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Large Accounts and Small Cash Deficits

Increasing Personal Account Size within a Fiscally Responsible Social Security Reform Framework

by Andrew G. Biggs

Executive Summary

As the debate over Social Security reform intensifies, it becomes more important to move beyond generalities to provide specific proposals for how to transform Social Security to a system including personal retirement accounts. Without endorsing any specific proposal, the Cato Project on Social Security Choice will present a number of possible scenarios for the creation of personal retirement accounts.

The spectrum of individuals and groups who support Social Security reform based on voluntary personal retirement accounts is wide. Yet different parts of the Social Security reform spectrum place priorities on different aspects of reform proposals, and many existing reform plans do not satisfy the entire reform coalition. The Social Security reform spectrum can be broadly divided into two groups:

Philosophical supporters of voluntary personal accounts wish to increase individuals' ownership and control of and the inheritability of their Social Security contributions and therefore favor large accounts investing a substantial portion of each worker's 12.4 percent payroll tax.

Fiscal-responsibility supporters of personal accounts wish to reduce the pressure that Social Security places on the federal budget as the population ages and support personal accounts as a way to prefund future benefit obligations. However, the desire to reduce or avoid large cash deficits in the program today leads fiscal-responsibility supporters of reform to generally favor smaller personal accounts investing only 2–3 percentage points of the payroll tax.

What follows is the outline of a proposal to incorporate large personal accounts within a structure that meets the concerns of fiscal-responsibility supporters of reform. It is less a compromise or splitting of the difference than a recognition that different parts of the reform spectrum favor personal accounts for different reasons and that it is possible to structure a proposal in a way that satisfies both groups' priorities.

In addition, the proposal includes a way to treat individuals who choose not to hold personal accounts so that they can receive the full benefits promised by the current program. This treatment of non–account holders is fair and fiscally responsible and presents workers with an honest choice between the two ways of providing Social Security benefits.

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Introduction

Social Security reform based on personal retirement accounts has made great progress, in terms of both public acceptance of the idea and policy development of specific proposals. Nevertheless, reform has yet to be implemented, and the broad reform community has failed to unite behind a single approach or proposal to implement personal accounts. This lack of unity, which can be a significant impediment to progress, stems at least in part from the starkly different viewpoints and priorities of the individuals and groups who support reform incorporating personal accounts. Progress toward reform will depend in part on the recognition of those different viewpoints and the development of proposals that best satisfy the range of opinion within the broader reform movement.

The spectrum of individuals and groups supporting Social Security reform based on personal accounts is broad, ranging from the free-market right to the center left of the political spectrum. This breadth of support is an asset and necessary to pass reform in the face of entrenched opposition from ideological opponents of accounts. Nevertheless, differences in the priorities of the two ends of the reform spectrum often prevent them from unifying around a single proposal to fix Social Security.

Broadly speaking, Social Security reformers can be divided into two groups: philosophical supporters of personal accounts, for whom ownership and control of retirement savings are a priority, and fiscal-responsibility supporters of accounts, who see accounts as a tool with which to increase national saving and reduce the burden that Social Security will place on future workers and on government finances.

Each group logically favors proposals that address its own primary concerns. Philosophical supporters favor large personal accounts investing a greater portion of the worker's payroll taxes. Those plans, however, often cost little less than the current program over the next 75 years and can have substantially greater budgetary demands during a transition period covering several decades.

Fiscal-responsibility supporters of accounts favor plans that reduce the growth of Social Security's costs, in both the short and the long term. They tend to favor small personal accounts investing a small portion of the total payroll tax, consistent with the goal of keeping Social Security's finances balanced both over the long term and on a year-to-year basis.

Thus, while both ends of the spectrum back personal accounts, the specific reform proposals favored by philosophical and fiscal-responsibility supporters of reform often differ markedly, with the result that it has been impossible for them to unify behind any single reform strategy.

Is it possible to satisfy philosophical supporters' desire for larger personal accounts within the constraints of a financing structure acceptable to fiscal-responsibility supporters of reform? Yes, and an outline of such a proposal is offered here. Using one personal accounts model from President Bush's 2001 reform commission as its starting point, this proposal incorporates larger personal retirement accounts to satisfy philosophical supporters of reform while maintaining a limited impact on the overall federal budget to satisfy the fiscal-responsibility part of the reform spectrum.

The goal of the proposal outlined here should be made clear at the outset. Compromise will be necessary as any Social Security reform plan moves toward legislation. However, the framework presented here is not intended as a compromise, defined as a settlement in which each party reduces its demands and accepts lesser satisfaction of its respective criteria for success. Rather, the proposal seeks to find efficiencies that can more fully satisfy the goals of both philosophical and fiscal-responsibility supporters of reform.

A reference to finance may illustrate the distinctions between a compromise proposal and one seeking greater efficiencies. In finance, an "efficient frontier" can be seen as a curve on a chart representing the tradeoffs between risk and return as the makeup of an investment portfolio is adjusted between safe (but lower returning) and risky (but higher returning) investments. Movement along this efficient frontier entails compromises between risk and return; one cannot be gained without sacrificing the other. However, if a portfolio resides inside the efficient frontier curve and can be altered to place it on the curve, then doing so produces gains in terms of both risk and return. In other words, changing a portfolio to place it on the efficient frontier does not involve compromises between risk and return but in fact improves it in terms of both criteria.[1]

For proponents of Social Security reform, the criteria are not risk and return but fiscal-responsibility and philosophical values. While at some point compromise may be necessary between the two, the proposal outlined herein shows that it is possible to more closely satisfy each of those criteria without demanding reduced satisfaction of the other. In other words, Social Security reform is not yet a zero-sum game, in which gains to one group necessarily entail losses to the other, between different members of the reform coalition. The plan outlined below aims to put Social Security reform proposals closer to the efficient frontier where all criteria are satisfied as fully as possible.

This proposal is painted in broad strokes and is intended to be a starting point for discussion between the two ends of the reform spectrum. Moreover, it is not necessarily the author's preferred approach. Rather, the proposal attempts to identify and address the key criteria for success of the different members of the Social Security reform community.

In addition, the proposal includes a means of treating individuals who choose not to hold personal accounts in a way that allows them to receive the full benefits promised them under the current program. This treatment of non–account holders is fair and fiscally responsible, and it presents workers considering the option of holding an account with an honest choice between two solvent and sustainable elements of the Social Security program.

The Reform Spectrum: From Philosophy to Fiscal Responsibility

Multiple opinion surveys indicate that Social Security reform based on personal retirement accounts has long held majority support among the public,[2] and the spectrum of policy analysts and groups favoring account-based reform is broad.

Generally speaking, however, the coalition for Social Security reform based on personal accounts can be seen as incorporating two central groups:

- Philosophical supporters of personal retirement accounts, for whom accounts are an end in themselves, embodying values of ownership and personal control, and
- Fiscal-responsibility supporters of reform, for whom accounts are a means to an end, of increasing national saving and reducing the financial burden Social Security will place on the federal budget and on future generations of workers.

Although that distinction is not sharp—philosophical supporters of accounts also tout their benefits to the budget and the economy, and fiscal-responsibility reformers also favor the ownership, control, and wealth accumulation that accounts would bring—it nevertheless shows that alternative sets of values, priorities, and criteria for successful action are represented in the broad coalition supporting Social Security reform based on personal retirement accounts.

Philosophical supporters of reform favor accounts because they give workers ownership and control of their Social Security contributions and those contributions are inheritable. To philosophical supporters, accounts are desirable independent of any impact they may have on the economy in general or on Social Security's financing problems in specific. Philosophical supporters understandably favor "large" personal accounts that invest a substantial share of the existing payroll tax and thus give workers ownership of as much of their retirement savings as possible.

Philosophical supporters would favor personal accounts even if Social Security were not in financial jeopardy, as—to this group—the primary problem accounts solve is one not of financial imbalance but of personal ownership. To be sure, individual control over Social Security savings makes financial balance easier to attain, particularly by preventing Social Security funds from being "raided" to cover deficits elsewhere in the budget. Nevertheless, to philosophical supporters of accounts, the current program's financing crisis is not the only, or even the most important, problem to be solved.

If philosophical supporters of accounts see them as an end in themselves, fiscal-responsibility supporters of reform see personal accounts as a means to an end—as a tool to address Social Security's financing problems by increasing national saving and changing Social Security from an unfunded pay-as-you-go system to one based on at least partial funding of benefits. Accounts are both a better means of ensuring saving than the current trust

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fund financing structure and an incentive for individuals to accept lower benefits from the traditional program.

To fiscal-responsibility supporters of accounts, a key priority is to restrain cost increases in Social Security as the baby boomers retire and the population ages. Those cost increases, they fear, would squeeze out other government programs they care for. To fiscal-responsibility supporters of reform, it is not sufficient that Social Security's finances balance *on average* over the long term, with surpluses in one year balancing out deficits in another. The program's finances must also balance as closely as possible on an *annual* basis. This criterion is grounded in doubts about whether the government can truly save Social Security surpluses in one year to cover deficits in other years, instead of using those funds to increase government programs or enact tax cuts. Thus, fiscal-responsibility supporters of accounts favor proposals in which annual cash deficits are as small as possible.

The difficulty so far has been incorporating large personal accounts into an overall financing structure in which costs are met not only in aggregate but on an annual basis as well. There are proposals in existence with large personal accounts and other proposals with small cash deficits, but so far none that addresses the concerns of both ends of the reform spectrum.

