CHAPTER 2

# Strengthening Retirement Security

Over the course of the 20th century, longer life expectancies and increased personal prosperity fostered a virtual revolution in the way Americans approach work and retirement. At the turn of the last century, male and female life expectancies at birth were 51.5 years and 58.3 years, respectively. Today, in contrast, life expectancy at birth is 79.6 years for males and 84.3 years for females. Because of these patterns, retirement security was not nearly the important policy issue in 1900 that it is just over a century later. And this issue is likely to grow in importance. Thanks to lifestyle improvements, less dangerous jobs, and advances in medical technology, among other reasons, the average life expectancy of a 65-year-old is projected to increase by more than 2 years over the next half century and to continue increasing even after that.

Changes in life expectancy and in fertility—American women are having fewer children—are among the forces working at the individual level that have demographic implications at the national level. These trends, together with the aging of the baby-boom generation, ensure that the population of the United States will grow older on average and remain older. Whereas in 1950 only 8 percent of the population were aged 65 or over, today those in that age group account for more than 12 percent of the population. Thirty-five years hence, they will represent more than a fifth of all Americans.

Not only are Americans living longer, but work and living arrangements have changed as well. In 1900, when fewer than 4 in 10 people reached the age of 65, approximately two-thirds of these survivors continued to work, the vast majority as farmers or laborers. In contrast, more than half of all workers today retire before their 62nd birthday, and only about 12 percent of the population work past 65. The few elderly Americans at the turn of the last century who were lucky enough to retire by 65 typically counted on extended family to support them in their old age: over 72 percent of retired men in 1900 were living with adult children. Today, fewer than one in five retirees live with extended family.

In addition to longer lives and earlier retirements, increased personal and national prosperity means that most Americans, including those in retirement, can now pursue leisure and recreational activities that were the exclusive privilege of the most affluent a century ago. To take full advantage of these changes, however, we must confront issues that previous generations of Americans, who often labored until life's end, did not have to. Planning

ahead for a comfortable, independent lifestyle during several decades without earnings from labor has become an important issue for most of the population. Amassing the resources necessary to live unsupported by others for an indefinite length of time is a task that demands forethought and preparation from the time a worker first enters the labor force. The growing importance of retirement security demands that, as we enter the 21st century, we reevaluate the strength of the Nation's many institutions for supporting workers' retirement planning efforts.

## Rationale for a National Retirement System

As a starting point for thinking about retirement security, it is useful to consider a simplified scenario in which each individual passes through two distinct phases of adult life, with the length of each known with certainty. During the "working" phase, the individual uses earnings from work both to purchase goods and services for current consumption and to accumulate assets for future use. In the "retirement" phase, the individual ceases to work and instead lives on savings accumulated during the first phase. If these individuals are forward looking, then because they know how many years they will spend in retirement, they will save enough while working to ensure that they can maintain through retirement their previous level of consumption, and perhaps make a bequest to their heirs as well. Put differently, they will use their savings to "smooth" their consumption over their entire lifetime, instead of living well only while working.

In this highly simplified world, retirement security is not an issue of national concern. Prudent individuals have the incentives and the means to successfully plan for their retirement so that they will always have enough resources in their nonworking years. There is no need for government involvement in workers' planning and saving decisions.

Why, then, is retirement security a public policy concern? Traditionally, the rationale for a public system for retirement planning derives from three broad sources: insurance against uncertainty, foresight and planning failures on the part of individuals, and redistributive goals.

### Insurance Against Uncertainty

So far we have deliberately ignored the many sources of uncertainty an individual faces when planning for the future. But in fact none of us who are working today knows how long we will be able to work, how much we will earn along the way, how long we will live, or what our costs of living in retirement will be. A person may plan to work for 45 years and may save accordingly, only to discover after just 40 years that, for health reasons, he or

she simply cannot work any longer. Exactly how long we will live in retirement is likewise subject to a great deal of uncertainty. Although the average remaining life expectancy of a 65-year-old today is about 18 years, nearly a quarter of those alive at 65 will live into their 90s. To guard against the pleasant "surprise" of a longer-than-expected life, an individual needs a larger nest egg than if he or she were certain of living to the average life expectancy. Uncertain and unexpected health care costs pose another potential obstacle to an individual's retirement planning. Out-of-pocket medical expenses are fairly low for most retirees, but for some they will be catastrophically high.

Can private insurance markets effectively safeguard individuals against these contingencies? Although insurance is available against disability and against large medical costs, not all the potential shocks to an individual's retirement security can be insured against. For example, an insured worker may find it difficult to continue to work, and therefore apply for benefits, but for various reasons the insurance company may be unable to verify that the person can indeed no longer work and is therefore entitled to benefits. This creates what economists call moral hazard: once a person is insured against running out of money in retirement, he or she has an incentive to retire earlier than in the absence of insurance, and this raises the insurer's costs.

It has been argued that the inadequacy of existing insurance contracts against a long life without work constitutes a market failure that only a national social insurance system can address. Some have pointed to the small size of the private U.S. market for life annuities as evidence of market failure due to adverse selection: those who expect to live longer than the average will be more inclined to buy annuities; this self-selection of higher risk (from the insurers' perspective) individuals raises the cost to insurers of providing annuities, and thus, ultimately, their price. The higher price in turn discourages still more potential annuity purchasers, further shrinking the market. But although there is evidence of some adverse selection in the U.S. annuity market, studies have shown that this is not a sufficient explanation of its small size. Among the leading alternative explanations is the existence of Social Security, which itself provides a substantial annuity to most disabled workers and retirees. Thus the seeming failure of markets for insurance against a long life may not actually be a sufficient motive for government involvement in retirement security.

## Foresight and Planning

Some have suggested that even if workers could insure against all uncertainty in planning for retirement, a portion of the population may nonetheless fail to save adequately for retirement. Why might this be the case? Some people may simply be shortsighted, failing to consider fully the long-run implications of their consumption and saving decisions. Also, some "free-riders"

might intentionally neglect to accumulate retirement assets, in the expectation that they can throw themselves at the mercy of a family or government safety net that will guarantee them a minimally acceptable living standard in retirement.

Even a worker who intends to save adequately for retirement may not fully appreciate the necessity of saving enough, early enough, in his or her working life. Or that worker may miscalculate the level of savings necessary to finance a retirement that may span several decades. Saving for retirement is a continuous, lifelong process, but inadequate preparation early in life, perhaps due to lack of experience in saving for large expenditures, may have lifelong implications. Although some empirical research suggests that most people do plan and save adequately for retirement, it is ultimately unclear, given widespread expectations of government support in old age, how much people would save in the absence of existing government programs.

## Redistributive Goals

For some, a third rationale for a public pension system is as a way of redistributing resources from higher income to lower income individuals. There are two reasons why government institutions for retirement security may be especially well suited for achieving redistributive goals. The first is that, because retirement benefits are provided after a person's working years are over, it is possible to redistribute based on lifetime rather than annual income. Because income in a given year is not perfectly correlated with income over a lifetime, redistribution on a lifetime basis should allow for more accurate targeting of the lifetime needy. However, as discussed below, evidence suggests that the current Social Security system accomplishes very little lifetime income redistribution. Another task for which a social security system might be uniquely suited is redistribution between generations. This sort of redistribution might be desirable if each generation is substantially wealthier than its predecessors. Indeed, in a continually growing economy this is normally the case, but it was especially the case for the generation following the Great Depression. The institution of Social Security transferred a large amount of resources from those who were younger during the Depression to those who were older, many of whom had lost much of their wealth, or were unable to accumulate it, during those years.

Unlike most events against which individuals insure, retirement and old age are not unforeseen. Accordingly, individual workers can and should take primary responsibility for their own retirement preparation. For a variety of reasons, however, retirement planning in the real world may not reflect the ideal, simplified world in which each worker can and does optimally provide for his or her own retirement. To the extent that obstacles to an individual's

ability to save adequately for retirement do exist and cannot be removed by private markets, or if certain social goals can only be achieved through government involvement in retirement planning, retirement security can be a national concern as well as a personal one. The appropriate public policy in this area depends on the nature of the impediments to successful retirement planning at the individual level, and the potential benefits from government intervention. Given the wide variety of circumstances facing individuals, however, retirement security must ultimately be the fruit of government policy that supports and enhances individuals' efforts to plan for themselves.

