Social Security Privatization: Balancing Efficiency and Fairness

By C. Alan Garner

Growing public awareness of future pressures on Social Security is eroding many Americans' confidence in this key retirement program. These pressures are nearly certain in the next century, stemming from the retirement of the large baby-boom generation, longer average life spans, and lower projected fertility rates. To meet such pressures, various reforms of Social Security have been proposed, ranging from simple repairs to the current system all the way to full privatization. In this context, privatization usually means moving the public retirement system toward a set of individual accounts with the workers' funds invested partly in private securities and with workers having some measure of control over investment allocations.

Choosing among the competing reform proposals is a daunting task. Supporters of privatization believe such reforms would boost economic efficiency, resulting in higher real output per worker and helping the nation cope with the future pressures from population aging. Supporters also believe privatization would produce a retirement system that treats different generations more fairly. Critics fear, however, that the privatization of Social Security would produce a more unequal income distribution for retirees and expose them to greater investment risks.

This article examines these fundamental issues of economic efficiency and fairness that should be weighed when considering Social Security privatization. The first section summarizes the challenges to the current system and outlines various options for reform. The second section explains how privatization could improve economic efficiency, and briefly considers the difficult issue of the transition costs in moving from the current system to full privatization. The third section discusses important issues of fairness within and across generations. Any decision to privatize Social Security will require balancing the likely gains of greater real output and fairer returns to younger generations with the possible adverse effects of a more unequal income distribution among retirees and greater investment risks. This balancing must occur through the political process because fairness is a matter of values rather than economic analysis.

I. THE GROWING INTEREST IN PRIVATIZATION

The many achievements of Social Security should not be forgotten in discussing possible reforms. Social Security has provided a secure

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retirement income for millions of Americans, lowering poverty rates among the elderly and protecting working families against the disability or premature death of a breadwinner. Moreover, such Social Security benefits are not currently in jeopardy because the system faces no immediate problem in meeting its financial obligations. Recent interest in privatizing Social Security comes, instead, from a growing awareness of the pressures that will emerge in the early decades of the next century, along with some long-standing issues about how to balance economic efficiency and fairness.

Financial challenges

Social Security is essentially a pay-as-you-go retirement system in which most of the payroll taxes paid in by employers and current employees are immediately paid out as benefits to retirees. An estimated 144 million people paid contributions to the old-age and survivors insurance and disability insurance (OASDI) trust funds in 1996, with the combined tax rate on employers and employees being 12.4 percent.[1] Benefits were paid to almost 44 million people at the end of 1996, with initial benefit levels depending on the workers' earnings histories and changes in national average wages. After retirement, benefit levels are adjusted upward to reflect changes in the consumer price level.

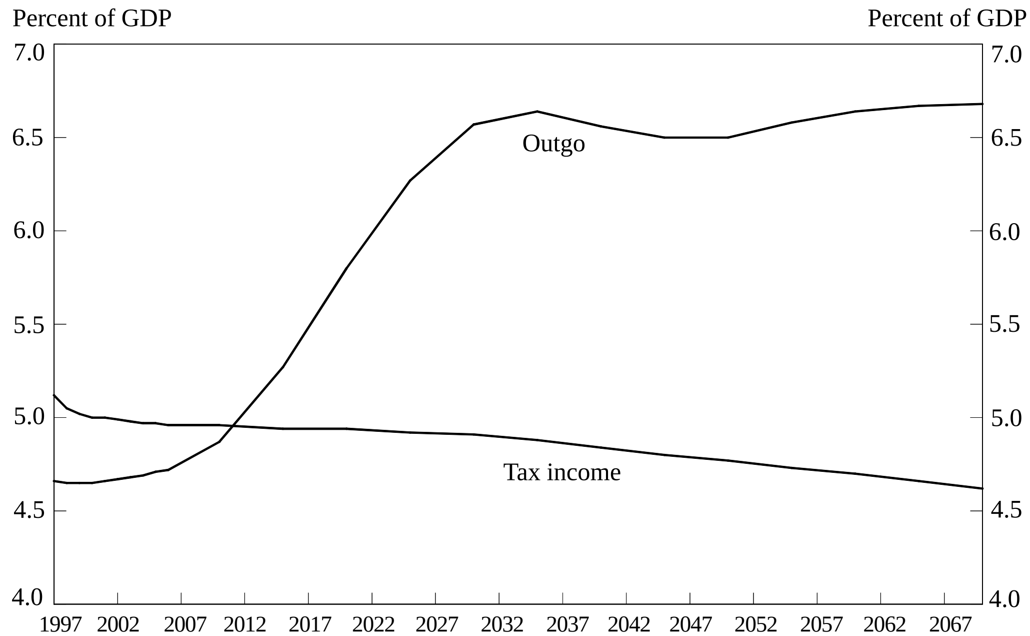
Despite the existence of the OASDI trust funds as an accounting device, Social Security is really unfunded in the sense that there is no portfolio of private securities backing the program that could be sold to maintain future benefit payments. Although Social Security is not estimated to be in long-term balance, the system's tax income currently exceeds benefit payments. The excess revenue is invested in special U.S. government securities, helping reduce the net borrowing requirements of the federal government. But under existing law, the outgo from the Social Security system is expected to exceed the tax income in 2012, and this deficit would have to be covered by the federal government either through general tax revenues, such as the personal income tax, or debt issues by the U.S. Treasury. Because Treasury debt is also serviced with tax revenues, Social Security is ultimately backed only by the taxing authority of the federal government. In contrast, a fully funded private pension would set aside enough stocks, bonds, and other assets to make the expected future payments to retirees.

