than the average.

The combined revenue effects of our plan give rise to a gradual increase in the payroll tax. As Table 4 shows, the employee payroll tax rate under our plan slowly increases from 6.2 percent in 2005 to 7.1 percent in 2055. The combined employer-employee payroll tax increases from 12.4 percent today to 12.45 percent in 2015, 13.2 percent in 2035, and 14.2 percent in 2055.

Table 4. Payroll Tax Rates under Proposed Reform

Percent of earnings		
Year	Employee rate	Combined employer-employee rate

2005	6.20	12.40
2015	6.22	12.45
2025	6.35	12.69
2035	6.59	13.18
2045	6.84	13.68
2055	7.09	14.18

Source: Authors' calculations.

By 2055 the tax rate is thus 14 percent higher than under the current tax structure ($14.18/12.40 = 1.14$). For an average worker becoming eligible for retirement benefits in that year, the PIA is also 14 percent lower than under the current benefit formula. This reflects the rough balance between benefit and revenue changes that we have pursued in our plan.

The overall results for benefit reductions and tax increases underscore that it is possible to restore long-term balance to Social Security while retaining the program's core social insurance role and spreading the legacy costs from the program's history fairly across generations. For the vast majority of workers, the provisions included in our plan would involve quite modest changes. The payroll tax rate would rise slowly in response to increasing life expectancy and to adjusting the ratio of legacy costs to taxable payroll; by 2035, the combined employer-employee payroll tax rate under our plan, at 13.2 percent, would be less than a percentage point higher than today's 12.4 percent. The benefit reductions would also be modest and gradual: today's average-earning 35-year-olds, for example, would experience less than a 5 percent reduction in annual benefits compared with the current benefit formula. To be sure, the required adjustments for higher earners would be larger, but so is their ability to absorb those adjustments.

Individual Accounts

Unlike many other proposals for Social Security reform, our plan does not call for the creation of individual accounts within Social Security. Individual accounts, which include tax-favored private sector accounts such as 401(k)s and Keoghs, already provide an extremely useful supplement to Social Security, and they can be improved and

expanded. But they are simply inappropriate for a social insurance system intended to provide for the basic tier of income during retirement, disability, and other times of need. Moreover the trend in private pensions from defined benefit to defined contribution structures makes individual accounts less attractive, since the trend adds to the correlation of the risks already being borne by workers to the risks in individual accounts.

Furthermore, individual accounts could potentially reduce the actuarial deficit in Social Security only if they are linked to reductions in traditional benefits in some way, either explicitly or implicitly. They would not by themselves improve the ability of the Social Security system to finance its traditional benefits, and they might undermine that ability. In particular, if individual accounts were financed by diverting payroll tax revenue away from the Social Security trust fund, the immediate effect would be to *increase* the deficit within Social Security. In that case, individual accounts could help reduce the projected deficit only if they more than compensated for the diverted revenue either by directly returning sufficient funds to Social Security or by being linked in some less direct way to benefit reductions within the traditional system.

However, reducing traditional Social Security benefits to make room for individual accounts would be, in our opinion, a very bad deal for society as a whole. The reason is that the benefits that would be financed from a system of individual accounts is likely to differ from the benefits that Social Security provides today in several important ways, including the following:

--Retirement benefits under Social Security provide an assured level of income that does not depend on what happens in financial markets.²⁷ Instead, benefits are related to the beneficiary's average lifetime earnings and when the beneficiary chooses to retire. With an individual account, by contrast, benefits during retirement depend on the value of the assets accumulated in the account, which likewise depends in part on lifetime earnings and retirement timing, but also depends on how well one has invested and on how financial markets happened to perform during one's career. It is entirely appropriate and indeed beneficial in some settings for individuals to accept the risks of investing in financial markets; it does not, however, make sense to incur such risks as a way of providing for a base level of income during retirement, disability, or other times of need.

This observation is particularly important for those workers who expect to rely heavily or exclusively on Social Security in retirement; recall that Social Security represents the *only* source of income for one-fifth of elderly beneficiaries.

--Retirement benefits under Social Security are protected from inflation and last as long as the beneficiary lives. A retirement system based on individual accounts could, in principle, achieve similar protection by requiring account holders, upon retiring, to convert their account balances into a lifelong series of inflation-adjusted payments (that is, an inflation-indexed annuity), but many proposals for individual accounts do not include such a requirement. Furthermore, any such requirement might not be politically sustainable. Individual accounts have been promoted on the grounds that they would enhance “personal wealth” and “ownership” of one’s retirement assets; this seems inconsistent with maintaining substantial restrictions on how accountholders may access and use their accounts. And the goal of “bequeathable wealth,” an explicit selling point of some proposals, is in direct conflict with the financing of benefits that last as long as the beneficiary lives. One cannot use the same assets to both maximize benefits during one’s own lifetime and leave something for one’s heirs. Not all retirement income need be protected against inflation and last for the life of the beneficiary, but some base level of income during retirement, disability, or other times of need should be so protected. Again, this observation is particularly important for workers with little or no retirement savings other than Social Security.

--Social Security benefits come as a joint-life annuity, protecting surviving spouses. Just as annuitization might not be sustained for individual accounts, so too protection of spouses might be undercut.²⁸

--The Social Security benefit formula is progressive: it replaces a larger share of previous earnings for lower earners than for higher earners. Most plans do not incorporate this type of progressivity in the individual accounts and some do not preserve comparable progressivity in remaining benefits. For the nation, the progressivity of Social Security helps reduce poverty and narrow income inequalities; for the individual, it can cushion the blow from a career that turns out to be less rewarding than one hoped. These protections would be strengthened under our plan, which includes provisions to improve Social Security benefits for the most vulnerable members of society.