## Sources of Retirement Security

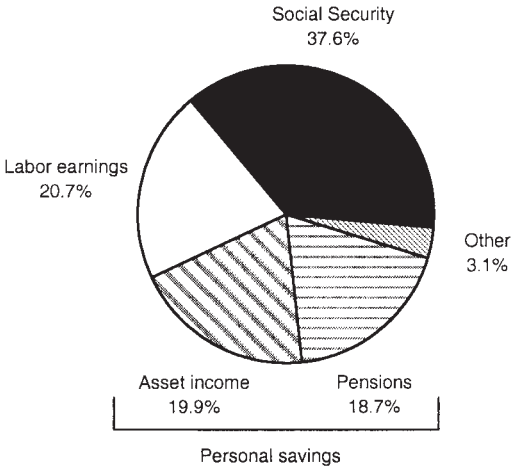
A traditional metaphor for retirement security is that of the "three-legged stool," where the legs—the principal sources of income in old age—are Social Security, employer-sponsored pensions, and individual savings. For elderly households as a group, the largest share of income today comes from Social Security, providing 38 percent of the total (Chart 2-1). Personal savings, which include both individual savings and employer pensions, also remain important, but a fourth income source has taken on increased salience in recent years, namely, earnings from labor. In fact, earnings from work are second only to Social Security in their contribution to the total income of the elderly. Other sources of income, including Supplemental Security Income (SSI) and other forms of public assistance, account for only a small fraction of all income for this group. In the future, the relative importance of each of these income sources will likely change; for example, many of today's younger workers will receive a larger share of income from private pensions upon retirement than did previous generations.

There are other sources of retirement security as well. Many people have the advantage of owning a home that they can occupy. Private, employer-provided health insurance benefits for retirees, as well as Medicare and Medicaid, also help mitigate the need for income flows in retirement.

### Social Security

Social Security plays a central role in the household budgets of older Americans as a group. On average, Social Security benefits account for 58 percent of total income for elderly households (defined in this chapter as households with at least one member aged 65 or over). For the poorest elderly, Social Security is even more important. Those in the lowest income quintile obtain an average of 77 percent of their money income from Social Security benefits; for half of that group, Social Security is the sole source of income.

Chart 2-1 **Income Sources of Aged Households, 1998**
Income from work and personal savings are, together with Social Security, fundamental components of retirement security.



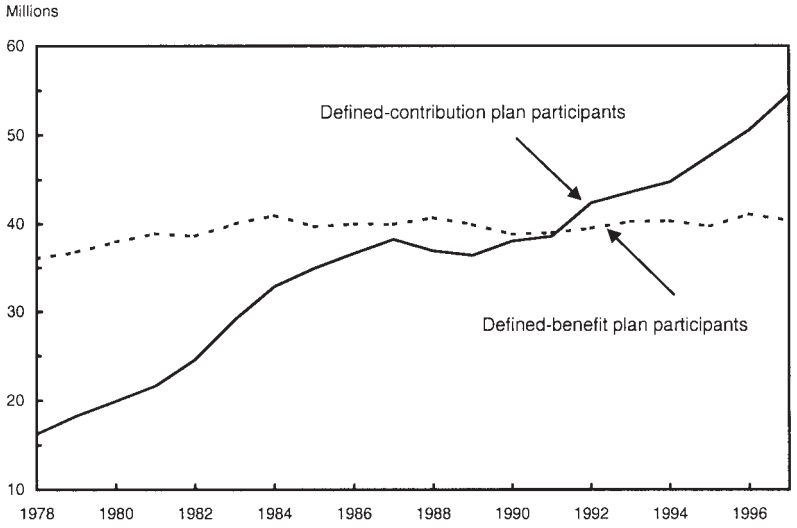

Note: Aged households are households with at least one member aged 65 or over.
Source: Social Security Administration.

The importance of Social Security benefits in the retirement portfolios of most American households does not necessarily mean, however, that most U.S. households would be poorly prepared for retirement without it. It is sometimes suggested that, were it not for Social Security, elderly poverty rates would be much higher than they are today. But this claim is generally based on the premise that benefit payments to current Social Security beneficiaries would suddenly be ended without warning, and that workers who had contributed to the system their entire lives would be given nothing in return. That is not the same as saying that, if Social Security had never existed, the elderly poverty rate today would necessarily be higher than it is. In the absence of a national retirement security program, people would have higher after-tax income and would not expect future retirement benefits. Therefore it is reasonable to suppose that today's retirees would have saved more on their own for retirement than they actually did. Private pension coverage might also have been dramatically different in the absence of a public pension system. Consequently, it is important not to conclude, based solely on the current distribution of retirement income sources, that people would be poorly prepared for retirement under a different set of savings institutions.

## Employer-Sponsored Pensions

Outside of Social Security, saving for retirement occurs in two main ways: individuals may save independently, or they may save through an employer-sponsored pension plan. Savings accumulated in employer plans have increased dramatically over the past few decades, growing from $852 billion (in 1997 dollars) in 1978 to almost $3.6 trillion in 1997. At the same time, there has been a pronounced trend away from defined-benefit plans, in which employees are promised specified benefit levels upon retirement, and toward defined-contribution plans, including 401(k) plans, in which employers and, often, employees make specific periodic contributions toward the employees' pension savings. The number of participants in defined-contribution plans has skyrocketed, from 16.3 million in 1978 to 54.6 million in 1997, while the number of participants in defined-benefit plans increased only slightly, from 36.1 million to 40.4 million (Chart 2-2). The growth in defined-contribution plans primarily reflects the popularity of 401(k)-type plans; participation in these had increased to 33.9 million by 1997, compared with only 7.5 million in 1984. Age-specific trends in plan participation, as well as a trend toward more companies offering plans, indicate that the rapid growth of 401(k)-type plans is likely to continue.

Chart 2-2 **Pension Plan Participants by Type of Plan**
Participation in defined-contribution plans has surpassed participation in defined-benefit plans.




Source: Department of Labor (Pension and Welfare Benefits Administration).

## Individual Savings

Income from assets accumulated outside of private pension accounts is another important component of retirement income, accounting for about a fifth of all income for elderly households. With more than half of elderly households reporting income from nonpension assets in 1998, individual retirement savings are a widespread, but not yet ubiquitous, phenomenon. At the same time, the distinction between pension savings and other personal savings has become increasingly blurred. For example, balances from 401(k) and other pension plans may be rolled over into Individual Retirement Accounts (IRAs), which are regarded as nonpension savings. Also, small firms may establish IRAs on behalf of their workers rather than provide traditional pensions or 401(k)-type plans; such accounts would be counted as individual savings even though the employer contributes the funds.

## Labor Earnings

Older workers are a vital part of the work force today and will become even more important in the future, as growth in the work force slows in response to population trends. Earnings from labor are an important component of income for a significant minority of older households. In 1998, 21 percent of elderly households reported income from labor earnings. Apparently, working is a feasible and perhaps even a desirable option for those elderly who wish to supplement income from Social Security and savings. And for those who determine that they have undersaved, or whose assets decline in value close to or during retirement, working in the traditional retirement years can be an important adjustment mechanism. Finally, today's elderly tend to be in better health than the elderly of 50 years ago, and it is likely that many more than in the past have valuable skills whose use does not require physical exertion. These considerations make the choice of continued work even easier.

## Public Assistance

Compared with the four primary sources—Social Security, savings in pension plans, individual savings, and labor earnings—public assistance programs such as SSI account for an insignificant share of total income for the elderly. Nevertheless, SSI, as the retirement security program of last resort, is an important part of the safety net for a civilized society, guaranteeing a minimum income for those elderly who have little or no income from other sources. Five percent of all aged households receive some form of public assistance, and for a quarter of these it is their sole income source. Medicare and Medicaid, which provide in-kind assistance rather than cash benefits and which may have a substantial insurance value, also are an important form of public support for the elderly.

