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2

Administering a Cost-Effective National Program of Personal Security Accounts

Sylvester J. Schieber and John B. Shoven

In the debate about social security reform, many people today are either advocating or considering options that would have individuals accumulate some of their retirement savings through personal accounts. Among the issues that repeatedly arise in the discussion of these reform options are the administrative feasibility and the cost of such an approach to social security reform. For example, the recently released report of the National Academy of Social Insurance on privatizing social security raises the issue directly. It notes that "Dallas Salisbury does not think than [*sic*] an individual account system for over 140 million workers, with less than an 18 to 24 month lag in account recording, is feasible at acceptable administrative costs in the absence of new technological developments, including moving 5.5 million small employers from paper filing to automated filing" (NASI 1998, n. 21). In an analysis of the Chilean retirement system, Peter Diamond (1996, 217) raises the question of whether an individual account system "is desirable, because compulsory savings are less attractive when costs are eating up a large fraction" of the savings.

In this paper, we investigate these issues. In section 2.1, we look at how various defined-contribution plans are administered around the world. In section 2.2, we focus on the cost of administering these plans. In section 2.3, we lay out a possible administrative structure for implementing an efficient individual accounts program in the United States and make some

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ballpark estimates for the cost of such a system. Finally, we address the issue of whether the administrative-structure and cost issues are sufficiently daunting to preclude further consideration of partial privatization of social security in the United States.

2.1 Administering Individual Account Plans

Defined-contribution (DC) plans have been popular as employer-sponsored plans in the United States for years. They have become increasingly prevalent here and elsewhere around the world over the last few decades. In recent years, DC plans have also become a popular vehicle for reforming national retirement systems. We first look at how DC plans have been organized in three countries as part of their nationally mandated retirement-income-security systems. Then we look at how DC plans are organized in the United States as part of our employer-based retirement system. The purpose of this survey is to explore what is feasible by examining what is already in place in various countries, including our own.

Chile is often considered to be the preeminent example of a country that moved from a defined-benefit (DB) retirement system to a mandated retirement-saving program. Since 1981, all covered Chilean workers have been required to contribute 10 percent of their monthly earnings to a savings account for retirement purposes. These contributions must be invested through a highly regulated set of intermediaries known as *administradoras de fondos de pensiones* (AFPs). Workers can choose which of the AFPs they want to use for investments, but they can invest through only one at a time. Each of the AFPs can manage only one retirement portfolio, and there is a strict separation required between that fund and others offered by the management firm. The AFP allocates the returns on the investment funds to the individual accounts. At retirement, workers can choose either to buy an annuity or to take periodic distributions designed to last a lifetime. In addition to the retirement benefits, the AFPs also provide a system of survivors and disability benefits. These latter benefits and the administrative costs of the system are financed by an additional contribution of 3 percent of pay (Edwards 1998).

Australia has traditionally had a means-tested old-age pension system that provides a flat benefit to the elderly. The level of benefits is approximately 25 percent of average weekly wages. During the 1980s, concerns arose about the cost of Australia's old-age pension system owing to the high rate of qualification for benefits. Fully 81 percent of the elderly were qualifying for some benefits under the program, and two-thirds qualified for full benefits. Australia has a baby boom generation similar in relative size to that in the United States. The prospect of Australia's baby boomers approaching retirement age sparked an interest in finding an alternative means of providing retirement-income security in the future. Today, approximately 15 percent of the population of Australia is over age sixty-five, and this segment of the population is expected to grow to 23 percent by 2030. While the evolving demographics of the society posed a problem for the finances of the old-age pension system, at the same time there was a concern that only 40 percent of the workforce were covered by voluntary employer-sponsored superannuation systems.

The government had stuck its toe in the water of a mandated savings plan in the mid-1980s as part of a mandatory wage-negotiation process between employers and the Australian Council of Trade Unions (ACTU). The ACTU was negotiating for a 6 percent general wage increase in 1986. The government was concerned about the potential inflationary consequences of such a wage increase and managed to strike a compromise with the ACTU. It granted a 3 percent wage increase but prevailed on the unions to accept the remaining 3 percent as a contribution to retirement funds for workers. As a result of this agreement, contributions to individual accounts were gradually introduced into wage contracts as they were renegotiated. The payments went into existing superannuation funds or into newly created union funds that were managed by private asset-management firms.

In 1991, the Australian government announced that it intended to expand this initial program of mandated retirement saving. The Superannuation Guarantee Charge Act of 1992 was adopted and implemented in July 1992. The act required employers to contribute to complying superannuation funds a specified percentage of earnings on behalf of employees. The initial contribution rate was 3 percent of pay. In 1997 and 1998, the required contribution was 6 percent of pay and, in 1999, 7 percent. In 2001, it will be set at 8 percent and, in 2003 and after, at 9 percent of pay. One of the intended benefits of the new system has already begun to materialize. Workers' reliance on the state for retirement security appears to have declined sharply as the system has been implemented. The Research Unit of the Association of Superannuation Funds of Australia estimates that voluntary contributions made on top of mandated contributions equal an average of 4 percent for all employees covered by compulsory superannuation. This second pillar of the retirement system (the mandated pensions) will not eliminate the first pillar of the system (the old-age pension program) for workers who fare badly in the labor market throughout much of their career but should eliminate the dependence on it over time for the majority of workers.

There are several types of superannuation funds offered through the second pillar of Australia's retirement system. They include corporate or enterprise funds provided by single employers or groups of firms that band together for efficiency purposes. There has been a decline in such employer-based plans in recent years with a growth in industry funds or retail master trusts. The industry funds are often sponsored by employer and employee organizations. These were developed primarily in response to the establishment of the original 3 percent contribution agreements that got the whole ball rolling in the mid-1980s. From the outset, the industry funds followed a policy of contracting out all services—that is, administration, provision of death and disability coverage, and, most important, investment services. The trusteeship of the industry funds was from an early stage shared between equal numbers of employee (union) and employer representatives, with an independent chairman. Some plans for individuals and small firms are invested through retail funds offered principally by the large financial institutions. These accounts can come in the form of master trusts, personal superannuation products, rollover products, and allocated pension and annuity products. Another class of funds, known as *excluded* funds, is used mainly by individuals or family groups of one to four members. Recently, these funds have witnessed rapid growth because of tax incentives favoring their establishment. Finally, this line of funds includes superannuation products offered directly by life insurance companies and banks. For workers in the public sector, public plans established by federal, state, and local governments provide coverage. Like many similar plans worldwide, these are largely unfunded. The distribution of assets and the number of plans within each specific category are shown in table 2.1.

The whole mandated second-tier retirement system in Australia has been organized to take advantage of the structure of financial institutions and retirement systems already in place. Other than the funds that are offered to individuals, virtually all the investment of the superannuation accounts now takes place in an environment of pooled funds. The Australian Prudential Regulatory Authority (APRA) estimated that, in June 1998, the asset allocation in superannuation funds was 7 percent in cash and deposits, 28 percent in fixed-income holdings, 37 percent in equities, 8 percent in direct properties, and 16 percent in international funds.

The United Kingdom has a two-tier public retirement system with voluntary employer-sponsored pensions as the third tier. The first tier of the U.K. system is the basic state pension, a floor old-age benefit that retirees qualify to receive on the basis of the length of their career. The second tier of the U.K. system is called the supplemental earnings-related pension scheme (SERPS). The government allows workers to opt out of this second tier of the system, and about 83 percent do so. Workers are required to use employer-based pensions or personal pensions if they opt out of the state-provided system. The SERPS program establishes the minimum benefits or contributions that must be provided for/by workers who opt out of the state program. For the most part, workers who contract out of SERPS are required to annuitize their accumulation at retirement (Budd and Campbell 1998).

In the United Kingdom, about two-thirds of the workers who have

Table 2.1 **Profile of Australian Superannuation Funds as of 31 December 1997**

	Total Assets, December 1997		Total Number of Funds, June 1997		Number of Accounts, December 1997	
	$Billions (Australian)	Distribution (%)	Number	Distribution (%)	Millions	Distribution (%)
Corporate	64.7	20.5	4,277	3.38	1.4	8.0
Industry	21.5	6.7	116	0.08	5.5	30.9
Public sector	74.6	23.6	122	0.09	2.8	16.0
Retail	79.9	24.4	319	0.31	7.8	43.4
"Excluded"	38.4	11.7	157,084	96.14	0.3	1.7
Balance of statutory funds	46.6	13.1	N.A.		N.A.	
Total	325.7	100.0	161,918	100.00	17.7	100.0

Source: Insurance and Superannuation Commission Bulletin (Australian Insurance and Superannuation Commission), December 1998, 30.
Note: N.A. = not available.

contracted out of SERPS are covered by occupation pension programs run by employers, and the remainder are covered by personal pension plans. The personal plans are DC plans. All the employer-based plans had to be DB plans until legislation adopted in 1986 allowed those in occupation plans to be covered by a DC plan. Employer plans in the United Kingdom are going the same route today as their counterparts in the United States; namely, they are shifting to DC plans. Larger plans are typically self-administered, with the assets being managed by the plan itself or through insurance companies. Smaller plans are typically insured. Personal pension investment can be handled through a wide range of providers, including insurance companies, building societies, unit trusts, and other financial organizations. There are few restrictions on how the assets in the plans can be invested (Budd and Campbell 1998).