The retirement of the baby-boom generation, a gradual increase in average life expectancy, and decreasing fertility are projected to put substantial upward pressure on benefit payments in the next century (Chart 1). Outgo from the OASDI programs is projected to rise from 4.7 percent of GDP in 1997 to 6.7 percent in 2070, while OASDI tax income is projected to decline slightly as a share of GDP. As a result, the current modest surplus in the OASDI programs would be converted to a deficit of about 2.1 percent of GDP in 2070. Closing the projected deficit within the current system would require either cutting future retirement benefits or raising Social Security taxes.

Social challenges

Social Security tries to balance various social goals in providing for retirees, the disabled, and their dependents. Although the promised level of benefits increases with the worker's average earnings, Social Security also has an important redistributional element, with low-income retirees receiving greater benefits relative to their past contributions than high-income participants. Social Security has important insurance aspects, as well, helping protect workers and their families against some of life's unpleasant surprises. Disability insurance is a clear example, protecting participants and their families

Chart 1
ESTIMATED OASDI OUTGO AND TAX INCOME



Note: Tax income includes payroll contributions and taxes on Social Security benefits, but excludes interest on trust fund investments.
Source: Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.

against career-ending injuries. In addition, Social Security provides insurance in that its benefits continue no matter how long a retiree lives, eliminating the risk of outliving one's savings. Inflation indexation of benefits also insures retirees against unexpected changes in the purchasing power of the dollar, a feature that rarely exists in private pension plans.

The balancing of social goals inevitably involves tradeoffs between economic efficiency and various—sometimes conflicting—notions of fairness (Okun). Efficiency refers to how much real output can be produced with a given set of resources. Fairness refers to beliefs about what is a just set of economic contributions and rewards. The income-redistribution element of Social Security is a concrete example of such tradeoffs. Because high-income participants do not benefit in proportion to their contributions, Social Security may discourage labor supply and saving, lowering the real output that can be produced with given economic resources. But this redistributional element has helped produce a more equal income distribution among the elderly, improving a situation that many Americans had viewed as unfair.

Although disagreements about the tradeoffs between economic efficiency and fairness have always existed, growing awareness of the future pressures on Social Security have brought these concerns to the foreground. Younger workers have begun to realize that they will not benefit from their Social Security contributions to the same extent as past and current retirees. These younger workers pay higher payroll tax rates than earlier participants in the Social Security system, and would experience a lower rate of return from Social Security even without cuts in future benefits. Opinion polls suggest that some younger Americans are skeptical that they will ever receive any benefits from the Social Security system (*U.S. News & World Report*).[2] Yet current retirees and older workers can also claim that it would be unfair to jeopardize their retirement security by cutting current payroll tax rates to help younger workers when the older generations contributed for many years under the present system and based their retirement plans on a promised level of benefits. In striking a political compromise to reform Social Security, such issues of fairness are likely to be as important as the issue of economic efficiency.

Options for reform

Growing awareness of the future challenges to Social Security has prompted numerous proposals for reforming the nation's retirement system. These proposals range from relatively moderate changes in the current tax and benefit structure to sweeping privatization of the entire Social Security system. The report of the 1994-96 Advisory Council on Social Security, summarized in the box, gives an idea of the range of proposals that are seriously being discussed. Such discussion is appropriate even though Social Security faces no immediate problem in making benefit payments because any reforms should be made as soon as possible so that current working-age families can make the needed adjustments in their savings plans. Moreover, prompt action may help to reduce the size of the policy reform that is ultimately necessary.

