Social Security: Budgetary Tradeoffs and Transition Costs

by

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The views in this statement are those of the author and do not necessarily reflect the views of Watson Wyatt Worldwide or any of its other associates.
Introduction

Mr. Chairman and members of the Committee, thank you for the invitation to testify before you today on budgetary tradeoffs and transition costs related to Social Security in our aging society. I believe that President Bush is to be congratulated for forming this Commission to take up this extremely important matter now. Despite the other extremely important matters now unfolding for our nation, it is time that the American public began to understand the scope of the Social Security financing issues that we face as we look at the pending retirement of the baby boom generation and beyond.

Some analysts who are involved in the current discussion regarding Social Security would have us believe that the sort of options you are considering will present tremendous new costs to our society that will jeopardize the existence of our national retirement system. They would have us believe they have a way of reforming the program that would eliminate transition costs that they attribute to systems of the sort you are considering.

I have spent much of the last thirty years studying the implications of the baby boom generation on our Social Security system. I have written two books on Social Security. I have testified many times before a variety of congressional committees on the subject and submitted to questions from them. I have discussed and debated various points about the system with many, if not most, of the prominent analysts who have been involved in the evolution of Social Security policy over the last two decades. I served as a member of the 1994-1996 Advisory Council on Social Security. I am currently a member of the Social Security Advisory Board that recently
issued a report on Social Security financing. My conclusion from all this study, discussion, and debate is that there is no way the current Social Security system or any alternative structure can survive the baby boomers' retirement period without our society incurring substantial transition costs. The transition costs associated with moving from our current system to an alternative one arise to a very significant degree, because the current system is facing a substantial financing deficit. That underfunding will require additional financing whether we stay with a current law structure for the system or some alternative.

The Nature of the Social Security Financing Problem under Current Law

The present value of the underfunding of the Old-Age and Survivors and Disability Insurance (OASDI) benefits defined in current law is approximately $3.2 trillion as estimated by the Social Security actuaries. This is the difference in the present value of obligations under current law and the current trust fund balance plus the present value of future tax collections for the system. This number says that the OASDI trust funds today are $3.2 trillion short of what they would have to be for us to maintain the benefits now defined in law with workers and employers continuing to pay taxes in the future in accordance with current law.

If we put off addressing the imbalance in the current system until 2016 or 2037 or any other future date, the $3.2 trillion shortfall in current law will be much larger. The reason is that the discounting period that is used in calculating the present value of future shortfalls will be much shorter. In the discussions about solutions to our Social Security problem we often hear about the magic of compound interest as a potential solution to our financing dilemma. A dollar
invested over a significant period of a worker's career has the potential to pay several dollars of retirement benefits. Rarely in this discussion do we hear that compound interest calculations play the opposite role in defining the magnitude of the problem we face. An unfunded dollar's worth of benefits that has been earned at age 40, or even age 50, becomes several dollars worth of promised benefits at age 65. If there are no funds backing those promises at age 40 or 50, compound interest works against the system not for it.

Some people have taken to heart implications of compound interest on our Social Security system and advocated that a portion of the OASDI trust funds be invested in the stock market in order to garner higher returns. There is considerable debate over how such investment might be accomplished. Some analysts and policymakers advocate that the trust funds invest directly in the stock market like any other pension plan. Others advocate that such investment be accomplished through individual ownership of Social Security accounts and self-directed investment. At the heart of which option people prefer is a debate about whether it is feasible and desirable for a federal government entity to own a significant share of private capital. Some analysts question its desirability.¹ Others believe it is appropriate.²


Ultimately whether Social Security trust funds will buy and manage an equity portfolio is a political debate that will have to be resolved by the U.S. Congress. It is not a new debate. The original Social Security Act included funding provisions that were strongly advocated by President Franklin D. Roosevelt. Roosevelt insisted that his Social Security program be financed through employer and employee contributions and that it not include any general revenue financing. In addition, he insisted that its benefits were to be fully funded by the end of an initial transition period spread over 30 to 35 years. There were concerns in the early days of Social Security's history about the potential size of the trust funds and how they would be invested. These concerns led Senator Arthur Vandenberg and others to support pay-as-you-go financing of the program over the funded approach that Roosevelt strongly advocated until his death. By the mid 1950s, the goal of funding the system was abandoned and the question of whether the trust funds could invest in anything other than government bonds was never resolved. But one of the major reasons that President Roosevelt and his associates did not prevail in their efforts to fund our Social Security system was because they could not convince Congress that a trust fund that would pay off all federal debt and invest in the economy was desirable.