## Challenges Ahead

At the beginning of the 21st century, America is taking stock of its institutions for retirement security. A monumental demographic shift is taking place, in the United States and around the world, with the result that the elderly, and programs for the elderly, will consume a growing proportion of the Nation's output. The aging of the baby-boom generation, whose oldest members will reach the age of 65 in just 9 years, together with continuing low fertility rates and increasing life expectancies, will mean that relatively fewer workers will be available to support a growing elderly population. Over the next 35 years, the number of workers for every retiree will fall from 3.3 to just 2.1—a 36 percent drop.

One clear imperative arises from this trend: Americans must take even greater responsibility for their own retirement security by increasing their personal saving. Higher personal saving has a twofold benefit. Not only will it improve personal retirement security by expanding personal wealth, but it will also have a salutary effect on the economy as a whole. When individuals save more, they add to national saving (Box 2-1). Higher national saving, in turn, means a larger capital stock and, consequently, an expanded national productive capacity for the future. This larger economic pie improves the ability of the Nation to ensure a minimum level of consumption for those members of the growing elderly population who did not earn enough while working to accumulate a large base of assets.

Public policy has an important role to play in encouraging personal saving as the foundation of retirement security. As outlined earlier, personal saving can take several different forms. Individuals may save for retirement on their own initiative. This form of saving can be encouraged through incentives in the tax system, such as the exemption of capital income from taxation. These incentives reduce the tax burden that might otherwise inhibit personal saving; however, they also have a cost in terms of forgone tax revenue, which can mean that national saving does not increase by the full amount of the increase in personal saving (see Box 2-4 below). Personal saving may also take place through employer-sponsored pension plans, which likewise receive favorable treatment under the tax code. Finally, personal saving may even take place through a public pension system, if the program allows individuals to save in accounts that they personally own. The rest of this chapter examines each of these important retirement security institutions, beginning with the institution that dominates the current retirement saving landscape: Social Security.

**Box 2-1. National Saving, Personal Saving, and Growth**

National saving is the sum of saving by individuals, businesses, and all levels of government, Federal, State, and local. Augmented by saving from abroad, national saving represents the total resources available for investment: the purchase of factories, equipment, houses, and inventories. When a country saves more than is necessary to replace worn-out capital goods with new capital, so that net national saving is positive, extra resources are available to expand the country's capital stock. A larger capital stock corresponds directly to a higher capacity to produce goods and services. Therefore increasing net national saving today can be an important step toward expanding the productive capacity of the economy for tomorrow.

During the 1990s, net national saving averaged about 5 percent of GDP, down from its 1960s average of nearly 11 percent. Although net national saving was fairly stable during the 1990s, its components varied widely across the decade. Net business saving grew slightly as a fraction of GDP, but there were substantial changes in the contributions of government and personal saving. Personal saving dropped sharply, from a peak of 6.5 percent of GDP in 1992 to just 0.7 percent in 2000. Over the same period, government accounts flipped from a deficit of 4.8 percent of GDP to a surplus of 2.5 percent—a total rise in saving of 7.3 percentage points. Thus, increased government saving roughly offset the decrease in personal saving. Traditionally, personal saving has been an important source of net national saving that finances investment. And because the Federal Government may not be expected to run large, persistent surpluses as an aging population strains its finances, it is imperative that the Nation increase personal saving now in order to expand the economy for the future.

# Social Security: Past and Present

## Origins of the Current System

The basic institution for retirement security in the United States today was established in the midst of the Great Depression, through the Social Security Act of 1935. Championed by President Franklin Roosevelt as a means of offering "some measure of protection to the average citizen and to his family...against poverty-ridden old age," Social Security was Roosevelt's proposal for a national system of retirement security. Ultimately, this proposal became a key part of the Nation's response to the upheaval of traditional social and economic structures in the early decades of the 20th century.

The secular decline in agricultural employment, on which many Americans had depended for their living, worsened the ill effects of the Great Depression for many of the elderly. The loss of agricultural jobs over several previous decades had forced a shift of employment to the cities. But nonfarm workers had always fared worse than agricultural workers during economic declines, and the pattern persisted during the 1930s. Unemployment in the work force as a whole reached a high of 25 percent in 1932, but unemployment among nonfarm workers peaked at nearly 38 percent. The elderly were hit particularly hard. In 1930, 54 percent of men aged 65 and over were unemployed and looking for work, and another quarter were temporarily laid off without pay.

Aggravating the situation, the stock market crash and subsequent failure of many financial institutions wiped out the limited resources that some older workers had managed to accumulate. Without assets, employment, or traditional support systems, many of the elderly of the 1930s were in dire need of assistance. President Roosevelt sought to provide aid for the aged through his plan for social insurance. Social Security, as envisioned by Roosevelt, addressed the problem through a system in which workers contributed a portion of their earnings while working and, in turn, earned the right to collect benefits upon retirement.

Importantly, Social Security was not implemented as a program for national saving. Although the authors of the Social Security Act of 1935 intended to create a funded system, one that sets aside revenue to meet scheduled future benefits, amendments to the act in 1939 made important changes to provide more immediate relief from the widespread poverty then afflicting the elderly. As a result, Social Security is not today a fully funded system. Rather it is primarily a system for the transfer of income from one generation to the previous one: each generation pays taxes during its working years to support the current generation of retirees. Such a system is called an unfunded, or pay-as-you-go, system.

Although the Social Security system as amended in 1939 addressed the needs of the elderly during the Great Depression, today the United States faces a different challenge. The role of our retirement security institutions in enhancing the ability of relatively fewer workers to support relatively more retirees will be a critical issue as the 21st century progresses. To that end we must consider the effect of Social Security on national saving, the essential ingredient for expanding the economy's productive capacity so that it can support a vastly larger number of retirees.

## Social Security and National Saving

To consider how the presence of Social Security affects national saving, one must examine the effects of the current program on two individual components of national saving: government saving and personal saving.

### *Government Saving*

To the extent that Social Security operates as a pure income transfer program, in which taxes collected from current workers are precisely equal to the benefits paid to current retirees, the system itself has no effect on government saving. Thus the effect of Social Security on government saving hinges on how any deviation from annual budget balance in the Social Security program affects overall government budgetary policy.

When Social Security runs a surplus, so that income from payroll taxes and taxes on benefits in a given year exceeds total benefit payments in that year, as is currently the case, the government essentially has two options for the use of those excess funds. The surpluses may be spent, or they may be saved. If the surpluses are used to finance current expenditure beyond the level that would have prevailed in their absence, they do not contribute to government saving. If instead those funds are used to pay down publicly held debt (which represents the accumulation of past government dissaving), government saving increases dollar for dollar with the reduction in the debt. However, the government's ability to save by paying down its publicly held debt is limited by the amount of such debt. If all publicly held debt were to be retired, the only way that the government could continue to save through existing systems would be through investments in non-Federal securities, such as corporate or municipal bonds, or equities. This, however, would raise difficult issues about government interference in equity markets and corporate governance.

Ultimately, the contribution of Social Security to government saving depends on whether non-Social Security surpluses or deficits are affected by the annual balances in the Social Security program. If the presence of Social Security surpluses leads policymakers to increase spending or reduce taxes in the non-Social Security budget, the potential contribution of surpluses to government saving is reduced.

Many discussions of the effect of Social Security surpluses on national saving are confused by misunderstandings about the relationship between the Social Security trust fund and national saving. (Technically, there are separate trust funds for the two major Social Security programs, that for old-age and survivors insurance and that for disability insurance, but for purposes of this discussion we will combine them.) The trust fund is essentially an accounting device for keeping track of annual surpluses in the Social Security portion of the Federal budget. The balance of the trust fund represents the accumulated

value of excess revenue, net of expenses, to the Social Security system in all years that the system has run a surplus, net of accumulated deficits, as well as the interest earned on those surpluses. All Social Security surpluses are credited to the trust fund, regardless of whether they are used to finance non-Social Security spending or reduce debt, and regardless of how the existence of those surpluses affects other government spending. Consequently, the balance in the trust fund is not a measure of the Social Security program's accumulated net contribution to government saving. Rather, it merely represents the upper bound on the saving that could have happened if all Social Security surpluses had been devoted to government saving. Although Social Security has run large surpluses since 1984, these surpluses have in most years been offset by large non-Social Security deficits, suggesting that actual saving through Social Security has been far smaller than the value of the balance of the trust fund.

