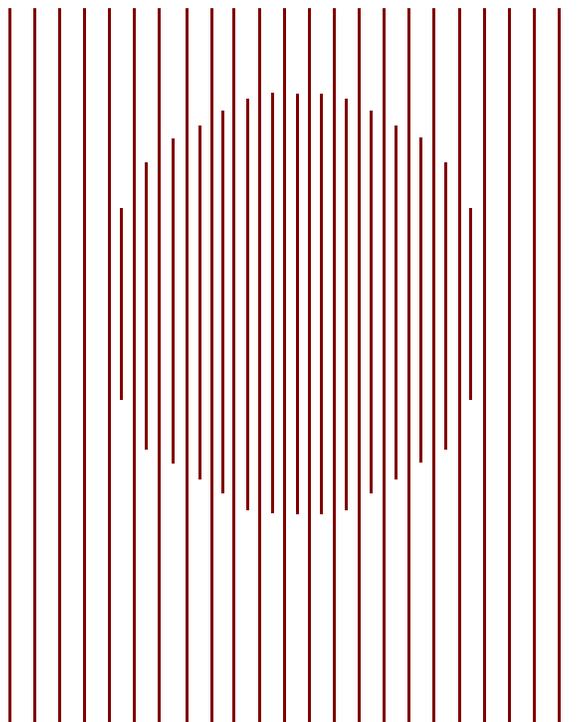


CBO PAPERS

**IMPLICATIONS OF REVISING
SOCIAL SECURITY'S
INVESTMENT POLICIES**

September 1994



CONGRESSIONAL BUDGET OFFICE

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**CONGRESSIONAL BUDGET OFFICE
SECOND AND D STREETS, S.W.
WASHINGTON, D.C. 20515**

PREFACE

In fiscal year 1994, the Social Security trust fund took in about \$58 billion more in revenue than it paid out. But this surplus will disappear over the next few decades, and some analysts have suggested changing the financing of the Social Security system as a means of addressing the long-run funding problem. This Congressional Budget Office (CBO) paper--prepared at the request of the House Committee on Ways and Means--analyzes changing the investment policy of the Social Security system. Approaches considered include investing the trust fund in assets other than U.S. Treasury securities and privatizing all or part of the contributions made on behalf of individual workers.

Joyce Manchester of CBO's Macroeconomic Analysis Division prepared the paper under the supervision of Robert Dennis and Kim Kowalewski. Ralph Smith of CBO's Health and Human Resources Division drafted the section on whether individual retirement savings accounts would be consistent with the goals of the Social Security system. Tom Trabucco of the Federal Retirement Thrift Investment Board and Brett Hammond of TIAA-CREF provided data for the analysis. At CBO, Jim Blum, Paul Cullinan, Nancy Gordon, Douglas Hamilton, Bob Hartman, Larry Ozanne, David Torregrosa, and Paul Van de Water made valuable comments on an earlier draft. Michael Simpson assisted with the analysis of mutual fund data, and Sharon Corbin-Jallow prepared the figure.

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SUMMARY

How to finance Social Security is a controversial issue that has recently generated considerable heated debate. At a time when many people are worried about how best to prepare for paying benefits to the large cohort of baby boomers that will retire after 2010, some policymakers see the investment policy of the Social Security trust fund as ripe for innovation.

By law, reserves in the Social Security trust fund must be invested in special U.S. Treasury securities ("special issues"). But some critics argue that the future of the trust fund and the nation's economic prospects could be improved if this investment policy was changed.

Some approaches to revamping Social Security's investment policies aim to increase the rate of return on investments of the trust fund. More income from investments would postpone the date on which the fund is projected to be exhausted--currently 2029. Such a policy change would, however, reduce the investment income available to private savers. Other approaches would reduce the liabilities of the Social Security system, for instance by requiring people to save for their own retirement. Unfortunately, those approaches would generally reduce flows into the fund by more than they reduce benefits paid out, thus worsening the position of the trust fund.

A broader view recognizes that Social Security's investment policies might in principle have significant effects on the national economy. Policies that seek to increase saving and investment in the economy as a whole could potentially increase resources available for both retirees and working people. For example, proponents of transforming Social Security into a system of individual retirement savings accounts believe that giving individuals more control over their retirement funds would encourage private saving for retirement, and thus overall saving, investment, and growth. If successful, however, such policies would probably do little directly to solve the narrow problem of financing Social Security. The reason is that growth increases benefits, under current rules, nearly as much as it increases financial flows into the fund. But additional growth might ease the funding problem indirectly by providing more resources all around.

Unfortunately, the approaches reviewed here--letting the trust fund hold private securities instead of special government issues and privatizing a portion of the fund--are unlikely to be particularly effective in increasing growth and may have undesired effects on the distribution of income. Government purchases of private securities, unless they were so large as to dominate the market, would have little effect on borrowing costs for private borrowers, and private lenders would have to be content with lower-yielding government securities.

Letting individuals take control of their Social Security accounts might generate more interest in saving for retirement, but it would also introduce a host of changes in the way today's Social Security system affects the distribution of income. Mechanisms could probably be devised that would preserve the long-established principle of providing higher benefits relative to earnings for retired workers with low lifetime earnings. But maintaining the myriad other features of the system would be much more of a challenge.

Moreover, better rates of return on individual retirement savings accounts are uncertain at best. Those lucky investors who reaped high rates of return on their nest eggs would fare nicely. But some investors, through uninformed or unlucky choices, could be faced with small or even negative rates of return. Others could unexpectedly find their retirement goals undermined by the volatility of stock prices at the time of conversion into an annuity. And those who chose to withdraw their retirement savings early or who did not make wise choices at the time of retirement could be left without adequate resources in their later years.

INTRODUCTION

The financing of Social Security is currently a highly controversial issue. Many people are now worried about how best to prepare for paying benefits to the large cohort of baby boomers that will retire after 2010. In response to that concern, some policymakers would like to change the investment policy of the Social Security trust fund.¹

The Social Security trust fund now takes in far more money than it pays out--about \$58 billion more in fiscal year 1994, according to estimates of the Congressional Budget Office (CBO). Moreover, it is expected to continue doing so for about two more decades.² During the retirement years of the baby boomers, however, annual benefits will exceed receipts and the trust fund reserves will disappear. The assets will be depleted as the number of beneficiaries per 100 covered workers rises from 31 to 49--about a 60 percent increase from its current level.³ Under the midrange assumptions of the Social Security trustees, the combined Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) trust fund reserves will become exhausted in 2029.⁴

By law, reserves in the Social Security trust fund must be invested in special U.S. Treasury securities ("special issues"). These special issue bonds can be redeemed at any time at their face value, regardless of changing interest rates. Thus, for the trust fund, they represent a secure and liquid investment. As long as the trust fund operates with an annual surplus, the policy of investing in special issues means that the government does not have to borrow as much from the public to finance the deficit in the rest of the government's accounts.

