ISSUE BRIEF NO. 4

SOCIAL SECURITY REFORM: MECHANISMS FOR ACHIEVING TRUE PRE-FUNDING

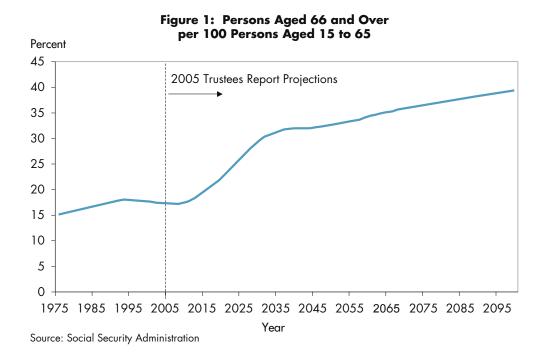
INTRODUCTION

This is the fourth in a series of Treasury issue briefs on Social Security reform. It expands on a point introduced in the second issue brief; namely, that making Social Security reform fair to future generations requires building up and safeguarding resources in the near term that can be used to fund future benefits as the number of retirees per worker increases. As was discussed in the second brief, there is nothing currently in place to prevent current contributions in excess of current benefits from being unwound by larger deficits in the non-Social Security portion of the federal budget. This brief reviews the need for true pre-funding and its implications for reforms that achieve a financially sustainable Social Security system. The brief then analyzes possible mechanisms to help ensure that attempted pre-funding is in fact real pre-funding.

The institutional reforms considered in this issue brief, including several variants of personal accounts, are discussed solely in terms of the contribution they make to ensuring that attempts to pre-fund Social Security actually result in an accumulation of resources to fund future benefits. Accordingly, elements of these reforms that do not directly bear on the question of pre-funding—for example, the inheritability of personal accounts—are not discussed. In addition, it should be emphasized at the outset that none of the mechanisms for pre-funding considered here involve the privatization of any function of Social Security.

FAIR REFORM REQUIRES SUBSTANTIAL PRE-FUNDING

The connection between fairness and the need for pre-funding is straightforward. As shown in Figure 1, the old-age dependency ratio—the ratio of retirees to workers—is expected to rise rapidly over the next thirty years and then to rise slowly but steadily in every year thereafter. This pattern reflects the imminent retirement of the relatively large baby-boomer birth cohorts together with projected sustained improvements in longevity. This demographic shift has important implications for Social Security, since the revenues of the system take the form of contributions paid by workers while expenditures go largely to retirees (as in previous briefs, the discussion here focuses on the retirement portion of Social Security rather than on disability benefits).



In these circumstances, any reform of Social Security that makes the system permanently solvent and that seeks to maintain contributions and benefits at some stable fraction of people's wages while working must accumulate resources in the near term when there are relatively more workers (that is, when the oldage dependency rate is relatively low) so as to help finance benefit payments in later years when there are relatively more retirees (that is, when the oldage dependency rate is relatively high). This accumulation of resources is known as "pre-funding," and is accomplished by having current revenues exceed expenditures and by safeguarding the resulting surpluses so that they provide resources with which to fund future benefits. If instead no attempt is made to pre-fund future benefits, then it will be necessary in a solvent system to reduce benefits for the cohorts of retirees that are relatively large and/or to require higher contributions from the later, relatively small cohorts of workers who are paying for the retirement benefits of the earlier cohorts. Either outcome would be viewed as unfair by most people because it causes the net value of Social Security to vary across birth cohorts depending on their size.

The amount of pre-funding that is needed depends on both demographics and the size of benefits to be afforded to future retirees. A convenient reference point for assessing the rough magnitude of pre-funding that would occur under a fair Social Security reform plan is given by the amount of planned pre-funding under the "Nonpartisan Reform Plan" that was recently proposed by Jeffrey Liebman, Maya MacGuineas, and Andrew Samwick.\(^1\) That plan calls for cuts to defined benefits that are partly made up by benefits payable from mandatory personal retirement accounts, and brings more revenue into the system by raising the maximum taxable earnings threshold and requiring that individuals make some out-of-pocket contributions to their retirement accounts.

For a description of the Nonpartisan Reform Plan and a link to the Social Security Administration's scoring of it, see http://www.nonpartisanssplan.com/pages/1/index.htm. The plan is used here strictly for illustrative purposes; this discussion does not represent an endorsement or a policy proposal.

The Nonpartisan Reform Plan involves significant planned pre-funding. This can be seen from Figure 2, which gives the projected time profile of contributions in excess of benefit payments (expressed as a share of GDP) implied by the plan. (Both contributions and benefits include the contributions and benefits that are attributable to the plan's personal retirement accounts.) Annual planned pre-funding under the plan would be about 1 percent of GDP between 2008 and 2018 and would slowly decline thereafter, with negative pre-funding starting in 2034 as resources are used to pay benefits. To put the magnitude of this planned pre-funding in perspective, note that it is equivalent to putting aside 15.5 percent of GDP in 2007 to help pay benefits after 2034; by comparison, past attempted pre-funding from the inception of Social Security to 2007—the accumulated value of all past Social Security surpluses—corresponds to 16.4 percent of 2007 GDP.