The Social Security system could be restored to soundness while retaining the current pay-as-you-go structure. Payroll tax increases and gradual benefit cuts could restore solvency to the system over the next 75 years, the period used to assess Social Security's long-range actuarial soundness. In this respect, the United States differs from many other industrial countries, where making such gradual adjustments is not a viable option (Suttle). But many analysts are concerned that changes in payroll tax rates and benefit levels that would restore actuarial soundness over the next 75 years might not be sufficient, and that the system could quickly slip back into a deficit.[3] Moreover, such changes would not produce the fundamental shifts in the tradeoffs between efficiency and fairness that are sought by some reformers.

Many of the recent proposals to reform Social Security involve some degree of privatization. Some of the growing interest in privatization stems from recent reforms of foreign public pension systems. Chile made a pioneering effort to privatize its pay-as-you-go retirement system beginning in the early 1980s (Edwards, Diamond and Valdes-Prieto). The new system was structured around individual accounts managed by private investment companies. The Chilean government retains an important role in the new system, however, by guaranteeing a minimum pension to poorer participants and a minimum return on funds accumulated in the individual accounts. The successes of the Chilean reform have encouraged privatization efforts in other Latin American countries as well as Australia and the United Kingdom.

In the context of Social Security reform, the term privatization rarely means a total withdrawal of the U.S. government from the nation's retirement system. The current debate generally accepts the idea that government should mandate some minimum saving rate by workers to

BOX

REPORT OF THE 1994-96 SOCIAL SECURITY ADVISORY COUNCIL

Members of the 1994-96 Advisory Council were unable to agree on a specific plan to restore long-term actuarial balance to the Social Security program. Members did broadly agree on some general principles, including the compulsory nature of the program, partial advance funding of future benefits, and the need for early action to reform Social Security. The Council then presented three options backed by different groups of members.

Maintain benefits

Six members favored a plan that would largely maintain the present Social Security benefit and tax structure. This plan would make technical adjustments reducing future benefits by about 3 percent, and would gain additional revenue by more complete federal income taxation of Social Security benefits and a redirection of some taxes on OASDI benefits now going into the Hospital Insurance Trust Fund. To keep the program from drifting out of balance later in the next century, the plan would raise the combined employer-employee payroll tax by 1.6 percent in 2045. This plan also calls for further study of investing up to 40 percent of the OASDI trust funds in corporate stocks, with the expected higher return on stocks helping to bring Social Security into long-term actuarial balance.

Individual accounts

Two members favored a plan that would create individual defined-contribution accounts held with the Social Security system. Contributions would be mandatory, equaling 1.6 percent of covered payroll. Individuals would have limited choices about how these accounts would be invested, choosing among such options as bond index funds and equity index funds. The social adequacy protections of the current system would largely be preserved, but the future growth of Social Security benefits would be reduced by accelerating the already legislated increase in the age of eligibility for full retirement benefits, lengthening the benefits computation period, and adjusting the benefits schedule for middle-wage and high-wage workers.

Personal security accounts

Five members favored a plan that would give individual accounts a much more important role than in the previous plan. Social Security would have two tiers, with the first tier being a flat rate benefit that would be below the poverty level. The second tier would be fully funded defined-contribution accounts referred to as personal security accounts. These accounts would be funded with 5 percent of the current payroll tax, and the funds would not be held or managed by the government. When fully effective, first-tier benefits would be financed by the 7.4 percent portion of the payroll tax not used to fund personal security accounts. To cover the average transition costs to the new system, the plan envisions a 72-year payroll tax increase of 1.52 percent. Federal borrowing would increase in the early decades of the transition, but the additional federal debt would be retired in later decades with the higher payroll tax receipts.

protect against myopic behavior. In addition, it generally accepts the idea that government should provide some tax benefits for such savings. Beyond this common ground, a wide range of privatization proposals is possible. But privatization proposals generally involve investing some portion of the worker's contributions in individual accounts that are controlled to some degree by the worker and that would have uncertain investment returns.

The more ambitious privatization proposals would eventually shift all retirees out of the pay-as-you-go system into privately managed accounts similar to IRAs or 401k plans (Altig and Gokhale, Kotlikoff and Sachs). Workers would choose their own fund managers and, possibly, would be allowed to contribute more than the government-mandated percentage of their payroll. As a result, workers' retirement incomes would more closely reflect their own contributions, which would depend on their earnings and thriftiness while working. Workers' retirement incomes would also reflect the performance of their privately managed investment funds, which partly would depend on workers' ability to pick investment managers and their willingness to hold riskier investments, such as corporate stocks. In some plans, private disability insurance would even replace the government's disability insurance program.