--There is no political pressure to give earlier access to Social Security benefit. In contrast, there is likely to be considerable pressure for individual accounts to mimic 401(k)s and IRAs that allow earlier access through loans and early withdrawals. This could undermine the preservation of funds for retirement.

--Social Security provides other benefits in addition to basic retirement income. Some of these, such as disability benefits, would be difficult to integrate into an individual accounts system. Under some individual accounts proposals, disabled workers would not have access to the accumulated assets in their accounts before they reach retirement age; thus the accounts would be of no help to them when needed most. Even with such access, workers who become disabled before retirement age will have had less time than other workers to accumulate a balance in their accounts. Thus, even though disabled workers are on average in worse financial condition than retirees, a movement to individual accounts is likely to treat them even worse than retirees.

--A system of individual accounts would require certain administrative costs to maintain those accounts, costs that the present structure of Social Security avoids. The higher these costs, the less generous the benefits that a given history of contributions can finance. Also, inevitably, some workers managing their own individual accounts will make poor investment choices that will leave them stranded in time of need, even if financial markets have performed well. Although some individual accounts proposals have rules that would limit administrative costs and restrict the opportunities for workers to make very poor investment choices, other proposals leave scope for very high administrative charges and misguided investment decisions. There is thus great uncertainty about the types of protective rules that may or may not accompany any individual accounts plan that is actually implemented.

To sum up, Social Security has certain core principles, including the following: to provide benefits to workers and their families in the form of a real annuity after the disability, retirement, or death of a family wage earner; to provide higher annual benefits relative to earnings for those with lower earnings; and to provide similar replacement rates on average to cohorts that are close in age. A system of individual accounts could well move away from all of these principles. Benefits might be provided as a lump sum

that might be outlived, leaving the worker or a surviving spouse much less well off than under an annuity; any access to account balances before retirement could leave less for retirement; replacement rates, rather than being progressive, could be proportional to earnings within a cohort if its members held the same portfolios and faced the same charges; and these replacement rates could vary dramatically from one generation to the next as financial markets fluctuate. Finally, under the current system, the level of benefits becomes very predictable as workers approach retirement age; under an individual accounts system, benefits could be far less predictable, depending on possibly sudden changes in asset values and interest rates.

Financing of Individual Accounts Plans

In addition to providing less satisfactory benefits to workers, individual accounts that divert revenue away from Social Security make Social Security financing more difficult. If Social Security revenue were diverted into individual accounts without any corresponding reduction in benefits, Social Security's financial standing would clearly be worsened. To avoid this, individual accounts financed by such revenue diversion must be linked in some way to a reduction in traditional benefits sufficient to offset the cost of the diverted revenue. To examine the effects of individual accounts plans that are linked in this manner, we begin with an example of an account structure in which traditional benefits that would otherwise be paid to the individual accountholder are reduced in such a way that traditional Social Security finances are unaffected over the accountholder's lifetime. This holds the Social Security trust fund harmless over the lifetime of the average worker from the diversion of revenue, but not in each year.²⁹

For our example, assume that a flow of revenue, such as payroll tax revenue, that otherwise would have flowed into the Social Security trust fund goes instead into a system of individual accounts. (It does not matter if the revenue is an existing flow or a new, additional flow, as long as it is assumed that it would have gone to the trust fund were it not being diverted to the individual accounts.) To ensure that the traditional Social Security system is held harmless from the diversion, a worker with an individual account in our example is considered to owe a "debt" to the Social Security trust fund.

Upon retirement, the debt is repaid by reducing the worker's traditional Social Security benefits. Those reductions in benefits must exactly equal the amounts diverted from the Social Security trust fund to the individual accounts, plus the interest the trust fund would have earned on the diverted funds had they remained in the trust fund, in order for the trust fund to be held harmless over the lifetime of the worker.

This example raises several issues: the timing of cash flows, the differences between benefits provided by the current Social Security structure and benefits provided by the combined individual accounts-Social Security system, the likelihood that revenue available to the individual accounts would otherwise have been available to Social Security, and possible differences in policy actions due to the presence of the individual accounts.

In our example, a reduction in traditional benefits is what holds Social Security harmless over the lifetime of a worker for the flow of revenue into the individual account rather than into the Social Security trust fund. However, for each worker, the bulk of the flow of revenue into the individual accounts would precede by many years the offsetting reductions in traditional benefits. For example, the benefit offset for a worker age 25 would occur over a period of several decades that does not begin until about four decades hence. Revenue would thus be diverted from the trust fund over many years before the corresponding "debt" would be repaid.

