CHAPTER 6

Restoring Solvency to Social Security

Much of the Federal government's budget is dedicated to *entitlement programs*, in which expenditures are determined not by discretionary budget allocations but by the number of people who qualify. Reform of entitlement programs remains the most pressing fiscal policy issue confronting the Nation. With projected expenditures of $478 billion in 2003, Social Security is the largest entitlement program and an appropriate place to begin. Social Security is designed as a *pay-as-you-go* system in which payroll taxes on the wages of current workers finance the benefits being paid to current retirees. While the program is running a small surplus at present, large deficits loom in the future. Deficits are first projected to appear in 15 years; by 2080, the Social Security deficit is projected to exceed 2.3 percent of GDP.

The coming deficits in Social Security are driven by two demographic shifts that have been in progress for several decades: people are having fewer children and are living longer. The President has called for new initiatives to modernize Social Security to contain costs, expand choice, and make the program secure and financially viable for future generations of Americans.

This chapter assesses the need to strengthen Social Security in light of its long-term financial outlook. The key points in this chapter are:

- The most straightforward way to characterize the financial imbalance in entitlement programs such as Social Security is by considering their long-term annual deficits. Even after the baby-boom generation's effect is no longer felt, Social Security is projected to incur annual deficits greater than 50 percent of payroll tax revenues.
- These deficits are so large that they require a meaningful change to Social Security in future years. Reform should include moderation of the growth of benefits that are unfunded and can therefore be paid only by assessing taxes in the future. A new system of personal retirement accounts should be established to help pay future benefits. The benefits promised to those in or near retirement should be maintained in full.
- The economic rationale for undertaking this reform in an era of budget deficits is as compelling as it was in an era of budget surpluses.

The Rationale for Social Security

All developed countries and most developing countries have publicly administered programs to provide benefits for the elderly, including programs to support surviving spouses and the disabled. Government involvement in markets for goods or services is typically predicated on a failure of private markets to achieve an efficient or equitable result. There are three main problems in the market for providing support to the elderly that justify a government role in old-age entitlement programs.

First, a strictly private market to support old age would require all individuals to choose the level of consumption that they would like in retirement and to save accordingly. Some individuals may not be capable of making the relevant calculations themselves and may not be able to enlist the service of a financial professional to advise them. For these people, Social Security provides a minimal level of financial planning. Social Security requires people who otherwise would not save for retirement to participate in a system that makes them pay for insurance against old-age poverty. It also provides a mechanism for everyone to share in the burden of taking care of those who are truly in need of assistance.

Second, well-being in retirement is subject to two types of risk that are not easily insured in private markets. The first risk is low income during working years, which can lead to poverty in old age. Low income may be caused by a specific event like disability, and Social Security provides workers with disability insurance. Private disability insurance plans exist but participation is quite low. Low income may also be caused by other events beyond an individual's control. However, these events do not lend themselves to private insurance contracts because income can also be low for a variety of reasons that are under an individual's control but that are difficult for an insurer to observe (such as low work effort). Social Security partially overcomes this problem through its progressive benefit formula—retirees with lower earnings during their working years get benefits that are higher as a share of preretirement earnings.

The other risk to well-being in old age is the possibility that retirees will live an unusually long time and thereby exhaust their personal savings. To protect against this risk, a portion of the retirement wealth that a worker has accumulated must be converted to an annuity, a contract that makes scheduled payments to the individual and his or her dependents for the remainder of their lifetimes. The annuity payments should be indexed to inflation, so that their purchasing power is not eroded over time. Inflation-indexed annuities are a fairly new financial product, and even today, relatively few people participate in the indexed annuity market. A public system of Social Security, in which the government pays benefits in the form of an annuity

that keeps pace with the cost of living, can help protect retirees from outliving their means to support themselves.

Third, in other contexts, the government's fiscal policies are designed to redistribute resources from high- to low-income individuals. In most cases, such as the progressive income tax schedule, income is defined based on an annual measure. Social Security is unusual because it can redistribute income based on a lifetime average of earnings. By doing so, Social Security more accurately targets these transfers to the people who most need the assistance. Individuals with higher lifetime average earnings receive benefits from Social Security that are higher in dollar terms, but lower as a percentage of their earnings, than do those with lower lifetime average earnings.

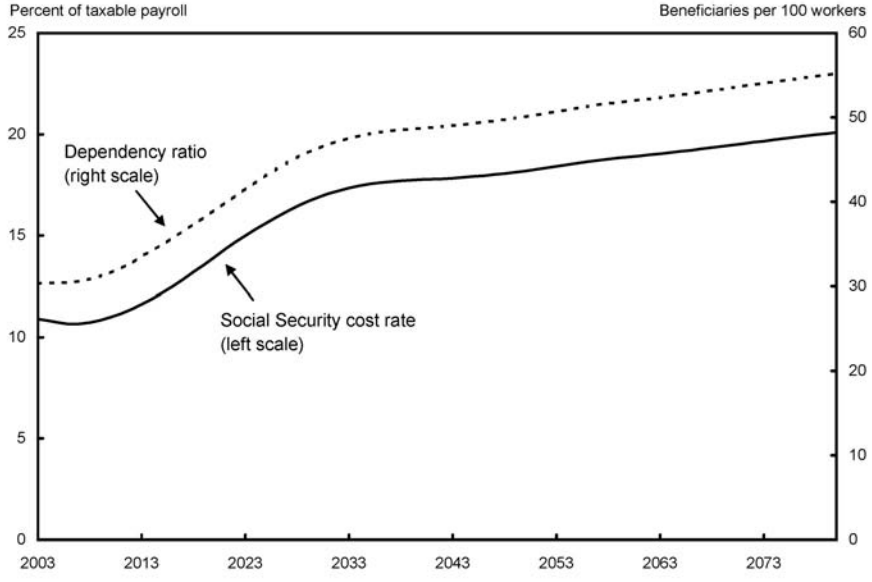
All of these rationales are legitimate. Whether the U.S. system actually meets these goals, and whether it does so in an efficient and equitable manner, however, should be a subject of continued debate. An essential part of this debate is that none of these rationales require that Social Security be operated on a pay-as-you-go basis. Long-term solvency can be restored by advance funding of future obligations through personal retirement accounts. Personal retirement account proposals can be and often have been designed to allow for greater protection for surviving spouses and other vulnerable groups. The President has taken an important step in this debate by making the modernization and long-term solvency of Social Security a prominent feature of his Administration's domestic policy agenda.

