Introduction [to Social Security and the Stock Market]

Alicia H. Munnell  
*Boston College*

Steven A. Sass  
*Boston College*

Citation

1

Introduction

The retirement of the baby boomers will initiate a dramatic aging of the U.S. population. The baby boom, the large generation born between 1946 and 1964, is currently of working age. But the entire generation turns 65, the traditional work-retirement divide, between 2010 and 2030. As the generations that follow are of roughly similar size, a roughly stable labor force will have to support an enormous expansion of the elderly population.

Most elderly people in the United States, defined as the population age 65 and over, currently enjoy a reasonably secure and adequate income. This income comes largely from two main sources—Social Security and employer-sponsored retirement plans. The impending demographic transition, and the rapid decline of employer support for traditional defined-benefit pensions, threatens the nation’s ability to provide reasonably secure and adequate old-age incomes going forward.

Reform, however, has been difficult. Policymakers, and people in general, tend to ignore problems lying far in the future, and Social Security has enough money to pay full benefits until 2041. Most people also thought that the growth of 401(k) plans, and similar individual account retirement savings plans, would be able to replace the decline in traditional employer-sponsored pensions. Policymakers did address the problem facing Social Security in the early 1980s by cutting benefits and increasing revenues, but they did not significantly alter the design of the program. By the 1990s, however, deficits reemerged. Concerns also grew over the ability of 401(k)s to replace traditional employer-sponsored pensions. A widening ideological divide and resistance to tax increases, benefit cuts, and government regulation have meanwhile resulted in political deadlock. Interestingly, policymakers of all stripes have embraced the use of investments in equities as an important component of their proposals to reform Social Security, but there is no consensus on how this should be done.¹

The purpose of this book is to explore the use of equities to help solve the Social Security financing problem. Equities offer a promising
way forward due to the high expected returns on stocks and the diversification of the program’s funding sources beyond the payroll tax. But the use of equities would also introduce a host of new and difficult challenges and could dramatically change the structure of Social Security in the United States.

To identify the challenges and implications for the structure of the nation’s retirement income system, this book explores the experience of the United Kingdom, Australia, and Canada. These three nations initially had retirement income systems quite similar to the U.S. system, in that they relied on both government and employer plans to provide the bulk of old-age income. These countries also face similar demographic and economic challenges. In response, they each introduced equities into their Social Security programs.

The reforms adopted by these nations largely mirror the three proposals that came out of the 1994–1996 Social Security Advisory Council—proposals that define the primary approaches for including equities in the U.S. Social Security program. The United Kingdom introduced equities through a system of “carve-out” individual accounts, whereby Social Security revenues are not increased but a portion can be diverted to individual accounts, where they can be invested in equities. Canada adopted the “trust fund investment” approach, which prefunds future Social Security obligations by building up assets in a trust fund and investing a portion of those assets in equities. Australia adopted a reform similar to the “add-on individual accounts” proposal, although the analogy is somewhat weaker than in the other two cases, where the government mandates contributions to individual accounts that can be invested in equities. The experience of these three nations sheds light on the risks and complications associated with the use of equities in the U.S. Social Security program and how the introduction of equity investment in Social Security could reshape the nation’s retirement income system.

Additional information on the challenges created by equity investment also emerges from an analysis of the history of employer-sponsored defined-benefit plans. These plans were once the backbone of the employer-based retirement income system in the United States and these three other nations. They are now in the process of being replaced by 401(k)-type individual account retirement savings plans. Factors contributing to this shift are the risk and uncertainty that equity investment in pension funds create for employers. Identifying the pitfalls that
have plagued the private sector provides insights on the ability of public plans to introduce equity investment.

Any change to the nation’s Social Security system must be evaluated within the context of the other sources of income available to older people. In the United States, the shift to 401(k) plans means that individuals are exposed to market risk during the accumulation phase and interest rate risk at retirement in their supplementary retirement plans. This exposure increases the desirability of introducing equities into the public plan in a way that minimizes the risk faced by the individual.

