Testimony of R. Kent Weaver, Senior Fellow in Governmental Studies, the Brookings Institution, before the Commission to Strengthen Social Security, San Diego, California, September 6, 2000—Main Points

1. **Collective investment of Social Security surpluses has important advantages over individual account plans.**

    1. Pooling investments and keeping transaction, marketing and reporting costs down allows higher returns on investments.
    2. Collective investment lowers information costs.
    3. A defined benefit with collective investment provides a more stable retirement income that protects against risks of fluctuating asset values, annuity prices and inflation.

2. **The risks of political interference with collective investment can be minimized through proper insulation mechanisms. These include**

    Insulation Mechanisms:

    1. Give investment funds explicit organizational mandates to maximize return on contributors' investment consistent with a prudent approach to risk.
    2. Have independent boards of trustees.
    3. Contract out portfolio management to professional fund managers.
    4. Invest funds primarily in broad indexed investments.

    Fund Size:

    1. Have multiple funds, limited in size to the size of the largest private sector investment funds.
    2. Mirror flow of contributions into 401(k) plans.

    Corporate Governance:

    Don't vote shares held by funds, or vote them in a way that does not affect outcomes.

3. **Individual accounts pose a more complex set of design issues than collective investment of Social Security trust funds, but once again there are better and worse options.**

    1. Centralized administration of individual accounts has significant potential to lower the costs of individual accounts, while providing wide fund choice and lowering opposition from employers.
    2. Individual retirement accounts should be required to hold a diverse portfolio of investments. No borrowing against such accounts should be allowed.

4. Partial opt-outs from Social Security into individual accounts are not a compromise between the status quo and privatization but rather the worst of both worlds.

3. Opt-outs are likely to lead to exit by higher-income workers, undermining the financial viability of Social Security.
4. Higher returns offered by defined benefit plans as workers age create uncertainties over whether it is better to opt back in. Potential solutions to this problem further undermine viability of Social Security.
5. Impartial advice on the wisdom of opting out may be hard to come by, and there a "mis-selling" scandal could result.

Concluding Points

1. Neither collective investment of trust funds nor individual investment accounts is a panacea for the long-term funding problems in Social Security.

2. Strengthening the financial viability of Social Security's defined benefit needs to be a central goal if political stalemate is to be avoided. Any plan recommended by the commission should reduce the long-term deficit in Social Security.

3. Getting the design of collective investment or individual accounts right is as important as the choice between them.

4. Some form of collective investment would be desirable even within a retirement savings system that incorporated mandatory individual savings accounts.

5. More needs to be done to encourage retirement savings outside the social Security system.

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Thank you for the opportunity to testify before the Commission to Strengthen Social Security on the critical issue of whether Social Security funds should be invested collectively or through a system of individual accounts. This question is of course related to the larger question of the extent to which Social Security should retain its character as a program paying a "defined benefit" that is protected from risks of market fluctuations and inflation, or whether individuals should be exposed to increased risk from financial market fluctuations.

Almost everyone accepts the need for a multi-tiered retirement income system, including a minimum floor, an income-related defined benefit, some form of tax-advantaged and/or mandatory retirement savings, and voluntary savings for retirement. And most of the advanced industrial countries have adopted a multi-tiered approach. The questions we must all weigh are: what mix of these tiers is appropriate? What is affordable? How much leeway do we have for change given past policy choices? And if we do decide on policy change, over what time frame should it be imposed?

I will focus my testimony on four issues. What are the relative advantages of collective and individual investment? How can we minimize the political risks associated with collective investment? What mechanisms could mitigate problems associated with individual accounts? Are the serious problems associated with a partial opt-out from Social Security into individual accounts solvable?

I believe that there is a stronger case for some form of collective investment of trust fund surpluses than for a move to individual accounts as a way of addressing Social Security's financing problems. But I also believe that the Commission must move beyond the ideological debate for or against privatization to consider the details of particular proposals. There are better and worse ways of organizing and implementing both collective investment and individual accounts. Whatever you decide to recommend, the details count.