Understanding the Financial Crisis

In a pay-as-you-go system like Social Security, the benefits paid to current beneficiaries are financed largely by the payroll taxes collected from current workers. In any given year, the system will be in balance when the *income rate* equals the *cost rate*. The income rate is the total amount of tax revenue collected (from both the payroll tax and the income taxation of Social Security benefits for moderate- and high-income beneficiaries) divided by the total amount of payroll on which taxes are levied. The cost rate is the total amount of scheduled benefits divided by the total payroll on which taxes are levied. The *annual balance* is the difference between the income rate and the cost rate in a given year.

The impending financial crisis in Social Security is due to the rapid growth in the cost rate relative to the income rate in the future. This growth is attributable to two demographic factors that have become critically important over the last half century: people are having fewer children and living longer in old age. As a result of these lower rates of both fertility and mortality, the size of the elderly cohort will expand relative to the younger cohort over time.

Chart 6-1 **Demographic Change and the Cost of Social Security Through 2080**
The increase in the cost rate for Social Security closely tracks the change in the dependency ratio.

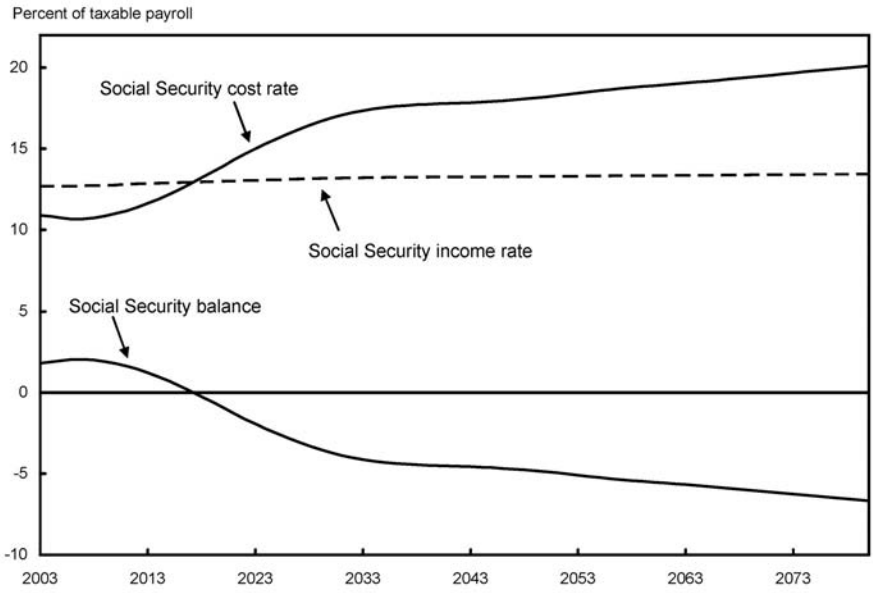


Source: Social Security Administration.

Chart 6-1 compares the Social Security cost rate with the *dependency ratio*, which is the number of beneficiaries per hundred workers. The projections are based on the intermediate assumptions made by the Social Security Trustees in their 2003 report. The dependency ratio rises from 30.4 in 2003 to 55.2 in 2080, an increase of 82 percent. Stated another way, the number of workers paying payroll taxes to support the payments to each beneficiary will fall from 3.3 workers per beneficiary in 2003 to 1.8 in 2080. With fewer workers to support each retiree, it is not surprising that the cost rate is projected to increase, in this case from 10.89 percent of payroll in 2003 to 20.09 percent in 2080. This 84 percent increase is almost identical to the rise in the dependency ratio. While changes in productivity, immigration, interest rates, and other factors also affect the long-term solvency of the program, changes in population structure are at the center of the looming crisis.

Chart 6-2 graphs the single-year projections of Social Security's income and cost rates, along with its annual balances. The solid curve that rises over the period represents the cost rate (this is the same curve as in Chart 6-1). The dashed line is the projected income rate, which reflects revenue received by the Social Security trust funds from the payroll tax of 12.40 percent plus a portion of the income tax on current benefits. Income taxation on benefits currently being paid generates an amount equal to 0.30 percent of taxable payroll. Thus,

Chart 6-2 **Social Security's Annual Balances Through 2080**
Social Security begins to run deficits in the next decades. Those deficits continue to widen over time.



Source: Social Security Administration.

the income rate in 2003 was 12.70 percent. Because the income thresholds at which Social Security benefits become taxable are not indexed for inflation, a greater share of benefits become taxable over time as the price level rises. In 2080, income taxation of benefits is projected to generate 1.03 percent of taxable payroll, resulting in an income rate of 13.43 percent.