**WHAT EQUITIES CAN AND CANNOT DO**

It is important to clarify that introducing equities into the Social Security program, by itself, will not significantly reduce the burden on future generations of providing for a greatly expanded elderly population. The primary way to reduce that burden is to increase national saving. Without an increase in national saving, the accumulation of equities in the Social Security trust fund, and decumulation of Treasury bonds, would only produce an offsetting reduction in equities held by the general public, and an increase in the public’s holdings of Treasury bonds. More saving, on the other hand, means more investment, increased productivity growth, and a bigger economic pie down the road. This bigger pie would ease the burden on future workers, leaving them more national output after they meet the claims of the elderly. To increase national saving, however, the current generation would have to reduce current consumption to increase contributions to the retirement income system or other saving vehicles.

The proposals to reform Social Security that involve equity investment would accumulate these assets either in the Social Security trust fund or in individual accounts. Economists worry, however, that both approaches might be less than fully effective as a mechanism for building national savings. Many economists claim that the accumulation of Treasury bonds in the Social Security trust fund, following the reform of the program in the early 1980s, led to an expansion of government spending that offset the buildup of trust fund reserves and its positive effect on national saving. Shifting trust fund investments from Treasury
bonds to stocks would help address this problem, but concerns remain about using the government as a custodian of national savings. Economists are also concerned about the effectiveness of individual accounts as a mechanism for increasing national savings. If workers see their retirement wealth as more immediate and real as a result of this transition, they could be tempted to increase consumption and reduce other forms of saving.

While investment in equities, by itself, does not ease the burden on future generations, it could have two important advantages. The first is an improvement in intergenerational risk sharing (Bohn 1997; Diamond 1997). In general, efficient risk sharing requires individuals to bear more risk when young and less when old. This is because it is easier for the young to work more if they suffer a capital loss. They can also average returns over time and take advantage of the fact that declines in stock prices are typically associated with higher returns in the next period. As the old are in the process of liquidating their equity holdings, they cannot take full advantage of this property. It is also reasonable to assume that the young are less risk averse than the old and hence more inclined to carry stock market risk.

However, the young generally hold no risky, high-yielding assets, and their implicit asset—Social Security—is invested in Treasury bonds. Introducing equities into the Social Security program, either through the trust fund or individual accounts, would shift the portfolio of assets held by the young to include less low-risk, low-return bonds and more high-risk, high-return stocks. If the financial assets in the economy remain unchanged, the portfolios of the old would hold more bonds and less stock. Introducing equities into the Social Security program thus shifts risk from the old to the young, which improves the age distribution of risk and could make all generations better off (Arrow and Lind 1970).

The second argument in favor of equity investment is more political than economic—that it could make Social Security less expensive and diminish pressure to cut benefits or increase taxes. Even without an increase in national saving, introducing equities with their higher expected returns into Social Security should increase the flow of income going to the expanding elderly population. It would give the elderly a larger share of the economic pie and a smaller share to the young. But, rather than accomplishing this transfer through higher payroll taxes,
the burden of supporting the expanded elderly population would be met through a reduction in the capital income of young investors, who would hold more bonds and fewer equities than they otherwise would. By making Social Security benefits less expensive, including equity investments would thus reduce political risk to the program.

EVALUATING EQUITY RISKS IN RETIREMENT PLANS

A central issue in the debate over the introduction of equities is the thorny question of how to treat the risk in such investments when evaluating the finances of retirement income systems. Some experts argue that holding equities should reduce the projected contributions required to fund a defined-benefit plan, such as Social Security, or increase the projected income generated in individual retirement accounts. After all, stocks yield 7 percent after inflation and bonds only 3 percent. Others claim this is nonsense. The higher expected return on equities reflects their greater risk. Any serious financial evaluation of retirement arrangements, they say, must “risk-adjust” these returns. After accounting for risk, the amount of contributions needed to fund future pension obligations (or the amount of income an individual account could generate) is the same regardless of whether the assets are invested in equities or bonds.

There is no clear consensus within the government on how to evaluate the use of equities in Social Security reform proposals. The Social Security actuaries take the first approach and credit equities with their expected rate of return. The Congressional Budget Office (CBO), a key government gatekeeper, ignores the higher expected return and credits equities as yielding the long-term Treasury rate. The CBO, in effect, views the cost of the additional risk in stocks as precisely offsetting their additional return.