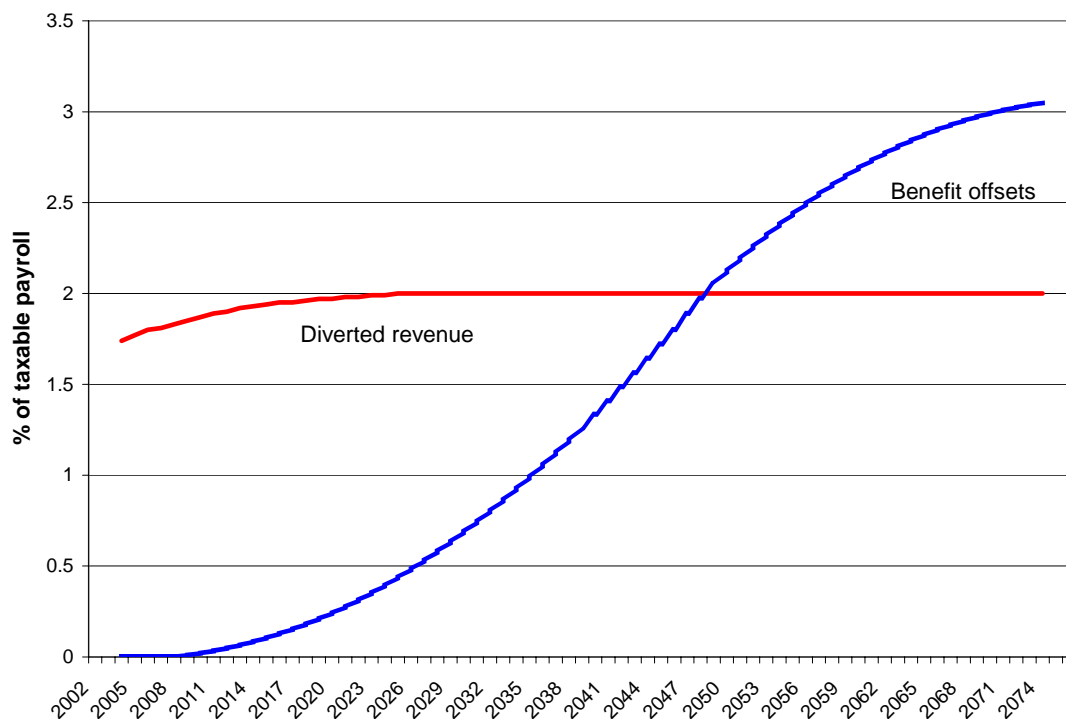
Currently, roughly 85 cents of every dollar in noninterest Social Security revenue is used to pay benefits during the same year. If revenue were diverted into individual accounts, the reduced cash flow would drive the trust fund balance to exhaustion sooner than currently projected, requiring either some source of additional revenue to continue paying benefits or a reduction in current benefits to offset the reduced revenue flow.

To examine our example in more detail, we assume that 2 percent of payroll is diverted to individual accounts, with an offsetting reduction in traditional benefits for accountholders upon retirement, as stipulated above.³⁰ Figure 3 shows the cash-flow effects. Over an infinite horizon, the individual accounts have no effect on the trust fund in present value terms—the trust fund is eventually paid back in full for the diverted revenue. However, the aggregate cash flow from the individual accounts is negative over

a period of more than forty-five years, because the diverted revenue exceeds the benefit offsets until almost 2050.

Figure 3: Cash flow from generic individual account plan

While the present value of the impact on the trust fund of the accounts is zero on an infinite horizon basis, at each point of time the trust fund is lower than it would have been. Indeed the loss of the trust fund relative to taxable earnings is steadily increasing throughout the projection period, is shown in Figure 4. The delay between the revenue flow and the corresponding benefit reductions thus poses a significant problem for the Social Security system. The net cash outflow shown in the figure causes the trust fund to be exhausted more than a decade earlier than in the absence of the accounts. To offset



this negative cash flow, it would be necessary either to phase in benefit reductions more rapidly, to provide additional revenue to Social Security, or to allow Social Security to

borrow from the rest of the budget. The problems with general revenue transfers and borrowing are discussed further later in the chapter.

Figure 4: Trust Fund ratio under generic individual account plan



With these individual accounts, workers can make deposits and purchase financial assets such as stocks and bonds, in effect financing those deposits with decreases in their future traditional benefits. Because the benefit decreases, including interest, are calculated using a Treasury bond interest rate, workers would in effect be doing an “asset swap,” substituting a mixed portfolio of stocks and bonds for an all-bond portfolio. It is important to remember, however, that in an efficient financial market, higher expected returns are earned only by taking on greater risks. Most investors do not like risk. To induce risk-averse investors to place money in riskier assets, those assets must offer

higher expected average returns. Risk is one of the principal reasons that stocks tend to have a relatively higher expected average rate of return than other financial assets.

Because individuals are averse to risk, comparing average rates of return on assets with different risk characteristics is misleading; an asset with a higher average return but substantially more risk may not be preferable to a lower-yielding, lower-risk asset. The average return on the riskier asset will be higher, but so will be the risk; some who invest in the asset will receive low returns, whereas others investing at different times will receive high returns. To analyze the relative attractiveness of different assets, virtually all economists believe it is necessary to adjust for risk.

To do this, economists calculate for risky assets a rate of return that adjusts for the risk associated with the asset. If the measured rate of return on an asset is high only because it is riskier than other assets, its risk-adjusted rate of return will not be so high: the risk adjustment will partly or fully eliminate the difference in the measured rates of return. The risk-adjusted rate of return thus allows one to evaluate the measured rates of return of different assets on a comparable basis. Only to the extent that the risk-adjusted rate of return is higher on one asset than another would that asset necessarily be preferable as an investment.

To compute risk-adjusted rates of return for various assets, economists have developed a variety of tools for measuring and correcting for risk. The task remains difficult, however. For example, the cost of bearing risk depends on a wide variety of factors, which vary from individual to individual, including especially the other risks to which they are exposed. Here we focus merely on the relative returns of stocks and bonds, abstracting from the other dimensions of risk.