Percent 1.5 Nonpartisan Reform Plan 1.0 (Budget Surplus + Personal Account Surplus) 0.5 0.0 -0.5 -1.0 -1.5 Current-Law Scheduled -2.0Benefits and Taxes -2.5 2005 2015 2025 2035 2045 2055 2065 2075 Year Source: Social Security Administration

Figure 2: Annual Attempted Prefunding Under the Nonpartisan Reform Plan (Current Contributions in Excess of Current Benefits Paid As Share of GDP,
Based on 2005 Trustees Report Assumptions)

Other Social Security reform plans call for less planned pre-funding than the Nonpartisan Reform Plan; this can be done by reducing benefits and/or increasing contributions relatively more gradually. In both cases, the effect is to impose a larger share of the Social Security reform burden on distant future generations. To assess whether the Nonpartisan Reform Plan provides a reasonable guide to the appropriate level of pre-funding, therefore, Figure 3 shows how the plan distributes Social Security's reform burden across birth cohorts as measured by the *lifetime net benefit rate*. As is explained in Treasury's second and third issue briefs, the lifetime net benefit rate is defined as the present value of net lifetime Social Security benefits (benefits less taxes) as a percentage of the present value of the individual's lifetime wages. The lifetime net benefit rate for a birth cohort is the same as that for an individual except that the numerator (net Social Security benefits) and the denominator (lifetime wages) are sums computed over all members of the birth cohort.

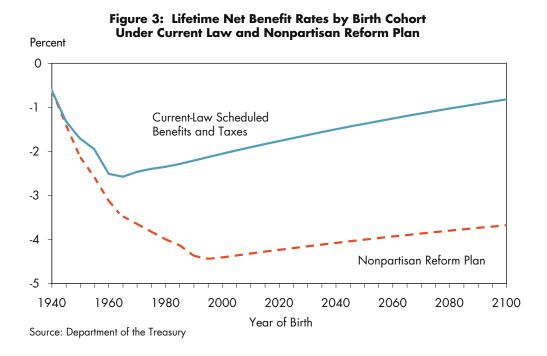


Figure 3 shows that the Nonpartisan Reform Plan's provisions are fully phased in beginning with the 1995 birth cohort. After the 1995 birth cohort, the lifetime net benefit rate creeps upward as life expectancies rise for successive birth cohorts, which results in their receiving benefits over a longer period of time. On this score, it is noteworthy that the plan probably does not achieve permanent solvency, but likely would do so if it were modified to include benefit reductions that offset the effect of increasing longevity on the value of lifetime benefits beginning with the 1996 birth cohort. Such a modification would not change the amount of planned pre-funding under the plan, but would result in a flat lifetime net benefit rate starting with the 1995 birth cohort. As was discussed in Treasury's third issue brief, a lifetime net benefit profile that is flat in the long run is arguably fairer than one that forever rises.

Whether pre-funding under this plan is too small or too large depends on one's judgment as to how quickly a Social Security reform should be phased in. This particular plan is fully phased in starting with the 1995 birth cohort, whose members are 13 years old when the plan's reforms are assumed to begin. If a more rapid phase-in were desired, then planned pre-funding would be larger and future generations would be made better off at the expense of current generations; similarly, if a less rapid phase-in were desired, then planned pre-funding would be smaller and current generations would be made better off at the expense of future generations.

WHAT HAPPENS WHEN PLANNED PRE-FUNDING IS NOT REAL?

Pre-funding is an effective financing strategy provided that the near-term surplus revenues are safeguarded in a way that allows them to be used to pay for future benefits. The present Social Security system has its surpluses accumulate in the trust fund. These surpluses will increase the government's capacity

² The Nonpartisan Reform Plan's benefit reductions end with the 1988 birth cohort, but rules concerning the share of personal account contributions that are made out-of-pocket make the accounts decreasingly generous for birth cohorts born between 1986 and 1997.

to pay benefits in the future only to the extent that they result in smaller amounts of public debt issuance than would occur if there were no surpluses. This is because reducing near-term public debt issuance would increase the government's capacity to issue debt in the future to help pay benefits when the bonds in the trust fund are redeemed.

Many analysts believe that Social Security surpluses under the present system do not increase the government's capacity to pay future Social Security benefits. Under this view, Social Security surpluses are offset in the rest of the federal budget by some combination of higher non-Social Security spending and/or lower non-Social Security taxes. To the extent that this is true, Social Security's surpluses do not increase the government's capacity to pay future Social Security benefits. The future benefit payments that would have been financed with public debt issuance had Social Security surpluses truly been saved must instead be financed with lower non-Social Security spending and/or higher non-Social Security taxes. In this case, the existence of the near-term Social Security surplus causes the non-Social Security budget to be more profligate, and the future Social Security cash deficit will require future non-Social Security budgets to have either higher taxes or lower spending than would have been the case had today's surpluses resulted in true pre-funding. Under this scenario, an attempt to make Social Security fair to future generations by accumulating near-term surpluses in the trust fund would be undone by a non-Social Security policy that is less fair to future generations. Rather than resulting in resources that provide future benefits, running a Social Security surplus today would instead lead to more debt outside the trust fund that must be paid off by future generations, leaving them with no net gain.