The government also confronted this issue when Congress introduced equities into the funding of the Railroad Retirement System in 2001. Congress raised benefits, reduced contributions, and sought to square the circle by authorizing investments in equities and other non-traditional assets. But the Office of Management and Budget (OMB), another key government scoring agency, ignored the higher expected
return on equities and used the long-term Treasury rate to project future trust fund balances. Like the CBO, the OMB viewed the additional risk in stocks as precisely offsetting the additional return. The agency clearly sought to avoid a situation where the government could appear to raise money simply by issuing debt and buying stock with the proceeds.

Adjusting for risk makes an enormous difference when assessing Social Security reform proposals that rely on equity investments. Projections using the riskless rate produce no reduction in the funding shortfall in trust fund investment proposals and dramatic benefit reductions in carve-out individual account proposals.

What then is the best way to evaluate the use of equities in retirement plans? It depends on the objective.

If the goal is to compare different proposals with the current system for policy purposes, then the bond return is the appropriate choice. The only way to get an “apples-to-apples” comparison is to look at streams of income with similar risk characteristics, and bonds rather than equities have the characteristics most similar to benefits under the current system.

If the goal is to assess the likely outcome under a reformed system, the evaluation is more complex. The natural instinct is to think that investing in equities will probably lead to a higher benefit in individual account proposals (or smaller deficits in the trust fund investment proposals) since equities have historically outperformed bonds. The extent to which individual participants (or future taxpayers) can capture these higher returns, however, depends on their ability to manage the risk. If participants (or taxpayers) have other resources or can pool risk or delay retirement, they could weather market downturns more easily. Or, if the risks are pooled across individuals and over generations by having the trust fund invest in equities, they can be managed more efficiently. These risk management considerations have a direct impact on the ability of different reform proposals to capture the higher expected return on equities, after properly subtracting the cost of the risk in such investments.

The different approaches to introducing equities into the Social Security program, in other words, are far from equal. The distribution of risk and its implications, as well as more conventional costs and benefits, depend crucially on whether equities enter the program through
individual accounts or the Social Security trust fund. Transaction costs and governance challenges—many of which emerge in response to the risk in equity investment—also vary dramatically from one approach to another.

THE OUTLOOK FOR THE U.S. RETIREMENT SYSTEM

The majority of the elderly currently enjoy a relatively good economic position. Their cash incomes are generally lower than what they earned prior to retirement, but they need less. They no longer pay Social Security payroll taxes and typically pay less income tax. Their children are typically out of the house and no longer a drain on their incomes. Nor do they have working expenses. The elderly typically own their homes free and clear and do not have to save for retirement. The freedom from having to work, and the ability to use one’s time to shop more effectively, produce goods and services previously purchased on the market, and generally enjoy life as one sees fit, are important lifestyle advantages. All in all, the elderly generally enjoy a standard of living not much different from that of their preretirement years.

The retirement income of the elderly comes from two main sources—Social Security and employer retirement plans. As Figure 1.1 shows, Social Security alone supplies 37 percent of the income of the elderly, 52 percent if earnings from work are excluded. Employer-sponsored retirement plans provide another 20 percent, over a quarter when earnings from work are excluded, and are especially important for middle- and upper-middle-income households. The only other significant sources of old-age income—investment income and earnings from work—are important only for those at the top of the income scale, and earnings from work, which tend to put recipients in the upper quintile, disappear as individuals age.

However, Social Security and employer plans are ill-equipped to provide the same level of support going forward. Legislation enacted in 1983, which raised the “normal retirement age” from 65 to 67 between 2000 and 2022, has already resulted in cuts in the level of pre-retirement earnings that Social Security will replace, and rising health care costs will dramatically eat into future Social Security payments.4
Major changes in the nature of employer plans raise critical questions as to their ability to replace the same share of earnings in the future as they currently do, let alone make up for the decline in Social Security. Americans thus face the prospect of a sharp drop in their standard of living in retirement, with the fall-off getting steeper with each succeeding cohort.