However, some critics argue that the current investment policy encourages larger government deficits by masking the size of the non-Social Security deficit and condemns the trust funds to the relatively low earnings characteristic of government debt. The future of the trust fund and the

1. The trust funds for Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) are treated here as a single trust fund of Old-Age, Survivors, and Disability Insurance (OASDI). The other Social Security trust funds for Hospital Insurance and Supplementary Medical Insurance are not considered here.

2. For the combined Old-Age and Survivors Insurance and Disability Insurance trust fund surplus, see Congressional Budget Office, *The Economic and Budget Outlook: An Update* (August 1994), Table 2-1, p. 29. Total income, including interest earnings, is expected to exceed expenditures through about 2018 under the midrange assumptions. See Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Fund, *The 1994 Annual Report*, House Document 103-231 (April 12, 1994), p. 23.

3. *Ibid.*, p. 119.

4. *Ibid.*, Table III.B2, p. 176.

nation's economic prospects could be improved, they believe, if the trust fund was invested in assets other than Treasury debt.

Changing the financing of Social Security could take many forms. Some approaches would invest trust fund assets in specific types of instruments such as municipal bonds, the stock market, or gold. Others would partially replace the Social Security program with mandatory savings accounts for retirement. Yet another approach would move toward a funded system rather than maintaining the current pay-as-you-go system, but that approach is not discussed here.

The goals underlying these approaches are many. Some of them claim to increase private investment in a particular sector or in the economy overall. With the looming retirement of baby boomers in mind, others attempt to raise the return on investment to the Social Security trust fund or individual beneficiaries. Still another goal is to ensure that resources are committed to finance the retirement of the baby boomers and will not be used for any other government purpose in the intervening years. Proponents of transforming Social Security into a system of individual retirement savings accounts believe that giving individuals more control over their retirement funds would encourage greater private saving for retirement.

Unfortunately, none of these approaches to changing the investment policy of Social Security is likely to increase the size of the national economy in a significant way. Only by increasing the rate of national saving would the pace of investment rise to boost productivity and raise the standard of living for retirees and younger people alike. Earning a higher rate of return on the Social Security trust fund might delay the point at which the trust fund is exhausted, but it would not have much effect on the overall burden on the economy caused by the Social Security program.

Moreover, even if the pace of economic growth did quicken, the long-run financial outlook for the Social Security program would not substantially improve. Faster economic growth helps the funding situation indirectly by providing more resources all around, but not as much as one might expect because benefits are tied to the growth of real wages. Approaches that put some of the current funding for Social Security into vehicles similar to individual retirement accounts (IRAs) would increase the trust fund's difficulties, unless they also reduced claims on the program. Yet if they did, some of the other objectives of the Social Security system could be compromised. Those are typical dilemmas that any changes to the current system would pose.

Social Security is not the only retirement program under pressure. All programs, both public and private, that provide support to retirees will have to sell their assets to provide for the retirement of the baby boomers at about the same time. Selling private assets during the retirement years of the baby boomers could be as difficult as relying on government programs to provide for their retirement. At about the same time that the trust funds for Social Security will be depleted, providing health care and other benefits to the large elderly population will exert pressures on federal budgets, retired baby boomers will have to spend down their assets, and private pension funds could become a net seller of funds--that is, the funds on average will pay out more in benefits than they will collect in revenues and interest.⁵

COULD REVISING THE SOCIAL SECURITY TRUST FUND'S INVESTMENT POLICIES PROVIDE MORE RESOURCES FOR THE RETIREMENT OF THE BABY BOOMERS?

The Social Security program promises levels of support to retirees that presumably reflect concerns about the distribution and adequacy of benefits. No single policy prescription can solve the problem of how to provide these benefits to future retirees. Rather, two issues are involved.

First, unless policymakers wish to increase transfers from young to old, the only way to expand the resources available to future retirees is through faster economic growth. Indeed, expanding the size of the economic pie would raise living standards for all ages. Faster growth can best be attained through increased national saving--the saving of individuals, businesses, and governments--so as to spur investment and raise productivity. Higher productivity--the amount each worker can produce--leads to faster economic growth by expanding the production of goods and services that can be distributed among the population. Not only will the elderly enjoy some of this bounty, but the working people who must contribute to the Social Security system to pay for the benefits of retirees will gain as well.

Although faster economic growth would help to finance the retirement of the baby boomers indirectly by making more resources available to all, it is no panacea. More rapid growth does not make funding easier for retirement programs such as Social Security and pension plans of the defined benefit type in which benefits are tied to the growth of real wages. Social Security

5. Sylvester J. Schieber and John B. Shoven, "The Consequences of Population Aging on Private Pension Fund Saving and Asset Markets," Working Paper No. 4665 (National Bureau of Economic Research, Cambridge, Mass., March 1994).

replaces a fraction of lifetime wages up to some maximum, and defined benefit pensions replace a fraction of final salary at the sponsoring firm. As real wages rise, so too do benefits, meaning that the flow of revenues coming into the system cannot exceed the flow of benefits going out of the system by a significant amount.

Second, the financing of the Social Security program must be designed in such a way as to minimize the burden on the economy, both now and in the future. Simply changing the form in which trust fund assets are held would not help, since the burden of the program is determined by the amount of benefits that must be paid out relative to how much is produced by the economy.

Approaches That Encourage Economic Growth

Some approaches to changing the investment policy of the trust fund would require investing in securities that in turn finance investments in sectors thought to contribute to economic growth. For example, in the past, advocates have urged that the trust fund invest in state or municipal government securities, an education loan bank, or community loan funds to provide more public infrastructure, education, or training opportunities.

Switching the form in which assets of Social Security trust funds are held, however, would offer little or no improvement in the outlook for either specific sectors of the economy or the wider economy for two reasons.

First, using less Social Security money to help finance the deficit in other federal accounts would mean only that saving from sources other than Social Security would have to finance that part of the Treasury's borrowing. Hence, although new Social Security funds might be directed to a given sector outside the federal government, an equal amount of investment would have to be drawn out of that and other sectors to be invested in Treasury debt. In short, redirecting money from Social Security to investments other than Treasury debt would not expand nonfederal investment as a whole.

Second, having the trust fund invest in particular nonfederal sectors would probably not even significantly expand funds available to those sectors or significantly reduce the cost of borrowing. Private investors readily shift their funds among different assets in search of the highest returns. If a significant flow of Social Security money into a particular security depressed the return of that security just a bit relative to others in the market, investors would take their funds out of those assets in search of others with higher returns. As a

result, borrowing costs and the total supply of funds would change little (see Box 1).

Small markets in certain securities could, however, provide exceptions to this rule. If the trust fund bought all or most of the securities offered in the education loan market, for example, it would surely affect their rates of return. But this step would effectively confer authority on the trust fund to make and execute policy, since it could independently determine subsidies provided to various sectors or regions. Not least, some danger exists that overinvesting in a particular sector could drive the rate of return below the socially optimal level. More resources could be diverted from other sectors than the Congress or other policymakers would think appropriate if given an opportunity to make an explicit, reasoned decision.

BOX 1.