One critical question is whether the higher returns to stocks observed in the past can be explained solely by the greater riskiness of stocks than bonds. Some economists have concluded that they cannot—that the rate of return on stocks is higher than can be explained by their greater riskiness alone. The complexities of risk adjustment make it difficult to reach a definitive conclusion.

For many workers covered by Social Security who also hold significant portfolios of assets outside of Social Security to help finance their retirement, the diversification is of little or no value. A worker accumulating assets for retirement can hold stocks and

bonds in existing retirement accounts as well as outside of such accounts. Adding the opportunity to substitute stocks for bonds within Social Security, as our generic example of an individual accounts system effectively does, does not alter the overall composition of the package of assets the worker can choose unless the worker is holding little or no bonds outside Social Security. In other words, a worker with a diversified portfolio will generally hold both stocks and bonds, with the shares of each reflecting the worker's risk aversion. An opportunity to become more exposed to stocks through Social Security does not alter this worker's opportunities, if the worker already had the opportunity to sell some of his or her bonds and buy some more stocks. For someone already holding a diversified portfolio, the risk adjustment that is appropriate shows that stocks are worth no more than Treasury bonds.

On the other hand, for workers with so little financial wealth that they are holding no stocks at all, the opportunity our generic example offers is a new one. Such workers may experience a small gain from this opportunity, but the opportunity does involve taking on additional risk.³¹ Even for such workers, *some* risk adjustment is therefore appropriate, and the fact that Social Security is the primary tier of retirement income may affect the size of that adjustment. Furthermore, evidence from workers' actual 401(k) investment choices makes it clear that many workers without investing experience have trouble making sensible investment decisions in the absence of significant financial education or extremely restricted portfolio choices.³² Ensuring that workers have adequate financial education to manage their individual accounts would be expensive, effectively adding to the administrative costs imposed under such a system.

It is worth noting that we do not object to individual accounts on grounds that the stock market is excessively risky. Indeed, if we were advising a large group of individuals saving for retirement, we would recommend a diversified portfolio, not one comprising only bonds. Our discussion of risk is intended primarily to help the reader interpret the presentations of proponents of individual accounts, some of whom regularly report the benefits that such accounts could finance without *any* adjustment for risk. Such presentations should be taken with a very large grain of salt.³³

Finally, if the judgment were made that diversification into equities does provide benefits even after adjusting for risk, such diversification could also be undertaken

directly or indirectly through the Social Security trust fund, without the need for individual accounts.

The bottom line is that the swap of bonds for stocks inherent in our generic example of individual accounts would be of no value to many workers. For those with little financial wealth, the swap may be of some value, provided the opportunity is pursued with good investment choices and to a sufficiently limited extent, in keeping with the risk aversion appropriate for someone relying very heavily on Social Security. Any potential advantages of such a swap, however, need to be considered along with the disadvantages associated with the potential changes in how benefits are provided. It is precisely those with limited financial wealth who are likely to gain the most from the annuitized benefits provided by the current system, and from its progressivity. Thus those who stand to gain from the change in asset holdings are also those most at risk of losing from other aspects of individual accounts.

Sources of Revenue

Our individual accounts analyzed above assumed that a given level of revenue is available either to traditional Social Security or to the system of individual accounts. Some analysts, however, argue that an increase in revenue is more feasible politically if it is devoted to a system of individual accounts than if it is devoted to the existing system. Edward Gramlich has been perhaps the most prominent advocate of this perspective.³⁴ Gramlich proposes a system of individual accounts financed by contributions beyond the existing payroll tax; the mandatory additional contributions would be tantamount to a payroll tax increase that is specifically directed to the individual accounts. This implicit tax increase would then be combined with a reduction in traditional benefits sufficient for the two together to restore actuarial balance to Social Security as a whole.

It may indeed be easier to legislate an implicit tax linked to individual accounts than an explicit payroll tax increase of the same size, although it is difficult to know for sure since strong backing is not currently in evidence for either approach. Our view is that the political system can provide adequate revenue without the crutch of individual accounts and that the shortcomings of such accounts make it worthwhile to seek a reform

without them. That is, we think the American public is sufficiently supportive of Social Security that it would continue to reelect legislators who voted for a modest payroll tax increase to shore up the system. To us it does not seem necessary to link payroll tax increases to individual accounts, although we acknowledge that this is a political judgment with which others may differ.

Some individual accounts proposals have not identified a specific source of contributions to the accounts but instead have simply assumed that the ultimate source will be the rest of the federal budget. For example, general revenue could be directly deposited into individual accounts, or existing payroll revenue could be diverted into the accounts and the trust fund compensated with general revenue transfers. In light of the substantial deficits projected for the federal budget, however, any proposal for transfers that does not identify a specific funding source seems strikingly irresponsible to us. Many individual accounts proposals are particularly problematic in this regard, since they rely on massive assumed general revenue transfers.

More generally, after almost seventy years the basic structure of Social Security is well settled: Americans have implicitly agreed to use Social Security to provide for a certain range of social insurance goals and not for other purposes. Any radical change in the program's structure would reopen largely settled questions about the broad approach through which the political process will meet this range of goals. In short, drastic changes in Social Security would alter the political environment from one of basic agreement to one of substantial flux and uncertainty. That is a risk that anyone who benefits from the current structure, or is concerned about those who rely on the current structure for their well-being, should regard as worrisome.³⁵ Indeed, the wide variety of rules proposed across the various individual accounts plans offered to date is itself evidence of how it is hard to predict what will come from such proposals if and when they are enacted, much less over time as political forces evolve.