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The practical distinctions between the philosophical and fiscal-responsibility approaches to reform can be illustrated by using two Social Security reform proposals that have been introduced in Congress. The DeMint-Armey proposal, sponsored by Rep. Jim DeMint (R-S.C.) and former representative Richard Armey (R-Tex.), is a large-account proposal that is attractive to many philosophical supporters of reform.[3] The Kolbe-Stenholm legislation, sponsored by Reps. Jim Kolbe (R-Ariz.) and Charlie Stenholm (D-Tex.), is broadly representative of the fiscal-responsibility approach to personal accounts and reform.[4]

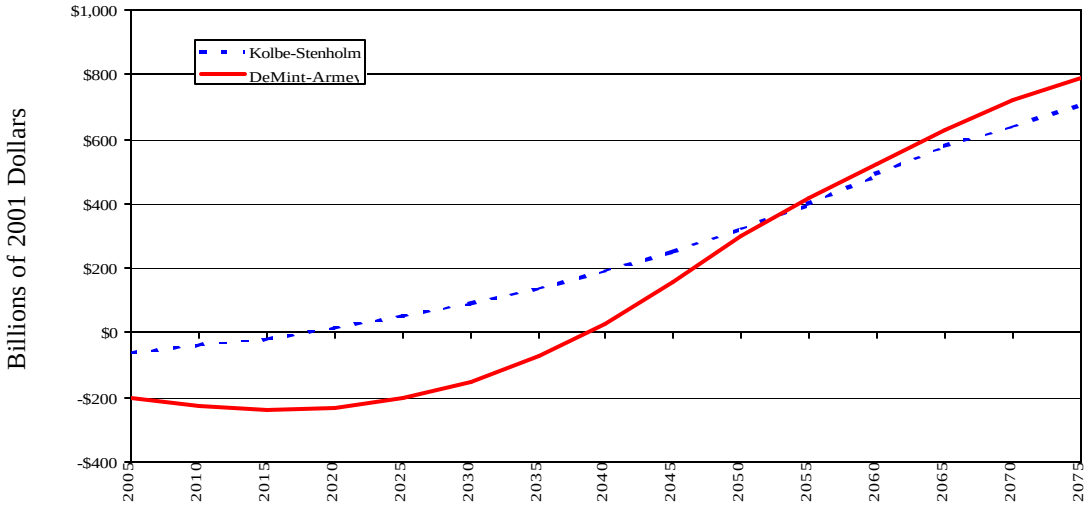
The DeMint-Armey plan allows workers to invest an average of 5 percentage points of the 12.4 percent payroll tax in personal accounts, with larger deposits for lower-wage workers. Thus, it gives workers significant ownership and control of their payroll tax contributions and the capacity to amass substantial sums of wealth. All retirees under DeMint-Armey are guaranteed to receive higher benefits than are scheduled under current law, and by midcentury most workers could expect to receive benefits some 20 to 40 percent higher than currently scheduled. Cash shortfalls in Social Security's finances would be met with substantial transfers of general tax revenue.

The Kolbe-Stenholm legislation allows workers to invest slightly more than 2 percent of their wages in personal accounts. The DeMint-Armey proposal would pay somewhat lower benefits than would Kolbe-Stenholm at retirement. Workers retiring in midcentury would receive around 92 percent of the benefits scheduled under current law, though that amount is roughly 125 percent of what the underfunded current program can actually afford to pay. Kolbe-Stenholm makes a variety of changes to taxes and benefits to cover cash shortfalls in the program, including speeding up current law's transition to an increased retirement age, adjustments to the computation of annual cost-of-living adjustments, or COLAs (and to non–Social Security federal payments based on the consumer price index, or CPI), an increase in the maximum wage subject to payroll taxes, and other changes to the benefit formula. As a result, Kolbe-Stenholm's need for transfers of general tax revenue is significantly smaller than that of DeMint-Armey.

To illustrate, consider Figure 1, which shows the impact of the DeMint-Armey and Kolbe-Stenholm proposals on the unified budget of the federal government. The unified budget reflects both the cost of paying Social Security benefits directly and the cost of redeeming the trust fund's government bonds. Thus, it is a good indicator of the overall impact of both the current program and reform alternatives on the federal budget as a whole. A figure below zero in any particular year shows that the proposal is a net drain on the unified federal budget relative to maintaining the currant program. A positive figure shows that the proposal is a net contributor to the federal budget in that year.

The two plans have roughly similar impacts on the federal budget beginning in the 2050s, but prior to that point DeMint-Armey is substantially more expensive than Kolbe-Stenholm. Although DeMint-Armey's higher costs are reflected in the higher benefits it can pay, fiscal-responsibility supporters of reform would view the cash deficits as similar to

Figure 1
Effects of Kolbe-Stenholm and DeMint-Armey Proposals on Unified Federal Budget Cash Flow



Source: Based on analysis from Office of the Chief Actuary, Social Security Administration.

deficits produced by the current program. While granting that DeMint-Armey would eventually achieve positive cash flows and become a net contributor to the federal budget, fiscal-responsibility supporters of reform would remain concerned that short- and medium-term cash shortfalls under the plan are unlikely to be maintained without large increases in public borrowing. That borrowing would put pressure on the unified budget in the future, effectively putting off the date at which the program (including its associated borrowing costs) truly becomes self-financing.

Both plans increase Social Security's costs in the short term, since both put aside extra money in personal accounts. Nevertheless, even if all this money were borrowed, the other provisions of Kolbe-Stenholm would make it possible to repay the borrowed money and begin reducing other government debt by the year 2034. Similar borrowing under DeMint-Armey could not be repaid within the 75-year scoring period.

However, although modest personal accounts such as those in Kolbe-Stenholm may prevent Social Security's costs from dominating the federal budget, they do little to excite supporters of accounts who focus on independence, ownership, and wealth accumulation. Large-account proposals such as DeMint-Armey remain more attractive to philosophical supporters of reform because unified budget impacts and changes in net public debt are not their primary criteria for reform. The ability to own, control, and pass on one's own retirement savings is of paramount importance to this group, and by that criterion DeMint-Armey is more successful than Kolbe-Stenholm. A low-wage worker retiring in 2042 under DeMint-Armey could amass an account totaling $140,000 (in 2001 dollars), while a similar worker under Kolbe-Stenholm would have only roughly one-third that level of assets.

The issue is not whether one legislative proposal is superior to another or, more broadly, whether the philosophical supporters of accounts address a more fundamental problem than do the fiscal-responsibility supporters. Each wing of the reform movement, while respecting and often sharing the views of the other, has its own highest priorities that a reform proposal must meet. That is not to say that either wing of the reform movement is unable or unwilling to compromise. It is merely to say that, while both wings favor reform and both embrace personal accounts, they hold different values and judge proposals by different criteria.

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Social Security reform will necessarily be hard fought. To garner the support of the entire reform movement, a proposal must address the concerns of both ends of the reform spectrum. To be successful, a personal accounts proposal must garner not merely support but enthusiasm from both the philosophical and fiscal-responsibility wings of the Social Security reform movement.

Large Accounts and Small Cash Deficits

Many Social Security proposals based on personal accounts reflect predominantly one or the other end of the reform spectrum, satisfying fiscal-responsibility supporters of accounts but not philosophical supporters or vice versa. What follows is the outline of a reform proposal that incorporates larger personal accounts within a financing framework that places only limited pressure on the unified federal budget.

This proposal builds on the second of three personal accounts proposals from the President's Commission to Strengthen Social Security, which was appointed by President Bush in May 2001 with a mandate to produce proposals to address Social Security's long-term funding programs.[5] Model 2, as the commission denoted it, occupies the middle ground of the reform spectrum. It has larger personal accounts than a fiscal-responsibility approach such as Kolbe-Stenholm and a more positive impact on the unified federal budget than a philosophical approach such as DeMint-Armey.

Nevertheless, it may be possible to modify Model 2 to better satisfy the criteria of the broad reform spectrum. The modifications to Model 2 accomplish three main goals:

- Increase the size of personal accounts available to workers, to provide greater ownership, control, and inheritability of payroll taxes;
- Reduce the need for transfers of unspecified general tax revenues over the 75-year period; and
- Reduce the size of cash shortfalls (and thus the need for general revenue transfers) in any particular year.

Together, those modifications should increase the attractiveness of the commission's Model 2 to both fiscal-responsibility and philosophical supporters of reform based on personal accounts.

Those modifications are not to be taken as criticism of the commission's proposal, which is indeed sound policy. The suggestions made herein are designed to build on an already sound foundation in order to give it wider appeal within the Social Security reform movement.

Before going to the proposal itself, however, it makes sense to review the current state of the Social Security program.

Current Law

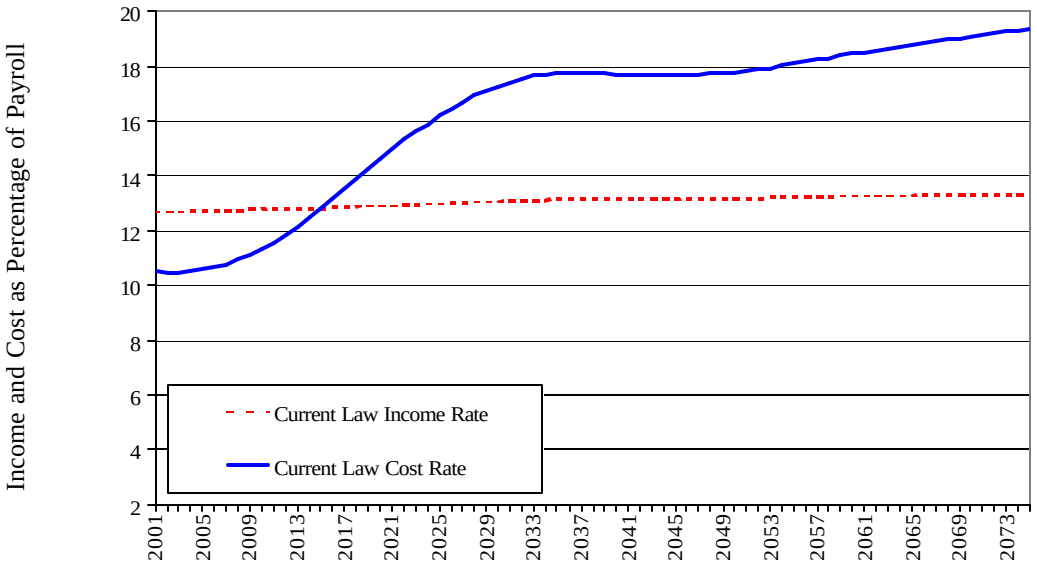
Under current-law financing, Social Security is financially unsustainable over the long run. Although it is currently running payroll tax surpluses, Social Security will experience cash deficits beginning in 2018, and deficits will continue and grow indefinitely, as Figure 2 shows. Social Security can redeem the government bonds in its trust fund to cover benefits until 2042, but the cost of redeeming those bonds must be included in the total burden placed on the taxpayer for maintaining the Social Security program.