WHY SHIFTS IN ASSETS HAVE LITTLE EFFECT ON INTEREST RATES

A substantial body of evidence suggests that exchanges of Treasury debt for other securities would have little effect on their relative interest rates. The proportion of privately held marketable Treasury debt to various nonfederal securities has changed dramatically since the end of World War II. Changes in the proportion by factors of 10 or more have had no apparent systematic effect on the relative interest yields of Treasury bonds and nonfederal securities.

According to the bulk of statistical studies of financial markets, exchanges of one kind of security for another may induce transient changes in relative interest rates. But any long-term change would probably be economically trivial. For example, estimates from one of the most recent studies imply that exchanging one-half of all outstanding corporate bonds for Treasury debt would lower the interest rate of corporate bonds compared with that of Treasury debt by less than a basis point (one-hundredth of a percentage point).¹ Similar results apply for other assets.

1. See Jeffrey A. Frankel, "Portfolio Crowding-Out, Empirically Estimated," *Quarterly Journal of Economics* (Supplement 1985), pp. 1041-1065.

Approaches That Improve the Investment Performance of the Social Security Trust Fund

Another approach to revamping Social Security is to enhance the investment performance of the trust fund itself, perhaps with an eye toward expanding benefits or reducing the financing burden. Under this approach, the trust funds could hold high-yielding corporate securities rather than special Treasury securities that earn relatively low yields. Even if higher returns were achieved, however, the cost of the Social Security system would remain unchanged--at least as measured by the benefits it pays, which have to come out of the goods and services produced by workers.

The Social Security system is one way to allow retired people to consume goods and services produced by working people. Workers build up an entitlement to benefits under the Social Security system during their lifetime of work. Benefits paid to retirees are largely financed out of the contributions of current workers, though the trust fund provides a cushion that allows the system to tap resources in the future when the ratio of contributions to benefits falls temporarily.

Other financing mechanisms are, of course, possible in principle. Retirees could pay for their consumption entirely out of their own savings, or the government could pay for it entirely out of general funds. Different methods of financing could certainly affect the equity of the system and would have different implications for incentives to work and save. But the major burden that retirement places on the economy depends not on the financing, but on the level of support provided to retired people.

Improving the investment performance of the trust fund might have one of two alternative goals: to help provide additional resources to retirees, or to reduce the burden of financing the existing level of benefits by holding down payroll taxes. A changed investment policy for the Social Security trust fund would reduce income earned by other investors, in precise proportion to the amount that it increased returns to the fund. Providing additional resources to retirees would clearly increase the main burden of retirement on the economy--namely, the resources that would have to be transferred from workers to retirees. Hence, the decision to provide such additional resources might best be made directly, not as a by-product of a financing decision.

Many proponents see better investment performance by the trust fund as a way to hold down Social Security taxes, which are somewhat regressive. Indeed, a rise in the rate of return on trust fund assets equal to 1 percentage point would currently produce about as much revenue as increases of 0.25

percentage points in both the employer and employee payroll taxes. Under the current tax structure, people of moderate income pay a higher percentage of their earnings to Social Security taxes than do the wealthy. That regressive effect is moderated to some extent, however, by the progressive nature of the benefit structure. The benefit structure replaces a higher percentage of income for low-wage workers.

At the same time, changing the portfolio mix implies that the trust fund would have to take on the increased risks that, in the private market, justify high returns for corporate equities or corporate bonds. Businesses can fail, dividends can be cut, and stock prices can fall. High rates of inflation would batter the value of the special Treasury securities that the trust fund now holds, but none of these other risks apply.

Moreover, the functioning of the economy would not necessarily be improved if the government, through the Social Security trust fund, were to underwrite substantial portions of the risk of private ventures by holding corporate equities. Many people argue that private markets and private investors are better at evaluating those risks than the government would be.

Approaches That Give Individuals More Control Over Their Social Security Funds

Approaches that would allow individuals to choose how to invest part of their Social Security contributions would enhance private control over retirement funds and presumably reduce the financing burden on the economy. These approaches would establish mandatory defined contribution pension plans--called individual retirement savings accounts (IRSAs) for the purposes of this paper--and would divert at least a portion of the Social Security payroll tax to the accounts.

Such approaches raise a number of thorny issues, including how the accounts could be integrated with the current Social Security system, whether such accounts would meet expectations regarding their rate of return, and whether they would undermine the redistributive goals of the current system. A further question is whether saving by individuals for retirement outside of Social Security would be raised or lowered if payroll tax revenues were shifted to IRSAs.

Giving individuals more control over their Social Security contributions could either increase or decrease overall private saving. If baby boomers became more confident that retirement benefits from Social Security or

IRSAs would be available, discretionary saving for retirement could decline. If early withdrawals were allowed, as is true for individual retirement accounts now, retirement saving could decline even further. However, individuals might take a greater interest in providing for their retirement if they were constantly reminded of the need to save.

In fact, the effect of Social Security on private saving is not even clear, so uncertainty over the effects of IRSAs on private saving is hardly surprising. If one assumes that people plan for retirement during a fixed working life, then the Social Security tax that is paid each year should reduce private saving by an equal amount.⁶ For an actuarially fair Social Security program, that outcome is equivalent to reducing the personal wealth accumulated before retirement by the actuarial present value of future benefits. But if retirement and saving decisions are made jointly, then Social Security is likely to induce earlier retirement and the resulting increase in the expected length of retirement will raise total savings during preretirement years. The net effect of Social Security on saving, therefore, could be either positive or negative.⁷

Further, if individuals are viewed as nonplanners who save in a haphazard way or not at all, the Social Security system would have no offsetting effect on private saving. Evidence based on cross-section data suggests that Social Security wealth does reduce private saving somewhat, but the offset is less than dollar for dollar.⁸

Moreover, national saving could either rise or fall in the short run depending on how people respond to the change in the way Social Security benefits are financed. The combination of increased personal saving and reduced government borrowing could lead to an increase in national saving. Indeed, if partially removing the Social Security trust fund from the government accounts made more people aware of the size of the non-Social Security federal deficit, policymakers might cut spending more or increase taxes further. But the deficit reductions achieved over the past few years have

6. Martin Feldstein, "Social Security, Induced Retirement, and Aggregate Capital Accumulation," *Journal of Political Economy* (September/October 1974), pp. 905-926.

7. Martin Feldstein, "Social Security and Private Savings: International Evidence in an Extended Life Cycle Model," in Martin Feldstein and Robert Inman, eds., *The Economics of Public Services* (New York: Halstead Press, 1977).

8. For example, see Alan Blinder, Robert Gordon, and David Wise, "Life Cycle Savings and Bequests: Cross Sectional Estimates of the Life Cycle Model," in Franco Modigliani, ed., *The Determinants of National Savings and Wealth* (New York: MacMillan Press, 1983). Also see Martin Feldstein, "Social Security Benefits and the Accumulation of Preretirement Wealth," in the same volume.

been painful. Deeper cuts might have been difficult to obtain even if the public thought the deficit was \$58 billion higher. Moreover, if people were to increase their consumption in response to a change in the financing of Social Security, national saving would decline unless deficit cuts exceeded the reductions in personal saving.