Individual Account Proposals

The President's Commission to Strengthen Social Security proposed a system linking individual accounts to traditional benefit reductions that is similar to our generic

example. Unlike our generic example, however, both Model 2 and Model 3 as proposed by the commission would have *subsidized* the individual accounts by charging an interest rate on the liability accounts (that is, on the amounts diverted from the trust fund) that is projected to be lower than the return the trust fund earns on its reserves. Because the interest rate on the diverted funds would be lower than what the trust fund would have earned otherwise, these individual accounts proposals would worsen Social Security's financial status even on an infinite horizon basis. Stated another way, the trust fund earns the interest rate paid on Treasury bonds on each dollar that is not diverted into an individual account; but on each dollar that is diverted into an individual account, under this proposal, the trust fund would earn only the interest rate charged on the liability account, which is lower. This amounts to a subsidy from the trust fund to the individuals who establish individual accounts. We see no reason why such a subsidy is warranted.³⁶

Other methods of linking individual accounts and traditional benefit reductions have been proposed. For example, under so-called clawback provisions, withdrawals from an individual account upon retirement would trigger proportional reductions in Social Security benefits or other transfers back to Social Security. Thus, unlike in our generic example, the returns on individual accounts subject to a clawback would affect not only the individual investor but also the financial position of Social Security. Alternatively, some plans would simply take revenue from the individual accounts without changing traditional benefits. Such a mechanism has been proposed by Representative Clay Shaw (R-FL), among others.³⁷

Under the Shaw plan, a worker who retired or became disabled would receive 5 percent of his or her account balance in a lump-sum payment. The other 95 percent of the account balance would be transferred directly back to Social Security.³⁸ In the absence of countervailing measures, such a structure could create incentives for risky investments in the accounts, since the Social Security system would subsidize 95 percent of any losses and tax 95 percent of the gains.³⁹ In the Shaw plan, however, workers would be forced to invest in a specified portfolio comprising 60 percent stocks, held in broad market indexes, and 40 percent bonds, in order to avoid the potential gaming problems associated with this type of clawback. A plan with 95 percent of asset balances returned to Social Security is merely a gimmick to take advantage of the actuarial scoring rules.

Administrative Costs and the Structure of Individual Accounts

Our generic example did not examine the administrative costs of individual accounts. Individual accounts would unquestionably entail administrative costs not present under traditional Social Security. Thus, in order for the net returns available to finance benefits to be the same with individual accounts as with matching trust fund investments, the costs of the accounts must be implausibly low. How high those costs would be in reality would depend on a number of factors, including how centralized the system of accounts was and how limited the investment choices were; the level of service provided (for example, whether individuals enjoyed unlimited free telephone calls to account representatives, frequent account balance statements, and other services); the size of the accounts; and the rules and regulations governing them. The higher the administrative costs, the lower the ultimate benefit a worker would receive, all else equal, since more of the funds in the accounts would be consumed by these costs, and less would be left over to pay retirement benefits. For example, if administrative costs amounted to 1 percent of assets each year over a typical worker's career, the level of retirement benefits that could be financed would be roughly 20 percent less than what could be financed without the administrative costs. If the costs were half as large, the reduction in benefits would also be roughly half as large.⁴⁰

Conclusion

Proposals to establish a system of individual accounts within Social Security raise many issues. Diverting revenue into these accounts and away from the existing Social Security system would generate a cash-flow problem for Social Security, even if the system were eventually reimbursed for the diverted funds. Advocates of individual accounts tend to play down this cash-flow problem or simply assume it away. We, however, view the prospect of the Social Security trust fund being exhausted more than a decade sooner than otherwise as a serious political economy problem. Furthermore, the various alternatives for “solving” the problem—including transferring funds from the rest of the budget or reducing current benefits to match the reduced level of revenue—are unappealing. Indeed they leave Social Security at risk.

Furthermore, individual accounts would likely not generate any significant gains in overall economic efficiency. Finally, because individual accounts would likely fail to provide the social insurance protections that the current system offers, it simply makes little sense to scale back that system in order to finance an alternative system of individual accounts in addition to the individual accounts (401(k), Keogh, IRA) that already exist on top of Social Security.

A Final Note

The long-term deficit projected in Social Security should not serve as an excuse for undermining the program’s social insurance structure. Nor should the shortfall be “eliminated” with accounting or other gimmicks that promise to erase the deficit without any pain—eventually the bill for those gimmicks will come due. The American public deserves a well-informed and honest debate over Social Security’s future, not obfuscation. As our proposal shows, Social Security can be reformed without dismantling its important insurance protections and without resorting to accounting tricks. It can also be done without undercutting the functioning of Social Security itself or of the economy—indeed, reform can improve their functioning.

We conclude by underlining that our plan meets important criteria: It would restore actuarial balance while addressing the terminal-year problem. It would not

directly increase the burden on the rest of the federal budget (or rely on gimmicks that take advantage of actuarial scoring rules). It would distribute the legacy cost fairly. It would preserve and improve the social insurance character of Social Security. And it would protect and improve the functioning of the economy by contributing to national saving.

Our plan comprises a moderate set of reforms that would restore long-term balance to Social Security by addressing three main sources of its long-term deficit: increases in life expectancy, increased income inequality, and the legacy debt from the system's history. The plan combines revenue increases and benefit reductions to achieve long-term solvency. Its design builds on the tradition set in 1983, when policymakers from both parties came together to embrace a balanced set of reforms.