Sweden has recently adopted a set of sweeping reforms to its national retirement system that, when fully phased in, will provide retirement benefits purely from a DC environment. Their old plan was a pay-as-you-go DB plan. People born in 1937 and earlier will receive their pension under the old system. For those born between 1938 and 1953, part of the retirement benefit will be based on the old system and part on the new. Those born in 1954 and later will receive benefits purely under the new system.

Sweden's revised retirement system requires contributions of 18.5 percent of pay on earnings up to $37,000 per year. Of that, 16 percentage points are used to finance current benefit payments to retirees. The extra 2.5 percentage points are contributed to a "premium reserve account." Workers' contributions under the pay-as-you-go element of the new system are credited to individual accounts on the basis of each individual worker's earnings level and taxes paid. The account is also credited with an interest accrual each year that is equal to the rate of growth of incomes in the economy. Since the contribution is actually spent to finance current benefits, these accounts are phantom or "notional" accounts in that they do not hold real investments. At retirement, a worker's individual account will be converted to an indexed annuity. The index is the average income growth in the economy. The size of the initial annuity will be based on the life expectancy of the birth cohort to which the worker belongs and his or her age at retirement.[1]

Under the Swedish reforms, the worker can choose an investment manager for his or her premium reserve account. Under this system, capital management is to take place through independent fund managers. The Premium Pension Authority (PPA) is to be a unitholder in the funds where the assets are invested, but it is the individual worker who chooses the investment manager and how to invest the money. The assets can be in-

1. The Swedish reforms are described at http://www.pension.gov.se/in%20English/summary.html.

vested in domestic securities funds or in foreign funds managed by fund managers with the right to do business in Sweden according to the Swedish Mutual Funds Act. A national fund company is also being set up to manage funds where the worker does not make an active choice of fund manager. This will be a special fund of the National Swedish Pension Fund and will be managed by a newly established fund board.

The PPA will approve the fund managers that can offer management services. Approval will require agreeing to cooperate with the PPA on setting up mechanisms for transmitting information and funds between the manager and the PPA. The PPA will also place a cap on the price of management services. The managers will be expected to adapt to the technical solutions adopted by the PPA regarding communications and the transmission of information on participants, funds, and so forth. The fund managers will be required to provide brochures explaining the funds to investors periodically and to make such information available to potential investors on request. There are to be no withdrawal charges for taking periodic distributions from the funds on retirement. Each year, the fund managers are to provide the PPA with a report on all costs associated with the fund's management. These reports from all the funds will be summarized by the PPA and made available to the public annually. It is anticipated that all the approved plans will be managed on an indexed basis.[2]

Until the early 1980s, the assets in employer-sponsored DC plans in the United States typically were held in pooled trusts, and each participant in the plan was credited with his or her vested pro rata share of the pool. During this era, the vesting periods could last as long as ten years. Because of this lengthy vesting period, significant amounts of the money in the plans at any point in time were not yet the property of the individuals to whom they had been credited. Today, employee contributions to 401(k) plans, according to law, vest immediately; 90 percent of the plans vest some part of the employer contribution within one year; and a significant majority have full vesting within five years of service. This change in "ownership" of the assets in the plan has been accompanied by a change in the management of the assets as well. With the evolution of 401(k) plans during the 1980s, sponsors of DC plans increasingly offered participants the opportunity to direct the investment of their retirement accounts. Today, virtually all participants in 401(k) plans have some discretion in the investment of the assets in their accounts.

The Employee Retirement Income Security Act (ERISA) is the major piece of legislation regulating employer-sponsored retirement plans in the United States. It requires that fiduciaries of benefit plans discharge their investment responsibilities prudently, including diversifying plan invest-

2. The operation of the PPA is described at http://www.pension.gov.se/in%20English/fundmana.html.

ments to minimize the risk of large losses. If these duties are breached, the fiduciary is liable to the plan for losses. ERISA, however, includes an exception to this provision in section 404(c), which states that, where participants can direct their own investments, the plan fiduciaries are not liable for any loss or breach that results from the participant's exercise of control. In the late summer of 1987, the Department of Labor released preliminary regulations under section 404(c) detailing rules under which employers could hand off some of the fiduciary obligations for managing DC-plan assets.

The precipitous decline in U.S. stock prices during October 1987 raised a number of fiduciary issues for plan sponsors still managing their DC-plan portfolios. For example, many plans at that time calculated the value of distributions on the basis of the last valuation date of assets in the plan prior to a worker's termination. Many valuations were done on a quarterly basis. Plans whose valuation dates coincided with the end of a calendar quarter were in the position of paying individuals who terminated prior to the end of 1987 considerably more than the value of their account at the date of termination. Paying someone terminating on 31 October 1987 the value of his or her account on the basis of a 30 September 1987 valuation would further drain the value of the remaining portfolio for those workers who remained in the plan. Thus, in addition to the restructuring of retirement plans and the changing perception about ownership of plan assets, there were practical developments that encouraged plan sponsors to allow participants to direct their own investments.

The section 404(c) regulations were finalized by the Department of Labor in September 1992 and were somewhat less onerous than the proposed regulations had been. Section 404(c) requires that a plan allow participants to "exercise independent control" over the assets in their individual accounts. This means that the participant must be able to give investment instructions to a plan fiduciary, who must generally comply with them. In addition, the regulations require that sufficient information to make informed investment decisions be made available to participants in these plans. The regulations allow plans to restrict the frequency with which investment changes may be made but require that participants be able to give investment instructions with a frequency that is appropriate for the expected market volatility of the investment. The regulations outline general rules requiring that the available investment alternatives be sufficient to give the participant a reasonable opportunity materially to affect both the potential return on assets in his or her account and the degree of risk of the portfolio. The regulations require that the participants be able to choose from at least three investment alternatives. This diversification requirement means that an employer's own securities cannot be one of the three investment options required to meet the minimum amount of choice, but, once a plan sponsor has provided three diversified options, the plan sponsor's own securities can be offered as an added option. Of the three required choices to meet the standard, each has to have materially different risk and return characteristics. Overall, the participant must be able to minimize risk through diversification across the investment choices offered. In return for setting up the 404(c) plan, the sponsor is not liable to participants for any loss or breach of fiduciary responsibility that results from the participant's exercise of control.

The evolution of this system in recent years has resulted in the typical plan participant being offered at least five to eight investment options into which savings can be directed. These would typically include a money market fund, a bond fund, a general equity index fund, and, possibly, a couple of more-segmented equity funds, often including an international equity fund. Most workers allocate their contributions and balances across more than one of the funds offered to them. Under most of these plans today, workers can check the balances and reallocate contributions and balances on a daily basis using automated voice-response systems. Those not offering such high-technology capabilities typically allow workers to reallocate balances either monthly or quarterly and give corresponding statements of accumulated funds.

2.2 The Cost of Administering Individual Account Systems

The prevalence of individual account retirement systems of various types around the world and in the United States makes it difficult to argue that we could not organize an individual accounts–based social security reform in this country. A second objection to this type of social security reform is that, even if we could devise a system to administer individual accounts, the costs associated with running such a system would absorb much of the added efficiency that would result from the reform itself.

Peter Diamond (1996, 215–16) estimates that, in 1991, Chile's per capita administrative costs for its national retirement system were 2.5–12.5 times those of the U.S. social security system. This follows from an estimate that the U.S. system costs were an average of $18.70 per person and that Chile's were $89.10. The 2.5–12.5 times ratios come from a rough estimate of the costs applied across contribution or account balances that would be held by workers with low versus high earnings rates. While the difference in costs in the two systems is notable, on its own Diamond's observation does not tell us much. Certainly, the inference with which he leaves us is that Chile's system is quite inefficient. On the other hand, he does not compare the rates of return in the two systems. Nor does he consider the possibility that social security in the United States is being administered at a level that is so inexpensive because people are not getting adequate levels of service from its administrators. Certainly, the latter is a prospect that Robert J. Myers (1992, 16), the former chief actuary of the system, has raised.

Sebastian Edwards (1998, 45) estimates that, in 1983, Chile's costs were about 15 percent of total accumulated balances at the time. But, by 1993, they had dropped to 1.8 percent of total assets. While the earlier figure is clearly not one that anyone would want to see sustained in a retirement system, it was drawn from the start-up period of Chile's individual accounts system. A system such as Chile's has a significant component of fixed costs. Such costs would generally be significantly higher relative to assets during the start-up phase than they would be once the system matured. Olivia Mitchell (1993, 409) observes that, by the early 1990s, the cost of the private account system in Chile on an active contributor basis was about the equivalent of the cost of its public social security system still in operation. On a total contributor basis, the private account system was only about two-thirds as expensive as the public system. So the private systems are not necessarily more expensive than public DB programs, even in Chile.