Over a longer horizon, privatization schemes that reduced benefits to Social Security recipients would reduce the growth of entitlements. Between fiscal years 1994 and 2004, CBO projects that all mandatory spending, excluding deposit insurance, will increase by \$761 billion.⁹ Social Security programs account for 28 percent of that increase. But reducing federal expenditures on Social Security benefits to retirees might not reduce the size of the federal deficit and increase national saving because payroll tax revenues would fall.

IS PARTIALLY PRIVATIZING THE SOCIAL SECURITY SYSTEM FEASIBLE WITHOUT FURTHER CHANGES?

If some of the money currently going to the Social Security trust fund was transferred to individual retirement savings accounts, something would have to be done to maintain the long-run financial integrity of the Social Security system. It clearly could not maintain the same level of benefits with lower income for a long period of time. Although the offsetting changes in revenues or benefits are not spelled out in some of the approaches, the options are clear: benefits might be reduced to match the lower cash flow, payroll taxes might be increased (thus undermining one of the major arguments for privatization), or the system might get subsidies from general revenues.

One country--Chile--that has already taken the step of privatizing a segment of its social security system illustrates the choices that must be made (see Box 2). Chile has privatized pensions for new employees as well as for more than 90 percent of existing employees who chose to join the new system. The remaining existing employees continue to pay into the state system and receive benefits under it, with some slight adjustments in the structure of benefits. Because the state system, like the U.S. system, was not fully funded but had a large pay-as-you-go element, the end of contributions has left the system with substantial shortfalls that must be met with subsidies from general revenues. A considerable amount of government debt will also be created in the future to meet the deficits of the old system, provide minimum benefits,

9. Congressional Budget Office, *The Economic and Budget Outlook: An Update* (August 1994), Box 2-1, p. 31.

BOX 2.
CHILE'S PRIVATIZED SYSTEM OF SOCIAL SECURITY

In 1981, Chile privatized its long-established "traditional" social insurance program.¹ The new system, in large part a defined contribution pension system, is financed through mandatory contributions of 10 percent of earnings from all employees except those in the armed forces. The system provides a minimum benefit to retirees as well as disability and survivor benefits. Moreover, employees receive credit for work history prior to 1981 in the form of recognition bonds for previous service.

Individuals can choose to invest their contributions in one of about 14 pension funds. Those funds may invest in government-guaranteed investments, time deposits in banks, mortgage bonds, common stocks, and bonds of private and publicly owned businesses. By dictating to some extent the allocation of the portfolios of the 14 funds, the Chilean system ensures some diversification. At the end of 1990, about 44 percent of the assets were invested in government-guaranteed investments. Only 11 percent were in common stocks.

The pension funds have enjoyed relatively generous real rates of return, but the administrative costs associated with the system have been quite high. From 1981 through 1990, the average real rate of return was 13 percent.² Earning high rates of return is important to providing adequate benefits—analysts estimate that, if the average real rate of return is about 6 percent, the ultimate level of retirement pensions will be about 70 percent of the average indexed salary over the last 10 years of coverage. In addition to the mandatory contribution of 10 percent of earnings, a contribution is paid to finance disability benefits and preretirement survivor benefits and to cover part of the general administrative expenses of the pension funds. On average, administrative expenses are 1.5 percent of earnings, giving a ratio of expenses to contributions of 15 percent.³

The effect of the new system on national saving in Chile is not at all clear. The social security system has been privatized for new employees. However, large contributions from taxpayers will continue for many years to maintain the old system for those who remained in it, guarantee a minimum pension to beneficiaries under the new system, and finance the recognition bonds for previous service. In fact, the large holdings of government obligations by the pension funds currently help to finance the considerable burden of the transition to the privatized system as well as provide minimum benefits.

Several characteristics of the Chilean system raise questions about the suitability of such a plan for the United States. Any transition to a system of individual accounts would involve huge general revenue costs to the government. Such costs would be necessary to finance the benefits not only for those now in the system but also for those within a decade or two of retirement age, whose individual accounts based on future contributions could not provide adequate benefits. Moreover, additional general revenues would be needed to finance minimum benefits for low-income individuals.

Other countries have mandatory saving schemes for retirement as well. In Singapore, for example, workers pay from 7 percent to 30 percent of gross wages to the government's provident fund, and the employer pays an additional 10 percent. Australia recently established a mandatory funded retirement scheme based on employment to supplement its public retirement program. And the United Kingdom now allows both employers and workers to opt out of the public retirement program into their own plan.⁴

1. For a description of the Chilean system and a discussion of its advantages as well as its disadvantages, see Robert J. Myers, "Chile's Social Security Reform, After Ten Years," *Benefits Quarterly* (Third Quarter 1992), pp. 41-55. For a different perspective, see Peter Diamond, "Privatization of Social Security: Lessons from Chile," Working Paper No. 4510 (National Bureau of Economic Research, Cambridge, Mass., October 1993).
2. Myers, "Chile's Social Security Reform," Table V, p. 51.
3. In a letter to the editor of *The Wall Street Journal* of May 23, 1993, Myers notes that the expense ratio for Social Security in the United States comparable to Chile's 15 percent is about 1 percent.
4. For further discussion, see Estelle James, and others, *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth* (World Bank Policy Research Report, World Bank and Oxford University Press, forthcoming).

and redeem the bonds that were issued to existing employees for prior service when they joined the new system.

Changes that would partially privatize the U.S. Social Security system also raise the question of how benefits for current and soon-to-be retirees would be financed. Increasing payroll taxes is not likely to be acceptable, since one of the main reasons for changing the current system is concern over current levels of the tax. Moreover, since the inception of the system, policy has been aimed at maintaining the appearance that Social Security pays its own way. Thus, subsidies would be likely to attract considerable opposition as well.

Approaches that privatize a part of the system therefore would probably require a reduction in benefits paid out of the federal system. As a group, beneficiaries would be unlikely to suffer an overall reduction in financing for retirement, since some benefits would come from the IRSAs. But if some would gain, others would lose from the exchange.

COULD PEOPLE MANAGE THEIR OWN FUNDS BETTER THAN THE SOCIAL SECURITY SYSTEM?

Although allowing individuals to choose how to invest a portion of the contributions in IRSAs could not be relied on to encourage more saving for retirement, it might have other benefits. Some people might feel more confident that retirement funds would be available. But policymakers would need to know whether workers could manage their retirement funds as well as or better than the Social Security system.

Relatively high returns are clearly available from investments in private securities, either corporate bonds or equities. Whether such high returns would be realized on average would depend on how much risk workers would be willing to assume in their IRSAs, how diversified their portfolios would be, and whether future asset returns follow their historical patterns. And unless national saving is higher than it otherwise would be, incomes would simply be shifted from one group of people to another without raising the level of resources available to all.

The issue is further complicated, since the Social Security system computes benefits in a complex way that provides substantially different returns to different participants in the system. Thus, although some individuals might benefit, others could well lose from any privatization of the system.