1. Collective investment of Social Security surpluses has important advantages over individual account plans.

Collective investment of Social Security funds in a broader range of instruments than government-guaranteed securities has several important advantages over the status quo. The most important is that it would allow a greater return on the trust funds over the long term through the higher returns (with higher risks) associated with equity investment.

Just as important as its advantages over the status quo, collective investment of Social Security trust funds has three important advantages over a system of individual accounts, with lower risks and costs. First, by pooling investments and keeping transaction, marketing, and reporting costs to a minimum, collective investments can lower the costs of investing funds dramatically and produce higher net returns than individual retirement savings accounts. How much administrative costs reduce the ultimate return on individual accounts depends heavily on the particulars of how that system is structured as well as the mix of assets that they invest in, as will be discussed further below. But an individual account system is inherently costly to administer, especially for small employers and firms with large labor turnover. A recent study by Estelle James, James Smalhout and Dimitri Vittas estimates that administrative and marketing costs in decentralized individual account systems where pension funds are "retailed" to individual consumers are likely to lower eventual pensions by fifteen to thirty percent. Those where there are more constraints on individual choice (e.g., a limited number of funds are offered) or where administrative functions are centralized (as in Sweden) lower pension accumulations by ten percent or less.[1] Because many of the costs associated with maintaining individual accounts are fixed costs—notably record-keeping and communication with shareholders--those charges are likely to hit small accounts held by persons working at low wages particularly hard unless fees are regulated in a way that protects small accounts (for example, capping fees at a total percentage of annual account balances while barring front-loaded fees, as in the new U.K. stakeholder pension).

A second advantage that collective trust fund investment has over individual accounts is that it lowers information costs for consumers, as the costs of evaluating alternative investments are spread over huge groups. There are also distributive issues here as well: low-wage workers are likely to bear the highest information costs in seeking information about investment options, because they are less likely to be targeted in the marketing efforts of fund managers who believe that they can make higher profits concentrating their marketing efforts on those with higher incomes and higher fund balances. Moreover, those with lower incomes will face a lower return on any information-gathering efforts because their fund balances are lower.

A third important advantage that allowing Social Security trust fund equity investments has over individual accounts is that it is doing so would not undermine or erode the defined benefit structure of Social Security, which provides a predictable retirement income that spreads the risks of fluctuating asset values and annuity prices across the population and over generations. The leading work on this topic has been done by my Brookings colleague Gary Burtless, who has estimated the initial replacement rates for successive cohorts of hypothetical workers over most of the past century who invested a constant six percent of their salaries in a broad stock market index and then converted the fund value to a level-rate annuity upon retirement at age 62. Burtless found that the initial replacement rates for workers ranged between 20 and 110 percent, with an average rate of 53 percent.[2] This difference of more than 5 to 1 in replacement rates is a fatal flaw for a program designed to ensure a basic income level. These variations can also be seen in very recent history: individuals under an individual account system who retire today rather than eighteen months ago would be hit by the double whammy of a falling stock market and higher annuity prices resulting from lower interest rates.

Workers in an individual account system would also be exposed to substantially varying degrees of inflation risk after retirement. Participation in an inflation protected-defined benefit plan eliminates the risk that whole cohorts of individuals who have played by the rules and done the right thing by saving may be left with an inadequate retirement income because of market conditions over which they have no control.

2. The risks of political interference with collective investment can be minimized through proper insulation mechanisms.

Critics of broadening the investment options for the Social Security trust funds fear that such funds would inevitably be subject to political interference, and that they would be so big that they would disrupt private capital markets. However, both of these concerns can be addressed in designing a set of safeguards for Social Security investment funds drawing on both domestic and foreign experience.[3] I will focus here on what I believe are the most appropriate models for the United States relating to three issues: insulation mechanisms, fund size, and corporate governance.