Less ambitious proposals might direct a smaller portion of payroll contributions into individual accounts, putting the rest into a more traditional public retirement system (Advisory Council on Social Security, Committee for Economic Development). The individual accounts would provide a tighter link between workers' contributions and benefits, improving their incentives to work and save. A scaled-back version of the current Social Security system could guarantee some minimum level of retirement benefits to all workers, regardless of their earnings history, and provide benefits for the disabled. Within this group of proposals, wide variations are possible—for example, the percent of payroll contributions directed toward individual accounts might vary substantially. In addition, some plans would restrict the investment options for individual accounts to a limited number of government-approved funds in order to hold down administrative costs and limit the risks assumed by participants.

Because there are so many reform plans with differing details, this article will not attempt to catalog or evaluate all the major proposals. Instead, the remainder of the article will focus on the conceptual issues of economic efficiency and fairness that must be weighed in addressing the challenges to the Social Security system.

II. PRIVATIZATION AND ECONOMIC EFFICIENCY

Privatization often improves people's incentives to produce in an economically efficient manner. Greater efficiency means that a given amount of resources could be combined to produce greater real output than before, potentially allowing everyone to experience a higher living standard. This section begins by showing that privatization of Social Security would probably raise real output through improved incentives to work and save. Then, the section turns to the special need for increased efficiency when the baby-boom generation retires and to the transition costs associated with moving to a funded public retirement system.

Effects on economic efficiency

Critics of the current system contend that Social Security lowers real output by reducing the labor supply and the saving rate. The effect on the labor supply arises because the Social Security payroll tax substantially reduces the after-tax wage of American workers. Although the payroll tax can be viewed as a contribution to a retirement system promising future benefits, the rate of return on these contributions is substantially less than the average historical return on private investments, such as corporate equities. Moreover, future retirement benefits do not rise proportionally with payroll tax payments as employee income rises. As a result, payroll taxes reduce the after-tax rewards from working. This disincentive to work may affect not only the decision to enter the labor force but also such labor decisions as the number of hours worked and the degree of effort (Feldstein 1995). Empirical studies of labor supply generally support the view that higher payroll taxes reduce the amount of labor supplied and, thereby, lower real GDP.[4]

Whether or not Social Security reduces private saving is a more controversial issue. The life-cycle theory of consumption implies that spending and saving decisions depend on a household's lifetime resources, including current income, expected future income, and wealth. Actually, the effect of higher Social Security wealth on personal saving is theoretically ambiguous. To the extent that anticipated Social Security benefits are a component of wealth, households may increase their consumption relative to income during the working years, implying a lower private saving rate. But higher Social Security wealth also might induce some workers to retire at an earlier age. Such workers might increase their saving during the working years to accumulate enough assets for the longer expected retirement.

Recent empirical studies tend to support the view that Social Security reduces the private saving rate. Although some past studies have found no effect, Feldstein (1996b) estimated that an increase in Social Security wealth of one dollar reduces private saving by two to three cents.[5] Because Social Security wealth is more than twice the gross domestic product, and because the nation saves a relatively small fraction of its annual income, this seemingly small impact per dollar of Social Security wealth is actually a large percentage of total private saving.[6] In the aggregate, these estimates imply that the Social Security program reduces private saving by almost 60 percent.

The effect of Social Security on the private capital stock ultimately depends, however, on national saving rather than private saving. National saving is the sum of private saving and the government budget surplus. The current surplus in the Social Security system reduces the overall government budget deficit and raises national saving, assuming other federal expenditures and tax receipts are held constant.[7] Or put another way, the Social Security surplus currently reduces the federal government's borrowing in financial markets, leaving more private saving available to buy equipment and build factories. However, the estimated annual reduction in private saving by Social Security greatly exceeds the program's current surplus, implying Social Security causes a substantial net reduction in national saving. Lower saving would, in turn, produce a smaller stock of productive capital, such as factories and machinery, and lower real output per worker.[8]

On efficiency grounds, the primary argument against privatization has been that a privatized public pension system would suffer from higher administrative costs than the current pay-as-you-go system. High administrative costs have been an issue in other countries, such as Chile and Mexico, that have introduced elements of privatization in their national retirement systems. A fully privatized system might have operating costs similar in percentage terms to a defined-contribution pension plan. In the United States, such percentage costs typically exceed those for