Investment Choices by Individuals

Many people tend to invest conservatively in low-risk, low-return investments when they control their own retirement funds. Three existing vehicles for retirement investment--401(k) plans and the self-directed retirement funds for federal workers and for teachers and professors--tend to be heavily invested in fixed-income securities such as bonds and guaranteed investment contracts (GICs) that invest in a fixed-interest contract with an insurance company. Higher-return but higher-risk investments such as equities or stock mutual funds seem to be less favored.

Investment choices by IRSA holders could differ. But if this preference for low-risk, low-return investments continues, individual choice is unlikely to increase the resources available to baby boomers in retirement as long as national saving does not change much. Assets in IRSAs, if conservatively invested, would probably not earn much higher returns than currently accrue to the trust fund, and some individuals might find that their market rate of return was in fact below what they had expected and planned for.

401(k) Plans. In 1989, the average equity share in all 401(k) plans was 21 percent, although different design features of the plans affect this number.¹⁰ Plans that provide incentives for participants to invest at least a portion of the overall contribution in the employer's securities (sometimes referred to as KSOPs) had 30 percent of total assets invested in equities.

Interestingly, employees are more conservative than employers. In a 1993 survey of 480 401(k) plans, 89 percent of the plans allowed employees to invest their contributions in traditional equity investment options such as growth and income, growth, or equity index mutual funds.¹¹ But only one-fifth of the employee balance--that is, the total assets contributed by employees or generated from earnings on those contributions--was invested in such funds, with an additional one-quarter of the employee balance in employer stock (see Table 1).

By contrast, employer contributions were tilted much more toward equity investments, though largely in the stock of their own firms. In more than two-

10. Jack L. VanDerhei, "New Evidence That Employees Choose Conservative Investments for Their Retirement Funds," *Employee Benefit Notes* (February 1992). A Congressional Budget Office tabulation of Form 5500 data from 1990 shows that the percentage of assets in equities has risen slightly to 24.5 percent of total assets. See Department of Labor, "Abstract of 1990 Form 5500 Annual Reports," *Private Pension Plan Bulletin* (Summer 1993), Table D5.

11. Hewitt Associates, *401(k) Plan Hot Topics, 1993* (Lincolnshire, Ill.: Hewitt Associates, 1993).

TABLE 1. ASSET MIX OF SURVEYED 401(K) PLANS IN 1993
(In percent)

	Employee Balance	Employer Balance
Money Market Funds	4	4
Guaranteed Investment Contracts	33	11
Diversified Fixed-Income Securities	6	3
Bonds	5	4
Balanced Funds	3	6
Traditional Equities	20	12
Employer Stock	25	59
Other	4	1

SOURCE: Hewitt Associates, *401(k) Plan Hot Topics, 1993* (Lincolnshire, Ill.: Hewitt Associates, 1993).

NOTE: Employee balance refers to total assets contributed by employees or generated from earnings on those contributions. Employer balance refers to total assets contributed by employers or generated from earnings on those contributions.

thirds of the surveyed plans, employer contributions were permitted to be invested in equity investment options. Yet, of the employer balance, one-eighth was in traditional equity investments, whereas three-fifths was in employer stock. Conservative investment choices such as guaranteed investment contracts, money market funds, and diversified fixed-income funds made up much of the remaining shares of both employee and employer balances.

Thrift Savings Plan for Federal Employees. Federal employees have a Thrift Saving Plan (TSP) program that is similar in many respects to 401(k) plans. Although TSP balances continue to be heavily invested in fixed-income funds, the flow of contributions shows a steady shift toward equities. The TSP program began operations in 1987. At the end of August 1994, more than 2 million individuals had TSP accounts with investments amounting to \$24 billion. Of this total, 70 percent was in government securities, 24 percent was in the equity fund, and 6 percent was invested in the bond fund.¹²

12. Allocations of amounts in the three funds reflect restrictions on investment choices that were in place until January 1991. In 1988, 80 percent of the employee contribution was restricted to the government bond fund. This restriction was reduced to 60 percent in 1989 and to 40 percent in 1990. Beginning in January 1991, participants were free to allocate both the employee and the employer contribution as they wished among the three funds.

More recently, however, TSP participants have moved sharply toward equity investments.¹³ In January 1991, more than 93 percent of monthly TSP contributions went to the government securities fund and only about 5 percent to the equities fund. But in August 1994, the most recent month for which data are available, only 55 percent of monthly contributions were allocated to the government securities fund. About 35 percent went to the equity fund, and 10 percent went to the bond fund. TSP participants have a lower percentage going into stock funds than do 401(k) participants, perhaps because they cannot purchase an employer's stock, as can 401(k) participants. Yet a trend toward higher-risk assets is clearly evident.

TIAA-CREF Allocations. Allocations to the Teachers Insurance and Annuity Association-College Retirement Equities Fund (TIAA-CREF) illustrate how contributions might be split between stock and bond funds in long-established retirement funds. TIAA-CREF now holds about \$130 billion in its portfolio, and monthly allocation choices since 1990 suggest that well-educated contributors tend to give higher allocations to equity funds.¹⁴ In April 1990, about 39 percent of monthly allocations went to CREF equity funds. By April 1994, that percentage had risen to 51 percent. The recent addition of a social choice equity fund and a global equity fund may explain some of the increase, but education efforts and the strong performance of equities markets until March 1994 probably deserve some of the credit as well.

Of course, the experience of 401(k) plans, the TSP program, and TIAA-CREF may not accurately predict how IRSA holders would invest for two reasons. First, individuals may have special reasons to invest their employer-sponsored retirement accounts in specific types of assets. Political pressures could cause some people to invest or not to invest in certain securities, as was evident in the boycott of investments in South Africa. The tax-deferred nature of employment-based retirement plans may also push investment choices toward assets that would be more heavily taxed to individuals in the current year.

Second, people with 401(k)s or federal workers and teachers and professors with self-directed retirement funds may have different preferences and different retirement portfolios than the general population. They may be willing to take more risk in return for higher rates of return. In addition, the

13. Tom Trabucco, Director of External Affairs, Federal Retirement Thrift Retirement Board, kindly provided the data on monthly contributions.

14. Communication from P. Brett Hammond, Director of Strategic Research, TIAA-CREF, New York, N.Y. Monthly allocations include contributions to retirement accounts as well as to supplemental retirement accounts. Allocations to the CREF money market and bond funds are not included as equity allocations.

retirement funds may represent only a portion of their retirement saving portfolio, while IRSAs could represent all retirement savings for some people. Because of such differences, only cautious inferences can be drawn about what investment choices the general population might make if IRSAs were available to everyone.

Historical Returns on Investment Portfolios

How individuals chose to invest their Social Security contributions would significantly affect the amount of resources available to them in retirement. Although future returns are uncertain, the historical returns on stocks, corporate and government bonds, and Treasury bills indicate the possible range of future relative returns. The volatility of returns suggests varying degrees of risk.