According to the 2003 report of Social Security's trustees, over the next 75 years Social Security faces an actuarial balance equal to 1.92 percent of payroll, or $3.5 trillion in present value (the amount we would need to invest today to meet future deficits). Adding to that figure the $1.4 trillion cost of redeeming the government bonds held in the trust fund increases the present value cash shortfall over 75 years to $4.9 trillion. In the infinite term, the present value of the current program's cash deficits totals $11.9 trillion.[6]

However, the analysis contained herein works from the assumptions used in the 2001 Trustees Report, as those were the assumptions used in constructing the President's Commission's reform proposals. At that time, Social Security faced a 75-year actuarial deficit of 1.86 percent of payroll, equal to $3.2 trillion in present value, plus a $1 trillion cost of redeeming trust fund bonds.

Because the proposals here are intentionally broad, the differences in Social Security's financing between the 2001 and 2003 assumptions do not alter the substantive conclusions. Figure 2, showing the income and cost rates for the current program under the 2001 actuarial assumptions, does not differ qualitatively from

Figure 2
Social Security Cash Flow under Current-Law Financing



Source: *2001 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.*

an income-cost depiction based on the 2003 Trustees Report. Both show a program beginning to run cash deficits within roughly 15 years and deficits that continue and grow indefinitely afterward.

Social Security's large cash shortfalls have forced a reappraisal of the program's traditional pay-as-you-go financing, in which contributions by today's workers are immediately used to cover benefits for today's retirees. With a quickly increasing population of retirees and a slow-growing labor force, the tax burden on each worker will rise rapidly if current-law financing is maintained. Without change, Social Security will be forced to cut benefits by 27 percent when its trust fund is exhausted in 2042, with larger reductions to follow. Avoiding benefit cuts would demand large tax increases, with the payroll tax rate nearing 20 percent by the close of the 75-year actuarial scoring period.

President's Commission Model 2

The President's Commission to Strengthen Social Security produced three distinct reform models, all containing voluntary personal retirement accounts. The commission's Model 2 would allow workers to invest 4 percentage points of the 12.4 percent total payroll tax in personal retirement accounts, up to an annual maximum of $1,000. That progressive account structure would give larger accounts to low-wage workers. The average account size would equal 2.4 percent of wages.

Model 2 would restore the traditional program to solvency by altering the rate at which future benefits are increased. Under the current benefit schedule, the initial benefits paid to each cohort of new retirees rise by the rate of wage growth. Changing the "wage indexation" of benefits to an index that would increase benefits at the generally slower rate of price growth—known as price indexing—would return Social Security to permanent solvency. The switch from wage to price indexing would reduce the level of benefits promised to future retirees relative to the current benefit schedule, though it would not reduce benefits for current retirees, reduce benefits for future retirees relative to those received today, or reduce benefits relative to those the current system is financially capable of paying.

Model 2 would have several effects on Social Security's financing. As Figure 3 shows, diverting payroll taxes to personal accounts would speed up the first date of cash deficits,

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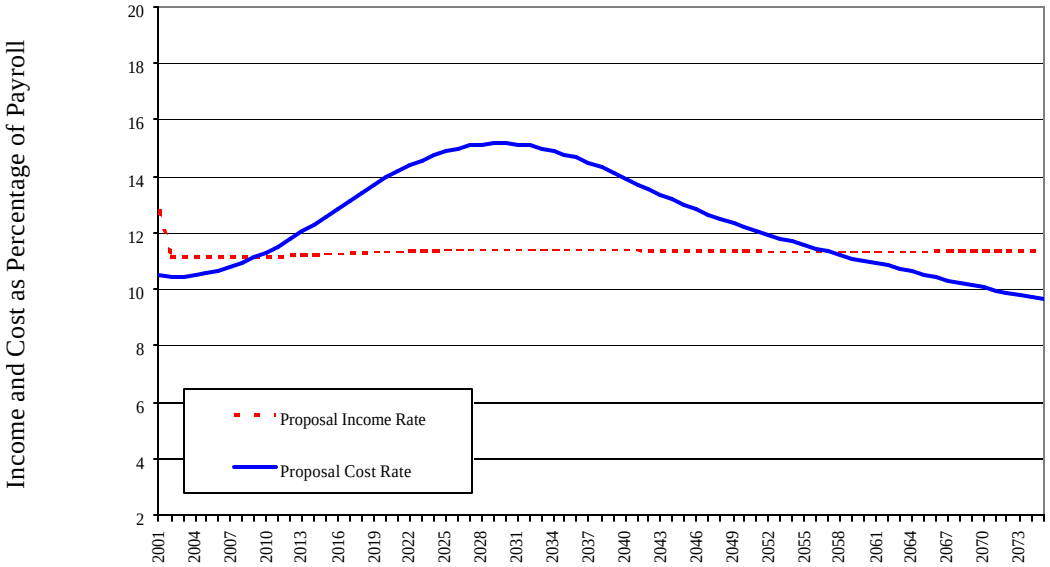
Figure 3
Commission Model 2: 2.4% Average Account, 2% Offset Interest Rate



Source: President's Commission to Strengthen Social Security, www.csss.gov.

from 2016 under current law to 2010. However, unlike current law, Model 2 would return to cash flow surpluses around 2059, leaving Social Security permanently solvent thereafter. Moreover, the personal account and price-indexing provisions detailed above would reduce Social Security's actuarial deficit over 75 years from 1.86 percent of payroll to roughly 0.7 percent of payroll. The remaining deficits would be met through transfers of general tax revenue. Including general revenue transfers, Model 2 would keep Social Security solvent not only over 75 years but on a sustainable basis thereafter.

Model 2 is a good middle point in the personal accounts spectrum. However, both the philosophical and the fiscal-responsibility ends of the reform spectrum have specific difficulties with aspects of Model 2.

For philosophical supporters of personal accounts who favor larger accounts, Model 2's modest account size does not go far enough in terms of increasing ownership, control, and inheritability under the Social Security program. While Model 2's 2.4 percent average account size is greater than that in some other proposals, even larger accounts would make Model 2 more attractive to philosophical supporters of reform.

To fiscal-responsibility supporters of reform, Model 2's effect on the federal budget on *average* is generally acceptable, but concerns exist that in certain years the proposal would demand larger transfers of general tax revenue than the political process could produce within the confines of a reasonably balanced budget. The largest annual cash deficit in Model 2 equals roughly 3.8 percent of payroll. Although those deficits are significantly smaller than the maximum cash shortfall of 6.1 percent of payroll under current law, some reformers think that even Model 2's largest annual cash shortfalls are too great.

It is worth noting at the outset that cash shortfalls are not synonymous with the "transition costs" associated with "carve-out" personal accounts that invest a portion of the Social Security payroll tax.[7] The cash shortfalls noted here and in the following examples consist of both transition costs associated with accounts and cash deficits that would exist under current law. Personal accounts create transition costs only to the extent that they extend the period in which Social Security would run cash deficits or increase the size of cash deficits during that period. Nevertheless, these proposals aim to cover both their own temporary transition costs and the

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permanent cash shortfalls that would exist under current law.

What follows is a proposal to more fully satisfy both ends of the reform spectrum: to increase the size of personal accounts under Model 2 while reducing the size of annual cash flow shortfalls. The proposal is not simply presented as a whole, which could lead to confusion; rather, it is presented in a step-by-step manner to illustrate the individual modifications made and explain the rationale for each.

Progressive Offset Interest Rates

Under any system of voluntary personal retirement accounts, workers opting for personal accounts agree to give up part of their traditional benefits. Under the proposals from the President's Commission, the reduction in traditional benefits works as follows: contributions to the personal account are compounded at a designated "offset interest rate," creating a notional "balance" at retirement.[8] This notional balance is entered into an annuity formula for calculating the monthly benefits it could purchase. That monthly amount is deducted from the worker's traditional benefit.

The offset interest rate constitutes a breakeven return for the personal account. So long as the worker's account earns a return that is higher than the offset interest rate, the benefits gained via the account would exceed the traditional benefits forgone via the offset, and thus a worker's total retirement benefits would increase.

However, there exists a tradeoff between the offset interest rate charged and the size of the personal account that can be established. This is intuitively understandable: assuming the proposal's actuarial balance over the 75-year scoring period was held constant, there could be larger personal accounts for which account holders agree to give up more of their traditional benefits, or smaller personal accounts for which they give up a smaller share of traditional benefits.[9] For instance, by increasing the offset interest rate from 2 to 3 percent, Model 2's average personal account size of 2.4 percent of payroll could be increased to roughly 3.2 percent with no effect on the overall actuarial balance of the plan.

For simplicity's sake, I have here assumed that the average personal account size would increase to 3 percent of payroll (rather than 2.4 percent under Model 2) and that contributions to the account would be offset at an average interest rate of 3 percent after inflation (rather than 2 percent under Model 2). Like that of Model 2, the account would be progressive, allowing workers to invest 5 percentage points of their payroll taxes up to an annual maximum of roughly $1,250. A 3 percent offset interest rate seems a fair tradeoff for the increased ownership and wealth accumulation opportunities that larger accounts provide.

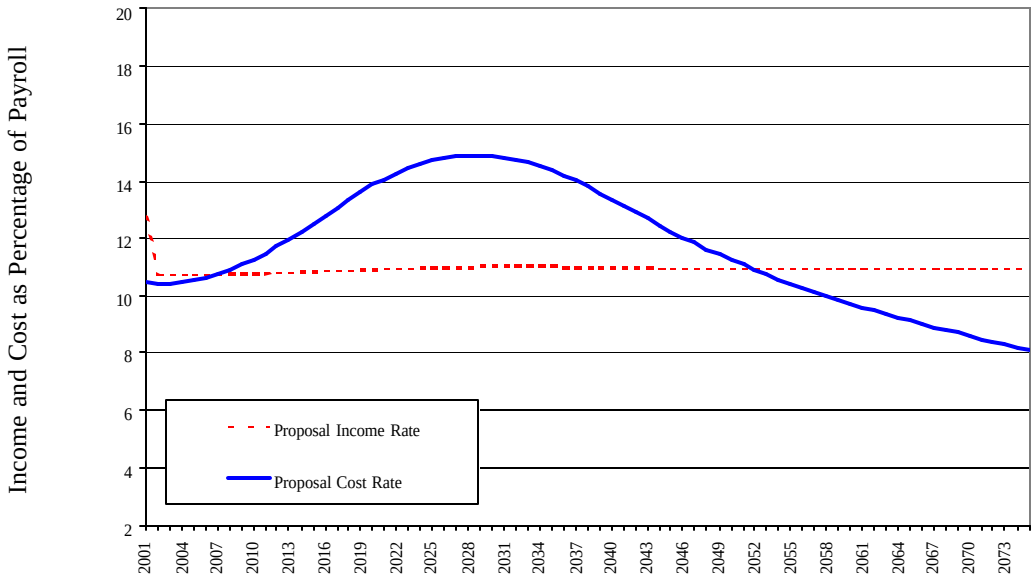
That said, increasing the offset interest rate from 2 percent to 3 percent also raises the breakeven return a worker's account must achieve for him to increase his total retirement benefits. This is of particular importance to low-wage workers, who often have lower tolerances for investment risk than other workers, and it could affect whether such workers choose to hold personal accounts.