The annual balance, the difference between the income rate and the cost rate, is projected to deteriorate. For 2003, the annual balance is 1.81 percent of taxable payroll (12.70 – 10.89). The annual balance is graphed at the bottom of Chart 6-2 as a solid curve that declines over the period. The substantial increase in the cost rate relative to the income rate in the future causes this annual balance to change from surplus to deficit by 2018 and to widen considerably thereafter. In 2080, the annual balance will be -6.67 percent of taxable payroll (13.43 – 20.09, as reported in the Trustees Report, with the small discrepancy due to rounding).

Unless the Social Security system is reformed before that time, the payroll tax would have to rise from 12.40 percent to 19.07 percent to pay all benefits scheduled by current law, even with the assumption that benefit taxation continues under current law to provide a rising share of program revenues. Such an increase represents an expansion of the payroll taxes associated with the program of over 50 percent (Box 6-1).

The annual deficit of 6.67 percent of payroll is the most straightforward way to represent the long-term fiscal challenge confronting the Social Security program. To describe a proposed reform as having restored solvency to Social Security, the reform must greatly reduce or eliminate these annual deficits. The only desirable way to restore solvency is to do so without

Box 6-1: The Retirement of the Baby-Boom Generation

It is common in public discussions to associate the financial crisis in Social Security with the approaching retirement of the baby-boom generation, those born between the years 1946 and 1964. This explanation, however, is only partly correct. The problems confronting Social Security are more fundamental than the aging of an unusually large birth cohort. In 2080, for example, the youngest baby boomer will be 116 years old, and almost all benefits in that year will be paid to retirees who were born after the baby-boom generation. Even with virtually no baby boomers among the beneficiaries, Social Security in 2080 is projected to have an annual deficit equal to 6.67 percent of its payroll tax base.

The retirement of the baby-boom generation *does* have an important impact on the system's finances, as can be seen in Chart 6-1. The period of rapid increase in both the dependency ratio and the cost rate occurs during the two decades starting roughly in 2008 when the baby-boom generation becomes eligible for retirement benefits. Chart 6-2 shows that over this same period, the annual balance in Social Security will deteriorate by over 5 percentage points of payroll. If the retirement of the baby-boom generation were the only source of Social Security's financial crisis, then the cost rate would begin to decline as that generation passed away and the dependency ratio fell.

As shown in Chart 6-1, however, the cost rate continues to climb even as the baby boomers age and pass away. The dramatic increase in the cost rate associated with the retirement of the baby-boom generation is, in fact, a permanent transition to an economy in which a higher ratio of beneficiaries to workers makes pay-as-you-go entitlement programs more expensive to maintain. This transition would be more apparent already were it not for the presence of the baby-boom generation in the workforce today. The huge numbers of baby boomers in the workforce have held down the ratio of beneficiaries to workers over the past several decades. Judged from this point forward, the retirement of the baby-boom generation does not cause the financial crisis; it simply makes the long-term problem in the pay-as-you-go system appear sooner rather than later.

continued reliance on general revenues. While these numbers are only estimates and are revised over time, recent efforts by the actuaries at Social Security to consider the uncertainty in the projections show that there is essentially no chance that the system will be in balance in the long-term (Box 6-2).

Box 6-2: Long-Term Projections and Uncertainty

Recent experience with short-term forecasts has shown that there is considerable uncertainty about how the economy will evolve. That uncertainty is compounded over the 75-year period that the Social Security actuaries must consider. Traditionally, the Trustees Report has included projections based on three different sets of assumptions—low cost, intermediate cost, and high cost. The low-cost scenario has higher fertility rates, slower improvements in mortality, faster real wage growth, and lower unemployment. All of these changes work to reduce the projected deficits. The high-cost scenario changes the assumptions in the opposite direction and results in larger projected deficits.

Policy discussions seldom include any mention of the low- and high-cost scenarios. Part of the reason is that these alternatives are accompanied by no information on how likely they are to occur. In the 2003 Trustees Report, a new method of dealing with uncertainty was included in an appendix. The method, called *stochastic simulation*, is based on the idea that each of the main variables underlying the projection (like the interest rate or economic growth rate) will fluctuate around the value assumed in the intermediate scenario. These fluctuations are modeled by an equation that captures the relationship between current and prior years' values of the variable and introduces year-by-year random variation, as reflected in the historical period. A stochastic simulation consists of many different combinations of possible outcomes for the random variables. Each combination generates a unique path for the key financial measures, each one analogous to the single assumed path generated by the intermediate-cost scenario. Taken together, these paths represent a wide range of possible outcomes for Social Security.