Between 1926 and 1987, stocks were by far the best long-term investment on average. Common stocks earned a compound average return equal to 9.9 percent a year in nominal terms over that period, whereas the compound annual return for long-term corporate bonds was only half as high (see Table 2). Among government securities, the average return on long-term government bonds lay somewhat below that of long-term corporate bonds, and U.S. Treasury bills with maturities of less than one year showed an even lower average return that beat inflation by only a small margin.

The riskiness of each of these broad categories of investments, however, varies with the average compound rate of return. In other words, categories with higher average total returns are more likely to show rates of return in any one year that are substantially above or below the average for the period.

TABLE 2. RETURN AND STANDARD DEVIATION ON BROAD INVESTMENT CATEGORIES OVER VARIOUS TIME PERIODS (In percent)

	Compound Annual Return			Standard Deviation, 1926-1987
	1926-1987	1948-1967	1968-1987	
Common Stocks	9.9	14.6	9.3	21.1
Long-Term Corporate Bonds	4.9	2.0	7.9	8.5
Long-Term Government Bonds	4.3	1.4	7.3	8.5
Treasury Bills	3.5	2.4	7.4	3.4
Inflation	3.0	1.9	6.3	4.8

SOURCE: Roger G. Ibbotson and Rex A. Sinquefeld, *Stocks, Bonds, Bills, and Inflation: Historical Returns, 1926-1987* (Chicago: Dow Jones-Irwin, 1989), Exhibits 19 and 24-C.

NOTES: The standard deviation of the compound annual return is a measure of risk. In one-third of the years, the compound annual return was more than one standard deviation above or below the average return. For example, in one-third of the years between 1926 and 1987, the return on common stocks lay below minus 11.2 percent or above 31 percent. Inflation is measured using the consumer price index.

For example, the standard deviation of total returns on stocks is 21.1 percent. This standard deviation means that in one-third of the years from 1926 through 1987, the annual total return on common stocks was likely to be higher than 31 percent or lower than minus 11.2 percent. For investors with a low tolerance for risk, a high standard deviation may indicate more rough sledding than they can accept.

Conversely, U.S. Treasury bills show relatively little risk. The standard deviation on Treasury bills was just 3.4 percent, meaning that in two-thirds of the years from 1926 to 1987, the annual total return on Treasury bills was likely to be between 0.1 percent and 6.9 percent. Losses in any individual year were rare. Investors obtain more reliable--though lower--rates of return when they invest in short-term securities of the federal government.

Corporate securities are riskier than government securities in another respect--they are far more heterogeneous. Treasury securities differ only by their maturities and coupons, but corporate securities require a whole range of additional considerations: whether the company is well managed, its market position, and so on. All of these factors affect dividends, stock prices, bond prices, and thus the return of a particular portfolio of securities. The impact of this risk can be reduced by diversification--by holding a widely spread portfolio of securities with different characteristics so that gains in one area will offset losses in another. But diversification may be hard to achieve

in a small portfolio, such as an individual IRSA. Indeed, investing IRSAs only in direct holdings of primary securities--stocks and bonds--would expose their holders to unnecessary risk.

The most obvious way for a small investor to diversify is to buy, not primary securities, but shares in a large, diversified portfolio--a mutual fund. But even these large portfolios do not generally eliminate all diversifiable risk, since they have distinctly different records. Only by investing in index funds could investors avoid risks not associated with the overall market.

To illustrate the possible range of returns for individual investors who invest in common stocks through mutual funds, CBO calculated compound total returns on the top 10 percent and the bottom 10 percent of mutual funds that invested in common stocks over the 1984-1993 period.¹⁵ During that particular period, the compound total return for those funds with yields in the top 10 percent of stock mutual funds was 18.4 percent a year, with a standard deviation of 18.1 percent. The standard deviation in this case is calculated using monthly data. In other words, in one-third of the months, the annualized total return was more than one standard deviation above or below the average total return. The compound total return for those funds with returns in the bottom 10 percent of stock mutual funds was 5.2 percent, with a standard deviation of 26.8 percent.

Such a range of returns means that investors could have had very different experiences had they invested their Social Security contributions in stock mutual funds during the 1984-1993 period. A lucky investor, who earned an average annual return of 18.4 percent, would have seen an initial \$1,000 investment burgeon to \$5,414. An unlucky investor, who earned just 5.2 percent a year on average, would have had an initial \$1,000 investment grow to only \$1,660. Moreover, the unlucky investor would have had a much greater probability of negative returns in any one month.

Until early this year, mutual funds investing in bonds performed especially well as interest rates fell unexpectedly. For the 1984-1993 period, bond mutual funds in the top 10 percent earned a compound total return of 12.7 percent a year with a standard deviation of 6.8 percent. The total return for the bottom 10 percent of bond funds was actually higher than that for the bottom 10 percent of stock funds and had a much smaller standard deviation

15. Morningstar Mutual Funds OnFloppy (Chicago, Ill., March 1994). The Congressional Budget Office weighted the returns by the mutual fund's net asset value so that relatively small funds receive less weight in calculating the average rate of return.

as well. The compound total return was 7.0 percent a year with a standard deviation of 2.2 percent.

Recent performance of bond funds illustrates the rather wide swings that can occur over short periods of time. During March and April of 1994, as interest rates jumped, bond funds typically lost 10 percent or more of their value. Although such losses could scare off many investors, the yearly performance of well-managed funds is unlikely to exhibit such volatility.

Some bond mutual funds that sought to achieve their investment objectives through active use of derivatives--financial instruments whose value is based on primary securities--suffered even larger losses earlier this year. For example, derivatives based on home mortgages lost value quickly as rising interest rates caused homeowners to repay their mortgages more slowly than anticipated.

Clearly, the experience of workers whose retirement funds are invested in IRSAs is likely to be widely disparate. Even among those who use mutual funds to diversify their investments, some will do very well and others will not keep up with inflation. Moreover, the outcomes for some could be even worse than the weakest experience described here, since the mutual funds that had the worst performance over the past 10 years probably went out of business and are thus not even reflected in the data. Workers who purchase securities directly will be exposed to even greater risk.

Ways do, however, exist to minimize the risk--for instance, rules might specify that IRSAs could be invested only in very broad index funds. But such rules would also reduce the possibility of high returns and would give individuals little latitude in managing their retirement assets, thus undermining one of the goals of privatization proposals.

Other Types of Risk Associated with Individual Retirement Savings Accounts

Benefits received from an individual retirement savings account would depend not only on the rate of return earned on the account but also on the value of the annuity that could be purchased at the time of retirement and on the administrative costs associated with maintaining the accounts.¹⁶

16. For example, retirees might want to purchase annuities that include survivor benefits or inflation protection. For a discussion of the issues involved in indexed annuities, see Zvi Bodie, "Inflation Insurance," *Journal of Risk and Insurance* (December 1990), pp. 634-645.

Unlucky market timing at the point that the IRSA is converted into a stream of payments could present risk unrelated to the average rate of return earned during one's working years. If the stock market suffered a setback at the time of a person's retirement, for example, a large share of the gains earned over many years could be lost. Rules allowing partial conversion of the IRSA into an annuity over a period of time would ameliorate such risk. Careful financial planning for retirement during one's working years could also reduce the risk.