Even though Mitchell's observations about the relative costs of Chile's public social security system and its individual accounts system suggest that the latter is not necessarily less efficient, the prospect of a system costing 1.8 percent of total assets per year is not very reassuring. In his work on the cost of the Chilean system, Peter Diamond (1996, 216–17) points to the marketing costs associated with a system targeted at individual investors as possibly being responsible for the high administrative costs. He notes, for example, that, in the United States, the costs of mutual funds directed toward individuals are about three times those directed toward groups and those handling large accounts. Citing research on the relative costs of the Chilean and Australian systems, he notes that nearly 36 percent of the costs of the Chilean AFPs are attributed to marketing, compared to between 3.2 and 6.4 percent of the Australian funds' costs.

Other than the funds that are offered directly to individuals in Australia, virtually all the investment of the Australian superannuation accounts now takes place in an environment of pooled funds. Certainly, compared to Chile, Australia appears to have a cost-effective system of retirement funding based on the twin elements of mandating contributions and a large number of superannuation accounts being offered on a group basis through industry funds. The Association of Superannuation Funds of Australia ("Administration Costs $4.40" 1998) estimates that the average administrative costs of their system equal $4.40—that is, U.S. $2.85—per member per week. In U.S. currency terms, at this rate administrative costs for a system that held average balances of $1,000 would be nearly 15 percent of assets per year. For a system that held average balances of $5,000, the cost would drop to 3 percent per year. For one that held average bal-

Table 2.2 **Administrative Costs as a Percentage of Assets under Management in Australian Individual Account Superannuation Funds during 1996 and 1997**

Number of Members in the Plan	1996	1997
1–99	.689	.619
100–499	.849	.673
500–2,499	.803	.797
2,500–9,999	.854	.837
10,000 or more	.922	.846
Total	.900	.835

Source: Australian Bureau of Statistics, Belconnen, Australian Capital Territory, tabulations of a joint quarterly survey conducted by the Australian Bureau of Statistics and the Australian Prudential Regulation Authority.

ances of $10,000, administrative costs would be 1.5 percent per year. By the time average account balances got to be $30,000, administrative costs would be under 0.5 percent per year. This pattern is important because it reflects the pattern of accumulating balances in a retirement system like Australia's as it is being phased in, as Australia's is now.

The costs of the system as a percentage of accumulated funds should be falling with the growth in the funds over the implementation period, as they clearly did in Chile. The administrative costs stated as a percentage of funds under management in Australia's individual account system for 1996 and 1997 are shown in table 2.2. The expenses reported here include those associated with the administration of the accounts and the investment of the assets and other expenses related to running the system. It is somewhat surprising that smaller plans report lower expense rates than do larger plans. This may possibly reflect differences in communications or other services provided to participants in larger plans.

Two asides about the Australian system should be mentioned. First, there has been a growing interest in allowing workers somewhat more choice in the system than they have at the present time. So far, the discussion has focused more on choices of vendors than on choices of alternative segments of the financial market, similar to what American 401(k) participants typically enjoy. Second, the tax treatment of mandated superannuation savings in Australia is punitive. Contributions are made with posttax earnings. Earnings on the funds are taxed at the point at which they are earned. Finally, benefits are taxed when received. No plan for the U.S. pension or social security system of which we are aware involves such heavy taxation. There are no comparable cost data, at least any of which we are aware, on the administration of retirement plans in the United Kingdom. One of the problems with the U.K. system that has received widespread attention is the so-called misselling scandal. From the establishment of the SERPS program in the late 1970s, workers could contract out of the second tier of the national retirement program. Originally, however, the only way to contract out of the SERPS was to be an active participant in an "occupation" retirement plan—that is, an employer- or union-sponsored plan. In 1988, the government allowed contracting out into personal pension plans. A number of life insurance companies began selling what are called *rebate only* pensions and other insurance products to set these up. The rebate only plans accept only the government's national insurance rebates given to fund the benefits of those contracting out of the SERPS. They will not take any additional contributions.

Insurance agents began selling these products in the late 1980s and early 1990s as an attractive alternative to the SERPS and to occupation plans where workers had previously contracted out of SERPS. By 1994, there was a government investigation of these personal plans (Securities and Investment Board 1994), which concluded that as many as 300,000 workers had been bid out of their occupation plans and had suffered losses because of bad financial advice, advice that was not in compliance with the Financial Services Act regulatory standards. Claims in the billions of pounds were pressed against the companies providing the plans because of the poor advice that was provided to workers in making their decision as to whether to go with a personal pension (*Financial Times,* 6 January 1996).

More recent analysis of personal plans in the United Kingdom suggests that the costs associated with personal pensions are highly variable and can potentially erode the full value of returns on investments over time (Budden 1997). The United Kingdom has taken a somewhat more laissez-faire attitude about regulating the providers of benefits to those who have contracted out of the SERPS than Australia has regarding its mandated savings program. The introduction of mandated superannuation in Australia in 1992 has resulted in relatively few consumer-protection issues being raised by policyholders. Committed to minimizing fraudulent activity or inappropriate conduct relating to the growing superannuation savings pool, the Australian federal government in 1987 bolstered consumer protection associated with this form of long-term saving. The Insurance and Superannuation Commission (ISC) was created in 1987 specifically to address some of the government's concerns about associated sporadic inappropriate selling of superannuation policies. Proactive regulation increased after the passage of the legislation establishing the current superannuation framework in Australia. Two of the major consumer issues with which the Australian government dealt in the early 1990s were the disclosure of key features linked with superannuation policies and the regulation of the selling practices of intermediaries who distribute such policies. The future approach toward disclosure, linked with superannuation, is summarized in the Australian Treasury (1997) statement that "it is highly desirable that a consistent and comparable disclosure regime for all financial instruments be developed. All financial instruments . . . will be subject to a requirement to disclose all relevant information to permit investors to make informed investment decisions" (p. 4).

The individual account system in Sweden is just getting organized, and no data are available at this time on the administrative costs that will be associated with it. Sweden has clearly opted for a system that is more regulated than that in the United Kingdom. Given that investments must be through index funds provided through licensed managers who must post their fees with the regulatory agency, the Swedish system is also going to be more regulated than either Australia's or Chile's.

Because the 401(k) system is voluntary in the United States, the regulatory authorities have not paid as much attention to administrative-cost reporting as have the corresponding authorities in Australia, which has a mandatory system. However, there are cost estimates for U.S. 401(k) plans. Access Research estimates that, in mid-1997, asset levels in 401(k) plans stood at approximately $865 billion and that the annual administrative fees for both record keeping and asset management for the year were $6.7 billion, or seventy-seven basis points—that is, 0.77 percent (Wuelfing 1997). This is similar to the charges levied against the Australian funds, which are also organized at the employer level.

The disclosure of tax-qualified plan operations that the government requires of plan sponsors requires reporting a range of plan costs, including the administrative costs charged to the plan. These do not include the asset-management charges. However, pure asset-management charges can be extraordinarily low (on the order of 0.01 percent) for indexed investment strategies. We have tabulated the administrative costs reported on the form 5500 tapes for 401(k) plans during 1995. Those results are shown in table 2.3. The table shows the mean and median administrative cost as a percentage of the average of beginning- and ending-year balances in the plans. We eliminated all plans that reported costs in excess of 200 percent of plan assets because we believed that there must be some reporting errors. We also eliminated all plans reporting zero administrative costs. In some cases, plan sponsors may be picking up the full cost of administering these plans, and it made little sense to include these plans in our tabulations. Finally, we included only plans that were at least three years old because we did not want to include plans that were still incurring substantial start-up costs. Including those plans did not radically change the results, but we were interested in seeing what plan costs would be in an ongoing environment.

From table 2.3, it is clear that there are substantial economies of scale related to various aspects of the administration of 401(k) plans. One should be careful in interpreting the costs among smaller plans because there were very few of them in the tabulation. In each of the two smallest size classes, there were twenty or fewer plans. And, in the size class twenty-

Table 2.3 Administration Fees in 401(k) Plans by Plan Size in 1995 Stated as a Percentage of the Total Assets in the Plan

	Employer Subsidizes Administration		Plan Pays All Administration	
Active Participants	Average	Median	Average	Median
1–10	0.701	0.223	1.852	0.445
11–25	1.100	0.780	1.372	0.982
26–50	2.840	0.471	1.360	0.863
51–100	0.529	0.296	0.907	0.682
101–250	0.436	0.201	0.763	0.557
251–500	0.422	0.202	0.716	0.487
501–750	0.332	0.161	0.613	0.405
751–1,000	0.375	0.180	0.462	0.314
1,001–5,000	0.302	0.145	0.343	0.176
5,001–10,000	0.276	0.106	0.291	0.148
10,001 or more	0.198	0.100	0.226	0.118

Source: Tabulations of the Department of Labor's form 5500 files.

six to fifty participants, there were fewer than forty in both cases. In addition to demonstrating economies of scale in plan administration, the table also suggests that there is considerable employer subsidization of the cost of running these plans. There are approximately three times as many plans where the employer is subsidizing some costs as where all costs are paid out of the plan.