### *Personal Saving*

To gauge the effect of the current Social Security system on national saving, one must consider the system's effect not only on government saving but also on personal saving. It is difficult to say definitively what personal saving would be, or would have been in the past, in the absence of Social Security, but reasoning and empirical evidence can be useful guides. As discussed previously, careful consideration suggests that Social Security may act as a substitute for retirement saving. Instead of saving, a worker pays taxes on his or her wages and, upon retirement, instead of using past savings to finance consumption, the worker receives a check from the government. In this way Social Security can negatively affect personal—and, consequently, national—saving.

For a number of reasons, however, a rational worker might decide to reduce personal saving less than dollar for dollar with increases in expected Social Security wealth. A worker may underestimate the expected value of Social Security benefits or simply not believe that the scheduled benefits will be forthcoming upon retirement. This is particularly possible in the current climate, when revenue has been projected to fall short of projected benefits. Another possibility is that Social Security affects saving behavior through an effect on retirement behavior (Box 2-2). If Social Security makes retirement an attainable goal and thus prompts workers to plan for an earlier retirement, they may actually save more than they would have in the absence of the program.

Clearly, economic reasoning alone does not lead to an unambiguous conclusion regarding the effect of Social Security on personal saving behavior. Therefore we must rely on empirical analysis to learn about the actual effect of the program on personal saving and, ultimately, on national

**Box 2-2. Does Social Security Alter Retirement Behavior?**

Careful economic analysis indicates that the current Social Security system does indeed have the potential to alter workers' retirement behavior. Incentives that affect retirement could come through a number of different channels. For some, Social Security provides more retirement wealth than they would have chosen to provide for themselves through their own saving; the resulting benefit windfall in old age could induce their earlier retirement. Also, Social Security adjusts benefits for those who retire and begin receiving benefits before or after Social Security's normal retirement age, currently 65 years and 6 months; if these adjustments deviate from what is actuarially fair, they may create incentives favoring retirement at a particular age. If those who work past 65 do not get an actuarially fair increase in benefits, for example, people might be inclined to retire earlier than otherwise. People with above- and below-average life expectancies will also have varying retirement incentives related to the benefit formula. Social Security may also have affected retirement behavior simply by establishing the social convention that 65 is the "normal" retirement age.

Since rational analysis does not lead to a definite conclusion about how Social Security affects retirement behavior, we must examine empirical retirement patterns in order to understand the ultimate effect of this complex system of incentives. Early retirement has become more common in the United States, as well as in other countries, in recent decades. And a considerable amount of evidence indicates that the relaxation of early retirement rules and the increased availability of benefits at earlier ages in the 1950s and 1960s resulted in these pronounced trends toward earlier retirement. Cross-sectional evidence using only U.S. data has been less clear in establishing a link between Social Security expansions and declines in the average retirement age. Some research suggests that changes in pension wealth have had a much stronger effect on retirement trends than have Social Security changes; this research finds that any Social Security effect accounts for only about 1 percentage point of the 20-percentage-point decrease in the labor force participation rate for males aged 55 to 64 between 1950 and 1989.

saving. Even then the results are less than clear, but in a recent Congressional Budget Office survey, 24 of 28 cross-sectional studies found a negative impact of increases in Social Security wealth on private saving. If Social Security does negatively impact private saving, as much evidence suggests, it may be inhibiting national saving and, consequently, economic growth.

## The Future of Social Security

In assessing the role of Social Security as a retirement security institution for the 21st century, two related, yet conceptually distinct, issues must be addressed. The first is the fundamental question about the degree to which government transfers should supplement personal saving for retirement. In the extreme, the essential choice is between a savings-based program in which individuals accumulate assets, and a program that simply transfers income from younger to older generations.

The second issue is that the current Social Security system, which resembles more the latter system than the former, is on a fiscally unsustainable course as a result of the demographic changes discussed earlier: the aging of the population and the consequent projected decline in the ratio of workers to retirees. These changes make it impossible to afford the currently projected rate of benefit growth without large tax increases or other fundamental changes to the system. The following sections deal with each of these issues in turn.

### Advantages of Personal Accounts

One of the President's principles for strengthening Social Security is that modernization must include individually controlled, voluntary personal retirement accounts to augment the Social Security safety net. Under such a system, a worker could direct a portion of his or her payroll taxes, or possibly an additional voluntary contribution, into a personal account that he or she would legally own. The worker would then choose, from a variety of options, how the assets in the account are to be invested. Upon retirement, the worker would have access to the accumulated assets, which could be used to purchase an annuity, provide a bequest to heirs, or make withdrawals from as needed. Workers who choose to direct a portion of their existing payroll taxes into private accounts could expect a higher combined level of benefits, because an annuity funded by the personal accounts would have a higher expected value than the benefits from the traditional system that are being partially replaced by the account contributions. Personal accounts would thus represent a voluntary means by which a worker could supplement benefits from the pay-as-you-go portion of Social Security. As such, they could

provide the foundation for a return to individual-based retirement security that takes advantage of the safety net aspects of Social Security and the strengths of individual choice and wealth accumulation.

Although the introduction of personal accounts within Social Security would represent the most significant change in the program since its inception, the idea itself is not new. In President Roosevelt's message to Congress on Social Security on January 17, 1935, he stated that one of his three principles for the program was "voluntary contributory annuities by which individual initiative can increase the annual amounts received in old age." In this light, a system of personal accounts would appear to be the next step in the natural evolution of the program. In addition, many other nations, from the United Kingdom to Australia to former socialist countries like Kazakhstan, have included personal accounts as an important part of their national retirement program.

A Social Security system that includes an element of personal accounts would offer many advantages over the current regime. These include personal ownership of accounts, bequeathability of account assets, better diversification of risk, reduced distortion of work incentives, and the potential for higher national saving. We discuss each in turn.

### *Ownership*

From the perspective of an individual worker, perhaps the most striking difference between personal accounts and the current system is ownership. Under Social Security, a worker's retirement security depends not on the assets that worker possesses, but on the hope that future Congresses will raise taxes on the next generation of workers by a sufficient amount to pay scheduled benefits. In fact, the Supreme Court ruled in *Flemming* v. *Nestor* (1960) that workers and beneficiaries have no legal ownership claim to their benefits, even after a lifetime of contributing to the system. A personal account, on the other hand, would be the legal property of the worker who contributed to it and whose name it bears. Regardless of the financial situation of the government, a worker would be legally entitled to the assets in his or her account upon retirement.

The security that comes from this ownership, however, is not the only benefit that ownership offers. Asset ownership and wealth accumulation could be a positive new experience for many Americans. In 1998 the median U.S. household owned only $17,400 worth of financial assets, including sums in retirement accounts. Four out of every nine households saved nothing at all during the year. For many families, contributions to individual Social Security accounts may represent their only chance to build privately held financial assets and wealth. The experience of selecting investments and observing the miracle of compound interest at work might help many workers overcome existing social and informational barriers to asset

ownership. Research has shown, in fact, that the experience of managing a pension account may actually encourage workers to save more outside of their pension than they otherwise would. Accordingly, personal accounts could have an important effect on the personal saving rate.

Studies have suggested a broad range of other benefits from asset ownership as well. Owning assets makes people more oriented toward the future, more likely to take calculated risks, and more likely to participate in the political process. Financial assets have also been found to be associated with positive physical and mental health effects, particularly for those between the ages of 65 and 84. Married couples with property and financial assets are less likely to divorce than couples without assets. Finally, a survey of participants in an experimental program designed to help the poor save and accumulate assets has yielded important information on the benefits of asset ownership. Program participants report feeling more economically secure, are more likely to make education plans for themselves and their children, and are more likely to plan for retirement because of their asset accounts. They also reported that they are more likely to increase their work hours or increase their income in other ways. They are more confident about the future and feel more in control of their lives because they are saving.