WHAT NEEDS TO BE UNDERSTOOD FOR SOCIAL SECURITY SURPLUSES TO BE SAVED?

In order for Social Security surpluses to be saved, taxes and spending in the non-Social Security portion of the budget must be set with the recognition that the special-issue government securities held by the trust fund represent liabilities that are every bit as real and important as debt held by the public. While the non-Social Security budget must ultimately redeem those special-issue securities in any case, it is only when they are recognized as equivalent to publicly held debt that the non-Social Security budget will plan in advance for their redemption by using Social Security surpluses to reduce public debt issuance. When used to lower publicly held debt today, the surpluses increase the government's capacity to issue publicly held debt to pay for Social Security benefits in the future. Otherwise, those future benefits must be financed with lower non-Social Security spending or higher non-Social Security revenues.

The meaning of this can be illustrated using actual budget numbers for a particular year. Table 1 shows how federal finances in the 2006 fiscal year can be divided into a Social Security component and a non-Social Security component. In that year, the unified budget deficit was \$248 billion, and was comprised of a \$185 billion Social Security surplus and a \$433 billion non-Social Security deficit. Debt held by the public at the beginning of the year was \$4.6 trillion, and was comprised of a \$6.4 trillion non-Social Security obligation and a \$1.8 trillion Social Security credit. Interest on the non-Social Security obligation puts its size in perspective; in the year shown, it was \$324 billion, which is 18 percent as large as non-interest non-Social Security outlays.

When looking at Table 1, the pertinent question is whether the \$109 billion non-Social Security deficit excluding interest (the *primary deficit*) was entered into with the full understanding that a \$6.4 trillion debt was outstanding that must be serviced exclusively with non-Social Security revenues, or whether the \$185 billion loan made by Social Security to the non-Social Security budget was viewed as an ongoing unconditional grant, with grants of that magnitude assumed to persist into the indefinite future.

In the latter case, the non-Social Security deficit is larger than it would have been had the Social Security surpluses not existed; Social Security surpluses are therefore not wholly saved.

Table 1
Fiscal Year 2006 Federal Finances
In Billions of Dollars

	Social Security	Non-Social Security	Unified
Primary Surplus	87	-109	-22
Interest Received*	98	-324	-227
Total Surplus	185	-433	-248
Debt Held by Public			
End of Fiscal 2005	-1,809	6,401	4,592
End of Fiscal 2006	-1,994	6,823	4,829

^{*} Interest received is entered as a positive number; interest paid is entered as a negative number. Source: Historical Tables, Budget of the U.S. Government.

FOUR STRATEGIES TO INCREASE THE LIKELIHOOD THAT PLANNED SOCIAL SECURITY PRE-FUNDING REPRESENTS REAL PRE-FUNDING

This section analyzes four strategies to help ensure that planned Social Security pre-funding is in fact real pre-funding. Ordered from most aggressive and most likely to work to least aggressive and least likely to work, the strategies are as follows.

- **Strategy 1.** Pre-fund in full-service personal accounts.
- **Strategy 2.** Pre-fund in bare-bones accounts administered by a quasi-governmental entity.
- **Strategy 3.** Invest the Social Security trust fund in private-sector assets.
- **Strategy 4.** Invest the Social Security trust fund in marketable federal debt.

STRATEGY 1: PRE-FUND IN FULL-SERVICE PERSONAL ACCOUNTS

If current trust fund accumulations do not represent true saving, it is because the special-issue government securities that are held by the trust fund are not regarded as liabilities to the non-Social Security budget that are as real and important as debt held by the public, despite the fact that these securities will ultimately be redeemed. In that case, introducing personal accounts to Social Security would remedy this problem by effectively converting the special-issue government securities into publicly held debt.

To see how this occurs, consider the following simple exercise. Start from any Social Security reform without accounts that makes Social Security permanently solvent, and imagine modifying the plan to

allow one individual to direct \$1,000 of his or her payroll tax payments to a personal account in exchange for reducing his or her future defined benefits in an actuarially fair manner. For this simple case, it will be shown that 1) the personal account will have no direct effect on the government's underlying fiscal condition; and 2) the account would better reveal the true state of fiscal policy and might thereby result in smaller non-Social Security deficits being chosen.

The Personal Account's Direct Effect on the Government's Fiscal Condition

The personal account's effects on the time profile of publicly held federal debt and the unified deficit are shown in Figures 4 and 5, respectively.³ The example assumes that the individual is 45 years old at the time of the personal account contribution, begins collecting benefits as a single person at age 65, and is certain to die at age 85; and that the real government borrowing rate is always 3 percent. In this case, then, the actuarially fair reduction in defined benefits is \$121 per year.