There are some costs embedded in table 2.3 that would not likely occur in an individual account program created as an element of social security reform. First, we would not anticipate that the costs associated with processing loans under 401(k) plans would be relevant in a mandatory-savings program. The loan provisions in 401(k)s arise because of the voluntary nature of the plans. If people did not have a way to get access to their money in time of hardship, many would not participate voluntarily. Given that we are talking about a mandatory supplement to social security, this issue goes away. The second thing is that the trustee's fees and the record-keeping fees show tremendous economies of scale in other analyses of administrative costs associated with 401(k) plans. For example, record-keeping costs have been shown to drop below ten basis points per year, and trustees' fees have been shown to drop below one basis point for plans with as few as two thousand participants (HR Investment Consultants 1997). If we can devise a relatively efficient way in which to group workers into large systems, the costs of these functions can be even lower. Finally, the actual fees associated with money management in a national mandatory-savings program could be driven almost to zero. If we assume that they might be as high as fifteen basis points—that is, 0.15 percent of assets under management—the total cost of administering the system could be under twenty-five basis points. While this might seem optimistic to some, we note that it is possible to buy retail funds with annual costs at or below this level. We certainly believe that it is possible to devise a mass-scale system that would at least match what individual consumers can buy today.

One test regarding what fees might be for individual accounts is to look at the terms offered on retail products today. Table 2.4 shows six product offerings from three of the largest mutual fund companies in the United States. The table is not meant to be a comprehensive survey, but it does contain a selection of widely available, cost-effective ways in which to participate in financial markets. In all cases, the source of the information in the table is the 1998 prospectus of the fund. All the index fund products have total expenses under fifty basis points, and two have expenses under twenty basis points. Four of the funds charge small annual fees for accounts under $10,000. All have special low minimum initial investment amounts for IRAs, with four of them setting the amount at $500 and the other two at $1,000. One question that people who doubt the ability of the financial services sector to offer cost-effective social security individual accounts must answer is why offerings such as these are available in the IRA marketplace. All these products appear to offer inexpensive ways in which the holders of small accounts can participate in diversified portfolios. It is not clear why the costs of social security's individual accounts must be higher.

2.3 An Administrative Structure for Personal Security Accounts

In this section, we describe a cost-effective way of administering a system of individual accounts. This is meant, not as a proposal per se, but rather simply as a description of what elements are required to achieve cost effectiveness. The system is structured to give workers considerable control over the investment of their retirement funds. In that regard, it is different from legislative proposals that would create individual accounts but put government managers in charge of portfolio allocation. Giving workers some control over the investment of their assets may be important for at least three reasons. First, economic circumstances and tolerance for risk vary widely among American households. One size fits all never fits most people very well. Second, competitive markets tend to produce more efficient combinations of services and prices than do government programs. And, third, giving workers control or an active role in the investment of their retirement savings is likely to spur more retirement savings and more financial education, just as it has done in the 401(k) environment.

There are a number of issues that must be addressed in structuring a

Table 2.4 **Sample of Cost-Effective Mutual Fund Products Available Today**

	Description	Small Account Fee	Annual Total Expenses (%)	Minimum Initial Investment ($)	Minimum Initial IRA Investment ($)
Fidelity Spartan Market Index	S&P 500 Index Fund	$10 for assets < $10K	.19	10,000	500
Fidelity Asset Manager	Asset allocation with stocks and bonds	$12 for assets < $2,500	.77	2,500	500
Schwab 1000	1,000 largest market cap stocks	N.A.	.46	1,000	500
Schwab Total Bond Market Index Fund	Lehman Bros. Aggregate Bond Index	N.A.	.35	1,000	500
Vanguard Index Trust Small Cap	Russell 2000 Index Fund	$10 for assets < $10K	.23	3,000	1,000
Vanguard Index Trust 500	S&P 500 Index Fund	$10 for assets < $10K	.19	3,000	1,000

Source: The 1998 prospectus of the fund in question.
Note: N.A. = not applicable.

system of self-administered accounts at the national level. One overriding issue is whether the administrative system is appended to an existing government agency (i.e., the Social Security Administration [SSA]) or set up as a separate, quasi-government entity, such as the Federal Reserve Board. Another possibility would be to administer the program privately with government regulation in a manner similar to the way in which the Teachers Insurance and Annuity Association and College Retirement Equities Fund (TIAA/CREF) functions.

In the early part of the discussion about administrative approaches, we lay out the considerations, in very broad terms, for going one route or the other in resolving the issue of integrated or separate administration. Primary among these is the set of goals that should be met in structuring an administrative system for a national program of personal security accounts (PSAs). In addition, there are a number of practical issues that must be addressed in devising a system. These include such things as getting contributions from employers into individual accounts, record keeping, setting up a structure to allow workers to make investment choices and the choice of an investment manager, communicating the details of the program, controlling administrative costs, and the like. In the following discussion, we develop a step-by-step description of a system that would address most of these issues. After doing that, we return to the matter of whether the management of the system should be integrated with existing government agencies or set up independently.

2.3.1 Issues in Structuring an Administrative System for PSAs

Social security is a national program, and any program of mandatory PSAs would replace some part of the existing system on a national basis. To the extent that there would be some remaining element of social security, there would have to be coordination between the remaining system and any new mechanisms that would be put in place. Also, to the extent that there would continue to be payroll limits on contributions, there would have to be some centralized clearing of amounts earned and contributed across an extremely dynamic workforce and employer environment. This suggests that some sort of administrative entity would need to fill an oversight role. Some people conclude that the SSA should fill that role because it is already administering a national retirement system. While it is possible that the SSA could serve that role, its current activities and those for which it would be responsible in an individual account, retirement-wealth-accumulation system are significantly different.

One consideration in setting up the administrative structure for a PSA system is the extent to which the benefits provided by traditional social security and those provided by the PSA plan are directly intertwined. If the reform of social security includes benefit offsets under the current program that are based on benefit accumulations in the PSA accounts, it would likely make more sense to have the two systems fully integrated. If the reform of social security includes independent or supplementary PSA benefits, there is less reason for the administration of the two systems to be handled by the same agency. For now, we develop the concept of an administrative entity that we call *PSA Central.* The resolution of where it resides relative to government will be addressed later.

There are certain goals that can be stipulated regarding any administrative system. The first of these is that the system limit the burden on employers, especially small ones without sophisticated salary-administration systems and the staff to support cumbersome reporting requirements. Second, the system must meet the needs of a diversified public with regard to the security of the funds accumulated through the system, simplicity of operation, and ownership and control of accumulating wealth to the extent appropriate in the context of a nationally mandated retirement system. Third, the administrative structure should be reasonably easy to explain and navigate. Fourth, there should be limits on the concentration of wealth control in order to minimize the significant pressures to divert the system's assets to uses other than the efficient accumulation and securing of retirement income (see Jackson 1999; Romano 1993; Schieber and Shoven 1999; and World Bank 1994). Fifth, the system should be structured so as to keep administrative costs at reasonable levels and to distribute them fairly across the participant population.

The United States can learn from the Australian approach and design a system that takes advantage of the significant infrastructure that already exists for the collection of retirement contributions both through employers and through the SSA. The system could also take advantage of the infrastructure that already exists for the investment of retirement contributions in the financial markets. The system need not be organized to operate at the level of lowest efficiency of any participant in it. In fact, regulations could be implemented to require that the system be more cost effective than some of the more expensive 401(k) offerings in the marketplace. A reasonable goal would be to give workers control of their retirement accumulations in a regulated environment that aims for efficient management of the assets involved.

Regardless of whether PSA Central is organized within or outside government, it is possible to specify its administrative roles and functions in the operation of the PSA system. If it is organized within government, it might serve as a regulator as well as an administrator. If it is organized outside government, the regulatory function would continue to be fulfilled by a government agency. We are not addressing the role of the regulatory body in the development of the administrative system that is laid out here. Throughout the implementation of the system and its continuing operations, PSA Central would be responsible for all record keeping associated with the accumulation of individual accounts.

2.3.2 Depositing Contributions and Allocating Them to Individual Accounts

Today, every employer required to withhold income tax from wages or liable for taxes under the Federal Insurance Contributions Act (FICA) must file a quarterly tax return using Form 941, unless the wages paid are for domestic service or agricultural labor. In the latter case, the tax return is filed annually on Schedule H with the employer's annual 1040 filing. Wage information is reported annually on W-2 forms. FICA returns and tax payments on form 941 are due on or before the last day of the month after the calendar quarter for which the return is filed. Deposits of accumulated taxes must be made more frequently. If an employer accumulates $100,000 or more of such taxes on wages paid, the taxes must be deposited the next banking day. Smaller employers are required to deposit either monthly or every two weeks. The actual requirement for a particular business depends on past tax liabilities. The determination is made by looking back over a twelve-month period each 30 June. Employers who reported a liability of $50,000 or less can deposit monthly. Those with a past liability of more than $50,000 report every two weeks.