Two decades later, the debate over Social Security reform has loomed large in presidential and other elections, but we have failed to fix the program. Extreme positions held by some and denial of the problem by others have so far impeded progress. It is time that we once again pursued a balanced approach to reforming Social Security.

¹ This paper is an adapted extract from our book with the same title, published by Brookings Institution Press.

2. President George W. Bush, announcing the formation of the President's Commission to Strengthen Social Security, in the Rose Garden at the White House, May 2, 2001 (www.csss.gov/press/press050201.html).

³. The Office of the Chief Actuary has established a set of criteria that must be met in order for the system to be deemed in actuarial balance. If the system's short-run finances (current revenue plus the trust fund balance) are insufficient to pay scheduled benefits, the system is clearly not in balance. Over longer periods, however, the reliability of the projections declines. Actuarial balance based on long-run considerations therefore allows some small degree of shortfall; if the shortfall is modest enough, corrective action is not necessarily warranted and the system is deemed to be in balance.

⁴. Specifically, using the period mortality table for the most recent available period and the one available for the previous year, and using the interest rates projected the previous year, the Office of the Chief Actuary would determine the percentage reduction in the Primary Insurance Amount for that cohort that would keep unchanged the lifetime cost, at present value, of a dollar of benefits commencing at the full benefit age. With this approach, changes in benefit levels do not depend on assumed changes in life expectancy, but rather on actual changes in mortality by age.

⁵. Since the seventy-five-year cost of benefits to all newly eligible beneficiaries is roughly 85 percent of the seventy-five-year cost of benefits in total, the percentage increase in the tax rate would be 85 percent of the percentage decrease in the Primary Insurance Amount. This does not result in precisely a 50-50 balance between changes in taxes and changes in benefits over the initial seventy-five-year period. Rather, our thought was to produce a rolling seventy-five-year balance from each annual change, recognizing that the initiation of this policy involves anticipation of many future changes. In addition, to avoid the administrative complexities associated with de minimis changes, the tax rate would change only when the accumulated computed change from this provision and later ones since the last adjustment exceeded 0.05 percent of payroll.

⁶. See, for example, Karen Smith, Eric Toder, and Howard Iams, “Lifetime Distributional Effects of Social Security Retirement Benefits,” presented at the Third Annual Conference of the Retirement Research Consortium, Washington, May 17-18, 2001; and Lee Cohen, C. Eugene Steuerle, and Adam Carasso, “Social Security Redistribution by Education, Race, and Income: How Much and Why,” presented at the same conference.

⁷. Interestingly, Model 3 of President Bush’s Commission to Strengthen Social Security also implicitly proposed a similar change in the maximum taxable earnings base to increase revenue. Although the commission was prohibited from recommending any tax increases, Model 3 included revenue that matched what would be generated if the taxable maximum were increased. Specifically, the scoring of the general revenue transfers under Model 3 assumed that the fraction of covered earnings subject to tax increased to 86 percent between 2005 and 2009 and was then maintained at that level thereafter. In what may be the only dissenting words in the report, the commission noted that “Some members ...believed that a substantial portion of this [revenue transfer to Social Security under Model 3] should come from an increase in the payroll tax base.... However, this suggestion was deemed inconsistent with the principles in the executive order establishing the Commission” (*Strengthening Social Security and Creating Personal Wealth for All Americans*, p. 131, note 41).

⁸. Much of the material in this section is drawn from Alicia H. Munnell, “The Impact of Mandatory Social Security Coverage of State and Local Workers: A Multi-State Review,” Revised Final Report, AARP, 2000.

⁹. With universal coverage, the Government Pension Offset and Windfall Elimination Provision under current Social Security law will eventually no longer be needed. These provisions were legislated so that those covered by Social Security for only part of their careers, or whose spouses were not fully covered by Social Security, did not receive unwarranted benefits from the program’s progressive benefit formula. Some have argued instead for eliminating these provisions, but we think that in the absence of universal coverage they serve an important role in targeting higher benefits on those intended to receive them, although there is room for improvement. See our paper, “Reforming the GPO and WEP in Social Security”. *Tax Notes*, November 2003

¹⁰. John Geanakoplos, Olivia S. Mitchell, and Stephen P. Zeldes, “Would a Privatized Social Security Really Pay a Higher Rate of Return?” in R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell, eds., *Framing the Social Security Debate* (Washington: National Academy of Social Insurance, 1998), p. 148.

¹¹ The benefit reduction would be calculated as $1 - 0.9969^{t-2022}$, where t is the year in which the worker becomes eligible for benefits.

¹². One could instead allow full or partial inclusion of such earnings in benefit calculations. We chose not to pursue this approach because those with such high earnings are not likely to be crucially reliant on Social Security for benefits. Thus a higher tax rate with partial benefit credits would not serve an important social insurance purpose beyond ensuring that high earners bear a fair share of the legacy cost.

¹³. Paine also wanted to use part of the revenue to give a grant to those turning 21 to help launch their careers. See Thomas Paine, “Agrarian Justice” (1797) in William Van der Weyde, ed., *The Life and Works of Thomas Paine*, Patriot’s Edition (New Rochelle, N.Y.: Thomas Paine National Historical Association, 1925).

¹⁴. Kelly Olsen and Don Hoffmeyer, “Social Security’s Special Minimum Benefit,” *Social Security Bulletin*, vol. 64, no. 2 (2001/2002), pp. 1-15.