A solution is a progressive offset interest rate, where the first dollar of contributions to a personal account is subject to a lower offset interest rate than subsequent contributions. While the *average* offset interest rate would be 3 percent, low-wage workers would have their personal account contributions offset an interest rate of roughly 2.5 percent; for medium-wage workers the offset interest rate would be roughly 3 percent, and for high-wage workers it would be roughly 3.5 percent.[10] The average offset interest rate would be 3 percent. Under the progressive offset, high-wage workers would be willing and able to take on more investment risk, and low-wage workers could be assured of increasing their benefits even with very conservative investments. This would maintain or enhance the progressivity of the program at a reasonable overall cost.

One admitted downside to a progressive offset rate is that it presents workers with some uncertainty regarding the breakeven interest rate their account must achieve, since workers cannot know for certain what their future income, and thus their future offset interest rate, will be. Nevertheless, this added uncertainty must be weighed against the *reduced* uncertainty workers would face if they replaced an unguaranteed traditional government benefit with account assets that they owned and controlled. On balance, the advantages of the larger account outweigh the uncertainties of a variable offset interest rate.

Under any system of voluntary personal retirement accounts, workers opting for personal accounts agree to give up part of their traditional benefits.

Figure 4
3% Average Account, 3% Offset Interest Rate



Source: Author's calculations.

On balance, the advantages of the larger account outweigh the uncertainties of a variable offset interest rate.

As Figure 4 shows, this modification to Model 2 moves the date of first cash shortfall from 2010 to 2007, and the year in which Social Security would regain permanent solvency also moves up, from 2059 to 2052.

The 3 percent account, 3 percent offset proposal reduces Social Security's actuarial deficit to 0.6 percent of payroll, from a deficit of 0.7 percent of payroll under Model 2 (in the absence of general revenue transfers).

However, the larger account size also increases the maximum annual cash shortfall to roughly 4.6 percent of payroll. If the goal is compromise, this alteration may appear to be a step in the wrong direction. However, this is merely the first step in constructing a proposal to satisfy the broad Social Security reform coalition.

Personal Accounts Holding Government Debt

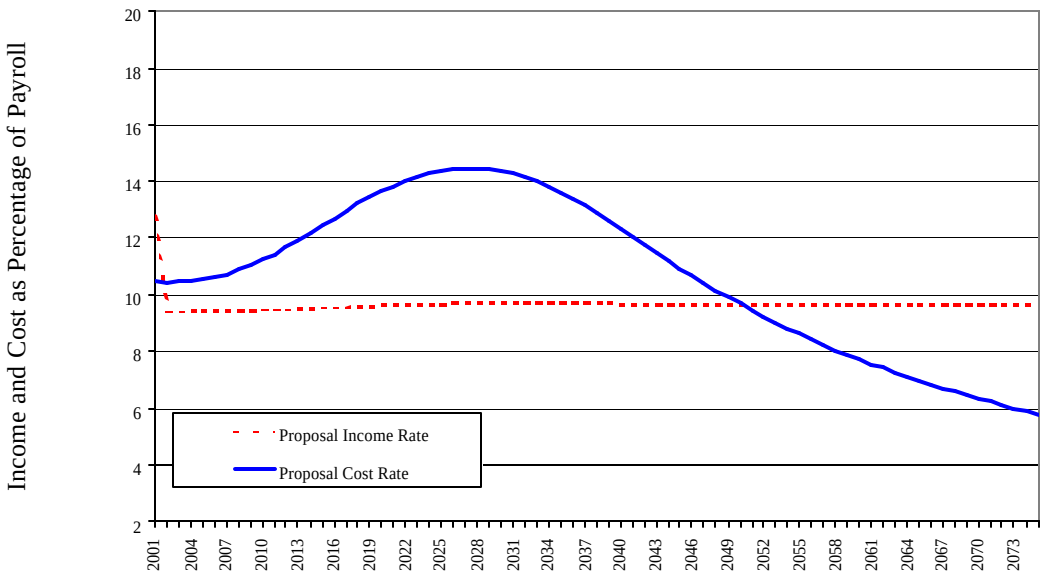
Model 2's personal accounts average 2.4 percent of payroll, a figure that could be increased to roughly 3 percent via the increased offset interest rate detailed above. The proposal is here further modified to allow workers to invest an additional 2 percentage points of the payroll tax in their personal accounts. In total, workers could invest an average of 5 percentage points of payroll in their accounts, on a progressive scale with low-wage workers given larger accounts. Under this progressive framework, workers could invest roughly 8.3 percent of their wages in their accounts, up to an annual maximum of around $2,100. This modification further satisfies the desire of philosophical account supporters for ownership, control, and inheritability.

However, the additional 2 percentage points of contributions to personal accounts must be invested in inflation-indexed government bonds.[11] At retirement, a worker would receive a total retirement benefit roughly equivalent to that provided under Model 2.[12]

Workers could allocate the 3 percentage point private element of their account as they wished, while the 2 percentage points of government bonds could not be traded.[13] It is assumed here that the overall account would be 60 percent equities, 40 percent government bonds, though workers could reduce their equity holdings in accordance with their tastes for market risk.

At first glance, increasing the account size to 5 percent of wages exacerbates the problems of single-year cash shortfalls that concern fiscal-responsibility supporters of accounts. As Figure

Figure 5
5% Average Account, 3% Offset Interest Rate



Source: Author's calculations.

5 shows, a 5 percent personal account with a 3 percent offset interest rate has a maximum annual cash flow shortfall of roughly 5.9 percent of payroll, almost as much as under current law. This setup would create cash flow deficits at implementation but return Social Security to permanent cash surpluses in the year 2050.

The 5 percent account, 3 percent offset iteration results in an actuarial balance during the 75-year scoring period of a deficit of 1.10 percent of payroll. This worsening of actuarial balance is due solely to the fact that the 75-year window considers account contributions made during the period as lost to the program but fails to count benefit offsets occurring after the 75-year period has ended. While any personal account plan suffers from this actuarial bias, the size of the accounting bias increases along with the size of the account. Even taking this into account, however, a larger account does produce larger single-year cash shortfalls.

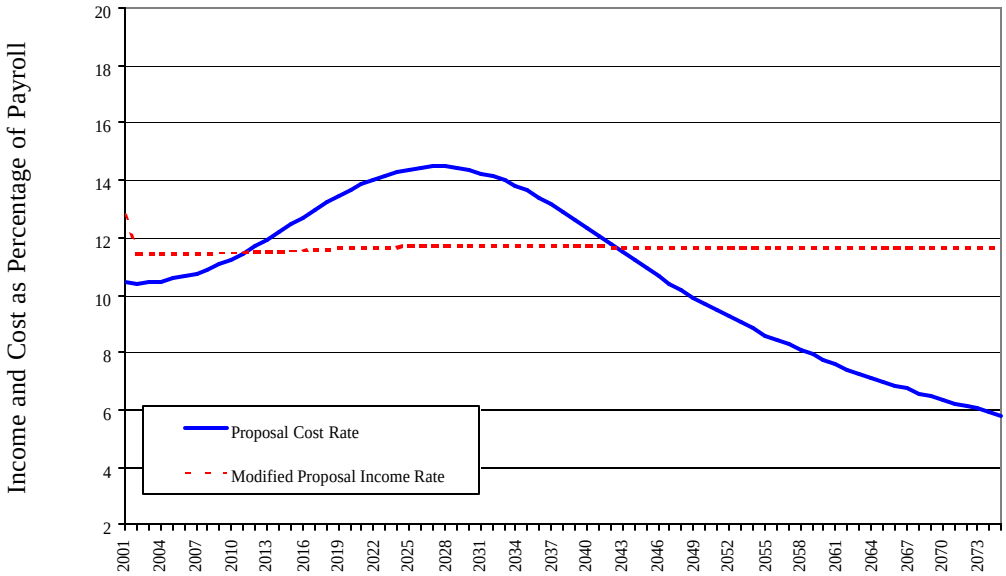
However, when 2 percentage points of the account are funded with government debt, these measures are misleading. From the point of view of the unified federal budget, this 2 percentage point debt component is not money lost to the government. If this cash were credited to Social Security, then a 5 percent account with 2 percentage points in bonds would have a net effect on Social Security's cash flow of just 3 percent of payroll.

In Figure 6, Social Security's income line is modified to reflect the fact that the 2 percentage points of government debt held in the accounts are not truly funds lost to the government as a whole. Funds used to purchase government bonds are, in effect, "recycled" through the system. Thus this proposal's effect on the unified budget cash flow is equivalent to an account of only 3 percentage points invested in private assets.

The government bond investments held in the account would be subject to the 3 percent average offset interest rate applied to the rest of the account. Since the assumed interest rate on government bonds is also 3 percent, the government bonds in the account constitute a dollar-for-dollar replacement of traditional Social Security benefits. A dollar of defined benefits currently paid by the Social Security Administration would be replaced with a dollar of guaranteed benefits provided by the redemption of government bonds in the account.

A dollar of defined benefits currently paid by the Social Security Administration would be replaced with a dollar of guaranteed benefits provided by the redemption of government bonds in the account.

Figure 6
5% Average Account, 3% Offset Interest Rate, 2% Debt in Account



Source: Author's calculations.

Unlike traditional government-paid benefits, government bonds held in a personal account would be the property of the worker and inheritable if he died prior to exhausting his account.

From the point of view of the government as a whole, funding personal accounts with government bonds is fiscally neutral, leaving the underlying budgetary realities of funding Social Security unchanged. Whether the government provides a given benefit directly through the Social Security Administration or indirectly by repaying a bond held in a personal account, the cost to the government (and thus the taxpayer) is the same.

The government bonds in the account merely transform an *implicit* government debt (Social Security benefits) into an *explicit* government debt, a legal financial contract between the Treasury and the account holder. While government bonds held in personal accounts would replace part or all of the traditional benefit, the level of benefits and the cost to the government would not substantially change.