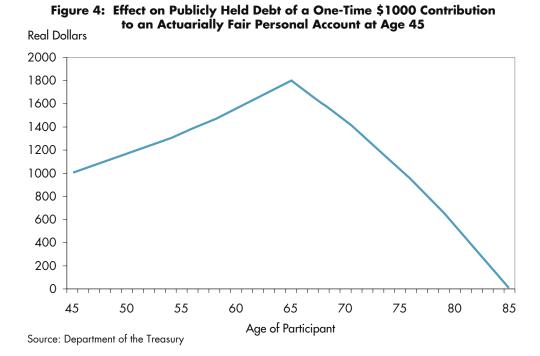


Figure 4.

The profile for the unified deficit shown in Figure 5 is the annual change in the level of publicly held debt shown in

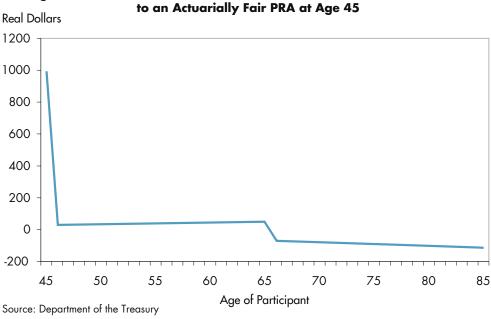


Figure 5: Effect on the Unified Deficit of a One-Time \$1000 Contribution to an Actuarially Fair PRA at Age 45

At the time of the \$1,000 account contribution, when the contributor is age 45, government outlays are increased by \$1,000 and government revenues are unchanged, so the increment to publicly held debt is \$1,000. Between the ages of 45 and 65, the increment to real publicly held debt rises at a 3 percent rate (the assumed real government borrowing rate) because the incremental debt must be continually rolled over. After the contributor retires at age 65, annual defined benefit payments are reduced by \$121 (this amount is made up by the benefits paid from the personal account); this reduction in defined benefits results in a smaller unified deficit (Figure 5), which in turn causes the increment to publicly held debt to steadily decline (Figure 4). When the person dies at age 85, the increment to publicly held debt is precisely zero, which is what it means in this context for the defined benefit reductions to be actuarially fair.

Figure 4 demonstrates that adding actuarially fair personal accounts to a reform plan that is permanently solvent results in a plan that is also permanently solvent. But while actuarially fair accounts do not compromise permanent solvency, they do cause near-term unified deficits and publicly held debt to increase. The presence of this increment to near-term debt levels—which is often referred to as *transition debt*—is sometimes enlisted as an argument against instituting personal accounts.⁴ In fact, "transition debt" does not represent a new obligation of the government, it merely substitutes publicly held debt for an existing implicit debt—namely, the obligation to pay defined benefits. Total government obligations are left unchanged at every point in time, which implies that the incremental public debt profile shown in Figure 4 is exactly matched by the time profile of reductions in the present value of defined benefit promises. (It is also true that the increase in publicly held debt is exactly matched by a reduction in the special-issue government securities held by the trust fund.)

While transition debt associated with each individual's account is ultimately zero, total transition debt would always be positive for an ongoing Social Security system with personal accounts. In the hypothetical situation where accounts are invested exclusively in government debt, transition debt is simply equal to aggregate account balances; in an ongoing Social Security system, such balances will always be positive. Hence, the term "transition debt" is a misnomer for two reasons: It does not represent an addition to government liabilities, and it is not merely transitory.

Substituting explicit public debt for an existing implicit debt should in principle have little impact on financial markets. This is most obvious in the case where personal accounts are invested in federal government bonds and are paid out as actuarially fair real annuities, and where the accounts' administrative costs are kept low. In that case, introducing actuarially fair accounts as described here leaves total benefit levels essentially unchanged; all that occurs is that participants hold federal debt, an explicit government obligation, in lieu of defined benefit promises, an implicit government obligation. Because the accounts are invested in federal debt, they absorb all the increment to publicly held debt and there is no pressure for market interest rates to change.

The story is more complicated if personal accounts are invested in assets other than federal debt. In that case, the annual increase in purchases of private assets (equal to the account contributions) is precisely matched by the annual increase in public debt, so accounts increase the supply and demand for financial assets by precisely the same amounts. Any effect on interest rates should therefore be modest.⁵

These conclusions have been arrived at for what might seem to be a special case—one in which personal accounts are an actuarially fair modification to a permanently solvent plan that includes no accounts. As Box 1 explains, however, these conclusions in fact apply to any plan that includes personal accounts.

BOX 1

A CONCEPTUAL FRAMEWORK FOR UNDERSTANDING THE EFFECTS OF PERSONAL ACCOUNTS

This brief isolates the effects of personal accounts on solvency and benefit levels by beginning with a Social Security system without accounts and then introducing actuarially fair personal accounts. This analytical framework clearly applies to reform plans whose personal accounts are described as actuarially fair. For example, plans with voluntary personal accounts that are funded with payroll tax revenues have two components: (1) defined benefits if there were no personal accounts; and (2) diversions of payroll tax revenues to personal accounts and offsets to defined benefits for those choosing a personal account. These plans conform to the analytical framework used here to analyze the effects of personal accounts if the defined benefit offsets are actuarially fair.