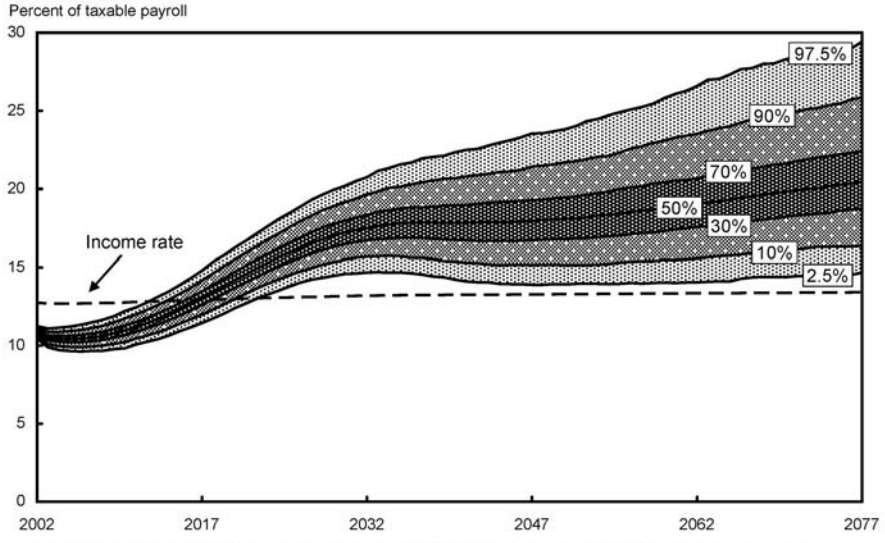
Chart 6-3 shows the range of outcomes for the cost rate generated by the simulation model. These simulations are based on the assumptions and methods in the 2002 Trustees Report, when the deficits reported in the last year of the projection period (2076) were 1.11, 6.42, and 14.66 percent of taxable payroll in that year for the low-, intermediate-, and high-cost scenarios, respectively. Each curve, starting with the lowest, corresponds to a successively higher percentile of the distribution of outcomes each year. In the last year of the projection

Box 6-2 — *continued*

period, the median cost rate is 20.33 percent of taxable payroll, which is slightly higher than the value of 19.84 percent based on the intermediate assumptions. Overall, 95 percent of the cost rates are between 14.53 and 28.98 percent of payroll. Thus, the low-cost estimate of 14.24 and the high-cost estimate of 28.51 correspond to very extreme outcomes in the overall distribution.

Modeling the uncertainty underlying the demographic and economic components of the projection is a large step forward in assessing the future obligations of Social Security. The simulation model used in the Trustees Report likely understates the variation that is possible for future costs of Social Security. Nonetheless, the simulations show that based on random year-to-year fluctuations, it is highly improbable that the system will have a cost rate below its income rate in the long-term. Uncertainty in the underlying projections only strengthens the case for reform.

Chart 6-3 **Probability Distribution of Projected Annual Cost Rates**
Simulations that incorporate economic and demographic uncertainty show a wide range of possible outcomes for Social Security's long-term costs.



Note: Lines represent percentiles of the distribution, as labeled. Darker shaded areas are more likely outcomes.
Source: Social Security Administration.

Misunderstanding the Financial Crisis

Altough the Social Security program is operated on a largely pay-as-you-go basis, discussions of the financial condition of the program often focus on the trust funds out of which benefit payments are made. There are two trust funds—one for the old-age and survivors benefits and one for the disability benefits—that will be referred to collectively as the "Social Security trust fund." In a year when the government collects more in payroll taxes than it needs to pay out in Social Security benefits (net of the income taxes on benefits), surplus revenues are allocated to the Social Security trust fund. The trust fund is held in a portfolio that consists of special-issue Treasury bonds. The interest rate on the portfolio reflects the yields on long-term Treasury bonds. In a year when Social Security benefit payments exceed revenues, some of the bonds in the trust fund must be redeemed to cover the gap.

In the 2003 Trustees Report, the *trust fund ratio* for the Social Security program was reported as 288 percent for 2003. The trust fund ratio is the proportion of a year's benefit payments that could be paid with the funds available at the beginning of the year. Thus, a trust fund ratio of 288 percent means that in 2003, the amount of bonds held in the trust fund could have been redeemed to cover nearly three years of Social Security benefit payments. A positive trust fund ratio is the standard way of assessing the solvency of Social Security at a point in time. A trust fund ratio of 100 percent is considered to be an adequate reserve for unforeseen contingencies, such as an unexpected drop in payroll tax collections in a particular year.

When the Trustees Report is released, the reaction in the popular press almost always focuses on the date at which the trust fund is projected to go to zero as an indicator of Social Security's financial health. In the 2003 Trustees Report, this date was 2042, and this was widely reported as good news because the prior year's report had projected that date at 2041. The additional year before all of the bonds are redeemed reflects higher annual balances in Social Security through 2042 than were projected in the prior year's report.

Focusing on the date of trust fund exhaustion is inadequate as a measure of Social Security's financial health because this date by itself gives no indication of how dire the fiscal situation becomes *after* the trust fund hits zero. When the trust fund is projected to be exhausted in 2042, for example, the gap between the income and cost rates on the Social Security program is projected to be 4.54 percent of taxable payroll (or 37 percent of the revenues collected by the payroll tax). If such a gap existed in 2003, it would be nearly $200 billion. Reform proposals that are based on pushing back the date when the trust fund is exhausted by a few years will be insufficient to address Social Security's long-term financial imbalance.

As a means of providing a longer-range summary of the finances of the program, the Trustees Report also projects the 75-year *actuarial deficit* in Social Security. Long-range actuarial projections are made over 75 years because this is approximately the remaining lifetime of the youngest current Social Security participants. The 75-year actuarial deficit is equal to the percentage of taxable payroll that could be added to the income rate for each of the next 75 years, or subtracted from the cost rate for each year, to leave the trust fund ratio at 100 percent at the end of the 75-year period.

In the Trustees Report for 2003, this 75-year actuarial deficit was 1.92 percent of taxable payroll using the intermediate assumptions, up from 1.87 percent in the prior year's report. That is, in order to have one year's worth of benefits left in the trust fund in 2077 (the last year of the 75-year projection period starting in 2003), Social Security payroll taxes would have to be 14.32 percent each year for 75 years.