The Future of Social Security

Under Social Security, active workers pay into the program, and they or their families receive benefits when they retire, become disabled, or die. The system functions on a partially funded basis. Roughly 75 percent of current revenues go to pay current benefits, and the remainder is used to build up the Social Security trust fund. Over the next
75 years, benefit costs will rise as the population ages. The ratio of the elderly population (age 65 or over) to working age adults (ages 20–64) will rise from 20 percent today to about 35 percent by 2030 (Figure 1.2). The child dependency ratio—the ratio of the population age 19 or younger to working-age adults—will decline, offsetting some of the rising aged dependency burden. Because the elderly consume far more resources per capita than children, the offset is not one for one.

The rise in the number of elderly relative to the working-age population will increase the cost of Social Security benefits well above payroll tax receipts (Figure 1.3). Without any change, future revenues combined with the assets in the trust fund will allow Social Security to pay 100 percent of benefits until 2040. Once the trust fund is exhausted, revenues will cover only about 70 percent of scheduled benefits. The federal budget will be affected earlier, when Social Security begins to redeem its trust fund assets. Instead of being a steady purchaser of government bonds, Social Security will become an added burden on the Treasury’s fund-raising operations.

**Figure 1.2** U.S. Population Age 65+ as a Percentage of Population 20–64, 1950–2050

![Graph showing the percentage of the elderly population from 1950 to 2050](image)

*Source: U.S. Social Security Administration (2006).*
Each year, the Office of the Actuary of Social Security prepares a high, low, and intermediate cost projection for the financial position of the program for the following 75 years, with the intermediate projection playing a central role in the political process. In 2006, the difference over the projection period between the present discounted value of promised benefits and the present discounted value of projected revenues, using the intermediate cost estimate, was $4.9 trillion (Table 1.1). Since the economy is projected to grow tremendously over the 75-year period, the dollar deficit is usually expressed as a percent of taxable payrolls or gross domestic product (GDP). In 2006, Social Security’s 75-year deficit stood at 2.02 percent of taxable payrolls. This figure means that the payroll tax rate needs to be raised immediately by roughly 2 percent of covered earnings—1 percent each for employers and employees—for Social Security to pay the current package of benefits to everyone who reaches retirement age through 2080.

Social Security’s long-term financing problem is somewhat more complicated. If balance were restored only over the next 75 years, the
Introduction

system faces a big deficit in the 76th year as the cost of benefits continues to exceed the system’s revenues. To avoid this type of financial “cliff,” most policymakers support additional revenues or benefit cuts, beyond those needed to restore solvency over Social Security’s 75-year planning horizon. Some observers even advocate looking at the deficit over an infinite horizon, which brings the shortfall to 3.7 as a percent of taxable payrolls.

Regardless of how the shortfall is measured, changes are needed to bring Social Security’s inflows and outflows back into line. These changes can take the form of benefit cuts, tax increases, or an increase in the returns on assets. As discussed above, many policymakers want to avoid higher taxes or lower benefits and thus have turned to equities as part of the solution.

Policymakers are reluctant to cut benefits because Social Security is already scheduled to replace a significantly smaller portion of preretirement earnings than it does today. A person with average earnings retiring at 65 currently receives benefits equal to $1,180 per month or about 42 percent of previous earnings. After the Medicare Part B premium is automatically deducted from Social Security benefits, the replacement rate drops to 38.5 percent. Under current law, Social Security replacement rates—benefits as a percent of preretirement earnings—are scheduled to decline at any given retirement age for three reasons. First, the increase in the normal retirement age from 65 to 67, currently in progress, is equivalent to an across-the-board cut. Second, Medicare Part B premiums are slated to increase sharply due to rising health care costs. Finally, Social Security benefits will be taxed more under the personal income tax, as the exemption amounts are not indexed to inflation. As shown in Table 1.2, these three factors will reduce the net replacement

---

Table 1.1  U.S. Social Security’s Financing Shortfall

<table>
<thead>
<tr>
<th>Period</th>
<th>Present discounted value (trillion $)</th>
<th>As a percent of Taxable payrolls</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006–2080</td>
<td>4.9&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.02</td>
<td>0.7</td>
</tr>
<tr>
<td>2006–Infinity</td>
<td>13.4</td>
<td>3.7</td>
<td>1.3</td>
</tr>
</tbody>
</table>

<sup>a</sup> The $4.9 trillion includes $4.6 trillion, the difference between scheduled benefits and projected revenues, and $343 billion required to bring the trust fund to 100 percent of annual cost by the end of the period.

rate for the average earner who retires at age 65 from 38.5 percent today to 29.3 percent in 2030, or $800 in today’s terms. Restoring solvency through cuts in benefits would reduce this level of support still further.