Table 1

THE DEMOGRAPHIC CHALLENGE

Calendar year	Total fertility rate	Life expectancy at age 65 (years)		Dependency ratio
		Male	Female	
Historical				
1950	3.03	12.8	15.1	.138
1960	3.61	12.9	15.9	.173
1970	2.43	13.1	17.1	.185
1980	1.85	14.0	18.4	.195
1990	2.07	15.0	19.0	.209
Projected				
2000	2.00	15.8	19.3	.211
2010	1.95	16.2	19.6	.214
2020	1.90	16.6	20.0	.275
2030	1.90	17.0	20.4	.355
2040	1.90	17.5	20.9	.369
2050	1.90	17.8	21.3	.372
2060	1.90	18.2	21.7	.398
2070	1.90	18.6	22.1	.410

Note: The total fertility rate is the average number of children who would be born to a woman in her lifetime if she were to experience the birth rates by age observed in the selected year. The dependency ratio is the population aged 65 and over, divided by the population aged 20-64.

Source: Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds

the Social Security system (Diamond). A privatized national retirement system might, however, reduce administrative costs by restricting workers' investment options to low-cost alternatives, such as index funds, and workers would always have the option of making such low-cost investments even if the system did not require it.

Taken as a whole, the evidence is fairly persuasive that the current Social Security system results in large continuing losses in U.S. real output. Feldstein (1996a) estimated that, under conservative assumptions, the loss from the current system exceeds 4 percent of real GDP. Any increase in administrative costs from privatization would likely be outweighed by the large rise in real output caused by the increased labor supply and saving.[9]

Problems caused by population aging

The prospects for large gains in real output would be intriguing under any circumstances, but this is especially so in light of the future aging of the U.S. population. Such large gains in real output could help the nation support a larger retired population without putting heavy burdens on future working-age families.

The dimensions of population aging can be seen in Table 1, which illustrates some of the demographic factors behind the Social Security projections. Although the U.S. fertility rate was well above 3 children per woman at the peak of the postwar baby boom in the 1960s, this rate has fallen to around 2 children in the 1990s and is expected to decline somewhat further. At the same time, retirees have been living longer, and a gradual further rise in life expectancy seems likely. With the baby boom and longer average life spans swelling the ranks of the retired, and with recent lower birth rates limiting the future working-age population, the ratio of population aged 65 years and over to the working-age population is projected to nearly double by 2070. Because a pay-as-you-go retirement system derives its revenues from workers, the worsening dependency ratio suggests that payroll tax rates on future workers could rise sharply, possibly lowering the living standards of future working-age families.[10]

The key economic issue in meeting future pressures from population aging is how to raise the nation's real output per person. If real output can grow fast enough in coming decades, future working age families might be able to shoulder a higher payroll tax burden and still have a higher average living standard than current working-age families. Increasing future real output per person could stem from two main sources, a higher national saving rate and faster technological progress.

As the previous section showed, privatization has the potential to produce large gains in real output per person by raising the national saving rate. Privatization proposals should, however, be compared with other policy changes that might prepare the nation for the pressures from population aging in the next century. For example, an alternative to privatization might be to modify the current system through a package of benefit cuts and revenue increases. The additional revenue might come from a consumption-tax or value-added tax, which are believed to distort labor supply and saving decisions less than payroll and income taxes. In addition, such a package might include further spending restraint by the federal government, resulting in a budget surplus that adds to national saving by reducing the government's claim on financial resources. How such a package would compare with privatization is an issue requiring further study, but there clearly are ways the nation could become better prepared for the pressures from population aging even without privatizing Social Security.

The transition problem

A major issue in privatizing Social Security is how to pay for the transition from the current pay-as-you-go system to a privatized retirement system. Because the current system is unfunded, those who are working during the transition period would be required to contribute to their own retirement accounts under the new system while continuing to fund the benefits promised to current retirees and older generations of workers. Financing such a transition sounds, at first, like an insurmountable obstacle. However, recent research offers hope that a properly structured transition plan could privatize Social Security without imposing an undue burden on current working generations.

For example, Feldstein and Samwick (1997) concluded that a properly structured privatization plan could maintain currently legislated retirement benefits indefinitely with only a moderate initial increase in the combined rate of the payroll tax and mandatory saving. This combined rate would initially be 14.4 percent, only two percentage points above the present payroll tax rate. Mandatory contributions to an individual account would be invested in corporate stocks and bonds, with the government rebating corporate tax payments to these accounts so that the funds would earn the full pre-tax real return to capital, which Feldstein and Samwick put at about 9 percent annually. Because such a return is much higher than is implicit in the present pay-as-you-go retirement system, a low level of contributions, about 2 percent, to these individual accounts would yield the same future benefits as the present Social Security system. The remaining portion of the contributions would be available to pay the promised benefits to those covered under the current pay-as-you-go system.