### *Bequeathability and Redistribution*

Recent research has shown that Social Security is only mildly progressive and may even be regressive on a lifetime basis, despite an explicitly progressive benefit formula (Box 2-3). One reason for this seeming paradox is that people with higher incomes tend to live longer than those with lower incomes. Because Social Security retirement benefits cease at the death of the insured individual (or the individual's surviving spouse), those with shorter lifespans will earn lower returns on their contributions, all else equal. Additionally, research has indicated that current Social Security arrangements may substantially increase the inequality of the wealth distribution by depressing bequests by low- and moderate-income households who might have accumulated bequeathable assets in the absence of the program. Depending on the degree of annuitization of assets that is required, and on other program design elements, a system that includes personal accounts has the potential to reduce some of the regressive tendencies of the current system. Accountholders who die earlier than the average might be able to pass on to their heirs a portion of the wealth in their personal accounts; this would partly correct for the disadvantage many higher mortality, lower income groups face under Social Security today. The introduction of personal accounts might also provide an opportunity for the creation of a more progressive benefit structure for the pay-as-you-go portion of Social Security.

**Box 2-3. The Effect of Social Security on Income Distribution**

One of the traditional justifications for a government role in retirement security institutions is the potential to use these institutions as tools for redistribution, especially redistribution based on lifetime income. It is often argued that Social Security is redistributive along a number of different dimensions. However, in large part because of heterogeneity among individuals in marital status and life expectancy, much less redistribution on a lifetime basis occurs under the current system than is widely believed.

*Progressivity.* The design of the Social Security benefit formula is explicitly progressive at the individual level. When redistribution is considered at the family level, however, the system looks less progressive than the benefit formula seems to imply. There are two reasons for the potential disparity. First, many low-income individuals are members of high-income households; if such a low-income person receives a high return on Social Security, the system will appear redistributive on an individual, but not on a household, basis. Second, the ability to collect benefits on the basis of a spouse's earnings also fosters redistribution to low- or zero-income individuals with high-income spouses. Research has shown that the system hardly redistributes to poor families at all.

*Redistribution by marital status.* Rates of return are considerably higher for single-earner couples than for dual earners. For medium earners (as defined by the Social Security actuaries) retiring in 2000, for example, the 4.75 percent rate of return for a one-earner couple was very nearly twice that for a two-earner couple. There is also substantial redistribution from single individuals to married couples. A man retiring in 2000 with medium earnings and with a wife who never worked would receive a rate of return on Social Security that exceeded twice the return obtained by an identical man who had never married.

*Redistribution by race.* Largely because of differences in mortality rates, African Americans receive on average nearly $21,000 less, on a lifetime basis, from Social Security's retirement program than whites with similar income and marital status, according to recent research. Other research finds that rates of return for African Americans from Social Security are approximately half a percentage point lower than for whites of the same marital status. Survivor benefits that pay benefits to the spouse or the children of deceased workers partly, but not completely, compensate for the negative effect of mortality on returns. The provision of disability insurance through Social Security also improves returns for African Americans, who are more likely than other groups to collect disability benefits.

### *Diversification of Risk*

Another important advantage of adding personal accounts to a pay-as-you-go system is the potential to diversify the risks inherent in such systems. Under the present Social Security system, the ultimate rate of return earned by a participant is subject to political risk. Without structural reform of Social Security, workers and retirees will face significant uncertainty about how future policymakers will alter system revenues and outlays to avoid system insolvency. These actions would directly impact the rate of return earned by participants in the system.

Although funds invested in equities through a personal account can be expected to earn a higher rate of return than funds in a pay-as-you-go system, investment in equities does expose participants to some degree of financial market volatility. However, as long as the market risk associated with equity investment is not perfectly correlated with the demographic and political risks of a pay-as-you-go system, a mixed system of personal accounts and pay-as-you-go benefits offers an opportunity for better diversification than either a pure pay-as-you-go or a pure investment-based system. This diversification could be especially important to low-income workers whose sole source of retirement income is Social Security, and who are consequently less well diversified than wealthier individuals who are able to hold private financial assets in addition to expecting scheduled Social Security benefits.

### *Labor Supply*

A reform of Social Security that includes personal accounts would reduce the economic inefficiency arising from elements of the current Social Security system that distort labor supply. For many workers, including younger workers and secondary earners in a household, the present structure of the benefit formula means that the marginal dollar of Social Security payroll taxes that they pay does nothing to raise their benefits at retirement. When this is the case, that worker's effective marginal tax rate is increased by the full amount of the payroll tax (provided the worker is earning less than the Social Security cap on taxable earnings, which is $84,900 in 2002). Since a higher marginal tax rate corresponds to a lower return to work, the Social Security payroll tax may discourage work by many low- and middle-income workers. In a system that includes personal accounts, however, the link between current contributions and future income is stronger, and there is more incentive to work than under the current system.

The current Social Security system may also distort labor supply behavior through its effect on retirement age. Growth of assets in personal accounts, however, is governed by the rate of return on those assets rather than by the potentially distortionary rules of a defined-benefit program. Thus workers

with income from personal accounts may be less influenced in their choice of retirement age than if their income from Social Security depended entirely on the particular structure of the Social Security benefit formula.

### *Higher National Saving*

Establishing personal accounts has the potential to raise national saving, thus expanding the capital stock and increasing productive capacity, so that a relatively smaller labor force can support a relatively larger population of beneficiaries. If Social Security payroll taxes were saved in personal accounts rather than used to finance an increase in non-Social Security government spending, national saving would likely be higher. Although it is theoretically possible, within the current system, for the government to save those excess payroll tax revenues, the experience of the last 20 years has shown that, even for laudable reasons, it is difficult to do so. The only truly effective way to preserve a Social Security surplus is to put it safely beyond the grasp of those who would spend it for other purposes, by depositing it into personal accounts. Doing so would also make the rest of the budget more transparent, because any non-Social Security spending in excess of non-Social Security revenue would clearly have to be financed by issuing public debt or increasing non-Social Security revenue.

The degree to which saving in personal accounts would increase national saving would depend in part on whether households changed their other personal saving in response to the accounts. Although ownership of a personal account might dampen other personal saving to some extent, it is unlikely that the effect would be large enough to completely offset the expected increase in national saving. As long as other personal saving were not reduced (and personal borrowing were not increased) one for one with contributions to personal accounts, the net effect of the accounts would likely be to increase national saving (provided that any forgone income tax revenue is less than the increase in personal saving). Since many low-income workers today have very little saving to reduce, overall personal saving should certainly not fall one for one with increases in personal account saving.

### *International Experience with Personal Accounts*

The United States would by no means be the first country to incorporate an element of personal accounts into its social security system. The finances of pay-as-you-go pension systems around the world have come under pressure, due to unachievable benefit commitments and an over-60 population that will rise from 9 to 16 percent of the global population over the next three decades. Finding their pay-as-you-go systems overextended, a growing number of countries have instituted major structural reforms, including

downsizing traditional defined-benefit public pension systems and relying increasingly on a personal account-based system that is fully funded and based on defined contributions. In 1981 Chile became the first country to implement a mandatory, funded system based on personal accounts. Switzerland, the Netherlands, and the United Kingdom also instituted major structural reforms in this direction during the 1980s. After a flurry of reform activity in the 1990s, at least 22 countries have now added funded systems or partially privatized part of the old system. Three more European countries have also advanced proposals. The reformers are a geographically and economically diverse set of nations, including 6 high-income industrial countries, 10 Latin American countries, and 5 former socialist countries. China's autonomous province of Hong Kong has also pursued reform along these lines.

International experience shows that pension reform seems to be one of the most politically difficult reforms to undertake, but also that when a pension reform is actually implemented and people are given a choice, they overwhelmingly choose personal accounts. The case of Uruguay illustrates the popularity of personal accounts in countries that have undertaken reforms, despite the political rhetoric that preceded those changes. In that country, there are 600,000 contributors in the national social security system. Before reform, a number of surveys showed that only 80,000 people would opt for personal accounts. When the system was implemented and people were given a choice, however, more than 400,000 chose personal accounts.

In evaluating America's reform options in light of the experiences of other countries, one should keep in mind the important advantages that this Nation possesses. Indeed, few of the many countries that have converted to personal account-based public pension systems were in as favorable a position to do so as the United States. First and foremost, the United States has the best-developed financial markets in the world, with a wide variety of investment vehicles and about 40 percent of world equity market capitalization. This long and broad experience with financial markets at the institutional level offers a solid foundation for a system of personal accounts. Another institutional advantage is the advanced degree of development of our private pension system. In 2000, 51 percent of all wage and salary workers had some type of private pension coverage at their current job, and almost 80 percent of those eligible participated in defined-contribution plans. This experience with defined-contribution plans means that a sizable portion of the population is already well grounded in the principles necessary for understanding and managing personal accounts. Additionally, the prevalence of these private plans means that much of the basic financial infrastructure needed for personal accounts is already in place.