### The Future of Employer-Sponsored Retirement Plans

Employer-sponsored retirement plans, the only other important source of income for most older Americans, seem ill-equipped to fill in the gap. Indeed, most observers question their ability to provide the same level of replacement income that they do today. The problem is not that a smaller share of the workforce participates in an employer plan. Participation rates have been remarkably steady over the past quarter century, at about half the private sector workforce, and they are likely to remain much the same going forward. Rather, the nature of these plans has changed so dramatically that it is very difficult to predict the income they will provide when the baby boom retires.

As noted above, employer plans currently provide 20 percent of the cash income of individuals age 65 and over—27 percent if we exclude earnings from work. For those retiring today, this income comes primarily from traditional “defined-benefit” pension plans. These plans typically pay benefits based on a combination of the worker’s final salary and years of service with the employer. The actual benefits workers get in retirement vary quite a bit, depending on how often they changed

<table>
<thead>
<tr>
<th>Provision</th>
<th>Replacement rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
</tr>
<tr>
<td>Reported replacement rate</td>
<td>42.2</td>
</tr>
<tr>
<td>After Medicare Part B deduction</td>
<td>38.5</td>
</tr>
<tr>
<td>2030</td>
<td></td>
</tr>
<tr>
<td>Replacement rate after extension of normal retirement age</td>
<td>36.3</td>
</tr>
<tr>
<td>After deduction for Medicare Part B</td>
<td>32.0</td>
</tr>
<tr>
<td>After personal income taxation</td>
<td>29.3</td>
</tr>
</tbody>
</table>

SOURCE: Munnell (2003) and authors’ updates.
jobs. Once a worker retires, these pensions generally remain the same until the worker dies. The major uncertainty is the rate of inflation because benefits are generally defined as a fixed dollar amount and lose purchasing power as prices rise. The elderly nevertheless can rely on a reasonably secure stream of income for the remainder of their lives.

Most baby boomers, by contrast, are covered by “defined-contribution” plans (Figure 1.4). In these arrangements, workers and their employers contribute a defined portion of the worker’s wage to an individual savings account. At retirement, the worker gets the accumulated contributions and investment income as a lump sum. The retirement income these plans provide depends on a host of factors, including how much workers and employers contribute, the real after-inflation return on assets in the accounts, how workers draw down their balances (both before and after retirement), and how long they live. Given the experience to date, defined contribution plans are unlikely to replace a greater share of preretirement income than defined-benefit plans. This income

Figure 1.4 Coverage by Type of Plan, U.S. Private Sector Wage and Salary Workers with Pension Coverage, 1981–2004

is also subject to significantly greater risks and uncertainties than a traditional pension. As a result, employer-sponsored plans in the future are unlikely to be as secure and reliable a source of retirement income as they are today. The baby boom generation thus faces the prospect of a sharp decline in living standards at retirement and even serious hardship as they age (see Box 1.1).

The challenge is to restore solvency to the Social Security program, make employer-sponsored plans work as well as they can, and maintain the contribution of these programs to retirement income security. As noted above, many proposals to eliminate Social Security’s financing shortfall involve the introduction of equities in one form or another. The following chapters review the creation of modern retirement income systems, examine the current situation in the United States and the experience of reforms enacted in the United Kingdom, Australia, and Canada, and draw lessons for the United States on how the introduction of equity investments into the Social Security program could affect individuals and influence the evolution of the nation’s retirement income system.