The transition to a privatized system in Feldstein and Samwick's model could be accomplished in various ways, but most likely would be spread over a long period. Over time, an increasing proportion of retirement benefits would be prefunded, allowing gradual reductions in the payroll tax rate. Eventually, the combined rate for payroll taxes and mandatory saving would fall substantially below the current payroll tax rate. In this proposal, some middle-aged to older workers might experience a small decline in welfare, but younger and unborn generations would likely experience substantial gains.

Other ways of handling the transition to a privatized national retirement system might produce large aggregate gains in future real output, while making no age cohort of workers or retirees worse off than under the present system. For example, the costs of the transition to a privatized system might be shared with future generations by government borrowing that would be paid off partly with tax receipts from generations as yet unborn. Some proposals would more quickly privatize the national retirement system by setting up individual accounts for all current workers regardless of age. Workers would receive credit for their past contributions to the pay-as-you-go system by receiving "recognition bonds" equal in value to their accrued Social Security wealth, a device used successfully in privatizing Chile's retirement system. These bonds would be added to the individual accounts and be paid off with future government revenues.

But it is important to recognize in closing this section that estimates of the future size of the Social Security problem and the benefits of privatization are uncertain. Estimates of future Social Security deficits depend partly on such difficult-to-forecast factors as fertility rates and productivity growth. The Social Security Administration's intermediate projections assume reasonable but fairly moderate growth of productivity and, thus, real output in the next century. If future productivity growth is much stronger than assumed in the coming century, as some analysts expect, population aging could put relatively modest pressures on the Social Security system and the living standards of future working-age families. Estimates of the benefits from privatization are also uncertain. For example, empirical estimates of how changes in tax rates affect labor supply and saving behavior differ, and the size of these effects and the speed with which they occur could substantially affect the estimated transition costs and the long-run efficiency gains from privatization. Despite these uncertainties, however, it does seem likely that Social Security will experience substantial pressures in the next century, and that privatization could help meet these pressures by increasing real output per worker.

III. PRIVATIZATION AND ECONOMIC FAIRNESS

Besides increasing aggregate real output, privatization is sometimes viewed as making the nation's retirement system fairer. But fairness can be measured along many dimensions, and beliefs about fairness differ. For example, some people believe the issue of intergenerational fairness strongly tips the balance in favor of privatization. Others believe, however, that privatization would have adverse effects on the income distribution within any given generation of retirees, which could outweigh any gains in fairness across generations. Whether or not to privatize Social Security may ultimately depend as much on beliefs about fairness as on the uncertain estimates of how much Social Security reduces the nation's real output.

Fairness across generations

Critics of the current system point to the low implicit rates of return to younger generations of workers. Looked at as an investment, contributions to the Social Security system by the baby-boom generation and younger generations are likely to yield substantially lower returns than were received by Social Security's earliest participants. The decline in rates of return is partly inherent in the maturing of a pay-as-you-go retirement system. The earliest participants in Social Security were granted full benefits without making payroll contributions over their entire working lives. Workers who made contributions throughout their careers would inevitably pay more taxes to receive their benefits, experiencing a lower return relative to what was paid in. However, this general effect was repeated when Congress expanded Social Security benefits in the years after the system was established, helping provide better returns for later generations of participants. With current workers paying throughout their careers and unlikely to experience further boosts in real benefits, rates of return can be expected to remain lower.

Opponents of privatization sometimes argue that a fully privatized system could produce unfair intergenerational outcomes because the rate of return on retirement savings would be highly uncertain. Although corporate stocks have higher average rates of return than a pay-as-you-go system, stock market returns are much more volatile. As a result, one generation of workers might experience higher or lower returns than another based on when they should happen to acquire or dispose of their investments. Such risks also exist in defined-contribution retirement plans, which are increasingly popular with U.S. companies. Opponents of privatization argue that with growing amounts of Americans' savings subject to market fluctuations, it becomes even more important that Social Security's returns be predictable over the long term.