As shown in Figure 6, the government bond element alters the fiscal impact of the 5 percent account somewhat. Based on the modified Social Security income line, the date of first cash shortfall is delayed from 2002 to 2011 and the date of permanent cash flow surpluses moved forward from 2050 to 2042. The maximum annual cash flow shortfall is reduced from 4.7 to 2.7 percent of payroll. The overall actuarial balance of the program should be unchanged relative to a 3 percent account holding only private assets, assuming that debt issuance and redemption are factored into the measurement of Social Security's cash flow.[14]

Personal accounts holding government bonds should not be confused with a so-called debt-financed transition to accounts, in which increased saving via accounts is offset by government budget deficits used to cover accounts' transition costs. Rather, the plan would begin with a clear conception of the true level of funding that is appropriate and achievable on both an aggregate and an annual basis. Part of the remaining pay-as-you-go benefit, which is an implicit debt of the government, would merely be transformed into an explicit government debt held by individuals in their accounts. While neutral with regard to the budget and the economy, this transformation of an entitlement to government payments into an asset held by workers is an important distinction for philosophical supporters of reform.

Advantages of Government Debt

over Traditional Defined Benefits

Augmenting personal accounts with government bonds does not make the underlying problem of paying Social Security benefits easier to solve. After all, the government must still collect taxes to repay those bonds. Nor, however, does it make it harder. Given this neutrality, debt held in a personal account has several important advantages:

- *Ownership:* Larger accounts would give workers substantially greater ownership and control of their Social Security contributions. Under a two-tiered plan in which the traditional pay-as-you-go program continues alongside personal accounts, workers have rights to their account assets but not to the traditional benefit. Government bonds placed in accounts would give workers greater ownership of their benefits and increased assurance that benefits would not be reduced.
- *Inheritability:* Workers who die prior to retirement lose rights to the traditional benefits they paid for. This hits low-wage and minority workers particularly hard, since they are more likely to die prior to retirement. Government bonds held in accounts would be transferable like other account assets, increasing Social Security's progressivity and enhancing wealth building.[15]
- *Guaranteed minimum benefit:* One justification given for a two-tiered system mixing personal accounts with government-provided defined benefits is that it ensures a guaranteed minimum benefit, regardless of investment returns. Under the current program, of course, there is no true legal guarantee of full payment, as the Supreme Court has ruled and as past experience with reform measures has confirmed.[16] Requiring that a certain portion of account assets be held in government bonds ensures that a minimum benefit will be paid.[17] In fact, this makes the government guarantee significantly stronger than under current law.
- *Transparency:* Many analysts are concerned about "implicit government debt," promises of future pension or health payments from the government that are substantially larger than the explicit government debt that is on the books. Government bonds in accounts would merely make the implicit Social Security debt under the plan explicit and legally binding. Moreover, this process could reduce total government debt, since most individuals would gladly accept a somewhat lower payment from guaranteed government bonds rather than a benefit entitlement that might change in the future.[18] Explicit debt also has a disciplining effect on government, making it difficult for politicians to promise more than can reasonably be paid on the expectation that benefits would be rolled back in the future.
- *Maintains pay-as-you-go benefit:* Advocates of a two-tiered system believe there are financial advantages to diversification between funded and unfunded benefit sources.[19] Although that conclusion can be debated, a government bond element amounts to de facto pay-as-you-go financing. When the proposed new system began to run payroll tax surpluses (in the 2040s), a decision could be made about whether to phase out the government bond element in favor of private investments.[20]

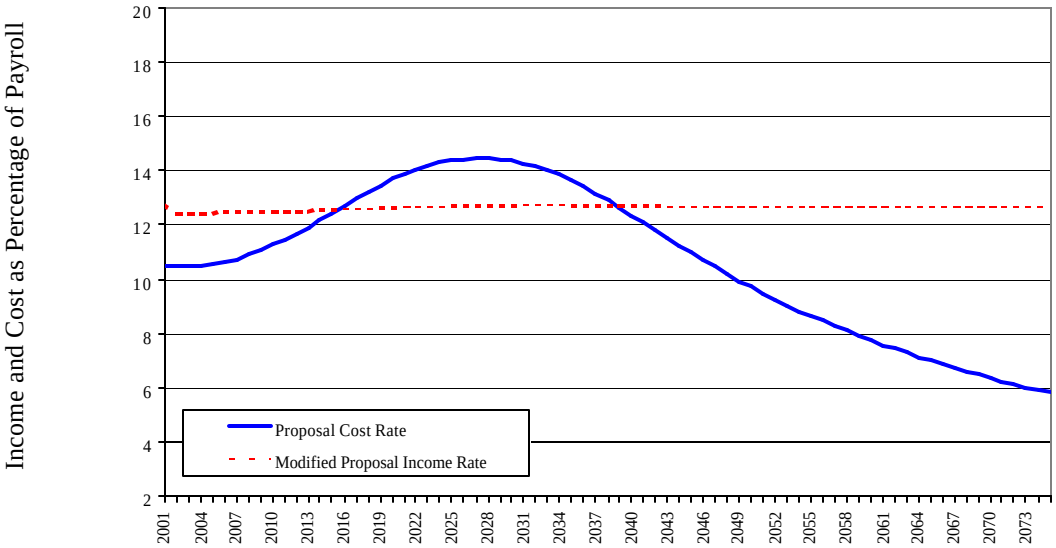
The addition of government bonds to the account would at first appear to be a gimmick, designed to fool people into thinking they are getting something different or better than what they really are. But this ignores the crucial values that philosophical supporters of accounts place on ownership, control, and inheritability. Unlike traditional government-paid benefits, government bonds held in a personal account would be the property of the worker and inheritable if he died prior to exhausting his account. It is hard to overestimate how important this aspect of reform is to philosophical supporters of personal accounts. Larger personal accounts holding government bonds could also have beneficial effects in terms of budgetary transparency and government accountability relative to a mixed system incorporating a pay-as-you-go defined benefit.

Filling the Gap 1: "Pork for Pensions"

Even with the modifications listed above, substantial cash flow shortfalls would exist in some years. To satisfy fiscal-responsibility supporters of reform that these shortfalls would not be met with debt, steps must be taken to fill the cash shortfall gap.

The preferred route to meeting cash shortfalls on the way to a sustainable Social Security program would be to reduce existing government spending, most of which produces returns to the nation well below those from private capital investments.

Figure 7
5% Average Account, 3% Offset Interest Rate, 2% Debt in Account, 1% Corporate Welfare Contribution



Source: Author's calculations.

A corporate welfare commission could overcome failures in the political process and present lawmakers with a list of corporate breaks to be voted on as a whole.

The preferred route to meeting cash shortfalls on the way to a sustainable Social Security program would be to reduce existing government spending, most of which produces returns to the nation well below those from private capital investments.[21] While there are any number of possibilities in a trillion dollar-plus federal budget, the best place to start would be corporate welfare spending.

Corporate welfare is "any government spending program that provides payments or unique benefits and advantages for specific companies or industries."[22] In practice, it extends from classic political pork such as a $1.1 billion loan guarantee to build cruise ships in Sen. Trent Lott's hometown, to financial assistance from the Overseas Private Investment Corporation for large corporations, to farm subsidies that ate up $35 billion last year. *Time* magazine estimates that corporate welfare cost taxpayers $125 billion in 1998, a figure that includes "tax expenditures" granting exemptions to favored industries such as timber, energy, and insurance.[23] Adjusted for the growth of the economy since 1998, corporate welfare would constitute roughly $138 billion annually today.

Corporate welfare costs taxpayers the equivalent of two weeks' wages per year. Domestically, corporate welfare favors certain companies and industries over others. Internationally, corporate welfare weakens America's free-trade credentials and invites retaliation from Europe and Asia.

The Bush administration's budget director Mitch Daniels has noted that it is "not the federal government's role to subsidize, sometimes deeply subsidize, private interests"[24] and that some programs "have nothing to show for years and years and years of essentially subsidizing corporate research budgets."[25]

Nevertheless, the government continues to spend tens of billions of dollars annually on grants, loans, and tax expenditures that give large returns to favored corporations but small returns to the taxpayer. Instead of draining taxpayers' pockets, the billions in subsides, grants, and outright handouts dispensed by both political parties could finance the transition to a sustainable Social Security program.

Corporate welfare could be targeted via a commission modeled on the Base Realignment and Closure Commission, which came about because, despite a military base structure that "made little sense on the whole, Congress could not bring itself to close specific bases."[26] A corporate welfare commission, which has been proposed by Sen. John McCain (R-Ariz.) and Rep. Richard Gephardt (D-Mo.), could likewise overcome failures in the political

process and present lawmakers with a list of corporate breaks to be voted on as a whole.

Targeting these savings for Social Security could be what makes such a commission a success. It is difficult to convince politicians to give up corporate welfare without receiving something of value in exchange. Social Security would be more than an even trade for most voters.

Washington is also reluctant to act on Social Security without an accessible means of paying for reform. This "pork for pensions" tradeoff could clear the way for action. Social Security could be a path out of the corporate welfare trap, just as corporate welfare could be the financial grease to ease the passage of Social Security reform.

Figure 7 assumes that a corporate welfare commission was able to eliminate spending equal to 1 percent of payroll, or slightly more than one-third of the estimated $138 billion in annual corporate welfare spending. These corporate welfare savings would be added to Social Security's income. This amount is assumed to grow each year at the same rate as payroll (a lower rate than GDP growth and substantially lower than the growth of overall government spending over the past several years).

The addition of even a small portion of total corporate welfare spending significantly eases the financing of Social Security reform. Adding this money to Social Security's other income pushes the date of first cash flow deficit back to 2016, and the date of permanent cash flow surpluses moves forward to 2038.

The maximum annual cash flow shortfall is reduced to roughly 1.7 percent of payroll. Overall, actuarial balance over the 75-year scoring period improves to a surplus of roughly 0.4 percent of payroll. Over the infinite horizon, which is a more accurate measure of system financing, this proposal would produce significant surpluses.

Filling the Gap 2: Chain-Weighted CPI

Cash needs could be further reduced via a methodological correction of the CPI, a step that has been strongly advocated by Federal Reserve Board chairman Alan Greenspan and mentioned favorably by even staunch opponents of personal retirement accounts.[27] A new, more accurate measure of increases in the cost of living would likely reduce costs for the Social Security program as well as free resources within the non–Social Security budget that could be devoted to Social Security reform.