**Box 1.1 It’s Not Just the Baby Boom**

The American population has been aging ever since the founding of the republic, the result primarily of declining fertility and rising life expectancy. Over the 200-year period between 1880 and 2080, the shape of the U.S. age distribution will change from a pyramid to almost a rectangle as the relative number of older people rises and the relative number of children declines (see the adjoining figure). Note that neither date that brackets this 200-year period has anything to do with the baby boom generation; 1880 predates the first boomer by more than six decades, and by 2080 virtually all the boomers will have died. (The youngest boomers, born in 1964, would be 116 years old in 2080.) The passage of the baby boom affects the timing of population aging, but the phenomenon is the result of the long decline in the number of babies per woman and of the increase in life expectancy.
Box 1.1 (continued)

ORGANIZATION OF THE VOLUME

Chapter 2 describes how retirement income systems emerged in all industrial nations in response to a common set of problems. These nations now all face the challenge of rapid population aging, and three countries that had a mix of government and employer plans much like ours (the United Kingdom, Australia, and Canada) have responded with reforms incorporating equity investment that are especially instructive for the United States. Most nations on the European continent, by contrast, opted for public or publicly directed solutions. The experience of other Anglo-Saxon nations is thus most relevant to policymakers in the United States.

Chapter 3 describes the challenges facing the U.S. retirement income system. After 1980, serious solvency problems emerged in both employer defined-benefit pension plans and Social Security. Reforms addressing the solvency of employer plans have been relatively ineffective, largely due to their inability to address the risk in equity investments. A far more important change in employer plans has been the shift from defined-benefit to defined-contribution formats—a change that exacerbated the risks in private retirement income programs, reduced the ability to effectively manage such programs, and raised new questions about retirement income adequacy.

A major reform of the Social Security program, in 1983, cut benefits, increased contributions, and restored solvency over the program’s 75-year planning horizon. The funding shortfall reemerged, however, as the passage of time brought more years on the other side of the funding “cliff” within the program’s 75-year planning horizon.

The 1994–1996 Social Security Advisory Council attempted to fix the problem. The council members resisted—for different reasons—restoring balance simply by raising taxes or cutting benefits. They all resorted to a new source of revenue—namely, the higher expected return on equity investment—but failed to reach a consensus around a single plan. Instead, the council produced three separate proposals: 1) “carve out” individual accounts invested in equities, funded by redirecting a significant portion of current payroll taxes and sharply reducing the guaranteed social insurance benefit; 2) “add-on” individual accounts, invested in equities, that would top up the reduced benefits that could be
financed by the payroll tax; and 3) a portion of trust fund assets invested in equities. No action has since been taken, and these three options remain on the table. The United Kingdom, Australia, and Canada have all introduced equities into their Social Security programs, each along the lines of one of these three approaches.

Chapter 4 reviews the experience of the United Kingdom, which reformed its retirement income system and introduced equities along the lines of the carve-out approach. To achieve solvency, the government sharply cut traditional social insurance benefits. To raise retirement incomes back toward levels initially envisioned for the public program, it allowed workers to carve out a portion of their payroll tax to contribute to an individual account that invests in equities. In exchange, workers give up a portion of their diminished Social Security benefits.

The British experience clearly illustrates a series of shortcomings to such an approach. Individual accounts, which were primarily offered in the financial marketplace rather than through an employer- or government-run program, encountered high administrative costs that market forces have not been able to reduce. Major scandals also illustrate serious difficulties in protecting unsophisticated workers from misleading selling practices. Meanwhile, the government’s guaranteed social security benefits have fallen below the traditional income floor guaranteed by the public welfare system—20 percent of national average earnings. In response, the government expanded the means-tested benefits for the elderly. To mitigate the disincentive to work or save created by these means-tested benefits, Britain introduced a tapered withdrawal rate for the elderly—reducing means-tested benefits by 40 pence per pound, rather than pound for pound. As a result, half the elderly are now eligible for welfare benefits and three-quarters are projected to be eligible by the middle of the century.

Proponents of the carve-out approach generally claim that they want to reduce dependence on the state and increase reliance on individual initiative and private financial markets. The British experience suggests that the outcome of the carve-out approach is likely to be a major expansion in means-tested benefits, just the opposite of the desired increase in self-reliance.