Assuming for the sake of discussion that some portion of the trust funds could be invested in equity markets and that the portfolio could be centrally managed, it would change the timing of a variety of events related to Social Security financing as reflected in Figure 1. Such a policy would help address Social Security's current funding shortfall but it would not resolve the current law deficit. The trust fund accumulation with "bonds only" in Figure 1 is derived directly from
the projections in the latest *Trustees Report*. The "with stock" accumulation is based on the assumption that surplus assets accruing from tax revenues starting in calendar year 2002 would be invested in an equity index portfolio until 40 percent of the total trust fund balance was invested there. In deriving the estimate, I assumed that equities would generate returns at a rate of 4 percent above the bond return rates assumed by the actuaries. At the end of each subsequent year after the year-end balance in equities exceeded 40 percent of the combined trust funds, I assumed there would be a rebalancing of the funds so the equity fund would hold 40 percent of the total. This is about as aggressive a proposal of investing trust fund assets in equities as I am aware of and corresponds with the recommendation made by Robert Ball during the deliberations of the 1994-1996 Advisory Council on Social Security.

The net effect of this alternative investment strategy on the trust funds would be to extend the date at which the trust fund would actually start selling assets from 2025 to 2034. It would extend the date of depletion of the trust funds from 2037 to 2048. This projection does not take into account the volatility in stock returns and, in that regard, does not show the range of potential outcomes that might be achieved. In fact, some economists still believe the market is overpriced and suggest that we could have as much as a decade with lower returns before returning to a longer historical mean return tendency. If the assumption on real return from stocks is reduced to 4.5 percent just for the first decade of the investment period and then restored to 7.0 percent instead of using the 7.0 percent for the whole period in deriving Figure 1, the date at which the trust fund would be depleted would be 2045 instead of 2048. In any event,
the projections show that even a relatively aggressive policy of investing in equities is not likely to fully resolve Social Security's long-term financing problem.

From a federal budgetary perspective, the implementation of a policy that resulted in the accumulation of equities under this scenario would result in stock purchases with a nominal value of nearly $1 trillion dollars over the coming decade. This would reduce by an equivalent amount the federal debt reduction that would be accomplished by continuing to pursue current investment policies with Social Security trust funds. After about a decade, the flow of funds from the equity accounts would be reversed, assuming that the goal of limiting total equity investment to 40 percent of total trust fund assets was enforced.

While pursuing a revised investment strategy of this sort might improve the long-term financing of the Social Security trust funds, it would have no practical effect on the overall economy's ability to pay for the benefits provided under current law. The reason is that the purchase of equities for the trust funds would be at the expense of selling additional bonds to the public or buying back fewer bonds than under the current funding approach. The trust fund would be swapping bonds for equities and someone on the other side of the transaction would be doing just the opposite. If the trust fund realized a higher return as a result of this swap, someone on the other side would realize an offsetting lower return. Another possible outcome is that there would be some equalizing of returns between stocks and bonds as stockholders insisted that the government pay them higher interest in order to get them to swap their stocks for the bonds the trust funds would otherwise own.
I believe from a general policy perspective, any solution for the Social Security funding shortfalls we adopt should help not only resolve the potential depletion of the trust fund but also enhance the economy's ability to deliver retirement security for the baby boomers. There is fairly broad agreement that some form of additional savings will be required to do that. These savings can be achieved by increasing the revenues flowing into the system, decreasing the expenditure rate or some combination of the two. To the extent that new saving is created it will lead to greater pre-funding of benefits than has persisted in the past. At the same time, new saving should lead to enhanced worker productivity and larger levels of output from our economy, thus reducing the relative burden the retirement of the baby boomers will put on it. Additional savings can help in almost any case but there is considerable concern that any new savings be used as efficiently as possible. The challenge that policymakers face, then, in devising Social Security reform options is finding options that will enhance our national savings rates and put the added savings to good use. There are different perspectives on how to meet that challenge and these have led to a number of alternative proposals on how to modify the current system.

**Social Security Reform Options and Transition Costs**

Much of the current debate about Social Security reform is being conducted around the concept of “privatization.” This term has come to have so many meanings that it is confusing the discussion about the various ways we might reform the first tier of our nation’s retirement system. Part of the Social Security reform debate is over the desirability of greater funding of the system than is provided under current law. Here there seems to be more agreement across
various parties involved in discussions about Social Security reform than often is apparent to the public. Another part of the debate is whether we should continue to have complete dependence on the defined benefit approach in current law or should move more toward a defined contribution system. Here there is significant disagreement and the rhetoric about the alternatives may be complicating our rational consideration of our alternatives and is almost certainly confusing the public about the options we face.