The CPI measures the change in prices of a market basket of consumer goods and services purchased by urban consumers.[28] It is the basis for annual COLAs to Social Security benefits and is based on the purchasing habits of urban consumers.[29]

The CPI's possible overstatement of inflation came into public view with a study by the Advisory Commission to Study the Consumer Price Index, commonly referred to as the Boskin commission after its chair, economist Michael Boskin. This commission, appointed by the Senate Finance Committee in 1995, concluded that the CPI overstated the true rate of inflation by roughly 1.1 percentage points annually.[30] Since that time, the Bureau of Labor Statistics has made a number of methodological changes to the CPI, and four former members of the Boskin commission concluded in 1999 that the CPI's overstatement of inflation had been reduced to between 0.66 and 0.9 percentage points per year.[31]

In 1997 testimony before the House Budget Committee, Greenspan noted that

> the best available evidence suggests that there is almost a 100 percent probability that we are overcompensating the average Social Security recipient for increases in the cost of living.[32]

Those biases can come about in large part because the BLS changes its basket of goods only every several years (and previously, just once per decade), not quickly enough to keep up with Americans' rapidly changing purchasing practices.[33] If the BLS's basket remains static while consumers change what they buy and where they buy it in order to reduce costs, the CPI will indicate a greater increase in the cost of living than was actually experienced by consumers.

Greenspan suggests replacing the current CPI with what is called the "chain-weighted" CPI for urban dwellers, or C-CPI-U. The chained CPI alters its basket of goods annually, in accordance with the goods purchased by the public, to give a more accurate view of true changes in the cost of living. Greenspan told

A new, more accurate measure of increases in the cost of living would likely reduce costs for the Social Security program as well as free resources within the non–Social Security budget that could be devoted to Social Security reform.

Table 1
Illustrative Price Changes

2002			2003		
Goods	Price	Spending	Goods	Price	Spending
2 Apples	$1	$2	3 Apples	$0.75	$2.25
2 Oranges	$0.75	$1.50	1 Orange	$1.50	$1.50
Total		$3.50	Total		$3.75

Many reform plans give workers the choice of whether to hold a personal account.

the Senate Special Committee on Aging in February that the chained CPI is "a far superior measure of the cost of living"[34] that would prevent the overstatement of inflation without reducing the real purchasing power of Social Security benefits over time.

To illustrate the differences between the conventional fixed-basket CPI and the chained CPI, Table 1 shows the hypothetical purchase of apples and oranges in 2002 and 2003. In 2002 each person purchased two apples at $1 apiece and two oranges at 75 cents apiece. In 2003 the prices for apples and oranges changed: apples fell in price to 75 cents, while oranges rose to $1.50. As a result of these price changes, in 2003 each person purchased three apples and just one orange.

Using the conventional CPI's method of holding the basket constant from year to year, the cost of living from 2002 to 2003 rose by 29 percent. That is, if each person had bought two apples and two oranges in 2003, it would have cost 29 percent more than in 2002. Under the chain-weighted method, which compares the costs of what actually was purchased in each year, the price increase was only 7 percent.[35] The example is overstated in order to illustrate the methodological differences between the two measures.

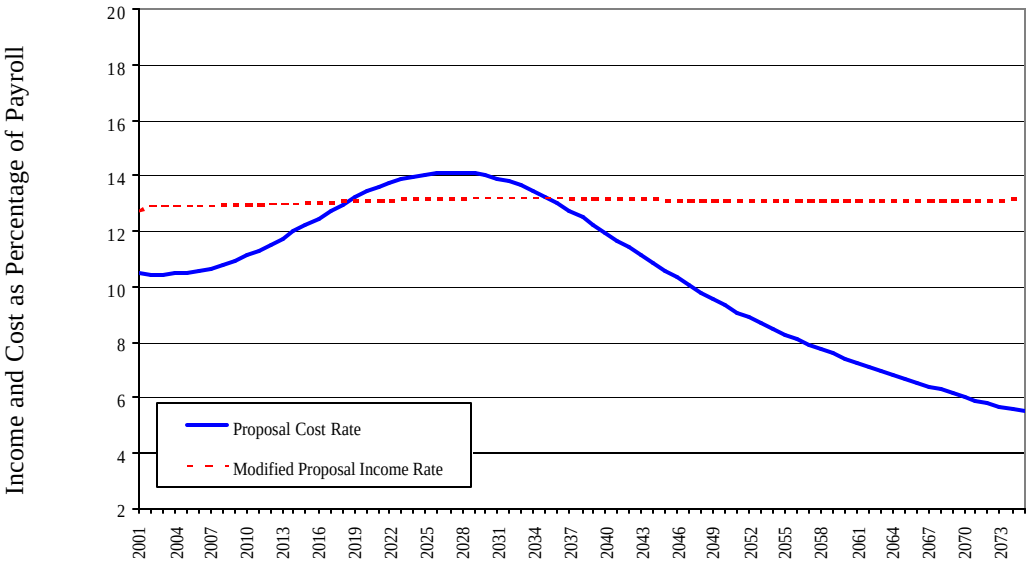
The actual difference in measured inflation between the fixed and chain-weighted CPIs is difficult to state with precision, because the BLS has been measuring the chained CPI only since 2000. During 2000 and 2001 the chained CPI recorded a 0.8 percentage point lower inflation rate than the fixed CPI-U, a substantially larger difference than the 0.1 to 0.2 percentage point difference the BLS had anticipated.

For the purposes of the reform proposal outlined here, it is assumed that a chain-weighted CPI would reduce measured increases in the cost of living by 0.33 percentage points. This figure accords with provisions of the Kolbe-Stenholm reform legislation that would reduce the annual COLA by a like amount, in anticipation of methodological adjustments by the BLS. Such a change would increase Social Security's income by an average of 0.51 percent of payroll over the 75-year scoring period, and more thereafter.

While analysts on both sides of the personal accounts debate favor corrections to the CPI, it is sure to be controversial because of its impact on current retirees, who many feel they should be held harmless against any policy changes enacted as part of Social Security reform. For that reason, it is here assumed that Social Security system financing benefits directly by only 0.25 percent of payroll annually, with the remainder being used to address issues with current retirees or other groups judged to merit attention.[36]

In addition to the direct benefits for Social Security's finances, correcting the CPI would create resources in the non–Social Security budget that could be targeted to Social Security reform. Many non–Social Security federal payments are also indexed to the cost of living, and the chain-weighted CPI would reduce the overstatement of these payments as well. A corrected CPI would also increase income tax revenues over time, as the income tax rate brackets are also indexed to the CPI. Following the Kolbe-Stenholm legislation, this paper credits these savings, totaling another 0.5 percent of payroll over time, to Social Security.[37]

Figure 8
5% Average Account, 3% Offset Interest Rate, 2% Debt in Account, 1% Corporate Welfare Contribution, 0.75% from CPI Change



Source: Author's calculations.

As outlined here, shifting to a chain-weighted CPI produces benefits to Social Security's finances averaging roughly 0.75 percent of payroll annually. Factoring these into Social Security's income further reduces the program's annual cash deficits and improves its overall actuarial balance. As Figure 8 shows, adjusting the measured CPI and crediting on-budget savings to Social Security delay the first year of cash shortfalls to 2019 and return the program to permanent cash surpluses beginning in 2035. The largest single-year cash shortfall equals roughly 0.9 percent of payroll.

In sum, Model 2 from the President's Commission goes a long way toward putting Social Security on a sustainable basis, even in the absence of any transfers of general tax revue to meet cash shortfalls. (If general revenue transfers are included as part of the proposal, of course, Model 2 remains solvent throughout the 75-year scoring period and beyond.) As Table 2 shows, it is possible to modify the commission's Model 2 to increase the size of personal accounts to satisfy philosophical supporters of reform while simultaneously reducing the size of the program's annual cash shortfalls, an important criterion to fiscal-responsibility supporters of personal accounts.

These changes are intended as broad-brush suggestions for a route to compromise. Other routes to compromise are surely available, and other means exist to balance the priorities and criteria of the wide coalition that supports Social Security reform incorporating personal retirement accounts.

Treatment of Non–Account Holders

Many reform plans give workers the choice of whether to hold a personal account. One of President Bush's principles for Social Security reform is that accounts be voluntary. However, voluntary accounts raise the important question of how to treat individuals who opt not to participate in personal accounts.

The commission's Model 2 solved this by making two sets of changes to the Social Security program:

- First, changes affecting both account holders and non–account holders designed to restore the system to long-term solvency, irrespective of whether accounts are introduced; and

Absent increases in taxes, changes would have to be enacted regardless of whether personal accounts are offered to workers.

Table 2
Summary of Current Law, Commission Model 2, and Modified Proposals

Proposal	Year of First Cash Flow Deficit	Year Regains Cash Flow Surplus	Rough Actuarial Balance as Percentage of Payroll (absent general revenue transfers)	Maximum Annual Cash Shortfall (as percentage of payroll)
Current law	2016	Never	-1.86	6.1
Commission Model 2: 2.4 percent account, 2 percent offset	2010	2059	-0.7	3.7
3 percent account, 3 percent offset	2007	2052	-0.6	3.9
5 percent account, 3 percent offset	2002	2050	-1.1	4.7
5 percent account, 3 percent offset, 2 percent debt	2011	2042	-0.6	2.7
5 percent account, 3 percent offset, 2 percent debt, 1 percent corporate welfare	2016	2039	0.4	1.7
5 percent account, 3 percent offset, 2 percent debt, 1 percent corporate welfare. 0.75 percent CPI change	2019	2035	1.1	0.9

Sources: *2001 Annual Report of the Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds;* President's Commission to Strengthen Social Security, Final Report; and author's calculations.

- Second, changes to the benefits of individual workers who choose personal accounts.

The first set of changes, to balance the traditional program's finances, would reduce the growth rate of the initial benefits received by each succeeding cohort of retirees to the rate of inflation, rather than the generally higher rate of wage growth currently used. Price indexing reduces the growth of future retirement benefits (though it does not cut them in absolute terms) and brings the program back to sustainable solvency without tax increases. The second set of changes, contained in the offset interest rate mechanism outlined above, details the specific reductions in traditional benefits for those individuals who opt to hold a personal retirement account.