Insulation Mechanisms: Many state pension plans in the United States, as well as the Federal Thrift Savings Plan and the Canada Pension Plan, have managed to achieve excellent financial returns, while keeping costs low and avoiding political interference in investment decisions. Although the governance structure of these plans varies substantially, their experience suggests several "best design practices" that are likely to minimize political interference, notably:

1. Give the investment funds explicit organizational mandates to maximize return on contributors' investment consistent with a prudent approach to risk rather than including social considerations in investment.

2. Have independent boards of trustees for the funds, serving long terms. Expertise in financial services should be an explicit requirement for appointment to the boards. Appointment of politicians on a partisan or regional basis should be avoided.

3. Have the investment fund trustees contract out portfolio management to professional fund managers on a competitive basis. Contracting out allows the Canada Pension Plan Investment Board to manage more than $C8 billion (with growth to $C130 billion planned by 2011) with a staff that currently totals about 15 persons.

4. Invest funds primarily in broad, indexed investments. This need not preclude more active investment policies entirely, however. The Canada Pension Plan Investment Board, for example, has recently begun to implement a policy to actively invest up to half of its Canadian equity assets. It has also begun working in partnership with merchant banks and other pension funds to take advantage of venture capital opportunities while spreading risks.[4]

The four mechanisms outlined above are not particularly difficult to design and maintain. With tens of millions of current and future Social Security beneficiaries looking on to make sure that

Congress does not meddle with "their" retirement futures, it is almost certain that Congress would maintain a hands-off policy.

Fund Size: Once concerns about political interference have been addressed, worries about the size of public investment funds can be addressed in two ways. One is simply to limit the size of any single Social Security fund, creating new funds that are separately (and also privately) managed once a public fund reaches a certain size. Multiple funds are already used in Sweden, which has six separate funds to manage accumulated surpluses in Sweden's pay-as-you-go public pension system, and a seventh to manage the funds of workers who do not designate a fund choice in the new individual accounts tier of the pension system. The government has put explicit limits on how much individual funds, and all the funds collectively, can own of a single firm and of the total market.

But how big a fund is too big? One simple standard would be to limit the size of any one Social Security investment fund to roughly the size of the largest private investment funds—a position currently held by Fidelity with 3.3 percent of domestic equities, followed by Barclay's Global Investors with 2.1 percent, and State Street Global Advisors with 1.6 percent.[5] Once a Social Security investment fund reached this size, it would not receive any new investment funds from Social Security surpluses, and a new investment fund or funds, again privately-managed, would be set up to receive new funds.

A second and somewhat more convoluted mechanism for limiting Social Security investment fund size would involve tracking employee contributions into tax-favored 401(k) plans. Social Security trust fund surpluses would be distributed among fund managers in proportion to 401(k) contributions—or at least to those fund managers who agreed to provide a hefty discount to the Social Security system in recognition of the vastly lower costs of administering one large account than tens of thousands of individual 401(k) accounts. The logistical difficulties and financial costs of setting up and administering such a system are not inconsiderable, but they are minute in comparison to the costs of setting up roughly one hundred million individual accounts, many of which would receive very small and irregular contributions from low-earners. The size-limited Social Security investment funds and "401(k) mirror" options outlined above could also be combined, each receiving half of Social Security surpluses.

Corporate Governance: Another concern that has been raised about collective investment of Social Security trust fund surpluses is that they will be the object of repeated initiatives aimed at affecting corporate governance and the investment practices of corporations. For example, liberal members of Congress might try to require fund managers to support shareholder resolutions forbidding a company from investing in Myanmar or in tobacco stocks, while social conservatives might try to get publicly-owned biotechnology companies to refrain from engaging in stem cell research. The record of some state public employee retirement funds in the 1980s has increased concern in the corporate sector about such risks. However, a recent study of state retirement funds by Alicia Munnell and Annika Sunden suggests both that there has been a move away from such practices in recent years by state retirement systems and that such funds have earned returns that compare well to those of private retirement funds.[6] To prevent such initiatives from occurring, the simplest solution is probably to establish in legislation that shares held by Social Security investment funds will not be voted by fund managers.