But the effects of personal accounts that are derived using this framework and discussed in the body of the brief apply to *any* plan that includes personal accounts, not just those that describe the accounts as being actuarially fair. To see that this is true, consider the hypothetical example given by the table below. The first two columns of figures (labeled columns 1 and 2) relate to "Plan A," in which a worker has the option of putting some of his or her payroll taxes into a personal account. If a personal account is not elected, column 1 indicates that defined benefits are \$95 and payroll taxes are \$100. Alternatively, if a personal account is elected, column 2 indicates that \$10 of payroll taxes are diverted to a personal account and defined benefits are reduced by \$5. Because the defined benefit offset is less than the payroll tax diversion, the personal account as described is more than fair to the worker. To focus on the effects of personal accounts, assume that the personal account is elected (this could equally describe a hypothetical plan with a mandatory account as in column 2). With the account chosen, Plan A is described in column 2: defined benefits are \$90, payroll taxes are \$100, and \$10 of payroll taxes are diverted to a personal account.

The point here is that the economic fundamentals determining interest rates are not changed when explicit public debt is substituted for implicit obligations to pay defined benefits. That said, if market participants fail to understand this—for example, if they were to believe that changes in publicly held debt have a larger effect on interest rates than do changes in implicit debt—then such a policy change would temporarily affect asset prices and interest rates. Eventually, however, market perceptions must come into alignment with underlying economic reality—deviations of market rates from fundamentals will not be permanent.

The effect of personal accounts in Plan A is the difference between the effects of that plan and the effects of a comparable plan that includes only defined benefits. For this purpose, the comparable defined-benefit-only plan is a modification of Plan A that diverts each person's \$10 personal account contribution to the trust fund and increases their defined benefits by the maximum amount possible while keeping the plan's long-run actuarial balance unchanged. The resulting plan, "Plan B," is shown in the third column of the table; it boosts defined benefits by \$10 relative to Plan A. It is apparent, therefore, that Plan A with accounts selected (or mandatory) is just Plan B plus actuarially fair personal accounts. So the effect of Plan A's personal accounts is found by comparing a plan without personal accounts—Plan B—with the same plan modified to include actuarially fair personal accounts—Plan A. This is precisely the analytical framework utilized in the brief.

Some analysts mistakenly infer the effects of personal accounts by comparing columns 1 and 2 in the table. The reasoning is that within the context of how the plan is described, electing an account moves an individual from column 1 to column 2, so the effect of the accounts is naturally associated with the effect of moving between these two columns. Under this way of thinking, the personal account increases total benefits (defined benefits plus benefits payable from personal accounts) by \$5 and worsens Social Security's long-run actuarial balance by \$5. But the same outcome could be achieved simply by boosting defined benefits by \$5; hence, this interpretation does not properly isolate the effects of the accounts as they differ from the effects of a defined benefit change that costs the same amount.

Table 2 Isolating the Effects of Personal Accounts for a Plan That Describes Them as Being More Than Fair

Plan with Personal Accounts (Plan A)			Comparable Plan
Item	If Personal Account Not Elected (1)	If Personal Account Is Elected (2)	Without Personal Accounts (Plan B) (3)
Defined Benefits	95	90	100
Payroll Taxes	100	100	100
Diversion of Payroll Tax to Personal Account	_	10	_
Memo:			
Implied Defined Benefit Offset	_	-5	_

It should be noted that because any Social Security reform plan with personal accounts can be conceptualized as a defined-benefit-only plan combined with actuarially fair personal accounts, it is not really meaningful to assess the degree to which personal accounts contribute to making Social Security permanently solvent as traditionally measured. True solvency requires the system's inflow and outflow over the indefinite future to be in balance in present-value terms (the traditional solvency measure), and also requires attempted pre-funding to be real pre-funding. Personal accounts do not help to improve the traditional solvency measure, but they would help to ensure that attempted pre-funding is real.

The Effect of Personal Accounts on the Conduct of Fiscal Policy

The discussion thus far suggests that introducing actuarially fair, conservatively invested personal accounts to a permanently solvent Social Security system in which accounts are initially absent carries no important consequences: Accounts do not directly change the time profile of the government's total liabilities; they should have little or no direct impact on financial markets; and they would have little effect on benefit levels.

However, the essential point of making personal accounts part of Social Security is to better reveal the state of the government's budget so that more prudent fiscal policy decisions are made outside of Social Security. Specifically, by transforming implicit promises to pay future Social Security benefits into explicit quantities of publicly held debt, personal accounts could result in smaller non-Social Security fiscal deficits today. To the extent that this is true, personal accounts are beneficial rather than merely benign as they would indirectly reduce the time profile of total government liabilities, thereby improving the well-being of future generations and putting downward pressure on interest rates.