The 75-year actuarial deficit is a widely used measure of the system's financial condition. However, even this measure understates the long-term challenge facing Social Security's finances. Although an increase in the income rate of 1.92 percentage points in each of the next 75 years leaves the trust fund with a positive balance at the end of the 75-year period, the trust fund will rapidly decline to zero in the years after 2077. This occurs because the payroll tax increase of 1.92 percent does not cover the annual deficits of over 6.5 percent that are projected for those years.

Relying on the 75-year actuarial deficit as a guide to solvency is only marginally better than considering the date of trust fund exhaustion. A reform that purported to close the 75-year actuarial deficit would be sufficient only to push the date of trust fund exhaustion to a year just beyond the projection period.

The actuarial deficit over any finite period, even one as long as 75 years, can dramatically understate the financial imbalance in Social Security when the program's annual deficits are getting wider over that period. For example, the 2003 Trustees Report estimates that the present value of the unfunded obligations for the program over the next 75 years is $3.5 trillion. In other words, if this amount of money were available today and invested at the rate of return that is credited to trust fund assets, it would provide just enough to cover the program's deficits over the next 75 years. However, the Trustees Report also estimates that the present value of the program's unfunded obligations over the infinite horizon—the next 75 years and all years thereafter—is $10.5 trillion. The $7.0 trillion difference reflects the continued annual deficits that persist after the first 75 years. Thus, the first 75-year period represents only one-third of the present value of the total shortfall.

A projection period limited to 75 years also biases the discussion of potential reforms in favor of those that are based on pay-as-you-go, rather than

advanced, funding. Some reform proposals would allow a portion of the payroll tax to be used to establish voluntary personal retirement accounts (PRAs). People who establish their own personal retirement accounts would be able to direct some of their payroll taxes into their PRAs in exchange for accepting lower benefits from the pay-as-you-go system in retirement. The additional funding requirements to maintain benefits for current retirees while allowing some of the payroll tax to be used for personal retirement accounts for current workers necessarily appear in the first 75 years. However, much of the benefit of advanced funding—in terms of reduced obligations of the pay-as-you-go system—occurs outside of the 75-year projection period.

Recognizing that even a 75-year actuarial deficit cannot fully reflect the long-term financial shortfalls in Social Security, the Trustees have increased their focus on the annual balance in the last year of the 75-year projection period as a guide to the financial shortfalls in the program. If the trust fund ratio is to continue to play a role in discussions of solvency, then, at the very least, the standard for restoring solvency to the program should be to have not only a positive trust fund in the terminal year of the projection period, but also a trust fund that is not declining toward zero in that year.

The Nature of a Prefunded Solution

To restore solvency to Social Security on an ongoing basis, the income and cost rates cannot be moving apart over time. If the income and cost rates are moving together at the same level, then there is no need for a large trust fund, because the program's annual balance will be roughly zero in each year. As noted above, the annual deficit is currently projected to grow to 6.67 percent of taxable payroll by 2080. Only by reducing annual benefits or increasing the payroll tax (or the income tax on benefits) by a total of 6.67 percent of taxable payroll can solvency be restored in the long term on a pay-as-you-go basis.

If these benefit cuts or tax increases are not desired, then an alternative is to allow the gap between the cost and income rates to persist (provided that it is not increasing over time) and rely on the investment income from a portfolio of assets to cover the gap. Such a portfolio would have to be accumulated in the intervening years, in order to prefund the difference between the program's scheduled obligations and revenues.

In 1983, the last time a major reform of Social Security was undertaken, the program was changed to begin accumulating annual surpluses in the Social Security trust fund. In 2003, the trust fund balance was $1.5 trillion. However, the intervening two decades provide little assurance that the Social Security surpluses during that time have increased the resources available to the government as a whole to pay future benefits.

The balance in the Social Security trust fund has a clear meaning as an accounting device. At any point in time, the trust fund balance shows the cumulative amount of additional revenue—plus interest—the Social Security program has made available to the Federal government to spend on other purchases. The special-issue Treasury bonds in the trust fund are IOUs from the rest of the government to the Social Security program to cover its deficits in future years. The trust fund balance shows the extent of the legal authority for the Social Security program to redeem those IOUs in the future. Administratively, the Social Security program is not authorized to pay benefits unless the trust fund ratio is positive; that is, it can only pay benefits to the extent that it has been a net creditor to the rest of the government.

The question of what the government has done with the revenues made available by past Social Security surpluses has important implications for what the trust fund represents in economic terms and for the design of Social Security reform. There are two competing conjectures about the government's actions. The first is that the surpluses in the Social Security program have had no effect on the surpluses or deficits in the rest of the government's budget. If this is true, every dollar that the government received from past Social Security surpluses and thus allocated to the trust fund served to reduce the amount of Treasury bonds held by the public by a dollar. In the future, drawing down the trust fund when Social Security is projected to run annual deficits simply involves selling the debt back to the public so that when the trust fund is exhausted, the amount of debt held by the public in the future will be the same as it would have been had there not been any Social Security surpluses. Under this conjecture about government budget policy, the Social Security surpluses have been a source of higher national saving and the trust fund represents real resources available to pay future benefits.

The second conjecture is that the surpluses in the Social Security program have encouraged the government to run smaller surpluses or larger deficits in the rest of its budget. If this conjecture is true, the Social Security surpluses have not been used to repurchase existing Treasury bonds held by the public but instead have been used to pay for government expenditures, such as defense, health care, or education. Drawing down the trust fund in future years will involve selling Treasury debt to the public, as in the first case. However, unless future government spending is reduced, the debt held by the public will be higher than it would have been in the absence of Social Security surpluses by the time the trust fund is exhausted. Under this conjecture about government budget policy, the Social Security surpluses have not resulted in higher national saving, and the balance in the trust fund does not represent additional real resources available to pay future benefits.