Is there a guarantee that the steps suggested above will completely eliminate all risk of political interference in how those funds are invested? Of course not. But neither can proponents of individual accounts guarantee that all interference (for example, domestic investment requirements) would be avoided with private accounts that provide compulsory or tax-advantaged retirement savings.[7] However, the steps suggested above should keep the risks of political interference very low—certainly low enough that the overall return on such funds is likely to be higher than for any plausible system of individual accounts, once the administrative and marketing costs of the latter are taken into account.

3. Individual accounts pose a more complex set of design issues than collective investment of Social Security trust funds, but once again there are better and worse options.

While collective investment funds present important and complicated issues of program design, designing an effective individual account system is far more complex. I assume that later speakers will focus on the many difficult issues related to the benefit structure in an individual account system. These issues include:

(1) the extent to which individuals are required to convert their account balances into some form of income stream at retirement, and the conditions under which that conversion takes place,;
(2) the problems that a system of individual accounts creates for spouse's benefits, and for survivors and disability insurance; and
(3) (3) the higher annuity prices charged to women given their longer life expectancy. Equally important is the issue of how to finance a transition from the current largely pay-as-you-go system to a system that includes fully-funded individual accounts, the so-called "double payment problem."

All of these issues deserve the Commission's full attention.

Even leaving these aside, individual account plans pose a formidable list of design choices. In addition to the question of whether to have individual accounts as an opt-out from the defined benefit plan or as a mandatory component, which will be the focus of the next section of my testimony, there are important issues of administering accounts and investment practices. I will focus briefly on each in turn, again seeking to draw out potential "best practices."

Account Administration: Administration of individual account systems differs on several dimensions. One is whether they are administered by employers, by government, or by some combination of the two (as in the U.K.). A second is whether government regulates entry and/or fees charged by pension providers. These governing choices have important implications both for the number of pension options available (in the aggregate and to subsets of the population) and for the costs of pension provision.

Many options are possible. Sweden's new individual account tier, for example, features a highly centralized system of account administration. Funds flow into the Treasury and out through a specialized state agency that moves resources into and out of investment funds, with the individual fund managers knowing only the amount of the funds to be moved rather than the identity of their owners. The advantages and disadvantages of this approach are clear. It facilitates maximum fund choice (regarding entry and switching of funds as well as distribution of assets among multiple funds) at minimum cost. When the program debuted in the fall of 2000, Swedes could choose from approximately 450 funds. The Swedish system also minimizes the additional paperwork burden for employers, who can follow existing procedures for submitting payroll taxes and do not need to get involved in administering fund choices and payments to multiple funds by their employees. Thus it almost certainly weakens opposition from employers (and especially small employers) to participation in such a system. Central administration of funds also makes it easier to negotiate reductions in management fees by fund providers, but it contributes to a very long lag time in crediting of individual pension accounts.

Other countries have made very different choices. Bolivia, for example, created a duopoly of pension providers when it created its privatized pension system, minimizing choice but also lowering administrative costs. Australia, with a decentralized individual account system run by individual employers or on an industry basis (fund management functions are generally contracted out), has a high cost system where the number of options available to employees differs greatly—but is usually quite limited.

Which set of options might be most appropriate for the United States if there is a move toward individual accounts in this country? Given the large size of the U.S. economy, limiting entry to a small number of competitors in an individual account system does not seem either politically sustainable or desirable. The five fund options offered by the Thrifty Savings Plan, for example, would be enormous if expanded to cover all persons currently paying Social Security taxes. On the other hand, the evidence presented by James et al and others suggests that the cost savings from centralized administration can be substantial. Overall, the best option is probably a variant of the Swedish approach, in which record-keeping and administrative functions are centralized--thus lowering the cost of fund administration--and a large number of fund options are permitted. This method would also lower costs to (and probably political opposition from) employers, although it does have the disadvantage of delaying the movement of funds into individual accounts.