What Role Does the Equity Premium Play?

Some analysts argue that personal accounts would also make Social Security more generous by giving participants access to equity returns that are normally higher than the returns earned on trust fund investments. This argument is flawed for two reasons, however. First, while equities do have an expected return that is greater than that offered by government bonds, the additional expected return (the socialled "equity premium") comes at the cost of assuming a larger amount of risk. To the extent that the equity premium merely compensates for this additional risk, cashing in a bond and buying equities does not make an investor any better off. In this case, the value of personal accounts is well approximated by their value when they are invested exclusively in government debt; hence, the presence of accounts would make Social Security no more or no less generous. A second and perhaps more compelling point concerns aggregate private-sector portfolio returns. Because personal accounts have no direct effect on national saving (as opposed to the indirect effect that they might have through fostering greater fiscal discipline), equities held in the accounts simply displace equities that would otherwise be held elsewhere in the consolidated portfolio of the private sector. Thus, accounts can only change the distribution of equity returns across the population, not total equity returns in the economy.

Equity returns do nevertheless have some relevance for assessing the advantages of personal accounts. First, to the extent that the accounts lead to smaller non-Social Security deficits, they result in an increase in government saving that boosts national saving and national wealth. The returns that would be earned on the additional national wealth are closely connected to the return on equities. Second, while the direct effect of personal accounts is to merely redistribute aggregate equity returns across the population, that redistribution could itself be beneficial. Although it is true that investors who wish to accumulate safe assets at a pace at least as rapid as the rate at which Social Security's defined benefit accrues should be indifferent to whether their personal accounts are invested in equities or bonds, young individuals with little financial wealth probably do not fit that description. Because many young people's primary access to equity investments would come through their personal accounts, their financial well-being would suffer if their personal account investments were restricted to bonds alone.

Administrative Costs Under Full-Service Personal Accounts

An important downside of full-service personal accounts is that they would substantially increase the costs of administering Social Security. Even if such accounts could be administered as efficiently as the current defined contribution plan for federal employees (the Thrift Savings Plan), a recent CBO study estimated that annual administrative costs would be \$25 per participant (in 2004 dollars), which would raise the overall cost of administering Social Security to about three times its current level.⁶ If accounts were to receive contributions equal to 2 percent of wages, the study estimated that administrative costs of this magnitude would reduce account balances at retirement by about 5 percent.

STRATEGY 2: PRE-FUND IN ACCOUNTS OFFERING NO INVESTMENT CHOICES AND ADMINISTERED BY A QUASI-GOVERNMENTAL ENTITY

In order to keep the administrative costs of accounts very low, it would be possible to create bare-bones accounts administered by a quasi-governmental entity like the Federal Reserve System. Such accounts might be invested exclusively in federal debt, or might include private-sector assets, but in either case investments would be pooled and no investment choice would be permitted. Without any investment choice, administrative costs would be very low because customer service would be limited to an annual account statement and a payout determination at retirement.⁷

A Social Security system consisting of bare-bones accounts and an ordinary defined benefit component could be designed to closely match benefit payments made by a defined-benefit-only system. Again, it is useful to imagine starting from a defined-benefit-only system that is permanently solvent—call this System A—and then introducing actuarially fair accounts (as in the discussion above) to arrive at a new system, System B. The System B accounts would be invested exclusively in government debt and would be paid out as real annuities. Because there would be no investment or payout choice, administrative costs would be very small and total benefits could be essentially the same as in System A. With such accounts, it should be clear that contributions made to the accounts are not available to finance non-Social Security programs. Similarly, it should be clear that the debt held by the accounts' administrator represents claims on the non-Social Security budget that are no different than other publicly held debt.

Investing accounts exclusively in federal debt would reduce risk and ensure that a reform plan that includes accounts could pay benefits that closely match the benefits that would be paid by any given defined-benefit-only system. Some, however, might prefer the higher expected returns offered by a riskier portfolio, even though there would be some chance that the portfolio's return would be lower than that offered by federal debt.8

⁶ Congressional Budget Office, "Administrative Costs of Private Accounts in Social Security," March 2004.

Another advantage of accounts with no investment choice is that the current time lag between when employers make payroll tax payments and when those payments are allocated to individuals (which can be as long as 18 months) would be of no consequence, as allocated and unallocated funds would be invested in the same way.

A possible disadvantage of investing accounts exclusively in federal debt is that policymakers would perceive that the accounts' administrator is a captive buyer of federal debt whose existence reduces the cost of issuing public debt. However, a contrary view is that what matters to policymakers when deciding deficit levels is the government borrowing rate; as discussed in the text, that rate should be little affected by how the accounts are invested.