An additional uncertainty facing the baby-boom generation is whether the retirement of such a large population group will have unusual effects on financial asset prices. Proposals for privatizing Social Security generally assume that average future returns from the stock market will be similar to those in the past. But some observers fear that large sales of stocks by the baby-boom generation to fund its retirement might depress stock and bond prices (Scheiber and Shoven). For the near future, at least, the effects of the baby-boom generation on financial asset prices are likely to remain uncertain. Research on the relationship between demographics and asset prices is still at a relatively early stage. The research to date suggests that population aging may have important effects on saving rates and financial asset markets, but existing studies do not give clear guidance as to the magnitude or timing of such effects (Bakshi and Chen, Kydland and Petersen, Yoo).[11]

Fairness across income classes

The current Social Security system also reflects the belief that some income redistribution among retirees of a given generation is fair. The current structure of payroll taxes and benefits is designed so that low-income participants receive higher benefits relative to their past payroll tax payments than do high-income participants. Under current law, the real rate of return on the contributions of a single worker born in 1930 is about 3.5 percent for a low-wage worker, but only 1.5 percent for a worker earning the maximum wage (Advisory Council on Social Security). Moreover, low-income retirees are highly dependent on Social Security for their living. Payments from the OASDI programs accounted for 84 percent of the income of aged families in the lowest income quintile, but only 21 percent of the income for those in the highest quintile (Aaron and Bosworth).

Americans differ widely in their beliefs about the fairness of income redistribution. A more equal income distribution has been considered a worthy goal in the past, as witnessed by the progressive structure of income tax rates and the structure of Social Security itself. But some of the support for income redistribution may have eroded, as suggested by efforts in recent decades to flatten the tax rate structure and reform the welfare system. It is unclear, however, that support for income redistribution has eroded to the point where Americans would want to strip it entirely from the public pension system, particularly if this reform meant a rise in poverty rates among the elderly.

Critics of privatization proposals have also emphasized that the greater risks of individual investment accounts could raise the percentage of elderly households living below the poverty level. A sharp decline in stock prices or a prolonged period of below-average returns might plunge many low-income households into poverty. High-income households would also experience reduced living standards in this event, but such households would be less likely to fall below the poverty line because they would have a greater amount invested in their individual accounts, and because such households often have private pension plans or other assets outside the public retirement system. Low-income households also might suffer in retirement if they lack the education or experience needed to select good investment advisors charging reasonable fees.

A privatized public pension system could be designed to alleviate the adverse effects on low-income participants. Many proposals for Social Security reform are, after all, hybrids of a truly private plan and a more traditional Social Security component, which could provide a minimum assured level of benefits to all participants. Instead of such a two-tier plan, the government could make additional payments to the individual accounts of low-income workers, producing a higher expected real income in retirement and reducing the chances of falling into poverty. And even if a purely privatized system were adopted, the nation could give assistance to the elderly poor through such programs as Medicaid and welfare. Some critics of privatization fear, however, that separating income redistribution from the public retirement system would undermine public support for income redistribution altogether.

Protecting against life's uncertainties

Proposals to privatize Social Security must also consider whether or not to keep the protections that the current system provides against such adverse events as the death or disability of a family breadwinner. Such events are often viewed as capricious and unfair, particularly when the breadwinner was otherwise willing and able to support the family. As a result, there has been widespread support for retaining disability and survivors insurance, either through a separate government-administered plan or the required purchase of private disability insurance.

One of the strongest points of the current Social Security system is that it also provides protection against outliving one's savings. Individuals who happen to live an unusually long life can continue to receive Social Security benefits, with the real value of these benefits preserved through inflation adjustments. Critics of privatization question whether a fully privatized system can provide similar protection at a reasonable cost. Mandated contributions under a privatized system likely would be set to provide adequate retirement assets for an average, or perhaps somewhat longer than average, life span. Individuals with an unusually long life could, thus, face a serious risk of using up their assets and falling into poverty.

A possible solution to this risk under a privatized system is to allow—or require—purchase of a retirement annuity with the proceeds accumulated in the individual's retirement account. An annuity could provide a guaranteed income stream regardless of how long the individual lives. However, privately provided annuities are often viewed as being expensive, and such annuities are rarely available in an inflation-protected form. Some reformers have proposed that the government become involved in organizing group annuities, possibly even requiring the purchase of an annuity when the employee reaches retirement age (Kotlikoff and Sachs). Others have argued, however, that such requirements would defeat the objective of turning the primary responsibility for retirement decisions back to the individual.

IV. CONCLUSION

Population aging will inevitably place pressures on U.S. productive resources in the coming century. Future workers will have to produce enough real output to support their own families and a larger retired population. Although health care is beyond the scope of this article, population aging is also likely to cause huge increases in the demand for medical care, and the nation will probably have to find more resources to meet this demand. Faced with such nearly certain pressures, efficiency-increasing options such as privatization look attractive. However, reform proposals will also have to balance possible increases in efficiency with the effects on economic fairness. The issue of intergenerational fairness is often cited by supporters of privatization, while defenders of the current system express concern about the income distribution and poverty rates among the elderly. Although economic research can help to clarify the tradeoffs, economists have no special competence in making value judgments. Ultimately, the balancing of efficiency and fairness must occur through the political process.