Investment Practices: A key issue in the design of individual account systems is whether those accounts should be required to limit risk by holding several different assets. Issues relating to diversification requirements are complex, and have been politically contentious in several countries. Should small business people be allowed to invest most or all of their individual retirement savings accounts in their businesses, for example, which may boost their long-term income if the business succeeds but leave them with nothing if the business fails? What about investing in the house that they occupy, which might allow them to pay off a mortgage faster and thus enter retirement with a lower drain on their income? Or concentrating most of their individual retirement savings in the stocks or bonds of their employers, if they work for a relatively large firm? Or putting all of their savings into a low-yielding bank account, which is insured against loss of principal by government but provides very limited opportunities for growth? All of these issues have surfaced in other countries. Note that Congress has successively broadened the conditions under which individuals are allowed to borrow against tax-advantaged retirement savings in the United States. Clearly such pressures would also be felt in an individual account system that was part of Social Security, as individuals asked why they could borrow against one form of retirement savings but not another.

There are no simple answers to these questions, but there is a principle that can help: the more that income from an individual investment account is expected to supply a "basic" level of income to a future retiree rather than supplemental income above a basic minimum or replacement rate, the stronger the case for investment diversification requirements and for prohibitions against borrowing. Certainly any type of account that is expected to supplant or offset current levels of Social Security income fits within the category of accounts where diversification requirements and borrowing prohibitions are essential.

4. Partial opt-outs from Social Security into individual accounts are not a compromise between the status quo and privatization but rather the worst of both worlds.

The mandate that President Bush gave to this commission was to develop a proposal that would permitworkers to shift some of their payroll taxes to individual retirement investment accounts but not require anyone to do so. Permitting rather than requiring sounds great. What could be more American? No one would be forced to do anything, but everyone would enjoy increased choice. But experience from abroad suggests that Social Security opt-outs pose some very serious problems.

Several advanced industrialized countries have adopted or, at least considered, mandatory savings programs for all workers. However, only the United Kingdom and (to a very limited degree) Japan use an opt-out approach for privatized pensions.[8] In the U.K., an opt-out system emerged not as a planned outcome but as a by-product of the fact that earnings-related pensions were not adopted until the 1970s, after a private system of occupational pensions was already highly developed.

The British experience with opt-out public pensions offers a number of cautionary lessons about the perils of this approach. Social Security opt-outs have all of the disadvantages associated with mandatory saving through individual accounts—notably high administrative costs and increased risk across individuals and cohorts. But opt-outs also pose an additional set of problems not found in mandatory individual accounts. One problem with an opt-out reflects the fact that the present system offers higher returns on contributions of low-wage workers to help provide them with a decent retirement income. If an opt-out were available, higher-income workers would be more likely to opt-out, seriously undermining the current Social Security system's financing. Conversely, opting out of Social Security wouldn't make sense for many low-wage workers. But they're likely to be the least sophisticated investors, so they might opt out when they would be better off staying in the current system.

A second major opt-out problem is the differing returns offered by contributions to an individual retirement investment account during a worker's life. The earlier in one's career these contributions are made, the likelier they are to generate higher pension value. Conversely, contributions to Social Security are indexed for wage growth. Contributions of equal real value will provide relatively equal returns regardless of when they are made. As a result, many opted-out workers will find it advantageous to opt back into a state-defined benefit plan at some point. However, British experience suggests that it is unclear where that point is, given uncertainties about future returns on investments and prices for annuities. Given the complex and confusing choices faced by British workers, it is no wonder that when the U.K.'s Financial Services Authority recently prepared a decision tree to help individuals make pension choices, almost all paths led to the same end point: consider getting professional financial advice.[9]

In the U.K., incentives to opt back into the state pension have been addressed through age-related rebates for National Insurance contributions: older workers get higher rebates as an incentive to continue to opt out of state pensions. These age-related rebates make the British system complicated and expensive to administer. Age-related rebates make even less sense in the U.S. system, where there is a closer linkage between contributions and benefits. The absence of general revenue financing in Social Security means that more generous Social Security contribution rebates for older workers would undermine the financing of Social Security as a whole. An alternative solution would be to require young workers to make a one-time, irrevocable choice to opt-out or opt-in from Social Security. But this option is almost certainly not appropriate given unforeseen changes in earning potential, and it is even less likely to be politically sustainable.