Following the process that is now used in filing payroll taxes, the quarterly filing of form 941 occurs by 30 April, 31 July, and 31 October in the year in which a worker's earnings are paid and on 31 January in the year following wages paid up through 31 December. By mid-January, the SSA begins receiving W-2 and W-3 statements from employers. In mid-February, it begins processing paper reports. In mid-March, it begins processing magnetic reports. In April of the year after wages are earned, the SSA begins mailing notices back to employers about unverified social security numbers and names. In mid-April, most of the self-employed file their individual tax returns with the IRS. In the May–June time frame, the SSA receives quarterly tax-return data from the IRS and simultaneously sends W-2 data to the IRS. The two agencies compare data and begin a reconciliation process. By 1 July of the year following the year in which wages were earned, 98 percent of magnetic reports are fully processed, and workers are credited with their past year's earnings. In the July–August time frame, the IRS sends SSA tapes for posting of self-employment earnings and earnings for domestic workers. By the end of September, 98.5 percent of both paper and magnetic reports are fully processed, and most workers are credited with their earnings from the past year. At this juncture, a reconciliation process of the remaining open cases begins. This process stretches out until April of the third year after the year in which an affected worker's wages were earned.

In the start-up phase of a PSA system, payroll contributions would continue to be collected the same way they have been in the past. As workers' earnings records are posted electronically at the SSA, they would be transmitted to PSA Central. Once PSA Central has the earnings records, it would allocate contributions to workers' accounts. The allocation process is described in the next section. Before turning to that, however, it is important to note that, during the initial phase of the system, actual allocation of roughly 98 percent of all workers' contributions could take place within nine months after the close of a calendar year. For some workers, that means that, if contributions made in January of one year are not posted until nine months after the close of that year, some contributions will not be posted for twenty or more months after they are made. In the electronic age in which we live, that will be unacceptable to many workers.

After getting initial operations up and running, PSA Central could develop an alternative mechanism for reporting workers' earnings. Essentially, any employer willing to file monthly wage-earnings records electronically would be allowed to do so. Virtually all employers who have DC systems are already compiling and filing this information with administrators of their plans. Many other employers using widely available salary-administration systems could also provide this information with little effort and small marginal costs. PSA Central would reconcile monthly filings after the end of the year with the complete electronic filings that it receives from the SSA as it goes through its normal wage posting. For those workers who have their monthly earnings reported, PSA Central would allocate contributions to their individual accounts on a monthly basis. This policy would undoubtedly arouse employee pressure on those employers not reporting wages on a monthly basis to do so. Such market-based pressure for improved efficiency on the part of employers could be beneficial for the economy as a whole.

For workers with multiple jobs over a year whose covered earnings reach the maximum level of taxable earnings, their additional contributions would be held in a suspense account invested in government bonds. As these workers file their annual tax returns for the year, their excess contributions would be returned to them as a tax refund, just as they are today. If a worker in this category earns a part of his or her annual wages through an employer reporting on a monthly basis and part through an employer reporting under current procedures through the SSA, the part reported on a monthly basis would be treated as first earnings for allocation purposes. The excess from the SSA allocation process would be the source of refund to the worker after the end of the tax year.

2.3.3 Investing the Funds in the Individual Accounts

At the outset of a PSA program, as payroll-tax contributions are deposited with the government, the share that would ultimately be invested in individual accounts could be segregated and invested in a government bond account and immediately begin to accrue interest. Allocation of PSA funds into individual accounts could be done at the same time that wage records are posted with relatively low marginal administrative expense. The share of the fund representing records that have not been fully reconciled at any point could remain in the government bond fund as the remainder of the reconciliation process is completed. As outstanding cases are resolved, the fund could be allocated to the appropriate individual accounts.

This process does raise a slight equity issue in that someone who worked only in January of a year earning $10,000 would be credited exactly the same rate of interest on his or her contributions as someone who worked only in December of the year earning $10,000. The equity issues raised because of the inability actually to post wages on a month-to-month basis under current operating procedures are relatively trivial relative to a wide range of other equity issues that exist in the current system. While this situation is not optimal, it is the price to be paid for not imposing new administrative burdens on employers not willing to file wage records on a monthly basis.

It would facilitate the implementation of a PSA program and be more efficient if the administrative structure of the system was evolutionary. There could be two major phases to this evolution, with the second one proceeding for some substantial period of time. In other words, we do not see the evolution as being two discrete steps, with the full evolution of the system being completed at the time of the move to the second step. In the first phase of the evolution of the administrative system, PSA Central would create a limited set of funds that workers could designate for the investment of their contributions under the PSA system. These would be structured to encourage minimal administrative and investment costs. They would also be structured to facilitate workers' understanding and efficient utilization of the system. It would give those with considerable experience in self-directed investment the opportunity to choose among asset classes and diversify risk. But it would also offer a limited environment to navigate for those without investment experience.

Consider a system that initially offered six funds: a money market fund, a government bond fund, a corporate bond fund, a broad domestic large-cap equity index fund, a broad domestic small-cap equity fund, and an international equity fund. The Board of Governors of PSA Central would put out a request for proposals (RFP) to the investment-management community to manage funds in each of these asset classes. A group of managers will be chosen in each category on the basis of their proposed investment strategy in a given asset class and on the basis of their charges. Some minimum number of managers will be chosen to manage each class of assets. Having multiple managers in each area will, over time, encourage efficiencies that arise out of competition. Such a policy will also preclude the necessity of completely replacing the sole investment manager handling one particular class of investments with another. New investment managers could be added over time with the periodic solicitation of vendors that could replace existing vendors if they could offer more efficient investment services.

For the participant in the plan, this mode of operation would allow selection across a broad range of asset classes but would simplify the amount of information that would be required actually to direct the investment of PSAs. Having multiple vendors would minimize the concentration of assets in the hand of any individual investment manager or under the direct control of the managers of PSA Central. The investment fees under the system should be extremely low because the structure of the system would encourage broad ownership of a class of assets and minimal churning of particular assets within the class. Record keeping should be quite efficient because of the economies of scale that can be realized from a large system, as we have shown earlier.

In the second phase of evolution of PSA Central, individual fund managers would be able to offer a family of funds to individual workers. Their fund offerings would parallel those initially offered by PSA Central. Each fund manager in the system would have to offer a full range of funds. Although many managers would likely manage assets in the full range of asset classes included, some might offer several of the classes and contract with other managers to manage the others. Workers would be restricted in their ability to shift the management of their funds from the PSA Central group of funds to individual managers on the basis of their account balances. The limits on being able to move to individual managers might be set at $1,000, $5,000, $10,000, or some other reasonable level. No individual worker would be allowed to have his or her fund invested with more than one manager at a time. Fund managers would be chosen to enter the system on the basis of an RFP process that would focus on investment strategy within each class of funds, security, and fees for asset management.

It is possible that some entirely new groups of fund managers might arise under this approach, somewhat along the lines of the Australian experience. For example, it is likely that organizations like the AFL-CIO, or even one of its affiliate members, might organize a set of funds to offer to union members or contract with an existing fund-management company to do so. Such a fund might actually pursue investment policies that would serve its clientele's preferences—for example, avoiding investing in anti-union companies. The pursuit of such policies would be permitted as long as the equity fund offered under this manager was broadly diversified across the total range of assets in the economy and structured to operate efficiently. Over time, if it was deemed desirable, additional funds might be offered. The funds going to individual managers would still be flowing to those managers on a pooled basis. All record keeping would still be performed through PSA Central.

For the participant in the plan, this mode of operation would allow selection among a broad range of both asset classes and asset managers. Not implementing this phase until the system has been operating for a couple of years will give workers time to become familiar with the process of making their own investment choices. Requiring that workers have a minimum balance will also increase the likelihood that workers have had some time and experience dealing with choice in the base system. The investment fees under the system should remain low because the structure of the system would still encourage broad ownership of each class of assets and minimal churning of particular assets. Record keeping should continue to be efficient because it would still be centrally operated.

2.3.4 Worker Allocation of Funds

Initial allocation of workers' assets to particular funds could be accomplished in several ways. After wage records are posted and the initial allocation of funds to individual workers is accomplished, workers would make their individual investment choices. The three media that are used for doing this in 401(k) and similar plans are paper-based systems, voice-response systems, and Internet systems. It should be possible for the PSA plans to use all three of these media. Information relevant to workers' choices would be distributed through employers.

One of the questions that would have to be addressed at the outset is how frequently workers would be allowed to reallocate their assets in the system. The experience that Watson Wyatt Worldwide's consultants have had in the design, implementation, and administration of DC plans where workers direct the investment of the assets in them is that allowing workers the option of moving their money across funds on a daily basis actually results in fewer asset transfers than does allowing assets to be moved less frequently. Initially, the volume of work involved in start-up activities might preclude the option of allowing workers to move their assets daily. Ultimately, however, the value of giving workers true control of the investment of their assets and the fact that they exhibit more stable tendencies in the freer environment suggest that daily allocation is the best way to proceed.

Another question that must be addressed at the outset is how to invest the assets of workers who fail to allocate their own assets in the system. This is a policy question that may result in a wide range of answers. The point of this discussion is not to resolve all policy questions associated with a PSA system but to illustrate that such an administrative system can be developed that is both effective and cost efficient. The choices would seem to range from allocating nonresponsive workers' assets into one particular fund, probably the bond index fund, to allocating them on some pro rata basis across the range of funds. The latter approach might actually alter the pro rata distribution of assets on the basis of the age of the worker. This system would seem to accommodate the entire range of options or possibilities on an efficient basis.