To help clarify the discussion about Social Security reform that is underway in this country today, consider our reform options within the context of Figure 2. It defines the policy field of choices we face by bringing together the issues of funding and plan structure. Currently Social Security is a defined benefit (DB) program that has largely been financed on a pay-as-you-go basis up until now. If it were funded purely on a pay-as-you-go basis, it would reside at the southwest corner of the figure. Since 1983, we have structured the program to deviate somewhat from pure pay-as-you-go and we are now accumulating a trust fund. Despite a trust fund of more than a trillion dollars today, the present value of future obligations are currently projected to outstrip that trust fund and present value of future revenues to the tune of $3.2 trillion over the next 75 years as discussed above.

Some policy advocates would have us return to almost pure pay-as-you-go financing. For example, Senators Daniel Moynihan and Bob Kerrey’s proposed legislation in the last congress that would adjust payroll tax rates and benefits within Social Security so it ran on a stricter pay-as-you-go basis in the future. Their proposal would achieve this by cutting payroll taxes in the
short run and then letting them rise again as the baby boomers moved into their retirement period. Most of the adjustment in the program under their proposal would be made in the form of benefit cuts.

Other policy analysts would have us maintain the current DB structure but attempt to fund it more than now. They propose partial funding because the interest on the accumulated fund would help to lower the payroll taxes needed to pay future benefits. If their proposals were adopted we would stay on the western boundary of the policy field but move north from the corner. The accumulation of funds, of course, would raise questions about what to do with the money. Higher average rates of return in the stock market relative to government bonds leads proponents of this approach to suggest that some of the proposed funding should be invested in equities. Many policy analysts oppose this approach because they do not believe the government can accumulate wealth to the extent implied, and if it did, they are concerned about governmental intrusion into private capital markets.

There is a third set of policymakers and policy analysts who would move more toward the defined contribution side of the policy field. Most of these claim that their proposals would end up with additional funding of our pension system although some of these proposals have been criticized because they would rely almost purely on higher returns to achieve this added funding rather than additional savings. The net effect of a defined contribution system that does not increase national savings but does invest in equities would be no different than that of a defined benefit system that invests in equities without creating added savings. Many of these proposals
have also been criticized because the cost of administering the plans would be higher than for staying under the defined benefit model. I believe legislative proposals put forward by Senators Judd Gregg (R-NH) and John Breaux (D-LA) and similar proposals would largely overcome the administrative efficiency concerns but that is the subject of another discussion.

**What Have Other Nations Done About This Problem**

One of the interesting things about the provision of retirement income security around the world is that many countries have changed their retirement systems significantly in recent years because they are facing the same or worse demographic challenges than we do. These countries are interesting case studies because they all started with defined benefit plans that were predominantly funded on a pay-as-you-go basis. They all changed the positioning of their retirement systems vis a vis the policy field location. In Figure 3 and the following discussion, I focus on four specific countries. They have each approached their pension reforms differently. I have chosen them because they offer a range of solutions that have been chosen. Other countries could be substituted for each chosen here. In my choosing the countries that I have chosen, I am not advocating anything that any of them have done in reforming their systems. In fact, there are some things that some of these countries have done that I would recommend against us doing. I simply offer them so I can more easily discuss some of the design and transition issues we face in addressing our own Social Security reform options.

The reformed Canadian pension system is shown in the field as being a defined benefit plan but having some funding. Until 1998, the system was run largely on a pay-as-you-go basis.
The accumulated fund behind the plan was equivalent to two years of benefit payments, quite similar to the U.S. Social Security system holdings at this time. The Canadian system is a two-tier program with universal eligibility for the bottom tier but with a “claw-back” provision—i.e., a means test—for retirees with substantial income. The second tier of the system is known as the Canadian Pension Plan (CPP). At the end of 1997, the contribution rate for the plan was 6.4 percent of covered pay. Legislation adopted in 1998 will increase the payroll tax to 9.9 percent of covered pay by 2003 where it was projected to be level thereafter.

The significant increase in the payroll tax under this legislation, coupled with some moderate benefit adjustments, was based on the estimate that the system’s costs would reach 14.2 percent of covered pay by 2030. The accelerated increase in the tax and benefit modifications were an attempt to pre-fund some of the obligations that will accrue between now and 2030. The goal is to take advantage of the returns on accumulating assets to help defray some of the costs of the system as Canada’s baby boom generation makes its claim on the system. In the coming years, the trust fund is projected to grow to roughly the equivalent of five years of benefits. The intent is to invest the funds in a diversified portfolio of securities in the hopes of getting higher returns than on the government bonds in which the fund had been invested in historically.

Sweden is shown in the figure as having a system with some funding but having retirement benefits provided purely from a defined contribution environment. This is based on reforms adopted during 1998 and being phased in on a gradual basis. Their old plan was a pay-as-you-go financed defined benefit plan. People born in 1937 and earlier will receive their
pension under the old system. Those born between 1938 and 1953 will receive part of their retirement benefit based on the old system and part on the new based on a gradual phasing out of the old benefit and gradual phasing in of the new. Those born in 1954 and later will receive benefits purely under the new system. The placement of Sweden on the policy field is a representation of where the retirement system will be once the new provisions are fully phased into operation.