Opponents have attacked the commission plan's treatment of non–account holders. The Campaign for America's Future of the Institute for America's Future, for instance, declared, "Despite assurances that privatization will be 'voluntary,' Commission cuts benefits even for those who choose not to invest."[38] That, of course, is untrue: reductions in the growth of traditional benefits under Model 2 are solely a function of the fact that the current program cannot afford to pay what it has promised. Absent increases in taxes, these changes would have to be enacted regardless of whether personal accounts are offered to workers.

Nevertheless, opponents claim that a shift to price indexing represents a fundamental change in Social Security's traditional goal of replacing a given percentage of an individual's preretirement income. There is no reason in principle why this must be so.

As an alternative or addition to Model 2's treatment of non–account holders, individuals declining to hold accounts could be offered the option of remaining in the current program and receiving full scheduled benefits, with no changes whatsoever. Of course, if individuals are to receive the benefits the current system promises to pay, they must also bear the tax burden.

Two options exist for paying full scheduled benefits under the current program's traditional financing structure:

- First, workers opting to remain in the current program could pay an additional payroll tax equal to the 75-year actuarial deficit of the program in that particular year. This amount, which would today equal 1.92 percent of payroll, will rise over time as Social Security's actuarial balance declines because of demographic changes.
- Second, workers could pay an additional payroll tax equal to Social Security's actuarial deficit in perpetuity, calculated in the 2003 Trustees Report as equaling 3.8 percent of payroll. This amount would keep Social Security solvent permanently and would not be expected to rise over time.

In either case, individuals opting to remain in the current program are not being penalized. They are merely being asked to contribute to Social Security at a level sufficient to finance the benefits they can expect to receive from the program.

As the General Accounting Office pointed out in testimony before Congress in January:

> There is a significant gap between scheduled benefits and projected revenues. [A] primary purpose of most Social Security reform proposals is to close or eliminate this gap.[39]

The personal account options presented here close that funding gap permanently. Opponents of personal accounts would prefer that those who remain in the current system receive full promised benefits without any tax increase whatsoever. But as a matter of simple mathematics, Social Security cannot currently pay full promised benefits without tax increases. If individuals opting for personal accounts accept the hard choices needed to live under a solvent program, those choosing to remain in the current system should do so as well.

Consistent with the president's reform principles and the commission's personal account proposals based on them, these payroll tax increases would apply only to workers under age 55 who chose not to participate in personal accounts. Individuals aged 55 and over would continue to pay current-law tax rates and receive currently scheduled benefits.

Several objections to such an option for non–account holders are sure to arise. First, some would argue that high-wage workers would opt for personal accounts, leaving the traditional program underfunded. In fact, there is no reason to believe that the percentage of high-wage workers who participated in personal accounts would be significantly higher than that of low-wage workers. Low-wage workers would be subject to a lower offset interest rate than high-wage workers, meaning they would give up less in traditional benefits by making the choice to hold a personal account. Moreover, the option to hold inheritable assets would be of significant benefit to African Americans, for whom the current program's progressivity is severely reduced by the fact that many in this group do not survive to collect retirement benefits. Moreover, to make overall financing equal, general revenue transfers to finance cash shortfalls under the personal accounts plan could be matched on a proportionate basis for those remaining in the current program, thereby reducing the size of the payroll tax increase needed and providing resources from a progressive funding source.

Second, some will object that, rather than raising rates, we should increase or remove the "cap" on wages subject to payroll taxes (currently $87,000). During his 1998 "Social Security tour" promoting reform, President Clinton himself stated his opposition to lifting the cap as a matter of fairness. In response to a question regarding the payroll tax cap, President Clinton replied:

> Maybe I should answer this, since this is really a question, if we're going to defend this, that a Democrat should answer. Let's suppose you took it off altogether. . . . [W]hat would happen is you would be putting people in a position of paying over the course of their lifetime 50, 60, 100 times more than they would ever draw out of the Social Security system. And you can say, well, they owe it to society. But these people also pay higher income taxes and the rates are still pretty progressive for people in very high rates. . . . [Y]ou would really have tremendously changed the whole Social Security sys-

As a matter of simple mathematics, Social Security cannot currently pay full promised benefits without tax increases.

A broadly supported personal accounts proposal need not be a watered-down compromise that pleases neither advocates of individual ownership nor guardians of fiscal responsibility.

> tem. You would have basically said, if you get to where you make $70,000 or more a year we're going to soak you and you're never going to get anything out of this compared to what you're putting in. . . . I wouldn't rule out raising it some, but I think we should be very careful before we get out of the idea that this is something that we do together as a nation and there at least is some correlation between what we put in and what we get out—except we want people on the bottom to get out a whole lot more than they put in so we can give them a decent retirement.[40]

Indexing the payroll tax cap to its average historical level, so long as workers also receive benefits based on their full contributions, is one thing. But plans that would lift the cap entirely, while paying workers no additional benefits for literally thousands of dollars in additional annual contributions are something else wholly out of step with Social Security's philosophy as a contributory social insurance program that, while progressive, pays benefits in fair proportion to contributions.

Third, still others will argue that instead of raising payroll tax rates on individuals not opting for personal accounts we should transfer general tax revenues to finance the program. Like removing the cap on payroll taxes, ongoing general revenue financing is not within the original vision of Social Security as a social insurance program funded with worker contributions rather than a "welfare program" financed by the general budget.

Although most proposals to prefund Social Security do rely on general revenues during a transition period, a distinction has been drawn between general revenue financing to cover temporary cash shortfalls and the ongoing financing of general operating costs.

The bipartisan 1994–96 Advisory Council on Social Security declared unanimously, "Any sacrifices in bringing the system into balance should be widely shared."[41] General revenue financing and increases in the payroll tax cap would concentrate sacrifices on a small number of people, undermining the fairness of and public support for the program.

The Advisory Council also declared, unanimously, that "Social Security should be financed by taxes on workers' earnings, along with taxes paid by employers, earmarked taxes on benefits, and interest earnings on accumulated reserves, without other payments from the general revenue of the Treasury." The council continued:

> [F]inancing Social Security entirely by dedicated taxes has given the system considerable protection from having to compete against other programs in the general budget. The fiscal discipline in Social Security arises from the need to ensure that income earmarked for Social Security is sufficient to meet the entire cost of the program, both in the short run and long run, rather than from competition with other programs in the general budget.[42]

There has long been bipartisan consensus that Social Security should not rely on general tax revenue as on ongoing source of funding.

In sum, opponents of personal accounts who wish to maintain the current program paying full scheduled benefits should do so in the traditional way: simply raise payroll tax rates. This presents younger workers with a fair choice between two solvent programs, each with advantages and disadvantages. Workers could then choose between them.

Conclusion

This proposal shows that it is possible to include large personal retirement accounts that invest a substantial portion of the Social Security payroll tax within a financing framework that demands only limited transfers of general tax revenue and substantially reduces pressure on the unified federal budget. Workers would enjoy far greater ownership, control, and inheritability of their Social Security contributions, while the strain Social Security would place on the federal budget as the baby boomers retire and the population ages would be substantially reduced relative to the strains of maintaining the current pay-as-you-go program. Large accounts within a fiscally responsible financing framework are a win-win situation for the broad coalition that favors Social Security reform.

Social Security reform is necessarily a difficult project on a technical level. However, in many

cases it can be even more difficult to build the unified and enthusiastic collation needed to make necessary changes that many would prefer to put off. The proposal outlined above is designed to strengthen that coalition, not by insisting that each party reduce its demands, but by devising policy provisions that more fully satisfy the desires of all parties. This framework, built on an already-sound reform proposal from the President's Commission to Strengthen Social Security, is designed not to promote tradeoffs but to more efficiently address the goals of different wings of the reform movement.

This type of proposal can garner enthusiasm and support across the wide spectrum of individuals and groups who favor Social Security reform incorporating personal retirement accounts.

Philosophical supporters of personal accounts place great emphasis on the ownership, control, and inheritability of retirement savings that accounts provide and thus desire that the accounts hold as much of the 12.4 percent payroll tax as possible. Increasing the size of accounts from an average of 2.4 percent of payroll to an average of 5 percent of payroll helps address the concerns of this group.

Fiscal-responsibility supporters of accounts place emphasis on reducing Social Security's pressure on the rest of the federal budget as the baby boomers retire and thus favor proposals that are as self-financing as possible. Steps such as cutting corporate welfare spending and correcting for overstatements of inflation by the CPI can finance Social Security's cash shortfalls on the way to permanent sustainable solvency in ways that are regarded by many on both sides of the personal accounts debate as fair and necessary.

Finally, modifying the treatment of individuals who choose not to hold personal accounts preserves the current program's full scheduled benefits for those who desire them, but in a way that is fiscally responsible, that is in agreement with Social Security's traditional means of financing, and that highlights the true choices facing Social Security, with or without personal accounts. This step can blunt arguments from opponents of reform, as well as convince the undecided that a viable and responsible traditional option is preserved for those who do not desire to hold a personal account.

A broadly supported personal accounts proposal need not be a watered-down compromise that pleases neither advocates of individual ownership nor guardians of fiscal responsibility. In fact, it is possible to construct personal account plans that garner enthusiastic support across the broad spectrum favoring reform.

Notes

1. The efficient frontier, the conceptual foundation of modern portfolio theory, was developed in a 1952 paper by Harry Markowitz, who won the 1990 Nobel Prize in economics for this work. See "Portfolio Selection," *Journal of Finance* 7, no. 1 (March 1952): 77–91. Economists would describe such a proposal as being closer to "Pareto optimality," a condition in which one party's satisfaction cannot be increased without reducing that of at least one other party.

2. For an overview of public opinion on Social Security reform, see John Zogby et al., "Public Opinion and Private Accounts: Measuring Risk and Confidence in Rethinking Social Security," Cato Institute Social Security Paper no. 29, January 6, 2003.

3. Analysis of the Social Security Ownership and Guarantee Act of 2001 is based on an actuarial memo from Stephen C. Goss, chief actuary, Social Security Administration, December 19, 2001.

4. Analysis of the 21st Century Retirement Act is based on an actuarial memo from Stephen C. Goss, chief actuary, and Alice H. Wade, deputy chief actuary, Social Security Administration, August 24, 2001, and additional analysis performed by the Office of the Chief Actuary.

5. For more details, see the final report of the President's Commission, www.csss.gov, or Andrew G. Biggs, "Perspectives on the President's Commission to Strengthen Social Security," Cato Institute Social Security Paper no. 27, August 22, 2002.

6. *2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*, March 17, 2003, www.ssa.gov/OACT/TR/TR03/index.html.