Administrative headaches from keeping track of thousands of individual accounts and the firms that must remit the payments for the accounts represent yet another type of risk. Administrative burdens could result in relatively large costs stemming from the many investment choices among individuals, the small sums of money involved, and the obligations to keep individuals informed about their accounts. High administrative costs could eat away at annual earnings on IRSAs (as, in an extreme case, they do in Chile).

Administrative burdens might be particularly onerous for the smallest accounts. Under some approaches, firms need not pay into an individual's account until the accumulated savings reach some limit. But how those funds are invested in the meantime, and what happens if the firm ceases to exist or fails to make good on the payments, is not at all clear.

WOULD INDIVIDUAL RETIREMENT SAVINGS ACCOUNTS BE INCONSISTENT WITH SOME OF THE GOALS OF THE SOCIAL SECURITY SYSTEM?

Benefits under the Social Security system are determined by a complex system that seeks a balance between equity and ensuring an adequate level of benefits even to the poorest recipients.¹⁷ At least implicitly, moving to IRSAs would alter this balance. The amount of retirement income derived from funds invested in an IRSA would be determined by the amount invested and the rate of return on that investment. That payout scheme is quite different from the benefit structure under current law. It would be equivalent to moving to a defined contribution plan, instead of a defined benefit plan.

The benefit formula itself exemplifies the mixture of goals in the current Social Security system. To help achieve equity, a link exists between what individuals pay while working and what they subsequently receive when they

17. This theme is developed by Martha Derthick in *Policymaking for Social Security* (Washington, D.C.: Brookings Institution, 1979). See, especially, Chapter 10.

retire or become disabled--regardless of their needs. In general, workers who pay more Social Security taxes will receive more Social Security benefits. However, the formula is progressive rather than proportionate, so that replacement rates--the ratio of retirement benefits to preretirement wage incomes--are generally higher for workers with low-wage histories than for well-to-do workers. That progressivity reflects the goal of providing benefits to people in need of assistance.

A major concern raised by opponents of approaches that include IRSAs is that individual accounts could undermine the progressive benefit structure of the Social Security system.

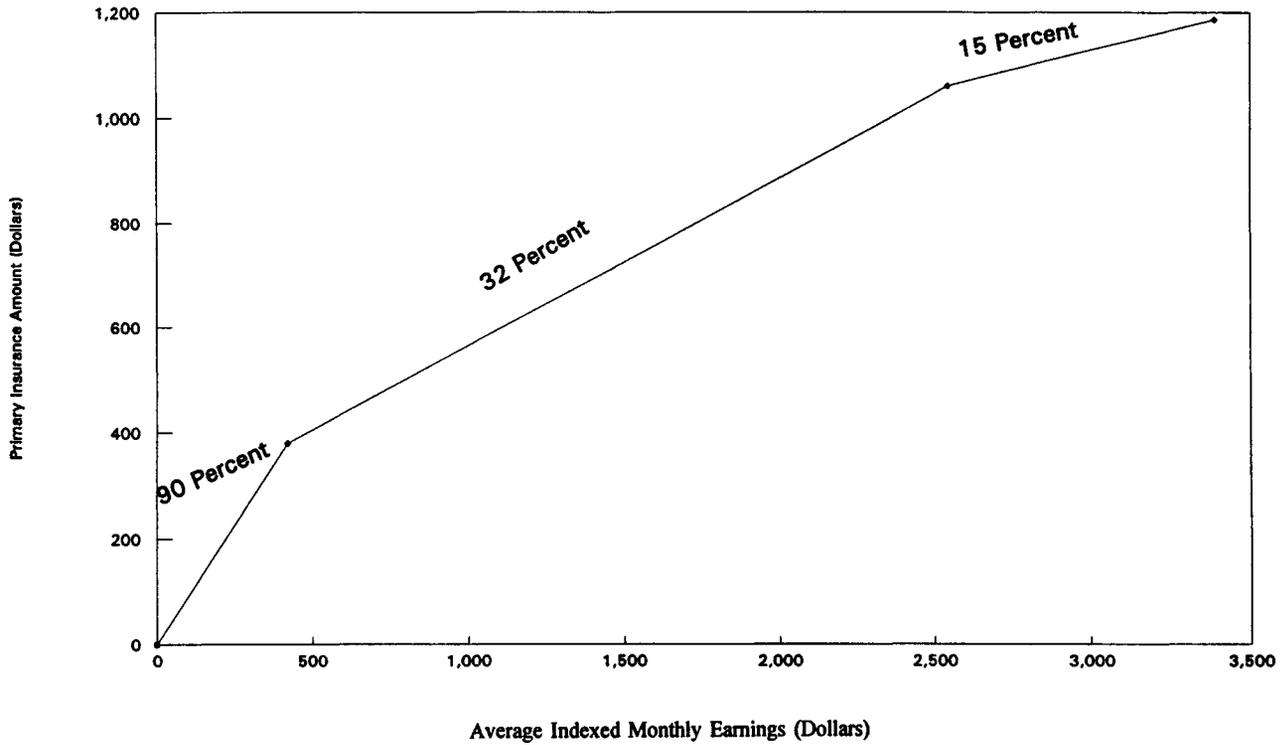
Current Benefit Structure

Benefits of retired (and disabled) workers are based on their earnings histories, expressed as an average level of earnings over their working lifetimes known as the average indexed monthly earnings (AIME). From this average, a formula is used to calculate a worker's primary insurance amount (PIA), which is then adjusted for a number of factors, such as reductions for early retirement, credits for later retirement, and increases for inflation.

A worker's AIME is based on wages earned in covered employment, with some adjustments. All earnings on which a retired worker paid Social Security taxes from 1951 to the year he or she turns 60 are "wage indexed" to compensate for past inflation and real wage growth. To accomplish this adjustment, each year's earnings up to the maximum subject to the Social Security tax are multiplied by an "indexing factor," which equals the ratio of the average national wage in the year the worker turns 60 to the average national wage in the year to be indexed. Earnings when an individual is age 60 or older are entered without being indexed. From this set of earnings, the highest 35 years are selected, added together, and divided by 420 (the number of months in 35 years). The result is the AIME.

To convert the AIME to a worker's PIA, a formula is applied that is progressive in the sense that it is designed to provide benefits that are a higher proportion of preretirement earnings for people with low average earnings than for those with higher earnings. That formula largely reflects a perception that relatively high replacement rates are necessary for those with relatively low earnings to provide them with adequate retirement incomes (see Figure 1 for an illustration of the formula).

FIGURE 1. PRIMARY INSURANCE AMOUNTS IN RELATION TO AVERAGE INDEXED MONTHLY EARNINGS UNDER CURRENT LAW, FOR WORKERS WHO TURNED AGE 62 IN 1994



SOURCE: Congressional Budget Office.