2.3.5 Communicating about the System

During the start-up phase of the system, there would need to be a media campaign telling all workers about the implementation of the PSA system. Explanatory materials could be provided through all forms of news outlets, employers, the postal service, banks, churches, and other relevant community organizations. The asset-allocation materials would be distributed through employers. Presumably, the federal government has the names and addresses of all employers who are currently contributing payroll taxes for their workers, so this would seem to be the most direct way to get to workers. Indeed, going through employers was the mechanism used in 1936 to register workers for the assignment of the original set of social security numbers and resulted in significantly higher initial registration than had been anticipated (Schieber and Shoven 1999).

After the initial phase-in of the program, PSA Central would send workers periodic statements of their accounts. These statements would include information on contributions in the most recent period, including the allocation of contributions by asset class, returns earned in each case, total cumulative balances in each class of asset and in total, and rate-of-return information for relevant comparison periods. Participants could also gather such information through a voice-response system or the Internet.

As the second phase of the investment options open to workers is introduced, it is likely that some communications would come from fund managers offering investment services directly to individual workers. Under this phase of operations, when the worker calls with questions regarding his or her balances, the call would either go directly to the particular vendor—call it Investco—or be routed there through a call to PSA Central. Investco's service representatives would be plugged into the administrative-record database at PSA Central and would have access to all PSA records being managed by Investco.

At least once a year, PSA Central would mail participants in the PSA system a report on all the investment managers in the system. This report would break down the costs of administering the various elements of the system that were charged against the assets in the system. This would include specific charges related to administration and record keeping by PSA Central, communications costs, and asset-management fees charged by PSA Central for its fund offerings and those of each individual fund manager with individual accounts.

Under this structuring of the system, it is likely that asset-management fees will continue to be relatively low. Keep in mind that asset managers are not actually acquiring funds directly from individual workers. The money invested in their funds would flow to them on a pooled basis through PSA Central. If the individual managers' fees get to be too high, it is likely that workers would revert back to PSA Central. On the other hand, workers might be willing to pay somewhat higher management fees for using a particular investment manager because of the services provided. It would be possible to limit fund vendors' fees to such a level that the total administrative cost of the system, including all central administrative operations, is no more than one hundred basis points or some other reasonable level. Our expectation is that most vendors would offer services at cost rates well below such a ceiling. The fund manager would be required to report annually all costs associated with the operation of each of the funds offered and the returns on the fund. PSA Central would make this information available to the general public in a summary form through the news media and the Internet. Investco's call center would handle all queries about account balances, asset allocations, and the like for PSA balances being managed by Investco.

2.3.6 Paying Benefits to Participants

One of the other policy issues relative to the consideration of a PSA system is how benefits are to be distributed. In the case of retirement benefits, the issue is whether workers would be required to annuitize some or all of their PSA balance. Once again, the system can be structured to give policy makers maximum flexibility in choosing among the options available to them. Since PSA Central will have a full accounting of all account balances and where they are invested, it would be quite easy as a worker retires and begins to claim benefits to sequester a portion of the accumulation for the purchase of an annuity. Indeed, it is possible that PSA Central could provide participants in the system with a list of current annuity vendors and the pricing of their products on an easily comparable basis if annuities are to be offered through private markets. If they are offered through the government by the SSA, the necessary funds could be transferred from the PSA system into an indexed bond portfolio.

2.3.7 Start-Up Financing

Once a system similar to what we have described is up and running, its full costs of operations can be borne by the assets in the system. During the start-up phase, however, the government could appropriate the funds to put the system in place. The need for a system such as this is related to the goals of national government policies. The start-up phase of the system will create initial investment costs that can be thought of as national financial infrastructure.

2.3.8 The Location of PSA Central

Having outlined the functions of a central clearinghouse and record keeper for individual PSA accounts, it seems like a second-order matter whether PSA Central becomes an office within the SSA, another government office, or a private, regulated enterprise. Clearly, the details of any particular reform proposal might favor one location over another, but we can imagine the system working efficiently given any of the three arrangements.

2.3.9 Summary Comments

We have attempted to show that it is possible to design a system of individual accounts, or PSA accounts, that takes advantage of existing technology, systems, and approaches to providing retirement benefits. No employer would be forced to make payments through any new mechanisms or file any reports not already required by law. Employers could continue to file their tax payments and periodic reporting statements exactly as they do now. The SSA and the IRS can continue to conduct their processing exactly as they do now. The only point at which changes to the existing system would be required is that of allocating funds to specific accounts. But that is going to be required of any individual account system. The structure that we have outlined here should be highly efficient from an administrative point of view. In addition to individual account administration, sending money to trustees will require administrative and control mechanisms. But, if trustees can perform their functions for fractions of a basis point for a 401(k) with two thousand participants, PSA Central can certainly do the same for a system covering millions of workers.

The new internal record keeping of accounts at PSA Central would create some new activities for our national retirement system. But keeping the process essentially mechanical should minimize costs. PSA Central should be able to buy a record-keeping system almost virtually off the shelf to do the data processing required.

Under a system such as the one that we have described, employers, including small employers, would undoubtedly feel pressure from their workers to disclose workers' wages on a regular monthly basis. On the other hand, electronic reporting of payroll histories is highly desirable because it is the most efficient way to report such information. A by-product of partially privatizing social security could be a modernization of the way in which labor market information is communicated in this country. A system of the sort that we have described may require more communications than the system that we have now, at least to the extent that some workers today are not participating in voluntary contributory retirement plans. But the distribution of general materials required by the new system and the distribution costs should be relatively minuscule compared to the overall scope of matters under consideration. The government could develop financial education programs that it would run periodically on public broadcasting stations and encourage commercial stations to run those same programs as well.

2.4 How Important Are Administrative Costs?

To a certain extent, the opponents of individual account solutions to social security's financing problems have focused on administrative costs so intensively because this is an area where they perceive the current system has an advantage over the alternatives. The earlier observation (from Mitchell 1998) that this is not necessarily so notwithstanding, the current U.S. system is administered reasonably efficiently. But the administrative costs of a system are only one consideration in the discussion of the optimal means of providing retirement security to a broad cross section of the population.

Although the current social security system might be relatively efficient to administer, it has a number of other glaring inefficiencies. For example, Geanakoplos, Mitchell, and Zeldes (1998) estimate that at least a quarter of the current payroll tax is required essentially to pay interest on the unfunded liability of the system. The practical limits of a system financed on a pay-as-you-go basis cannot possibly provide workers a reasonable return given a relatively stable workforce and limited wage growth. There are those who are calling for the central funding of social security. But we have been unable to accomplish that for the last six decades. Even though Franklin Roosevelt was adamant that his social security be funded, repeated congressional action or inaction from the late 1930s through the mid-1950s disassembled his intentions. We slid into an unfunded pay-as-you-go system. Some people would have us believe that the accumulation of the trust funds since 1983 represents an increase in national saving, but that is highly questionable. At the same time as social security was raking up a surplus, the rest of the government was accumulating debt at an even faster pace.

The only way in which we can improve the lot of future workers under our current national retirement system is to raise national saving and begin to fund the system. We believe that a record of nearly sixty-five years of failing to do so under the current system suggests that there must be a better way. Central funding is not credible, and people are understandably reluctant to pay higher taxes with the promise of central fund saving. But individuals would be willing to contribute more to appropriately designed individual accounts. The administrative costs of such a system are probably higher than those of the current financially insolvent pay-as-you-go system, but the productivity benefits of a better-funded system outweigh the added costs. In this paper, we have tried to show that a cost-effective individual accounts system can be designed, particularly by piggybacking on systems already existing in our economy.

References

"Administration Costs $4.40." 1998. *Superfunds,* no. 218 (September): 16.

Australian Treasury. 1997. Financial markets and investment products—corporate law economic reform program proposals for reform. Paper no. 6. Canberra: Australian Government Printing Service.

Budd, Alan, and Nigel Campbell. 1998. The pension system in the United Kingdom. In *Privatizing social security,* ed. Martin Feldstein. Chicago: University of Chicago Press.

Budden, Robert. 1997. Rebate only pensions, money down the drain? *Money Management,* January, 46–53.

Diamond, Peter A. 1996. Social security reform in Chile: An economist's perspective. In *Social security: What role for the future?* ed. Peter A. Diamond, David C. Lindeman, and Howard Young. Washington, D.C.: National Academy of Social Insurance.

Edwards, Sebastian. 1998. The Chilean pension reform: A pioneering program. In *Privatizing social security,* ed. Martin Feldstein. Chicago: University of Chicago Press.

Geanakoplos, John, Olivia S. Mitchell, and Stephen P. Zeldes. 1998. Would a privatized social security system really pay a higher rate of return? In *Framing the social security debate,* ed. R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell. Washington, D.C.: Brookings Institution Press.

HR Investment Consultants. 1997. *401(k) provider directory.* Baltimore.

Jackson, Jesse L., Sr. 1999. Oral statement before the Ways and Means Committee, House of Representatives, at a hearing on preserving and strengthening social security. 106th Cong., 1st sess., 21 January.