ENDNOTES

1 The article will not discuss the problems of the federal hospital insurance (HI) program, commonly known as "Part A" of Medicare. This program is financed by payroll taxes on employers and employees with a combined rate of 2.9 percent in 1996, putting the total tax rate for the OASDI and HI programs at 15.3 percent. Although the HI program faces severe pressures in the next century as the population ages, such pressures will not be analyzed here because hospitalization insurance raises many complicated issues that are beyond the scope of this article.

2 This view appears to be overly pessimistic. Based on the intermediate projections, current tax rates would still cover about 70 percent of promised benefits at the end of the long-run projection period (Advisory Council on Social Security, p. 59).

3 Some worsening in Social Security's finances is likely under existing benefit and tax rate schedules because the population will probably continue to age in the final decades of the next century, decades that are not yet included in the official actuarial estimates. This problem is widely recognized, and some reform proposals have tried to take it into account so that the system would not slip quickly back into deficit as the 75-year projection period moves forward with the passage of time.

In addition, some economists distrust the intermediate projections for Social Security because these projections have often been too optimistic about the system's actuarial soundness in the past. Kotlikoff and Sachs preferred the Social Security Administration's pessimistic projections as a more conservative estimate of the system's future finances, while Gokhale argued that Social Security's realized income and outgo have historically fallen between the intermediate and pessimistic projections. Nevertheless, this article presents the intermediate projections because these figures are commonly used in discussing Social Security's problems, and the projections are based on reasonable economic and demographic assumptions.

4 Feldstein (1996a) estimated that the "deadweight loss" of the Social Security payroll tax was $68 billion in 1995. Eliminating this deadweight loss would raise GDP by about 1 percent annually.

5 Findings by Feldstein (1974) were challenged by Leimer and Lesnoy and other researchers in the 1970s and 1980s. However, Feldstein (1996b) corrected the problems in his earlier study and, using longer sample periods and alternative measures of Social Security wealth, confirmed the result that the Social Security system reduces the private saving rate. This basic conclusion was also obtained from cross-section studies examining a large number of individual savers (Blinder, Gordon, and Wise; Diamond and Hausman), although such studies obtained differing estimates of the size of the effect.

6 These estimates were made with gross Social Security wealth, which is the present value of future Social Security benefits. Net Social Security wealth, which equals gross Social Security wealth minus the present value of future Social Security taxes, is roughly 1.5 times GDP (Feldstein 1996a).

7 Is it reasonable to assume that all other federal spending and tax receipts are constant? Without the current Social Security surplus, Congress and the President might feel greater pressures to cut government spending or raise taxes to reduce the budget deficit. Therefore, the Social Security surplus may, to some degree, encourage a larger deficit in the non-Social Security portion of the federal budget. Most likely, the Social Security surplus does still contribute to national saving, but by less than the officially recorded amount (Feldstein 1996a).

8 The effect of a lower national saving rate on the U.S. capital stock would be reduced to the extent that capital moves across national borders. Lower domestic saving would tend to raise the real return on capital, attracting funds from abroad and helping maintain domestic real output. But the after-tax return on this foreign-owned capital would accrue to foreigners, reducing the consumption opportunities of U.S. citizens compared with a case where the capital stock is domestically owned. Empirical evidence suggests, however, that relatively little of the lost domestic saving is replaced by international capital flows (Feldstein and Horioka).

9 Mariger provided a more critical assessment of recent privatization proposals. He argued that shifting to a funded retirement system could have the greatest effect on national saving, and that such a reform could be accomplished within either a public retirement system or a mandatory system of private accounts.

10 Aaron noted that the true burden on future working-age families may be less than the projected increase in the number of retirees per worker would suggest. At the same time that the population is aging, the number of dependent children per worker is expected to gradually decline. As a result, the total number of dependents per worker would

increase much less rapidly in the next century than the number of retirees per worker. The rise in the elderly population per worker is, however, a much more certain development than the decline in the number of dependent children per worker because past projections of the fertility rate by demographers have often gone far astray—for example, the postwar baby boom was not widely anticipated by demographers.

[11] Another source of uncertainty about the future retirement resources of the baby-boom generation is possible changes in the real price of housing. Much of the wealth of the average American household is tied up in home equity. Future retirees could potentially pay their living expenses and medical bills either by selling their homes or borrowing against their home equity. Mankiw and Weill have argued that the aging of the baby-boom generation is likely to prompt a sharp decline in real housing prices, depriving American families of some part of this wealth. But other analysts, such as Holland and Swan, have argued that forecasts of a sharp decline in housing prices are based on a flawed analysis.

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