Analysts have argued in favor of both of these conjectures. Determining which one is correct requires making an assumption about what the

government would have done in the counterfactual case that Social Security had not run annual surpluses. The unified budget deficit (including Social Security) has been the focus of budget discussions for almost all of the last two decades. This provides a strong *prima facie* case that government expenditures outside of Social Security were higher due to the presence of Social Security surpluses during this period.

Allocating Social Security surpluses to special-issue Treasury bonds in the trust fund provides no guarantee that future Social Security obligations are prefunded. It would therefore not be appropriate to simply accumulate government bonds in a trust fund as a way to restore solvency. One way to overcome the vagueness in trust fund accounting is to require that the prefunding occur by allocating a portion of Social Security's annual revenues to the purchase of private rather than government securities and to treat these purchases as annual expenditures of the Federal government. Doing so would break the link between Social Security surpluses and the issuance of debt by the Federal government. This would allow the Social Security program to accumulate a portfolio of financial claims on private sources to pay for future obligations.

Some simple arithmetic shows the size of the portfolio of private securities that would be required to close the entire long-term annual deficit in this manner. Suppose that investments in a portfolio of stocks and corporate bonds earn a 5.2 percent expected return, net of inflation and administrative costs. To obtain an income flow of 6.67 percent of taxable payroll (the annual deficit in 2080) would require a portfolio of assets equal to 6.67/5.2 = 128 percent of taxable payroll. In 2080, taxable payroll is projected to be 34.7 percent of GDP, so that the required stock of assets would be equal to 44.5 percent of GDP. If such a fund existed in 2003, when GDP was estimated to be $10.9 trillion, the fund would have a value of $4.9 trillion. This calculation assumes that either taxpayers or beneficiaries will absorb the financial risk associated with investments in corporate stocks and bonds. Repeating the same arithmetic using a 3 percent real interest rate—the projected return on the Treasury bonds in the Social Security trust fund—shows that the fund would have to be $8.4 trillion.

For portfolios of this magnitude, prefunding by investing in private securities would require that individuals establish their own personal retirement accounts. To put these figures in some perspective, as of November 2003, the net assets of all mutual funds in the United States were estimated to be $7.24 trillion. Thus, in order to cover the annual deficit in 2080 through prefunding, a portfolio the size of at least two-thirds and possibly more than 100 percent of all mutual funds would have to be accumulated. A portfolio of this size is simply too large to be administered centrally without political interference and without disruption to the capital markets.

In light of these issues, a Social Security reform plan should have two components. First, it should restrain the growth of future pay-as-you-go benefits for those not currently in or near retirement to bring the cost rate of the program in line with the income rate in the long term. Second, it should establish personal retirement accounts for each worker. The personal retirement accounts serve a dual purpose. First, because the accounts can be located outside of the government's budget, the accumulation of assets in these accounts would not provide any impetus for higher government spending in the non-Social Security part of the budget. Second, the personal retirement accounts would provide a way for individual workers to accumulate assets to offset the reduction in their total retirement income that otherwise would occur due to the lower benefits in the pay-as-you-go part of the system.

Can We Afford to Reform Entitlements?

While Social Security's long-term solvency has been an ongoing concern for over 25 years, the report of the 1994-1996 Advisory Council on Social Security prompted a new round of policy discussions that included serious proposals to prefund future obligations with private securities. These discussions were bolstered by the appearance of surpluses in the Federal government's budget and budget forecasts during the late 1990s. Shortly after the President took office in 2001, a bipartisan commission on Social Security was established. The commission's final report discusses three reform options that would involve the use of personal retirement accounts to prefund a portion of future benefits.

Some critics of personal retirement accounts have suggested that Social Security reform requires surpluses in the unified budget (including Social Security) or even the non-Social Security portion of the budget to begin investing in the accounts while maintaining pay-as-you-go benefits to current retirees. Since the budget surpluses forecasted a few years ago have not materialized, critics argue that adding personal retirement accounts to Social Security is impossible or impractical. In reality, the need to add resources to the Social Security system is no less pressing now that the surpluses have disappeared; indeed, it may be even more so. The change in the budget outlook makes reform neither less necessary nor less economically feasible.

As an illustration, consider the recent President's Commission's Model 2, under the assumption that all eligible workers will voluntarily choose to establish a personal retirement account (thereby maximizing the transition costs to be discussed below). This plan has two main components. First, it slows the growth of benefits from the pay-as-you-go system by indexing

future benefits to prices rather than to wages. Prices generally increase more slowly than wages. Second, the plan allows workers to receive a tax cut now, if they place the tax cut into a personal retirement account, in exchange for specific reductions in the pay-as-you-go benefits they would receive otherwise. When workers choose this option, private saving is increased. Under the conjecture that Social Security surpluses are saved rather than spent, government saving is reduced and national saving is essentially unchanged. However, the long-term solvency of the pay-as-you-go system is maintained, and government and national saving increase to the extent that having resources go into personal retirement accounts rather than the Social Security trust fund prevents the government from using Social Security revenues to pay for non-Social Security expenditures.