Mitchell, Olivia S. 1998. Administrative costs in public and private retirement systems. In *Privatizing social security,* ed. Martin Feldstein. Chicago: University of Chicago Press.

Myers, Robert J. 1992. Can the government operate programs efficiently and inexpensively? *Contingencies,* March/April, 15–17.

National Academy of Social Insurance (NASI). 1998. *Evaluating issues in privatizing social security.* Report of the Panel on Privatization of Social Security. Washington, D.C.

Romano, Roberta. 1993. Public pension fund activism in corporate governance reconsidered. *Columbia Law Review* 93, no. 4 (May): 795–853.

Schieber, Sylvester J., and John B. Shoven. 1999. *The real deal: The history and future of social security.* New Haven, Conn.: Yale University Press.

Securities and Investments Board (SIB). 1994. SIB announces programme to provide redress to people mis-sold personal pensions. Press release. London, October.

World Bank. 1994. *Averting the old age crisis.* New York: Oxford University Press.

Wuelfing, Robert G. 1997. Speech presented to the national conference of the Society of Professional Administrators and Recordkeepers, Washington, D.C., 23 June.

Comment Olivia S. Mitchell

In policy matters, it is often said that the devil is in the details, and nowhere is this more true than in the current debate over how to reform the U.S. social security system. In their thought-provoking paper, Sylvester Schieber and John Shoven provide a substantial service by taking seriously some of the administrative details that need to be worked out in order to privatize part of the current social security system. They begin by showing how Chile and Australia worked to resolve structural design questions associated with individual accounts, and then they go on to show how a similar structure might function in the U.S. context. In this effort, they raise and address several questions that thoughtful observers recognize must be resolved before selecting a particular reform plan.

The four key tasks of a national old-age pension system are to collect taxes, to manage the money, to track participants, and to pay benefits.[1] Architects of a new system must therefore design mechanisms to handle each of these four tasks, and international experience shows that countries differ dramatically in how they have chosen to handle these tasks. Structure in turn affects the costs—and often the benefits—of the plan in question. On the tax-collection front, Schieber and Shoven indicate that it has proved fairly expensive to collect pension taxes using individual agents, as in Chile. By contrast, using a central collection authority (either a government or a union/employer model) can drive down collection costs, as in Australia and Mexico. On the money-management front, costs appear to decline with the size of the asset pool under management and tend to fall after a start-up period. Therefore, a low-cost design for an individual account plan would probably need to exploit scale economies and offer somewhat limited investment options, as in the U.S. Thrift Savings Plan.

Turning to record keeping, the third function of a pension plan, here, too, there are design choices. Tracking participants and their earnings appears to be less expensive when done centrally, as in Mexico's new individual accounts program, as compared to a system that relies on multiple

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1. For further development of these themes, see Mitchell (1997, 1998a).

retirement-saving institutions.[2] Central record keeping is also appealing given the need to have regulatory oversight for individual account pensions. A national regulatory regime is now under construction in Britain that will stand in sharp contrast to the very complicated and (for many) confusing state of affairs in the United States. Mainly for historical reasons, the American approach to pension regulation is quite disperse: individual states regulate insurers, the U.S. Department of Labor oversees employer pension fiduciary responsibilities, the SEC supervises investment matters, and still other agencies (e.g., the IRS, the Pension Benefit Guaranty Corporation) have their own interests and exert additional sway over the pension environment. It would be inaccurate to levy on an individual accounts program all the costs of a much-needed pension regulatory reform, of course, but the need for systemic overhaul should be kept in mind when designing the new system.

The last and probably key function of an individual accounts pension system is the payment of benefits. It should be recognized that paying pension benefits is not a simple exercise since, in many reform proposals, individual account payouts must be integrated with a continuing pay-as-you-go old-age benefit guarantee. This has been true in Australia, as Schieber and Shoven note, and it is the case in virtually all the Latin American nations following the Chilean model for pension reform.[3] To the authors' credit, they devote serious attention to the underappreciated question of how the benefits are to be paid at retirement, whether they are to be accessible as a lump sum, how benefits will vary with years of service, benefit portability, and so forth.

On the payout front again, several choices need to be made, to many of which Schieber and Shoven correctly alert us. The annuity issue is, in my view, key. Some have argued that adverse selection in private insurance markets will rule out individual accounts since people might not be able to annuitize their accumulated funds. However, research shows that private insurance markets are likely to be able to meet the demand for individually purchased annuities and, indeed, even real (inflation-linked) annuities.[4] Additional evidence is available from the United Kingdom, where inflation-indexed annuities are required for a portion of old-age pension benefits. A related point—one not touched on by virtually any U.S. individual account reform plan—is how disability benefits are to be handled. For instance, if a worker is disabled, he will need to convert his individual account accumulations into a disability annuity, yet little discussion has

2. These comparisons are discussed in Mitchell (1998b).

3. For a review of the Latin American individual account plans, see Mitchell and Barreto (1997) and Barreto and Mitchell (1997).

4. Evidence that annuity markets in the United States could meet the demand for real annuities in an individual accounts system is offered in Brown, Mitchell, and Poterba (in press).

been conducted about how this is to take place. If disabled workers are left to decide whether they will annuitize their accounts, adverse selection might result when those facing shortened life spans take cash-outs and leave the remaining disabled group worse off. Examining the extent of this problem is an important area for future research that will have to be taken into account as reformers continue to shape specific proposals for individual accounts.

One subject that Schieber and Shoven mention but probably underemphasize is the fact that the current social security system needs to incur substantial modernization costs—even if an individual account system is not implemented. For instance, under the current OASDI program, earnings and contribution records take one to two years to be reconciled within the system, almost 15 percent of employers submit cumbersome paper rather than electronic records, and it is impossible to have earnings sharing between spouses since records are simply not kept this way. New institutions are needed to make it possible for employers and employees to benefit from the low-cost contribution, reporting, and disclosure mechanisms made possible by technological developments in the twentieth century. Once these new systems are built, the burden of adding investment options to social security would be relatively small and potentially dwarfed by the expected gains. Therefore, if the deferred-maintenance accounting were done properly, it is likely that the marginal cost of instituting individual accounts could be quite modest.

Meeting this modernization challenge will be expensive, and it is important to discuss how to spread the cost of modernizing social security across all the stakeholders—current retirees, current workers, and those in future generations. Most countries adopting individual accounts have forced a relatively short period for amortization of these costs, which in effect imposes modernization costs on workers at the time a new system is put in place. But other financing approaches could be compared, including one in which system-upgrade costs would be financed across cohorts other than current workers. To the extent that baby boomers already bear a substantial portion of the transition costs associated with the old pay-as-you-go system, there may be some support for spreading these costs more broadly.

Social security reform plans are debated by many who focus on the "big picture" with macroeconomic, generational, and political concerns. But, as noted at the outset, the details matter too, and they matter so much that Schieber and Shoven are absolutely correct to draw our attention to them. Indeed, it is not an exaggeration to say that design issues may be make-or-break propositions in the public arena. Most would agree that adding an individual account pillar to the U.S. old-age system will likely increase administrative costs, but it will also provide participants with a range of additional services, more opportunity to invest in diversified accounts, and a greater sense of ownership than under the current social security system, which confronts insolvency and uncertainty. And, as I have shown, the current system is in need of upgrading and will require a substantial investment to bring it in line with modern standards. Deferring the modernization of the social security system will inevitably raise the political—and probably the economic—costs of that modernization.

References

Barreto, Flavio A., and Olivia S. Mitchell. 1997. Privatizing Latin American retirement systems. *Benefits Quarterly* 13, no. 3:83–85.

Brown, Jeffrey, Olivia Mitchell, and James Poterba. In press. The role of real annuities and indexed bonds in an individual accounts retirement program. In *Risk aspects of investment-based social security reform,* ed. John Y. Campbell and Martin Feldstein. Chicago: University of Chicago Press.

Mitchell, Olivia S. 1997. Building an environment for pension reform in developing countries. Working paper. Wharton School, Pension Research Council, August.

———. 1998a. Administrative costs of public and private pension plans. In *Privatizing social security,* ed. Martin Feldstein. Chicago: University of Chicago Press.

———. 1998b. Evaluating administrative costs in Mexico's AFORES system. Working paper. Wharton School, Pension Research Council, November.

Mitchell, Olivia S., and Flavio Barreto. 1997. After Chile, what? Second-round social security reforms in Latin America. *Revista de Analisis Economico* 12, no. 2 (November): 3–36.

Discussion Summary for Chapters 1 and 2

Stephen Zeldes noted that the Schieber and Shoven paper seemed to indicate that administrative costs as a percentage of assets under management were increasing in the number of workers per plan for Australian individual account superannuation funds but were decreasing in the number of workers per plan for U.S. 401(k) plans. Zeldes suggested that perhaps the distinction between fixed cost *per plan* and fixed cost *per worker* needed to be fleshed out more precisely. That is, if much of the fixed cost is per worker cost, then it would not be surprising to find costs as a percentage of assets covarying positively with the number of workers per plan; but this result would be surprising if the fixed costs were mainly per plan. Zeldes suggested that, if most of the fixed costs are per worker costs, it is important to examine average balances in order to understand how the number of workers per plan will likely affect total plan costs as a percentage of assets. If, for example, average balances increase with plan size in Australia but decrease with plan size in the United States, and if most of the fixed costs were per worker fixed costs, this could explain the result implied by Schieber and Shoven's tables.