Problems concerning who should opt out and when to opt back in raise a third critical problem with opt-outs: To whom could workers turn for impartial advice on whether opt-outs were an appropriate choice for them? Pension fund providers and many financial advisers have a vested interest in selling their products. And the Social Security Administration would likely resist such a role under intense pressure from the administration, Wall Street and the pension industry not to weaken the message that privatization is a good thing.

Unfortunately, the outcome in the United States could mirror the British experience: workers may respond to high pressure sales practices by pension providers who "mis-sell" pension products. In the U.K., mis-selling in the late 1980s is estimated to have cost more than 15 billion dollars. Were this to happen in the U.S., litigation would surely follow. A U.S. pension mis-selling scandal could be the biggest boon to trial lawyers since the Ford Pinto.

In short, opt-out plans for Social Security impose too much additional complexity in an already very complex pension system. Potential implementation problems could undermine the legitimacy of both Social Security and the private pension industry. While universal mandatory savings plans have merit, they should be considered as a supplement to rather than an opt-out from Social Security.

Conclusions

In closing, I would like to leave you with five thoughts, most of which reflect my political scientist's orientation to issues of pension program design, implementation and political viability.

First, investment of Social Security funds in a broader range of financial instruments, whether done collectively or through individual accounts, is not a panacea that will solve all of Social Security's long range funding problems, which flow from the demographic bulge of the Baby Boom's retirement and more fundamentally from longer life expectancies. To use a nutritional metaphor, collective or individual investments in equities are not a free lunch that will cause this financial problem to disappear, but more like a healthy snack that can help to make it more manageable.

Second, any proposal that the Commission recommends should have as a central objective strengthening the long term financial viability of the current defined benefit system. Social Security is by far the most popular federal program, and the most successful in reducing poverty. Defined benefit replacement rates are very low in comparison to most other advanced industrial countries.[10] Any plan that is perceived by the public as weakening the ability of Social Security to pay currently promised defined benefits—and almost all opt-out plans fit in this category—will be political non-starters, moving the debate on Social Security reform backward rather than forward. Any plan that does not reduce the projected long-term deficit is no plan at all. The Bush administration's Social Security proposals suffer from a widespread perception that it is a mechanism to send billions of taxpayers' money to Wall Street for the administration of individual accounts. Unless this perception is credibly addressed, policy stalemate and heightened political division are the likely outcomes. Strengthening Social Security is likely to require going beyond the Commission's mandate to design a viable opt-out system: as talented as this group is, being given a mandate to make two plus two equal five doesn't mean that it can be done.

Third, getting program design right is as important as the choice between individual accounts and collective investment. For collective investment, it is imperative that a strong set of protections be put in place to prevent political interference in investment decisions. As noted above, I believe that both foreign experience and experience with state retirement systems and the Federal Employee Retirement System suggest that these risks are manageable. Individual accounts pose a far more complex set of design issues, including how to prevent the erosion of accounts by administrative expenses, minimizing risks posed by market fluctuations in asset values and annuity prices, whether and how to require conversion of account balances into income streams, and whether or not to allow inheritability of fund balances if a worker dies before retirement or shortly thereafter. Again, there are better and worse solutions to these issues. I believe that any move to individual accounts should focus on lowering administrative and marketing costs and should be integrated as much as possible with the current program in terms of conversion of fund balances into retirement income streams.