Budgetary Treatment Issues

How personal accounts would affect official measures of deficits and debt depends on whether the accounts are judged to be owned by individuals or by the government. The Office of Management and Budget (OMB) would determine the status of accounts based on the source of funds, legal terms of ownership, and control over use and disposition of the accounts. One important criterion for the private-property designation under current budgeting rules would be that an individual's defined benefits not be too closely linked to the individual's personal account balance. This would rule out the possibility that the reduction in each individual's ordinary defined benefits would be set equal to the annuity value of his or her account balance at retirement, as was assumed in the illustration given above of actuarially fair accounts. If that possibility is ruled out, it would not be possible for a system with accounts to exactly mimic benefit levels payable from any given defined-benefit-only plan. But provided account administrative costs are kept very low, it would be possible for a Social Security system with accounts to pay the same benefits on average as does any given defined-benefit-only plan.

If the accounts were determined to be government owned and if they were invested in federal government debt, they would be treated very much like the current trust fund. Account contributions would be treated as an outlay of the general fund and an offsetting receipt by the accounts, while the accounts' investments in federal securities would not be recorded as an outlay. Hence, there would be no effect on the unified deficit, and any pre-funding for Social Security would continue to mask the size of the non-Social Security deficit. In that case, the accounts would offer only one advantage: The government-owned account balances would be exactly offset by an easily identifiable offsetting obligation (benefits payable from the account balances). This would be analogous to specifying the current \$2 trillion trust fund balance as the financing source for some portion of defined benefits going forward. It is not clear that this would have a material effect on the conduct of fiscal policy.

If the accounts were determined to be government owned and if they were invested in private assets, then they would be accounted for like the current trust fund would be if it were invested in private assets. In both cases, the purchase of private-sector assets by a government account would be recorded as an outlay, so the unified deficit and publicly held debt would both increase. Compared to investing the trust fund in private-sector assets (an option that is discussed below), introducing government-owned accounts that were invested in private assets would have one advantage—they would result in an easily identifiable obligation (benefits payable from the account balances) that exactly offsets the value of the government-owned account balances. This situation would be analogous to investing the trust fund in private-sector assets and specifying the trust fund balance to be the financing source for some portion of defined benefits going forward. As before, the key question is whether this would lead to a material change in the conduct of fiscal policy.

⁹ In this case, any increase in account balances would result in a reduction in ordinary defined benefits that leaves account owners with no net gain and leaves the government with no net change in its fiscal position. Hence, it is reasonable to rule that the account is not really private property.

¹⁰ An offset to defined benefits might depend on a hypothetical account balance at retirement computed using specific prospective assumptions about earned rates of return. While these offsets can be defined so that expected benefit levels are unchanged, actual benefit levels would change depending on how actual rates of return compare with expected returns. Also, essentially similar benefits could be defined directly without explicit reference to account balances.

It is possible that current budgeting conventions might be modified if government-owned accounts were to purchase private assets so that the asset purchases would not be recorded as outlays.

Other Possibilities for Administering Bare-Bones Accounts

Thus far, it has been assumed that the bare-bones accounts would be administered by a quasi-governmental entity. This would presumably allow some of the actual operations to be performed by private companies. For example, if accounts were invested in private assets, then the buying and selling of those assets would almost certainly be contracted out to a private company. Recordkeeping could also be contracted out, but that would probably be uneconomical given the amount of government oversight that would be necessary to assure privacy and accuracy.

The bare-bones accounts could also be administered by a government agency, with the Social Security Administration being an obvious choice. In that case, cash flows to and from the accounts would be scored the same as in the case where the administrator is a quasi-governmental entity (or a private company, for that matter). The only potentially important difference is that policymakers might be more apt to view the assets held by the administrator as being available to help finance non-Social Security programs if the administrator were not viewed as being separate from the government.

It is possible that the Social Security Administration could administer a system of accounts at lower cost than could a new quasi-governmental entity. However, it would seem that any such cost advantage would be slight. The only synergies between the Social Security Administration's current functions and account administration would concern data collection and recordkeeping, and data sharing between the Social Security Administration and a separate account administrator would be inexpensive if properly automated.

STRATEGY 3: INVEST THE TRUST FUND IN PRIVATE-SECTOR ASSETS

A less-aggressive strategy to help safeguard Social Security surpluses would be to invest all or part of the trust fund in private-sector assets. As with personal account balances scored as privately owned investments, every dollar invested in such assets would most likely increase official measures of outlays and the unified deficit by a dollar. But in this case, the assets purchased would be the property of the government rather than of individuals, and there would be no easily identified offsetting government obligation. There is a risk, therefore, that any deficits that would have to be run to purchase private assets for the trust fund would be netted against the value of the assets purchased, which would in effect result in policy choices being made with an eye toward the implications for the unified deficit less the trust fund's investments in private assets (and publicly held debt less the value of private assets held in the trust fund). In that case, non-Social Security taxes and spending would be the same as they would be absent the purchase of private-sector assets by the trust fund, and the strategy would therefore fail to effectively safeguard Social Security surpluses.

What distinguishes privately owned accounts from trust fund purchases of private-sector assets is the implication each proposal would carry for the time path of government financial net worth. Privately owned accounts increase publicly held debt, thereby reducing the time profile of government financial net worth and widening the unified deficit. Investing the trust fund in private-sector assets increases the government's financial assets and its financial liabilities by the same amount, and hence has no effect on its financial net worth. If budgeting decisions are made with reference to the government's financial net worth rather than to publicly held debt, then investing the trust fund in private-sector assets would not increase the chances that Social Security pre-funding is truly put aside to help pay future Social Security benefits.