NOTE: For workers in this cohort who retired at age 65 (in 1997), the Primary Insurance Amount would be based on the formula illustrated in this figure, with the amounts increased by the cost-of-living adjustments effective in 1994, 1995, and 1996.

Under the formula, Social Security benefits replace 90 percent of the first part of a worker's AIME. But for subsequent portions of the AIME, the proportion falls--first to 32 percent and finally to 15 percent. For workers who reached age 62 in 1994, the formula is as follows: a worker's PIA equals 90 percent of the first \$422 of the AIME, plus 32 percent of the AIME between \$423 and \$2,545, plus 15 percent of the AIME over \$2,545. The points at which the percentage of the AIME replaced by the PIA changes (known as "bend points") are indexed to average annual earnings for the labor force as a whole. Consequently, as wages rise over time, average replacement rates are maintained.

In general, workers receive 100 percent of their own PIA in benefits if they first receive benefits at the age of full retirement, which is currently 65. The benefit is reduced if they retire earlier. For example, a worker who retires at age 62 receives a 20 percent reduction. Similarly, a credit is given for later retirement. Beginning with the age of initial eligibility (62 for retired workers), the PIA is increased each year for inflation.

In addition, spouses and other survivors of workers may be eligible for benefits based on the worker's PIA. The rules are complicated. However, elderly spouses of retired workers are usually eligible for benefits equal to 50 percent of the worker's PIA, and elderly widows and widowers are eligible for benefits equal to 100 percent of the deceased worker's PIA. Spouses who are also eligible for benefits as workers based on their own earnings records in effect receive the higher of the two benefits to which they are entitled. Various other provisions in the law and in regulations determine benefits paid in the case of divorce, retirement before age 65, employment after initial retirement, and common-law marriages.

The progressive benefit formula, spousal benefits, survivor benefits, and the longer life spans of women combine to produce striking differences among groups in projected Social Security benefits and taxes. For example, some analysts estimate that inflation-adjusted rates of return among early baby boomers, based on both the employee and the employer portions of the OASI payroll tax, would range from close to zero for high-earning workers who never married to over 4 percent for low-earning married men whose wives never worked for pay.¹⁸

18. C. Eugene Steuerle and Jon M. Bakija, *Retooling Social Security for the 21st Century: Right and Wrong Approaches to Reform* (Washington, D.C.: Urban Institute Press, 1994), Table A.3, p. 277. The estimates cited are for workers born in 1950. The estimated rates of return for high-earning single males and for single females were 0.03 percent and 0.94 percent, respectively. The rate for low-earning husbands with wives not entitled to benefits as workers was 4.41 percent. For workers born before 1950, the estimated returns were higher.

Benefits Based on an Individual Retirement Savings Account

The distribution of benefits would change if IRSAs were implemented, with the impact on the benefit structure depending on the percentage of benefits based on assets in the IRSA. If the current benefit structure was simply replaced with one in which retirement benefits were determined by the amount of money in one's IRSA, then its progressive character would be eliminated. All else being equal, a retired worker who consistently earned half of the earnings of the average worker would expect to receive half of the average benefit.¹⁹ By comparison, under current law, that low-wage worker receives roughly 65 percent of the average benefit. Similarly, a retired worker whose lifetime earnings were 1.5 times that of the average worker could expect to receive 50 percent more than the average benefit under a pure defined contribution plan, rather than about 30 percent above the average benefit under the current system.

Deviations would occur if the rates of return on investments differed. But low-wage workers might not invest their IRSAs in assets that would yield higher returns than those of other workers. Indeed, lower-wage workers might well be more risk-averse and less sophisticated in their investment behavior and therefore obtain lower returns.

However, the goal of redistribution need not be abandoned if IRSAs were adopted. Other federal programs used in conjunction with Social Security benefits based strictly on the value of IRSAs could achieve minimum levels of income or redistributive objectives. For example, the Supplemental Security Income (SSI) program already provides cash assistance to poor elderly or disabled participants. That program could be expanded or modified. One problem that would need to be addressed, however, is whether the existence of SSI or other means-tested programs would encourage individuals to choose riskier investment strategies for their IRSAs or withdraw them early because taxpayers would, in effect, bear a portion of the risk.

Alternatively, the progressive benefit structure could be maintained by using a mixed strategy in which only a portion of the payroll tax would go to the IRSA. If the benefit structure for the remainder was left in place, then the overall system would still be progressive, albeit somewhat less so. One way of doing that would be to lower the replacement rates within each of the three brackets in the benefit formula proportionately, while setting the bend points as under current law. Another approach (which could be combined

19. This calculation assumes that all contributions would accumulate until retirement. Early withdrawals, of course, would reduce benefits further.

with the mixed strategy) would be to adjust either the Social Security benefits that would be paid or the amount that would be made available to the worker for investment to preserve the current degree of progressivity.²⁰

Other aspects of the Social Security system would be more difficult to preserve. For example, the specific treatment of benefits for disabled workers and for survivors and spouses of workers in the present benefit structure might not be easily replicated in a defined contribution plan. And the indexed annuity feature of the current Social Security system, which ensures that benefits are indexed to keep pace with inflation and are paid as long as a person lives, might not be readily available in private markets. Without such a feature, some people could find that their IRSA payouts decline in value when inflation is positive or are exhausted before the end of their life.

Indeed, how IRSAs are converted into benefits for retirees would have a large bearing on the well-being of the elderly, the amount of public assistance that is needed to support a minimum standard of living, and the amount of wealth the next generation inherits. If IRSAs were paid out as lump-sum distributions at the time of retirement, people who did not invest wisely or who lived unexpectedly long might find themselves without sufficient financial resources toward the end of their lives. Public assistance might be required for some. If people chose to convert IRSAs into annuities, any price charged other than the actuarially fair price would deliver windfalls to either the issuers or the recipients, whether people purchased annuities from the government or from private entities. Moreover, no wealth accumulated in IRSAs would be transferred to the next generation if annuities were chosen.

In sum, moving to a system in which a portion of one's Social Security benefits was based on investments in an IRSA would require decisions to be made about which elements of the current benefit structure should be preserved, modified, or eliminated. Mechanisms could probably be devised that would preserve the long-established principle of providing higher earnings-replacement rates for retired workers with low lifetime earnings. But maintaining the myriad other features of the system would be much more of a challenge.

20. Such a plan was devised by the General Accounting Office. See General Accounting Office, *Social Security: Analysis of a Proposal to Privatize Trust Fund Reserves* (December 1990).

CONCLUSION

No easy fixes to the funding problems of the Social Security system exist. Although reinvesting the assets of the Social Security trust fund at first seems to offer some relief to the long-term funding problem, closer examination of such approaches shows that little would change. Social Security benefits must be financed using resources from the economy. Whether those resources are obtained from current taxes or from earnings on assets does not matter much.

Letting individuals take control of their Social Security accounts might generate more interest in saving for retirement, but it would also introduce a host of changes in the way today's Social Security system affects the distribution of income. Moreover, better rates of return are uncertain at best. In some cases, individuals could unexpectedly find their retirement goals undermined by the volatility of market rates of return.