John Shoven agreed that these dynamics are important but also suggested that different levels of service in Australian as opposed to American plans could also be a driver of differential average costs. *Zeldes* commented that perhaps the most effective measure of average costs in general may be cost per worker.

Fred Grauer suggested that, in general, the number of investment choices available in Australia is much broader than it is in comparable plans in America. *Estelle James* disagreed, noting that, in the United States, employers have been increasing options, whereas, in Australia, there are perhaps only four or five options. *Grauer* replied that individuals in Australia have a significant amount of choice in selecting a plan vendor. But *Sylvester Schieber* supported James's observation, pointing out that individuals who are involved with superannuation plans through an employer are constrained in their choice by the options allowed by the employer, who sponsors the plan. Schieber noted that, although the issue of allowing multiple vendors to offer their portfolios to a given plan is currently under debate, there has been considerable resistance on the part of plan sponsors (e.g., employers) and therefore that choice for the individual employee in Australia remains quite limited.

Peter Diamond raised the point that, in addition to level of costs, one should also consider the significance of the way in which costs are charged to the individual: front load versus percentage of assets. Diamond noted the heavy reliance on front-load charges in the Chilean and Mexican pension schemes and cited evidence from a recent Investment Company Institute report indicating that a high percentage of U.S. equity mutual funds also used front-load fees. Diamond pointed out that Schieber and Shoven assumed no-load funds, and he questioned the appropriateness of this assumption given the evidence and the significant positive and normative implications of types of loads.

Estelle James offered an example of the normative implications of front-load charges. She noted that, in the Chilean system, the front loading of fees translates into very different effective annual charges and effective reduction of gross returns for individuals entering the system at different ages. Those entering the system at an earlier age experience lower effective annual charges and deduction from gross returns than do those entering the system at a later age.

James Poterba cautioned against using the assumption that 401(k) plans are breaking even when interpreting Schieber and Shoven's data detailing 1995 information on administrative fees of 401(k) accounts according to plan size. Poterba noted that 401(k) providers may undertake cross-subsidization within the mutual fund family. To investigate this possibility, he suggested comparing the Schieber and Shoven table to analogous data from before 1986. Poterba's recent research with David Wise indicates that this comparison might be of interest because, in the pre-1986 period, there were many fewer large 401(k) accounts than there are today—because, before 1986, 401(k)s in general had not been operating for very long. This suggests less opportunity for using revenues from the large accounts to subsidize.

John Shoven pointed out that a cross-subsidization type of effect may also arise if financial institutions presume that individuals depositing money in a 401(k) account may also open up additional accounts. This may affect fees on 401(k)s as the institutions attempt to attract and retain 401(k) money. *Poterba* suggested that some institutions, for example, banks offering CDs, actually may not want to accept retirement-plan money because the IRA and 401(k) rules give individuals significant freedom to move their money around within the account and banks may not want to deal with the transaction volume. *Shaun Mathews* of Aetna suggested that it would be fruitful to discuss this issue with "transfer agents," who provide services to 401(k) providers. Mathews suggested that transfer agents may have data that would allow one to back into fee and profit data for 401(k) providers.

Regarding churning costs, *Andrew Samwick* suggested that a small number of individuals would likely be responsible for most of the churning. *Michael Graetz* replied that the analysis of the Goldberg and Graetz paper assumed that individuals were limited as to the number of times they could reallocate their funds free of charge. He further noted that, although they had only explicitly assumed this for the "simple personal investment fund" (SPIF) accounts, it could also easily be built into the "qualified private fund" (Q-fund) accounts as well. *Martin Feldstein* argued that there is no particular reason why we would want to regulate how often individuals could reallocate funds if they paid the extra cost. *Graetz* agreed that a cap on the amount of churning is not necessarily needed, just a charge for churning after a certain point. Responding to this point, *Samwick* cautioned that this may lead to paternalistic policies on churning. Getting back to Samwick's original point, *Fred Goldberg* pointed out that the Goldberg and Graetz cost estimates did assume some level of churning. *Samwick* added that he was especially concerned about the different churning experience of different populations and that he was pleased to hear (from the Grandolini discussion) that Mexico had established a centralized clearinghouse for information, reconciliation, and reporting, which mitigates churning costs. He suggested that this was an encouraging precedent. *Graetz* responded on a related point, noting the crucial distinction between the institutions and costs associated with a reformed system on day 1 and the evolving characteristics of the system over time. He suggested that we need not consider the existence of such institutions as a clearinghouse for information and transactions (or, e.g., the consolidation of regulation of financial intermediaries) as a *precondition* for the establishment of a system of individual accounts. Rather, institutions such as these may well develop over time if the system is established with proper foresight.

Mark Warshawsky noted that Goldberg and Graetz assumed a prominent role for the IRS in their model of a system of individual accounts and questioned whether this would be politically viable given the recent expression of public dissatisfaction with the IRS. *Schieber* suggested that this should not be a problem, noting that, under the Goldberg and Graetz proposal, the IRS would not have access to any information to which it did not already have access. *Martin Feldstein* concurred, pointing out that many proposals currently circulating assume some processing role for the IRS. *Warshawsky* replied that he was referring mostly to public opinion/perception. *Michael Graetz* countered that he did not see this as an important issue and suggested that the Roth hearings investigating IRS misdeeds had been misleadingly inflammatory. *Fred Goldberg* noted that, despite the complaints about various aspects of the IRS, it performs its information-processing tasks remarkably well.

Picking up a point from the Grandolini presentation, *Leonard Glynn* posited that the World Bank staff retirement plan's experience suggests that it is difficult to achieve consistent overperformance from active management of pension assets. In particular, he suggested, it implies perhaps that any social security system with individual accounts ought to put every individual in a "default plan" that would be completely passively managed, with heavy restrictions on investor choice and ability to reallocate funds. (He conceded that perhaps individuals could eventually be allowed to opt out into a more flexible plan, but only after their account had reached a specified dollar amount.) He suggested that such a system would cut costs from churning and investor education while apparently not giving up much in terms of potential gains to active management.

Fred Goldberg replied that one could take that approach but that it is more a question of policy than of mechanics since the Goldberg and Graetz framework *does* allow for a more restrictive default option as well as a less restrictive opt-out option. *Olivia Mitchell* argued that the investor-education issues do not disappear altogether, as individuals would eventually be eligible to enter an opt-out plan and would need to understand the implications of doing so. *Leonard Glynn* agreed but noted that this option would not be available until the program had been in place for several years, during which time investors would have the opportunity to become educated about their options. Glynn further noted that annual statements could be a part of the education process by including information regarding the structure of the default plan's "life-cycle" investment allocations. This could also have the effect of convincing some individuals to stay with the default plan when they are presented with the option to switch.

Martin Feldstein argued that charging front-load fees was not a viable option because the individual would need to pay a new up-front fee every time he or she switched investment managers. Consequently, charging fees as a percentage of assets seemed the only viable option. Feldstein also commented that it was puzzling that there is not more of an attempt on the part of fund managers to offer quantity discounts to clients with larger funds. *Estelle James* replied that mutual fund managers are not allowed to offer different fees to different customers. But *John Shoven* pointed out that this occurs de facto when fund managers offer funds with high minimum investments and lower fees than similar funds without minimum investment requirements.

Kent Smetters noted that Goldberg and Graetz estimated the administrative costs of their default plan (the SPIF) as between thirty and sixty basis points and asked why that figure would not be closer to the eight- to nine-basis-point figure of the federal Thrift Savings Plan (TSP). *Estelle James* pointed out that the initial costs of the SPIF plan would be high because of the likely small size of the accounts. She noted that the same had been true of the TSP. *Fred Goldberg* concurred, noting that the thirty- to sixty-basis-point figure corresponded to a five-year time horizon, whereas, in the long run, the figure ought to be closer to the TSP figure. *James* suggested that, with passive management, it ought to be possible to get below the thirty- to sixty-basis-point figure within five years.

David Cutler noted that many individuals currently do not file tax returns and that it may be difficult to bring these individuals into an individual account system that relied on the existing IRS infrastructure. *Fred Goldberg* agreed that there are several million individuals who do not file tax returns and suggested that an additional form would be necessary for these individuals to receive credits to their individual accounts. He noted further that any future major tax reform would need to take special account of the implications of reform to the individual account system if that system relied on the IRS infrastructure. *Martin Feldstein* and *Daniel Feenberg* inquired about the size of the working, nonfiling population. *Goldberg* replied that, although it is difficult to determine an exact figure, there may be as many as several million such individuals. He cited as an example of the type of person falling into this category a young worker whose only annual income was a few hundred dollars from a summer job. Goldberg also noted that, even if an individual with official wage income does not file a tax return, he or she will still have a W-2 filed for his or her work. The system could still credit his or her individual account, although with a lag of approximately eighteen months.