¹² The Congressional Budget Office (CBO) made this determination in scoring President Clinton's fiscal year 2000 budget.

Some analysts have advocated investing the trust fund in private-sector assets as a means of increasing trust fund rates of return rather than as means of safeguarding Social Security surpluses. However, as in the case of personal accounts, this is a poor rationale: The higher expected rates of return on risky assets merely compensate for risk that would ultimately be borne by taxpayers. And risky trust fund investments would not increase national saving, so risky assets held in the trust fund would just displace risky assets held in the consolidated portfolio of the private sector (the private sector would hold fewer risky assets and more federal debt). To the extent that risky assets held by the trust fund would earn higher returns, therefore, the resulting gain to taxpayers would be offset by lower returns earned on private-sector assets. Moreover, budget politics are such that it is likely that the taxpayers who would gain if trust fund equity returns were high would not be the same taxpayers who would lose if trust fund returns were low. This would occur, for example, if the policy response to movements in equity prices involved passing through higher equity returns to benefits relatively quickly, but delayed reducing benefits in the face of lower returns until Social Security's finances were in crisis. In that case, current generations would enjoy the upside risk while future generations would bear the downside risk.

Trust fund equity investments might also reduce the perceived urgency for Social Security reform, thereby delaying reform and causing Social Security to be less fair to future generations. This would occur if the Social Security trustees were to decide to project Social Security's finances under the assumption that trust fund equity holdings are certain to receive the expected return on equities rather than the proper risk-adjusted return, which is the return received on risk-free assets. In that case, trust fund equity investments would only result in an illusory improvement in Social Security's projected finances.

Finally, there is one additional important downside to investing the trust fund in private-sector assets: Political considerations might influence investment choices and how equity shares are used to influence questions of corporate governance.

STRATEGY 4: INVEST THE TRUST FUND IN MARKETABLE FEDERAL DEBT

If the trust fund were invested in marketable federal debt rather than in special-issue government securities, there would be essentially no change in the way the trust fund is accounted for in budgetary calculations. Current budget accounting norms dictate that the purchase of federal debt is not scored as an outlay; in addition, any publicly held debt purchased by the trust fund becomes public debt held by a federal government account (as are the current special-issue government securities held by the Trust Fund), thereby ceasing to be publicly held debt. Hence, the time path for the unified deficit, publicly held debt, and government financial net worth would not be affected by this policy. There would therefore appear to be no reason for the government's fiscal situation to be perceived any differently in this case.

CONCLUSION

Making Social Security fair to future generations requires reforms that involve substantial true pre-funding of future Social Security benefits. Attempting such pre-funding through the trust fund runs a significant risk that it would be offset by higher non-Social Security deficits, in which case a Social Security policy that is more fair to future generations will be offset by a non-Social Security fiscal policy that is less fair. Large dividends would be realized, therefore, if a mechanism could be found to increase the odds that attempted Social Security pre-funding would represent true pre-funding.

Nearly all analysts agree that personal account assets owned by participants would constitute true prefunding. Moreover, if account investments were conservative and pooled (i.e., if no investment choices were permitted), then accounts would be relatively inexpensive to administer and would have very little effect on the level and certainty of total Social Security benefits. In that case, accounts would offer the benefit of increased confidence that Social Security pre-funding is true pre-funding. Making policymakers and voters aware of these facts will require some effort, as some mistakenly believe that the principal benefit of accounts is to permit access to equities' higher expected returns.

Investing the trust fund in private assets might increase the odds that trust fund accumulations would constitute true pre-funding. Such a policy would increase publicly held debt and official measures of the unified deficit, but it would be easy to see that the increased publicly held debt is offset by the value of private assets owned by the government. It is quite possible that policymakers would be unconcerned by any deficits that result from purchasing private assets for the trust fund, and would therefore make policy choices based on their implications for the unified deficit less trust fund investments in private assets and publicly held debt less the value of private assets held in the trust fund. In that case, non-Social Security taxes and spending would be the same as they would be absent the purchase of private-sector assets by the trust fund, and the strategy would therefore fail to effectively safeguard Social Security surpluses. Moreover, there is a substantial risk that trust fund equity investments would be improperly scored as reducing Social Security's actuarial imbalance, and that political considerations would influence investment choices and how equity shares are used to influence questions of corporate governance. And, as with personal accounts, the prospect of earning high returns on private assets is largely irrelevant to the pros and cons of investing the trust fund in private assets.

Finally, investing the trust fund in marketable federal debt rather than in special-issue government securities is least likely to affect policymaker perceptions of the state of fiscal policy. The official measure of the unified deficit would not be affected, and once the marketable debt is purchased by the government it would be officially scored as public debt held by a government account, the same designation currently given to special-issue government securities held by the trust fund.