The economic rationale for undertaking this type of Social Security reform does not depend on the current budget situation. This is clearly true with respect to the first component of reform—restraining the growth of future pay-as-you-go benefits to a level that is commensurate with future payroll tax revenues. The value of pursuing this objective does not depend in any important way on whether, due to prior economic and budgetary events not related to the reform, future generations will be paying interest on a large or small stock of public debt. If anything, easing the payroll tax burden on future generations is *more* important if they face a greater interest burden. Relying on personal retirement accounts also remains necessary. Compared to government saving, saving in personal retirement accounts gives workers greater freedom to prepare for their own retirement. Saving in personal retirement accounts also ensures that the additional resources being accumulated for Social Security are not available to be tapped for additional government spending.

Even if both components of reform are still necessary, though, are they feasible? Chart 6-4 shows the plan's effect on the unified budget deficit and total government debt held by the public assuming that the first contributions to personal retirement accounts are made in 2004. Even under the favorable conjecture that Social Security surpluses do not facilitate higher government spending outside of Social Security, the deficit initially increases, but then falls as the reform is fully phased in. At its maximum, in 2022, the incremental deficit increase is less than 1.6 percent of GDP. The higher deficits in turn lead to a greater stock of debt in subsequent years, followed by repayment. The maximum increment to the debt is 23.6 percent of GDP, in 2036.

The hump-shaped pattern for the impact of reform on the deficit reflects the combined effects of the two parts of the reform. Personal retirement accounts widen the deficit by design—they refund payroll tax revenues to workers in the near term while lowering benefit payments from the pay-as-

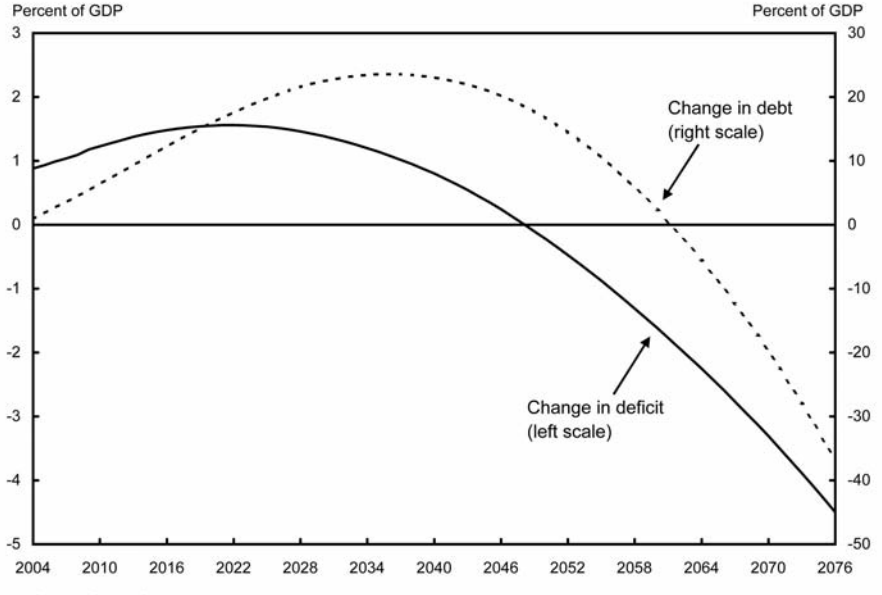
you-go system in later years. After 2048, an incremental surplus emerges as the benefit reductions phased in through price indexation begin to outweigh the net effect of the personal retirement accounts on the deficit.

Is this temporary increase in government borrowing a problem? Not from an economic perspective. The increased borrowing does not shift any burden to future generations. The tax cuts given to today's workers are paid for by reductions in the share of their future benefits that must be paid from future tax dollars. Nor are current workers harmed. They save this money in their own accounts, which can give them retirement income just as surely as if the government were promising it to them.

While the government's budget situation does not affect the *economic* necessity and feasibility of Social Security reform, under some assumptions about the political constraints on the budget process, the *political* feasibility and desirability of reform may be shaped by the overall budget picture.

Reforms will lead to larger unified budget deficits in the near term but smaller deficits in the long term. The presence of a deficit in the non-Social Security part of the budget may make it more difficult to persuade lawmakers to reform Social Security, if the transition costs of the reform cause the deficit to eclipse a previous record. However, avoiding Social Security reform will not keep deficits in check. If nothing is done to reform Social Security, under current projections, the growth of Social Security,

Chart 6-4 **The Potential Impact of Commission Model 2 on Deficits and Debt**
Relative to GDP, reform initially increases then reduces the deficit and debt.



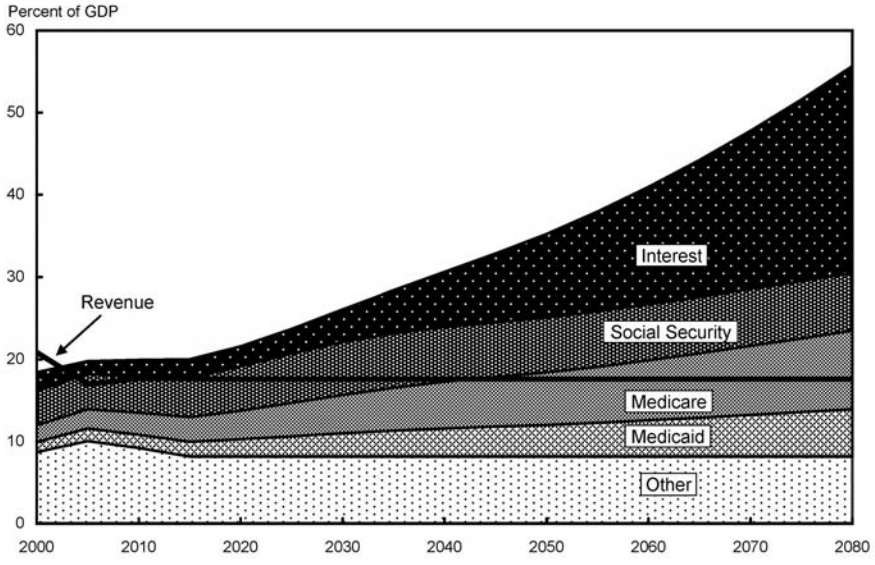
Source: Social Security Administration.