Chapter 5 reviews the experience of Australia, which reformed its system and introduced equities along the lines of the add-on approach. The analogy is not perfect, but the introduction of individual accounts
was accompanied by a big increase in contributions. Australia added mandatory contributions to individual retirement savings accounts, which could invest in equities, atop its preexisting public pension program. In Australia, these mandatory contributions are generally collected and invested collectively, which reduces administrative costs and relieves workers of many of the decisions they have to make in the UK system. The other component of Australia’s retirement income system is its means-tested Age Pension. The Age Pension is far more generous than the UK means-tested program; it guarantees an income of about a third of national average earnings, reduced by 40 cents for each dollar of other income above a minimal amount. Nearly all elderly Australians qualify for a full or partial benefit. In a system dependent on individual accounts invested in equities, the Age Pension means test performs a valuable risk-management service. It assures a reasonably comfortable income to those who outlive their individual account assets, invest poorly, or are in unlucky cohorts when it comes to investment returns. The Age Pension, however, also creates a powerful disincentive to work or save that should become a serious problem as assets build up in the nation’s mandatory savings program.

Chapter 6 reviews the experience of Canada, which reformed its system and introduced equities along the lines of the trust fund approach. It accelerated scheduled tax increases to prefund future benefits (which the United States had done in 1983) and invested the accumulated assets in equities (whereas the United States stayed with government bonds). The trust fund approach has significant financial advantages over the use of individual accounts, especially if the policy objective is to achieve some specified level of retirement income. It is much better at handling the risks inherent in equity investment and avoids the work and saving disincentives seen in the Australian system. The trust fund approach also has much lower administrative and governance costs. The power it potentially puts in the hands of government, however, raises serious political issues. In response, Canada developed an elaborate governance design to minimize political involvement in the management of trust fund assets. Although the program has only been in place a few years, the Canadian experience suggests that the problem is manageable. It also appears considerably less daunting than the task of governing equity investments in a myriad of Social Security individual accounts.
Chapter 7 reviews the lessons drawn from the foreign experience. It suggests that the trust fund approach, adopted by Canada, may be the most promising way to introduce equities into the U.S. Social Security program. Although the program is relatively new, trust fund investment in equities seems like the most efficient way to manage the risks and administrative challenges inherent in equity investment while delivering a targeted level of retirement income. The Canadians have also developed a governance system that illustrates the ability of government to keep investment management essentially free of political influence. The Canadian approach seems to be well regarded both in Canada and internationally. Holding equities in add-on individual accounts, the approach adopted by Australia, also bears consideration. It adds significant resources to the system and increases national saving. Holding equities in individual accounts carved out of the Social Security program, the approach adopted by the United Kingdom, is clearly problematic. The British experiment shows how this approach precipitated the conversion of the UK retirement income system into a combination of large and risky individual accounts atop a minimal means-tested welfare program, with most of the nation’s elderly at some point in their lives dependent on means-tested welfare benefits.

Notes

2. The Office of Management and Budget (OMB) provides a full discussion of the need to risk-adjust expected returns: “Equities and private bonds earn a higher return on average than the Treasury rate, but that return is subject to greater uncertainty. Sound budget principles require that estimates of future trust fund balances reflect both the average return and cost of risk associated with the uncertainty of that return. . . . Economic theory suggests, however, that the difference between the expected return of a risky liquid asset and the Treasury rate is equal to the cost of the asset’s additional risk as priced in the market. Following through on this insight, the best way to project the rate of return on the fund’s balances is to use the Treasury rate” (OMB 2003).

Most economists seem to agree on the need to risk-adjust returns when evaluating Social Security reform proposals. Geanakoplos, Mitchell, and Zeldes (2002) note that “our view is that the risk-adjusted NPV [net present value] measure is most helpful for ranking alternative” proposals. More recently, Diamond
and Orszag (2004) use risk-adjusted returns to evaluate proposals that include individual accounts. Others, however, continue to embrace the “best-guess” actuarial approach (Biggs 2002).

3. Option pricing techniques can also be used to calculate the risk-reward trade-offs. See Bodie (2001).

4. The normal retirement age will rise from 65, for those reaching age 62 prior to the year 2000, to age 67 for those who reach 62 in 2022 or after.

5. For a discussion of proposals to reform current 401(k) plans, see Munnell and Sundén (2004).