## The Financial Sustainability of Social Security

A system of personal accounts based on individual wealth accumulation has many advantages over alternative methods of financing retirement. Whether or not personal accounts become part of the solution, however, Social Security reform is a necessity. The Social Security system faces a severe, long-term financing shortfall. Put simply, the system does not have a dedicated income stream sufficient to pay the benefits scheduled under current law. According to intermediate projections of the Social Security Administration, by 2016 the system will begin running persistent cash flow deficits; by 2050 the current benefit structure would cost nearly 18 percent of the Nation's payroll, whereas program revenue would be just over 13 percent.

### *Adverse Demographic Trends*

The need for reform arises because the structure of the current system is on a collision course with the changing demographics of our country. In a funded pension system, the resources available to pay retirement benefits depend on the assets put into the system for that purpose and the rate of return those assets earn, not on demographics. Because Social Security is unfunded, however, demographic trends can play an important role in system finances and in determining the rate of return that workers earn on their Social Security contributions. The ability of an unfunded Social Security system to pay benefits to retirees in a given year depends on the size of the taxable wage base in that year. Consequently, demographic trends that decrease the number of workers available to support each beneficiary, referred to as the worker-to-beneficiary ratio, reduce the ability of an unfunded system to pay retirees without raising taxes or reducing benefits. In the United States, lagging birthrates and increasing life expectancies, together with the aging of the baby-boom generation, will put tremendous pressure on the Social Security system.

The baby-boom generation, defined as those Americans born between 1946 and 1964, was a major demographic boon for the United States. In particular, the birth of many new workers-to-be during those years was a major blessing for a pay-as-you-go Social Security system that operates best with a large number of workers for each benefit recipient. The total U.S. fertility rate (roughly speaking, the number of children the average woman would have in her lifetime, based on current births) climbed steadily through the 1940s and 1950s, from 2.2 children per woman in 1940 to a peak of 3.7 in 1957. Unfortunately for Social Security, which depends on the younger generations to finance the retirement of workers in the older generation, fertility rates subsequently fell to pre-baby boom rates. By the mid-1970s, the total fertility rate had fallen by half from its peak, to just 1.8. It presently stands at around 2 children per woman and is not projected to change substantially in the foreseeable future.

These lower birthrates are especially problematic given the aging of the baby-boom generation. Beginning in 2008, the first of the baby boomers will be eligible for early retirement under Social Security rules. By 2026 the youngest boomers will have reached age 62, and most of that generation will have retired and begun to collect Social Security benefits, putting a substantial burden on the system.

Another significant factor in the aging of the population is the fact that, as noted previously, Americans are living longer than ever before. Of the cohort born in 1875—the first to receive Social Security benefits—only 40 percent survived to age 65, and those who did lived an average of 12.7 additional years. In contrast, 69 percent of males born in 1935 lived to age 65, and those who did could expect to survive an additional 16.2 years on average. And among males born in 1985, 84 percent are expected to survive to age 65, and those who do will be able to look forward to an average of 19.1 years of life in old age.

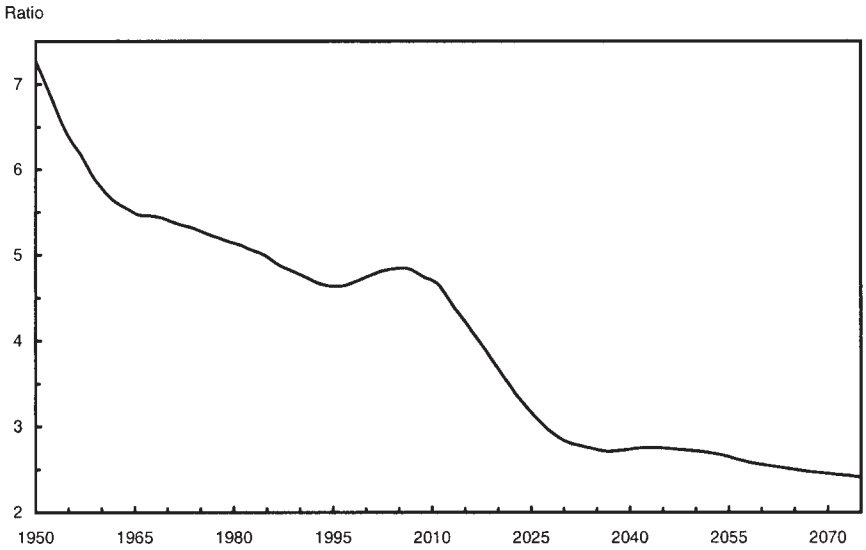
This trend toward increasing longevity, combined with the low birthrate, implies an aging of the overall population. The share of the population over age 65 will increase from 12.4 percent today to 20.9 percent by the 2050s. Moreover, the "oldest old," those aged 85 and older, will more than double their share of the population, from 1.5 percent today to 3.7 percent in 2050.

The combined effect of these fertility and longevity patterns is to reduce the number of people of working age relative to the number collecting Social Security benefits. Chart 2-3 displays the declining ratio of 20- to 64-year-olds to individuals aged 65 and over. The change in this ratio over time reflects fertility and longevity trends and, together with changes in labor supply and Social Security rules, accounts for the change in the worker-to-beneficiary ratio discussed previously. Today there are approximately 4.8 people of working age for each person 65 or over; by 2030 that ratio will have dropped to 2.8, and by 2075 it will be 2.4. The bottom line is that there will be relatively fewer people of working age to support a growing elderly population. Because Social Security is primarily unfunded in its current form, the declining ratio of young to old foretells serious solvency problems for Social Security.

### *Insolvency on the Horizon*

Beginning in 2016, as noted previously, payments to Social Security beneficiaries are projected to exceed revenue to Social Security from payroll taxes and taxes on benefits. The result will be annual cash flow deficits for the system, which are projected to continue indefinitely. Although the trust fund will have a positive balance at that time, allowing Social Security to continue paying full benefits, the Federal Government will be forced to find a way to finance those benefit payments that exceed the revenue generated by payroll and benefit taxation. In that first year of cash deficits, the projected shortfall amounts to $17.4 billion in 2001 dollars. Just 4 years later, however, the

Chart 2-3 **Ratio of Working-Age to Retirement-Age Persons**
The declining number of younger, relative to older, Americans is a growing problem for a pay-as-you-go Social Security system.




Note: Working-age persons are aged 20-64, and retirement-age persons are aged 65 and over.
Source: Social Security Administration.

annual deficit will have jumped to $99.3 billion. By 2030 Social Security will face a $270.8 billion annual cash shortfall, representing over 4 percent of taxable payroll, and deficits will continue to worsen for the foreseeable future. Until the trust fund becomes insolvent in 2038, Social Security will finance these cash deficits by redeeming bonds from the trust fund, but this will put a large strain on the rest of the Federal Government's budget. Financing these cash shortfalls, therefore, requires that the government increase revenue to the system or slow the growth rate of outlays.

Meanwhile, because of the aging of the population, the non-Social Security portion of the Federal budget will face increasing pressure from other sources as well, further complicating the overall fiscal situation. Medicare will demand an increasing share of the Nation's resources, reducing the government's flexibility in addressing Social Security financing issues within the budget. An amount equivalent to 2.3 percent of GDP goes to Medicare today, and the program's claim on GDP is projected to rise to 8.5 percent by 2075. Absent structural reforms, Medicare and Social Security together will consume more than 15 percent of GDP by that year. By comparison, all personal income taxes paid to the Federal Government today amount to only about 9 percent of GDP.

### *Restoring Fiscal Balance*

To solve the serious long-term financing shortfall facing Social Security, some combination of the following two measures is required:

- Future Social Security resources must be increased beyond currently legislated levels, or
- Future Social Security spending growth must be reduced from currently legislated levels.

Every policy proposal to solve the Social Security financing problem, including those that utilize personal accounts, must follow one or both of these two approaches. Thus restoration of fiscal balance to the system will require some combination of a resource increase to support the benefit structure and a reduction in the rate of traditional benefit growth to a level that can be paid by currently legislated tax rates.