7. So-called add-on accounts, which are funded with money other than payroll taxes, have no transition costs as such. However, obtaining these non–payroll tax funds presents a similar burden on the unified federal budget.

8. The offset interest rates are 3.5 percent, 2 percent, and 2.5 percent for Models 1, 2, and 3, respectively.

9. Over the infinite term, this is not necessarily true. A personal account plan with an offset interest rate equal to the interest rate on the trust fund (assumed to be 3 percent after inflation) will have no impact on Social Security's actuarial balance over the infinite term, since the present value of payroll tax contributions to personal accounts will equal the present value of forgone traditional benefits. In that case, accounts could be made larger or smaller without affecting solvency, since the offset is neutral. (In the infinite term, with an offset rate above the trust fund's interest rate, larger accounts will improve actuarial balance, and with an offset rate below the trust fund rate, larger accounts will reduce actuarial balance.) Over the

traditional 75-year scoring period, however, larger accounts would appear to reduce the balance because a larger amount of payroll tax revenue is "lost" to the program during the 75-year period but not "repaid" until after the measurement period ends. This, however, is an accounting bias that does not alter the fundamentals over perpetuity.

10. These rates might have to be manipulated somewhat to achieve a 3 percent average, given the distribution of individuals at different earnings levels.

11. Although individuals will have larger personal accounts, they will also give up more traditional benefits. At retirement, the total benefit they receive (personal account plus reduced traditional benefits) will roughly equal the total benefit paid under the commission's Model 2. The government bond portion of the larger account isn't really intended to increase benefits; it is meant merely to substitute explicit government debt on a more or less dollar-for-dollar basis for Social Security benefits paid by the government. Individual workers may receive a bit more due to the equity premium, but that's a function of risk, and therefore not guaranteed.

Personal accounts holding government debt is one aspect of the Social Security proposal from Reps. DeMint and Armey. However, bonds in the DeMint-Armey plan would generally be issued by the Social Security Administration rather than the U.S. Treasury, making them a "weaker" form of public obligation and presumably not counted as part of the explicit public debt. While debt issued by the Social Security Administration addresses important accounting issues, it would be hoped that explicit Treasury debt could be used and Social Security's accounting modified to properly measure it.

12. Younger workers would rely on the account for most of their total retirement benefit, while older workers would continue to receive partial benefits from the traditional program. Over the long term, benefits and costs would be somewhat higher under this plan than under Model 2, as the larger account size would reduce the impact of Model 2's shift to price indexing of traditional benefits (that is, account contributions and the benefits from accounts would continue to grow at the rate of wage growth rather than the rate of price growth that will govern increases in traditional benefits).

13. It is assumed that the government bond element of the account could not be traded, since it is intended as a simple substitute for the defined benefit currently provided by the traditional program. However, there are benefits both to individuals and to government finances from making the bonds tradable. Individuals would benefit from increased flexibility to manage their portfolio according to their age and taste for financial risk. Moreover, tradable bonds would be counted as part of the publicly held debt, making it more "real" in the minds of the public and the markets than nontradable debt or intragovernmental debt, thereby enhancing the transparency of government finances. (To illustrate the merits of tradable debt, consider that the Social Security trust fund's bonds are not generally referred to in public discourse as part of the national debt.)

14. The DeMint-Armey proposal uses bonds issued by the Social Security Administration rather than the Treasury so that the financing is fully internal to Social Security and thus fully reflected in its actuarial balance. While internal SSA bonds are not preferable for this purpose, since it is desirable that the bonds issued be as close as possible to other government debt, Social Security's accounting should be altered to take account of them. In any event, a 5 percent account with 2 percentage points invested in government bonds would have the same impact on the overall cash flow of the government, represented by the unified budget, as a 3 percent account holding only private assets.

15. It may be argued that allowing for increased inheritability through larger accounts weakens the traditional program's finances, since under current law the benefits of individuals who die prior to retirement can be used to meet benefit payments to those who live past retirement. In fact, the offset interest rate mechanism prevents increased inheritability from weakening system finances. On average, account contributions would be offset at a 3 percent interest rate, equal to the trust fund's bond rate, and therefore Social Security's finances are held harmless over the long term. Larger accounts and increased inheritability do reduce the current program's bias in favor of those with longer life spans, which is one of the most regressive aspects of Social Security's current financing. Individuals with shorter life expectancies, particularly African Americans and low-wage workers, would be the beneficiaries of larger accounts and increased inheritability.

16. See Charles E. Rounds Jr., "Property Rights: The Hidden Issue of Social Security Reform," Cato Institute Social Security Paper no. 19, April 19, 2000.

17. In theory there is no reason the government debt held in accounts should not be tradable; that would allow workers to alter asset allocations as their age and risk aversion dictated. However, I have here assumed that the government debt is not tradable. This gives less individual control than a fully tradable account but remains a clear increase in control, ownership and inheritability relative to benefits provided through the traditional system.

18. This is not strictly the case in this plan, since the tradeoff between Social Security benefits and government bonds deposited in the account is, on average, dollar for dollar. However, larger personal accounts do make the other steps necessary to balance the traditional program more palatable to the public.

19. This idea is traceable to economist Robert Merton. See Robert Merton, "On the Role of Social Security as a Means for Efficient Risk Sharing in an Economy Where Human Capital Is Not Tradable," in *Financial Aspects of the United States Pension System*, ed. Zvi Bodie and John B. Shoven (Chicago: University of Chicago Press, 1983).

20. System surpluses could also be used to reduce tax rates or service any debt accumulated during the transition.

21. Paul Evans and Gregorios Karras, "Are Government Activities Productive? Evidence from a Panel of U.S. States," *Review of Economics and Statistics* 76, no. 1 (February 1994): 1–11. See also Douglas Holtz-Eakin, "Public Sector Capital and the Productivity Puzzle," *Review of Economics and Statistics* 76, no. 1 (February 1994): 12–21.

22. Stephen Slivinski, "The Corporate Welfare Budget: Bigger Than Ever," Cato Institute Policy Analysis no. 415, October 10, 2001, p. 6.

23. Donald L. Barlett and James B. Steele, "Corporate Welfare," *Time*, November 9, 1998, p. 36.

24. Quoted in Edward Alden and Nancy Dunne, "Business Uneasy with New Administration's Revenue Plans," *Financial Times*, March 6, 2001, p. 4.

25. Quoted in Richard Wolfe, "Bush Set for Battle over Spending and Tax Cuts," *Financial Times*, March 1, 2001, p. 1.

26. Kenneth R. Mayer, "The Limits of Delegation: The Rise and Fall of BRAC," *Regulation* 22, no. 3 (1999): 34.

27. In testimony before the Senate Finance Committee on October 3, 2002, both Peter Orszag of the Brookings Institution and Robert Greenstein of the Center on Budget and Policy Priorities spoke favorably of corrections to the CPI.

28. For background on the CPI, see General Accounting Office, "Bureau of Labor Statistics: Making the CPI More Reflective of Current Consumer Spending," April 29, 1998. A number of background papers are available online from the Bureau of Labor Statistics at http://stats.bls.gov/cpi/cpihe00.htm.

29. The CPI-U measures price increases for all urban consumers. The more limited CPI-W, which is the basis for Social Security's annual COLAs, measures price increases in the basket of good purchased by urban wage earners and clerical workers, who make up roughly 20 percent of urban dwellers. The CPI-U generally shows a slightly higher increase in prices than the CPI-W, but for present purposes analysis will focus on the distinction between relatively fixed-basket measures such as the CPI-U and CPI-W and chain-weighted measures such as the C-CPI-U.

30. Advisory Commission to Study the Consumer Price Index, "Toward a More Accurate Measure of the Cost of Living," Final report to the Senate Finance Committee, December 4, 1996, www.ssa.gov/history/reports/boskinrpt.html.

31. General Accounting Office, "Consumer Price Index: Update of Boskin Commission's Estimate of Bias," February 1, 2000.

32. Alan Greenspan, "Bias in the Consumer Price Index," Testimony before the House Committee on the Budget, March 4, 1997.

33. Biases in the CPI are attributed to four main sources: *Upper level substitution bias:* consumers purchasing an item from one BLS category instead of a preferred higher priced item in a different category, such as renting a video instead of going to a movie; *Lower level substitution bias:* consumers shifting purchases within the same BLS category, such as purchasing lower-priced granny smith apples instead of higher-priced red delicious apples; *New product/quality change bias:* new products not including in the CPI basket or quality improvements of existing produces can alter the real price level of purchases; *New outlet bias:* consumers changing where they make purchases in order to get a better price, such as purchasing goods at warehouse outlets or on the Internet instead of from large department stores. Together, these factors can cause the measured CPI to overstate true increases in the cost of living.

34. Alan Greenspan, "Aging Global Population," Testimony before the Senate Special Committee on Aging, February 27, 2003. See also Greenspan, "Bias in the Consumer Price Index."

35. If the basket of goods in each year is represented by B_{year} and the price in each year is represented by P_{year}, the fixed-basket approach to calculating the CPI above is $[(B_{2002} \times P_{2003})/(B_{2002} \times P_{2002})] \times 100$. The chain-weighted approach is $[(B_{2003} \times P_{2003})/(B_{2002} \times P_{2002})] \times 100$. The base CPI (in this case for the year 2002) is represented by the number 100.

36. This can be accomplished in a variety of ways, such as delaying implementation of the COLA, applying the change only to individuals below a given age, or applying the change only to individuals with incomes above a given level (if the desire is to protect low-wage individuals from changes).

37. Under Kolbe-Stenholm, transfers of general tax revenue would average 0.53 percent of payroll over the 75-year scoring period, beginning at 0.13 percent of payroll and gradually rising to 0.80 percent of payroll after 60 years. For the purpose of simplicity I have assumed a flat transfer throughout the period.

38. Hans Riemer, "Bush Social Security Commission Proposes Benefit Cuts to Pay for Privatization," Institute for America's Future, December 6, 2001, p. 2.

39. David M. Walker, "Social Security: Analysis of Issues and Selected Reform Proposals," Testimony before the Senate Special Committee on Aging, January 15, 2003.

40. "The Great Social Security Debate," Kansas City, Mo., April 7, 1998, www.concordcoalition.org.

41. Advisory Council on Social Security, *Report of the 1994–1996 Advisory Council on Social Security*, vol. 1, *Findings and Recommendations* (Washington: Government Printing Office, 1997), p. 17.

42. Ibid, p. 18.