Medicare, Medicaid, and the interest on the borrowing required to finance their growth will lead to unified budget deficits that surpass previous records as a share of GDP.

Chart 6-5 shows the projected costs and revenues in the unified budget under the assumption that no reforms are made to Social Security. The projections are based on the President's policies in the fiscal year 2004 budget, modified to include relief from the alternative minimum tax. The chart assumes that all scheduled Social Security benefit payments are made, financed through additional debt after the trust fund is exhausted. The stacked areas represent total scheduled Federal spending as a share of GDP. Even with nonentitlement spending fixed at 8.1 percent of GDP and excluding interest payments, Federal spending surpasses 20 percent of GDP in 2025, 25 percent in 2050, and 30 percent in 2080. The solid line shows total revenue. The budget deficit, which is the height of the areas above the black line, grows sharply in upcoming decades.

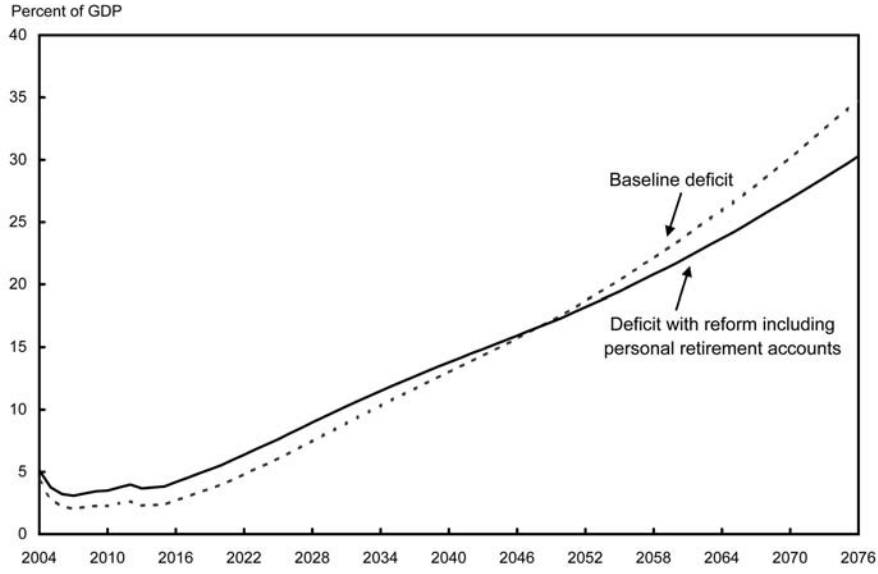
The impact of Social Security reform on the baseline deficit is shown in Chart 6-6, which graphs the evolution of the deficit under two scenarios: the baseline from Chart 6-5 in which no reform is implemented and a reform that includes all of Model 2, with 100 percent participation. Recall from Chart 6-4 that this reform causes the budget deficit to increase temporarily before falling to a lower share of GDP as the reform is fully phased in.

Chart 6-5 **The Long-Run Budget without Social Security Reform**
The unified budget deficit widens considerably over the coming decades.



Sources: Social Security Administration, Centers for Medicare and Medicaid Services, Office of Management and Budget, and Council of Economic Advisers.

Chart 6-6 **The Long-Run Budget Deficit with Social Security Reform**
Enacting Social Security reform leads to lower unified deficits when fully phased in.



Sources: Social Security Administration, Centers for Medicare and Medicaid Services, Office of Management and Budget, and Council of Economic Advisers.

With the reform, the unified budget deficit reaches 5 percent of GDP in 2019. Without reform, this deficit is reached instead in 2023. The benefits of the reform appear over time, making a positive impact on the Federal budget after 2048.

Policy makers concerned about the unified deficit will have to decide how they will restrain Federal spending over the upcoming decades—they will have to confront this question even if nothing is done to reform Social Security. The benefit of reforming Social Security is that it alleviates, to some extent, the financial burden that unreformed entitlement programs will place on future generations.

Conclusion

The Nation must act to avert a long-foreseen future crisis in the financing of its old-age entitlement programs. The crisis results mainly from the fundamental demographic shifts to lower birthrates and longer lives rather than the impending retirement of the baby-boom generation. However, the scope for enacting meaningful reform will disappear as the baby-boom generation begins to retire and an ever greater share of the population sees its current income arrive in the form of a government check. The design of the Social Security program has failed to keep pace with emerging demographic realities. The benefits promised to those currently in or near retirement must be honored, but a new course must be set to ensure that Social Security is viable and available to Americans in the future.

To do nothing at this point to restrain the growth of entitlement programs would bequeath to future generations an increasing tax on their income to support Social Security. The only way to avoid such an outcome without reducing the living standards of future retirees is to save more today. Greater saving will increase the capital stock and increase the productive capacity of the economy so that it can support those higher payments. The combination of reducing the projected cost of taxpayer-financed benefits and shifting the revenues into personal retirement accounts provides the best mechanism for achieving that result.