Regardless of the path selected, personal accounts would provide participants with the opportunity to increase their expected benefits by investing in a diversified portfolio of assets. Historically, private sector investments have consistently delivered higher returns than government securities over long time horizons. If the future is like the past, personal accounts could provide individuals with higher benefits than in the absence of personal accounts. As such, personal accounts provide an opportunity to increase the expected benefits of participants relative to any comparably funded system that lacks personal accounts, and are therefore an important component of plans to restore fiscal soundness to the Social Security system.

Increases in the system's resources could take a number of forms. One possibility is an increase in the payroll tax, either by an increase in tax rates or by an expansion of the taxable earnings base. For perspective, if taxes were increased each year just enough to cover the contemporaneous benefit shortfall, combined employer and employee Social Security payroll tax rates would need to rise from their current level of 12.4 percent to 14.1 percent by 2020, 16.6 percent by 2030, and 17 percent by 2040. Increasing payroll taxes on this basis would be detrimental to economic growth and ultimately unsustainable, and the President, in enunciating his principles of Social Security reform, has ruled out such an approach. Alternatively, current law benefits could be paid by raising general revenue to support the system, but this would require a comparable income tax increase or a comparable reduction in non-Social Security spending. Yet another possibility is for the government to borrow the necessary funds. Any borrowing, however, would have to be repaid by some future generation through higher taxes or decreased spending. Debt financing alone cannot be a permanent solution in any case, because in the absence of structural reform, the debt could never be repaid, as Social Security's cash shortfalls are projected to continue indefinitely.

An alternative to increasing revenue to pay for currently legislated benefit payments is to place the benefit formula on a more sustainable course. The President has made it clear that benefits for current retirees, and for persons nearing retirement, should not be changed. However, under the existing benefit formula, benefits for future retirees are scheduled to rise substantially above current levels in real terms. One way to achieve fiscal sustainability is to restrain the rate of future benefit growth.

Many specific policy changes could be used to slow the rate of benefit growth. For example, future growth in initial benefits could be indexed by price growth rather than by wage growth in the economy, as now. According to intermediate projections of the Social Security trustees, wage growth is expected to exceed price growth by approximately 1 percentage point a year. Indexing benefits to price inflation would keep benefits fixed at their current real level, significantly reducing future system costs. In fact, according to the Social Security actuaries, price indexing alone would suffice to close the entire 75-year actuarial deficit. This approach would entail no real benefit reductions or tax increases relative to current tax and benefit levels. Another possible change to reduce benefit growth would be to adjust benefit levels in accordance with increases in life expectancy.

### *Personal Accounts and Fiscal Sustainability*

In assessing any reform proposal, it is important to remember that the need for action to restore fiscal sustainability is independent of whether personal accounts are implemented. It would be possible to restore fiscal sustainability without personal accounts, simply by raising taxes or reducing benefit growth, and it would be possible to introduce personal accounts in a way that does not contribute to fiscal sustainability. A well-designed reform package, however, would provide workers with the opportunity to benefit from personal accounts and would, simultaneously, help restore fiscal soundness to the Social Security system.

Many specific design elements in Social Security reform will determine how personal accounts and fiscal sustainability will interact. It is possible to design personal accounts that are wholly separate from the traditional Social Security system; for example, they could be funded entirely by new contributions or from general revenue. In that case the accounts would neither improve nor worsen the underlying fiscal status of the traditional system. On the other hand, many proposals would integrate the two systems by allowing for a redirection of current payroll tax revenue to fund the personal accounts. In this type of proposal, it is appropriate to construct a "benefit offset," that is, an amount by which a person can choose to have his or her traditional benefit reduced in order to have the opportunity to invest in the personal account. Depending on how this offset is constructed, the decision to choose

a personal account can have implications for system finances. If, on the one hand, the individual is required to forgo a portion of benefits that is actuarially equivalent to the portion that would have been paid with those redirected payroll taxes, the long-run effect of this choice on system finances will be neutral. On the other hand, if the benefit offset deviates from actuarial equivalence, it can have a long-run effect on system finances.

This discussion has focused on the long-run fiscal effects of specific alternative reforms. During a temporary transition period, movement to a system of personal accounts would require additional funds in order to make scheduled payments to current and near-retirees while simultaneously funding the new personal accounts. This is sometimes referred to as a transition cost, but it is more appropriate to think of it as a national economic investment. These funds would not be spent on consumption, but rather saved to finance future retirement benefits through the personal accounts. This prefunding of benefits is the mechanism by which national saving will be increased. Indeed, ultimately, it is only by such a reduction in consumption that saving can be increased.

### *Baselines for Comparison*

As the Nation debates plans to reform Social Security and considers personal accounts as a component of that reform, it is important to keep in mind the appropriateness of the standards by which any proposed reform is assessed. It has become clear that the Social Security system is unsustainable in its present form. As noted above, options for resolving the system's long-range financing issues include increasing system revenue and reducing the rate of growth of system outlays. Because the full benefits scheduled under current law cannot be paid without taking one or the other of these steps, or some combination, it is not appropriate to compare a reformed system with the present, unsustainable system without specifying how "current law" will be brought into fiscal balance. In other words, one set of options for achieving sustainability should be compared with other sets of options for doing so; comparing any set of options for achieving sustainability with the current unsustainable program is neither meaningful economically nor informative to the public.

There are many alternative baselines that one could use in this comparison. One approach is to measure reform proposals against the benefit levels that could feasibly be paid given current Social Security payroll tax rates. In 2040, for example, without tax increases, benefits would have to be 27 percent lower than under current law. Alternatively, if one wishes to use currently scheduled benefits as a basis for comparison, it is necessary to specify the source of the funding required to finance those benefits.

The effectiveness of a particular proposal for reform cannot be judged solely on the basis of tax rates and benefit levels under that proposal, however. The change in the total projected future burden on taxpayers resulting from the reform must also be considered. This total projected burden is the sum of explicit national debt and the present value of the benefits scheduled to be paid under today's primarily pay-as-you-go system. Although the present value of currently scheduled benefit payments to future Social Security recipients can be changed through reform of the system, the value of this implicit burden can be thought of as a form of implicit "debt" on the part of the government. If the current schedule of future benefit payments were binding and were feasible, which it is not, the government would find itself in the situation of paying people alive today about $10 trillion more in future benefits than it would have collected from them in the form of future payroll taxes. A complete accounting of a Social Security reform's effect on national saving and the country's fiscal situation should recognize the change in this potential burden on the Federal Government.

It is important to understand how any proposed reform would change the combined level of the explicit debt and the implicit burden imposed by scheduled benefits. For example, a change to the current system could make the country as a whole better off by decreasing the total national obligation even while increasing explicit, publicly held debt. This scenario could arise if a transition to a new system with a lower total projected burden were financed by converting a portion of future benefit payments into explicit debt. Under current accounting rules, which document only explicit debt, the Nation would appear to be worse off after such a transition. In reality, however, the overall fiscal health of the Nation might actually have improved. Because of this discrepancy, it is essential that reform proposals clearly specify not only what benefits and taxes would be after reform, but also how the total future burden of the program on future generations would change.

## Other Sources of Retirement Security

As the earlier discussion of current sources of retirement income emphasized, Social Security is not the sole source of support for the elderly. Nor is it meant to be. The current average Social Security benefit, for instance, is equal to only about 36 percent of the average worker's wage. Already today, workers need to supplement their Social Security benefits with income from other sources in order to maintain a lifestyle in retirement similar to what they enjoyed while working. With rising out-of-pocket medical expenditures, an increasing number of years spent in retirement, and an unsustainable Social Security system, the need to diversify retirement wealth is imperative

as we move into the future. Personal saving, undertaken both independently and through employer-sponsored pension plans, is an increasingly important element of retirement security.