¹⁵. Under the Kolbe-Stenholm approach, workers with a twenty-year history of covered earnings under Social Security would receive a benefit at the full benefit age of at least 60 percent of the poverty level. The minimum benefit would increase for workers with longer careers; for workers with at least forty years of covered earnings, the minimum benefit at the full benefit age would equal 100 percent of the poverty level. The minimum benefit target would be indexed to prices over time under the Kolbe-Stenholm plan, as is the poverty level.

¹⁶. The commission’s Model 2 proposed a new minimum benefit for low-wage workers with at least twenty years of covered earnings. This benefit would increase with years of additional covered earnings. For workers with at least thirty years of covered earnings, the benefit at the full benefit age was expected to reach 120 percent of the poverty threshold by 2018 and then stabilize at approximately that level. Model 3 also proposed a minimum benefit for workers with at least twenty years of covered earnings. This benefit,

too, would increase with additional years of coverage; for workers with at least thirty years of covered earnings, the minimum benefit at the full benefit age would equal 100 percent of the poverty threshold in 2018 and exceed the threshold thereafter.

¹⁷. Steven H. Sandell, Howard M. Iams, and Daniel Fanaras, “The Distributional Effects of Changing the Averaging Period and Minimum Benefit Provisions,” *Social Security Bulletin*, vol. 62, no. 2 (1999), pp. 4-13. This minimum benefit was simulated assuming that Social Security had been modified to take forty years into account in computing regular benefits, rather than thirty-five years as under current law. Since that assumption reduces regular benefits, the marginal effect of the minimum benefit is somewhat exaggerated relative to adding a minimum benefit to the scheduled benefit level. Our plan, however, would also involve some reduction in regular benefits relative to the scheduled benefit level; the results presented here may therefore still provide at least some insight into the marginal effect of a minimum benefit of this type under our plan.

¹⁸. For workers who become disabled or die before age 62, the years of coverage required to receive (or for their survivors to receive) the minimum benefit would be scaled to the length of the elapsed period from age 22 to the year of benefit eligibility.

¹⁹. As specified, this provision would create a “notch” between those becoming eligible in 2011 and before and those becoming eligible in 2012 and thereafter. The notch could be eliminated by phasing the provision in over time rather than having it take full effect all at once in 2012.

²⁰. Karen Holden and Cathleen Zick, “Insuring against the Consequences of Widowhood in a Reformed Social Security System,” in R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell, *Framing the Social Security Debate: Values, Politics, and Economics* (Washington: National Academy of Social Insurance, 1998), pp. 157-81.

²¹. Melissa M. Favreault, Frank J. Sammartino, and C. Eugene Steuerle, “Social Security Benefits for Spouses and Survivors,” in Favreault, Sammartino, and Steuerle, eds., *Social Security and the Family* (Washington: Urban Institute Press, 2002), table 6.1, p. 183.

²². Richard Burkhauser and Timothy Smeeding, “Social Security Reform: A Budget Neutral Approach to Reducing Older Women’s Disproportionate Risk of Poverty,” Policy Brief 2/94, Syracuse University Center for Policy Research, 1994.

²³. Specifically, each year the Office of the Chief Actuary would produce tables that would indicate, for any couple, the change in benefits on a break-even basis that would achieve the proposed survivor replacement rate. That is, when the second member of a couple claims benefits, the Office of the Chief Actuary would first determine what the benefits would be under current law (adjusted for any legislated changes in benefit levels). Then it would adjust the time profile of benefits to ensure a target survivor replacement rate of 75 percent. To do so, it would proportionately reduce the benefits of both members of a couple while alive in order to finance the higher survivor benefit level after one spouse dies. There would also be a need for rules to cover the possible return of one of the retirees to work. We envision the use of a period mortality table for this calculation to avoid disputes about the mortality rate projection and to allocate slightly more benefits to later in life.

²⁴. To the extent that the couple’s expected mortality experience differed from the population’s, there would also be some redistribution toward or away from the couple. Note that since the actuarial calculation is based on a seventy-five-year horizon, and the benefit reductions for the couple would precede the benefit increases for the survivor, this proposal would improve the system’s seventy-five-year actuarial balance. However, we did not request that the implied increase be included in the official actuarial evaluation of our plan, since we prefer to restore actuarial balance without having this change contribute toward the actuarial balance.

²⁵. For further details, see Kilolo Kijakazi, “Women’s Retirement Income: The Case for Improving Supplemental Security Income,” Center on Budget and Policy Priorities, June 8, 2001.

²⁶. For data on the circumstances of people with disabilities, see Virginia Reno, Jerry Mashaw, and Bill Gradison, eds., *Disability: Challenges for Social Insurance, Health Care Financing, and Labor Market Policy* (Washington: National Academy of Social Insurance, 1997).

²⁷. This is not to say that benefits as described by current law will never be changed; indeed, we are proposing to make changes to the benefit structure. But Social Security can be designed so that the need for legislation is infrequent. With advance planning, legislated changes can protect those nearing retirement

and involve only moderate and gradual changes for others active in the labor market. In contrast, financial market changes can be large and sudden and affect those on the verge of retirement, and even those already retired if they continue to rely on a diversified portfolio of assets. For one recent study of how older workers have reacted to substantial financial market fluctuations, see Jonathan Gardner and Mike Orszag, "How Have Older Workers Responded to Scary Markets?" Watson Wyatt Technical Paper 2003-LS05, June 2003.