Fourth, even if the commission does recommend a system of individual accounts, some element of collective investment is still desirable, and probably necessary. It will still be desirable to increase the returns on the surpluses in the Social Security trust funds, and it will probably be necessary to have collective funds to deal with individuals who do not make a choice among funds and to deal with transitional periods between when funds are collected and when they can be attributed to individual accounts.

Finally, although it is important to preserve the current, relatively modest level of Social Security defined benefits, that benefit is clearly insufficient to provide a retirement income that most Americans will find adequate. The federal government should do more to encourage individual savings for retirement by its citizens. This can be done in a number of ways. A broader public education campaign modeled after the "Choose to Save" campaign by the American Savings Education Council and Employee Benefit Research Institute could be useful in increasing public awareness of the importance of retirement savings. More direct steps to encourage retirement savings among all income groups should also be undertaken. The 2001 tax bill makes important strides in this direction for upper-income workers, but more needs to be done to help low-income workers who cannot save enough on their own by providing tax subsidies or direct subsidies to these workers. Strengthening Social Security should be the keystone of a broader effort to improve the retirement income system in the United States.

FOOTNOTES

[1] Estelle James, James Smalhout and Dimitri Vittas, Administrative Costs and the Organization of Individual Account Systems: A Comparative Perspective," pp. 17-83 in Juan Yermo and Annette Yunus, eds., *Private Pensions Systems: Administrative Costs and Reforms*, Paris: Organisation for Economic Cooperation and Development, 2001.

[2] These estimates are probably on the high side by as much as one fifth because Burtless excludes both management costs during the period of asset accumulation and annuity charges. For a recent statement, see Gary Burtless, "How Would Financial Risk Affect Retirement Income Under Individual Accounts?," Boston College Center for Retirement Research Issue in Brief No. 5, October 2000.

[3] For a broader set of foreign lessons for pension reform, see for example R. Kent Weaver, "The Politics of Pension Reform: Lessons from Abroad," in R. Douglas Arnold, Michael Graetz, and Alicia Munnell, eds., *Framing the Social Security Debate: Values, Politics and Economics*, Washington, D.C.: Brookings Institution Press, 1998, pp. 183-229, and Gary Burtless, "International Evidence on the Desirability of Individual Retirement Accounts in Public Pension

Systems," testimony before the United States House Committee on Ways and Means, Subcommittee on Social Security, July 31, 2001.

[4] On the evolution of the Canada Pension Plan Investment Board's investment strategy, see CPPIB, *Annual Report, 2001*, and CPPIB, "CPP Investment Board Announces Its First Private Equity Investments," Press Release, August 21, 2001.

[5] I am grateful to Alicia Munnell for suggesting a linkage to the largest private sector funds. This section draws on our joint work. See Alicia Munnell and R. Kent Weaver, "How to Privatize Social Security," *Washington Post*, July 9, 2001.

[6] Alicia H. Munnell and Annika Sundén, "Investment Practices of State and Local Pension Funds: Implications for Social Security Reform" in Olivia S. Mitchell and Edwin C. Hustead, eds., *Pensions in the Public Sector*, Philadelphia, PA: Pension Research Council and the University of Pennsylvania Press, 2001.

[7] A good analogy is to the regulations imposed on Canada's Registered Retired Savings Plans (RRSPs) and Registered Pension Plans (RPPs), Canada's equivalents to 401(k) plans and tax-subsidized occupational pensions, which limit the percentage of tax-advantaged funds that can be invested abroad. These limits preceded the creation of the CPPIB and were then applied to its investments as well.

[8] For a recent discussion, see Peter R. Orszag, "Voluntary Individual Accounts: The Lessons from the U.K. Experience," testimony before the United States House Ways and Means Committee, Subcommittee on Social Security, July 31, 2001.

[9] Financial Services Authority, *FSA Guide to the Risks of Pension Transfers*, London: FSA, August 2000, p. 11.

[10] For cross-national data, see Weaver, "The Politics of Pension Reform," p. 192.