The role of public policy in ensuring retirement security by no means ends with Social Security. The government can continue to adopt tax policies that reward and encourage the efforts of workers to plan for their own future. Creating a friendly environment for retirement saving requires an awareness of the ways in which the tax structure might encourage or discourage people's efforts to save. The income tax, one of the most basic components of the tax system, may discourage saving by reducing after-tax returns. This is particularly true for capital income, which is often taxed twice: once at the level of the corporation, and once at the individual level. Recognizing this fact, certain mechanisms that reduce the burden of the income tax have been built into the tax system in order to encourage saving for a variety of purposes, but especially for retirement. IRAs and 401(k) plans are the most prominent examples of such tax-preferred vehicles, but there are many less well known arrangements as well.

## Employer-Sponsored Pension Plans

One important means by which the government encourages saving for retirement is through provisions in the tax code that grant special tax status to profit-sharing and employer-sponsored pension plans. Generally, contributions made by an employer to a defined-benefit or a defined-contribution plan, including a 401(k) plan, on behalf of an employee are not included in the employee's taxable income. This tax advantage gives employers an incentive to sponsor pension plans for their employees, thus increasing retirement saving. These plans also have the advantage that earnings on invested contributions are not taxed until they are withdrawn, offering participants the possibility of being subject to a lower tax rate in retirement. Moreover, even if the owner's tax rate has not declined, there is an advantage from the deferral of taxes on returns accumulated within the account, effectively lowering the tax rate on such saving.

Employer-sponsored pensions will continue to increase in importance as a source of retirement income, as evidenced by the fact that a substantially larger share of current workers than of current retirees have pension coverage. As noted earlier, the 401(k) plan in particular has become increasingly popular in recent years. In contrast to most other defined-benefit and defined-contribution plans, in which only the employer contributes to the plan, the employer, the employee, or both may make contributions to a 401(k) plan. These plans are expected to account for a growing share of retirement income. By some estimates, assets in such plans could rival or

even exceed total Social Security wealth by the time workers currently in their early 30s retire. Provisions of the Economic Growth and Tax Reform Reconciliation Act (EGTRRA), enacted in 2001, will further encourage this form of saving by increasing the limit on individual contributions to 401(k)-type plans, as well as the limit on an employer's deduction for contributions to certain types of defined-contribution plans. Additionally, workers aged 50 and over will now be eligible to make "catch-up" contributions to their 401(k)-type plans; this will help workers who might not have saved in past years.

Although pension assets represent a large and growing share of retirement wealth, pension coverage remains far from universal. In recent years almost half of retirees lacked pension income or annuities, and 49 percent of those employed lacked a pension plan. With this fact in mind, changes in tax policy and pension law that further encourage all employers to provide plans for their employees should continue to be explored.

The government must also work to expand its outreach to employers, especially small businesses, to encourage retirement plan sponsorship. It should eliminate artificial barriers to employers wishing to provide sensible retirement advice to those who participate in pension plans. Also needed is increased assistance to employers, plan sponsors, service providers, participants, and beneficiaries, to better inform these parties of their responsibilities under the law. This compliance assistance will ultimately lower the cost of investigations, judicial dispute resolution, and plan administration. Reducing such burdens should remain an ongoing Federal goal, because efforts to that end can yield higher retirement income for working Americans.

## Individual Saving

Personal saving independent of profit-sharing plans and employer-sponsored pensions is the third important component of retirement security. Public policy has aimed to encourage such saving as well, most notably through IRAs, which allow individuals to save for retirement on a tax-preferred basis. Contributions to traditional IRAs, like those to most employer-sponsored pensions, are tax-deductible under certain conditions, and earnings on investments in these accounts are tax-deferred. Contributions to Roth IRAs are not tax-deductible, but the earnings on these contributions are generally tax-free. IRAs provide an important incentive for individuals, some of whom may not be covered by an employer-sponsored pension plan, to invest for retirement. And research has shown that IRAs are effective in increasing personal saving (Box 2-4). EGTRRA greatly expanded the potential for saving through IRAs by allowing catch-up contributions for those over age 50, raising the annual limit on contributions from $2,000 in 2001 to $5,000 by 2008, and indexing that limit to inflation thereafter.

Congress has appropriated increased resources to several Federal agencies to promote retirement saving as well as general financial education. These educational programs should be better coordinated to leverage best practices and resources aimed at communicating the importance of savings, both individually and through employer-sponsored retirement plans. Furthermore, the Federal Government must remain a committed partner with the private sector, both for-profit and nonprofit, to educate Americans about the need and opportunities to save.

Other features of the tax code might also encourage saving for retirement by relieving some of the burden of the income tax system. As one example, medical savings accounts may be a useful mechanism for some people wishing to save in anticipation of possibly large out-of-pocket medical expenses related to old age.

**Box 2-4. The Effectiveness of Saving Incentives**

How effective are targeted saving incentives such as IRAs and 401(k)s at increasing saving? The answer depends, first, on how much "new" saving these incentives generate, and second, on the cost of achieving that saving, in terms of tax revenue forgone.

The first question can be addressed by considering two possible extremes. One is that all saving in IRAs, for example, is new saving—saving that would not have happened were it not for the tax incentives associated with saving in an IRA. At the other extreme, it could be that all saving in IRAs is saving that would have happened even without the incentive. The question then becomes where, between these two extremes, the actual fraction of new saving lies. This question is widely debated, but estimates suggest that 26 cents of every dollar in IRA contributions represents new saving.

Whatever the amount of new saving is determined to be, is it worth the cost in terms of forgone tax revenue? A useful measure for answering that question is the amount of new saving per dollar of revenue cost. Estimates of this measure have indicated that IRAs need not generate considerable new saving per dollar of lost revenue to generate increases in the capital stock that are "inexpensive" relative to the initial revenue loss. This cost-effectiveness of IRAs results because contributions to IRAs lead to a larger capital stock and faster growth. This faster growth translates into higher corporate revenue and, thus, higher tax revenue that more than makes up for the forgone tax revenue associated with IRA contributions.

## Fostering Self-Reliance

The key principle underlying all of America's retirement security institutions should be individual self-reliance in planning for retirement. Personal Social Security accounts, private pension plans, and vehicles for individual saving all aim to encourage and support individuals' efforts to prepare for their own financial future. Pension plans and saving vehicles allow individuals to save for retirement on a tax-preferred basis by reducing obstacles to saving inherent in the income tax system.

In a Social Security system with personal accounts, participants will take a more active role in exercising direct control over their retirement wealth, as participants in defined-contribution pension plans and IRAs already do. Lower income individuals will find in personal accounts a mechanism by which they can play a larger role in their own financial destiny. Meanwhile the defined-benefit element of Social Security will continue to provide a foundation of retirement income for those for whom lower resources represent an obstacle to complete self-reliance in retirement planning.

# Meeting the Challenge of Retirement Security

The major challenge facing America's retirement security institutions in the 21st century is how to enable a relatively smaller work force to support a growing elderly population. To meet that challenge, we must fortify all three legs of the retirement stool: individual saving, employer-provided pensions, and Social Security. Today the task at hand is to strengthen each of these institutions to serve our needs tomorrow by encouraging public policy that focuses on individual self-reliance in retirement planning.

Social Security is the retirement institution most urgently in need of rebuilding. Simply put, the system will not take in enough in payroll taxes over the coming years to pay the scheduled level of benefits to retirees. Correcting this problem will require some combination of increasing resources to Social Security and slowing the growth rate of outlays. However, this difficult situation also offers an opportunity to build for the future. Restructuring the current system to include personal accounts could improve Social Security's fiscal situation while giving workers a sense of ownership, an element of choice, and the opportunity to leave something to their heirs. Personal accounts could also increase national saving, helping to grow the economy and support a relatively larger elderly population.

A Social Security system made sustainable is just one component of a complete foundation for retirement security. Personal saving, undertaken both independently and through employer-sponsored pension plans, is also essential for ensuring the financial well-being of future retirees. Employer

pensions have seen considerable growth over the past two decades and should continue to grow. Individual saving outside of these plans, on the other hand, has lagged recently. Tax policy should follow the lead of EGTRRA and continue to develop in ways that encourage, rather than punish, these forms of saving.

Meeting the needs of a growing retired population with a relatively smaller work force is a new challenge for the United States, but it is not by any means an insurmountable one. What lies ahead is clear. What we must do to prepare is also clear. We must reinforce our existing retirement security institutions and use them to begin raising national saving right away. These steps will pave the way for a secure retirement for Americans and a prosperous future for the whole country.