²⁸. Social Security provides spouse and survivor benefits without reducing the worker benefit for a worker with a spouse. In contrast, individual account annuitization pricing would reduce worker annuities to finance spouse and survivor benefits. The current structure is controversial, with some analysts believing that the current structure is too generous to married workers relative to single workers and makes benefits too dependent on the division of earnings between husband and wife.

²⁹. This design was applied in somewhat different form in the plans proposed by the President's Commission to Strengthen Social Security. A form of this approach was originally proposed by the General Accounting Office in response to requests from Representative John Porter (R-IL). See General Accounting Office, "Social Security: Analysis of a Proposal to Privatize Trust Fund Reserves," GAO/HRD-91-22, December 12, 1990. We ignore the complications arising from workers who die before starting retirement benefits.

³⁰. More specifically, we assume that payroll is diverted into individual accounts for workers aged 54 and younger at the beginning of 2002. We also base the projections on the 2001 intermediate cost assumptions of the Social Security trustees' report. These assumptions allow us to use a variety of calculations already undertaken by the Office of the Chief Actuary for Model 1 of the President's Commission to Strengthen Social Security. To ensure that the Social Security trust fund is held harmless over a worker's lifetime, the benefit offset must reflect the diverted revenue accumulated at a 3 percent real interest rate, which is the real interest rate assumed to be earned by the trust fund. To compute the benefit offsets, we combine the figures calculated by the Office of the Chief Actuary for Model 1, which assumed a 3.5 percent real interest rate for the benefit offsets, and for Model 3, which assumed a 2.5 percent rate. The figures for Model 3 are scaled by 2.0/2.965, because the offset amounts under Model 3 are based on a total 2.965 percent-of-payroll contribution rate (including 1 percent of payroll in add-on contributions).

³¹. See, for example, John Geanakoplos, Olivia S. Mitchell, and Stephen P. Zeldes, "Would a Privatized Social Security Really Pay a Higher Rate of Return?" in R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell, eds., *Framing the Social Security Debate* (Washington: National Academy of Social Insurance, 1998), and Peter Diamond and John Geanakoplos, "Social Security Investment in Equities," *American Economic Review*, vol. 93, no. 4 (September 2003), pp. 1047-74.

³². For example, many workers seem to have difficulty understanding the value of diversification, recognizing the meaning of different points on a risk-return frontier, and avoiding risk-increasing attempts to time markets. Many of these problems could be avoided by allowing little or no discretion in portfolio choice, but that might not be politically sustainable.

³³. Furthermore, we would not recommend that individuals with small retirement savings borrow in order to invest in stocks. That seems too risky. But carve-out accounts as proposed by President Bush's Commission to Strengthen Social Security would effectively allow for such borrowing. One of the major objectives of Social Security reform should be to put Social Security on a firm footing, to ensure that future retirees can more readily rely on a basic, assured stream of income. Carve-out accounts are inconsistent with this objective.

³⁴. See the Individual Accounts plan proposed by Gramlich and Mark Twinney in with the report of the 1994-1996 Advisory Council on Social Security. A description is available at www.ssa.gov/history/reports/adccouncil/report/gramlich.htm. See also Edward Gramlich, *Is It Time to Reform Social Security?* (University of Michigan Press, 1998).

³⁵. See Hugh Heclo, "A Political Science Perspective on Social Security Reform." In Arnold, Graetz, and Munnell, eds., *Framing the Social Security Debate*.

³⁶. For a further description of the commission's proposals, see Peter A. Diamond and Peter R. Orszag, "An Assessment of the Proposals of the President's Commission to Strengthen Social Security," *Contributions to Economic Analysis and Policy*, vol. 1, issue 1, article 10 (2002).

³⁷. Martin Feldstein earlier proposed a similar mechanism. See the memorandum from Stephen C. Goss, Deputy Chief Actuary, Social Security Administration, “Long-Range OASDI Financial Effects of Clawback Proposal for Privatized Individual Accounts - INFORMATION,” December 3, 1998.

³⁸. For a more complete analysis of the Shaw plan, see Kilolo Kijakazi, Richard Kogan, and Robert Greenstein, “The Shaw Social Security Proposal: The Role of Massive General Revenue Transfers,” Center on Budget and Policy Priorities, September 2002.

³⁹. Even stronger incentives could arise if the clawback were limited to the level of traditional benefits and the account were large enough so that the clawback would simply eliminate the traditional benefit. In evaluating the actuarial effects of the Shaw plan, the Office of the Chief Actuary took this possibility into account. For further detail, see Stephen C. Goss, Alice H. Wade, and Chris Chaplain, “OASDI Financial Effects of the Social Security Guarantee Plus Act of 2003,” Office of the Chief Actuary, Social Security Administration, January 7, 2003.

⁴⁰. These examples were chosen because equity mutual funds currently charge more than 1 percent a year on average, but individual accounts can avail themselves of mechanisms to lower the charges. For details on the relationship between charges and benefits, see Peter Diamond, “Administrative Costs and Equilibrium Charges with Individual Accounts,” in John Shoven, ed., *Administrative Costs and Social Security Privatization* (University of Chicago Press, 2000); and Mamta Murthi, J. Michael Orszag, and Peter R. Orszag, “Administrative Costs under a Decentralized Approach to Individual Accounts: Lessons from the United Kingdom,” in R. Holzmann and J. Stiglitz, eds., *New Ideas About Old Age Security*.