Sweden’s revised retirement system requires contributions of 18.5 percent of pay on earnings up to $37,000 per year. Of that, 16 percentage points of the contribution are used to finance current benefit payments to retirees. The extra 2.5 percentage points are contributed to a “premium reserve account,” a funded account, that will earn interest during a worker’s career. The worker can choose an investment manager for his or her account. Since roughly 85 percent of the total contributions are still used to finance pay-as-you-go benefits, I have only plotted Sweden’s position about 15 percent of the way up the funded dimension of the policy field. Workers’ contributions under the pay-as-you-go element of the new system are credited to individual accounts based on each individual worker’s earnings level and taxes paid. The account is also credited with an interest accrual each year that is equal to the rate of growth of incomes in the economy. Since the contribution is actually spent to finance current benefits, these accounts are phantom accounts in that they do not hold accumulating real wealth. Accounts of this sort are often called “notional” accounts. At retirement, a worker’s individual account will be converted to an indexed annuity. The index is the average income growth in the
economy. The size of the initial annuity will be based on the life expectancy of the birth cohort to which the worker belongs and his or her age at retirement.

People can retire as early as age 61 under the new system and will receive a benefit that is 72 percent of the benefit they would receive by waiting to age 65 to start taking their pension. If they wait until age 70, their benefit would be 157 percent of the age 65 benefit. The incentives to work extra years are clearly stated and are there for workers to take or leave. By moving to a defined contribution system of this sort, the effects of increasing life expectancy are automatically recognized by the system. The issues to setting normal retirement ages through political deliberation are also largely eliminated.

I have depicted the United Kingdom as being somewhat in the middle of the policy field on social security provision and financing. The United Kingdom has a two-tier public retirement system with voluntary employer-sponsored pensions as the third tier. The bottom tier of the U.K. system is the Basic State Pension, a floor old-age benefit that everyone qualifies to receive. The benefit at the end of 1997 was around $100 per week, about 15 percent of the average wage for full-time male workers. The second tier of the U.K. system is called the “Supplemental Earnings-Related Pension Scheme” or SERPS for short. Since Margaret Thatcher was prime minister of the United Kingdom, the government has allowed workers to opt out of this second tier of their system, and today about 83 percent do so. These workers are required to use employer-based pensions or personal pensions if they opt out of the state provided system. In
that regard, the SERPS program establishes the minimum benefits or contributions that must be provided for by workers who opt out of the state program.

The reason that I put the United Kingdom roughly in the middle of the policy field is because the benefits for workers who contract out of the state plan are funded, so some of the overall system benefits are funded and some are not. Some of the benefits are provided through employer-sponsored defined benefit plans but the indexation provisions for benefits for workers who leave jobs prior to the end of their career make them essentially the equivalent of defined contribution arrangements. In addition, the trend in the United Kingdom away from defined benefit and toward defined contribution plans at the employer level are following those in the United States. It is possible to quibble that we have the United Kingdom placed a little too low or too high on the funding scale, or too much toward the DB or DC ends of that dimension. The point is that they are well out in the middle of the policy field in their provision of retirement security to workers.

The approach to Social Security reform that has received by far the most attention by the press and policymakers around the world in recent years is that of Chile. Chile’s 1981 reform of its pay-as-you-go retirement system was revolutionary at the time. The government basically transformed its pay-as-you-go defined benefit system into private individual retirement accounts that are mandatory, fully funded, fully vested, and completely portable. Because of its structure and nature, it is placed toward the upper right hand corner of the policy field in Figure 2. Workers must contribute 10 percent of earnings to their retirement accounts. Currently they can
choose from a relatively narrow number of funds offered by highly regulated, specialized fund management companies. Workers are also required to purchase term life insurance and disability insurance, offered by the same pension managers. The combined contributions covering retirement, life and disability insurance, and administrative expenses are about 13 percent of payroll, roughly comparable to contributions in the U.S. system for retirement, survivors and disability benefits. Upon retirement, Chileans can choose between a phased withdrawal of their account balances or an inflation-indexed annuity sold by insurance companies. I did not put the Chilean system in the extreme northeast corner of Figure 2 because they still have certain guarantees that underlie workers defined contribution accounts, thus retaining an element of pay-as-you-go financing and defined benefit structure.

**Transition Costs Associated with Social Security Reform Options**

One of the issues that has generated considerable controversy in the consideration of Social Security reform for the United States is the issue of the transition costs associated with such reform. At times it is possible to get the impression that any change from doing exactly what we do today has tremendous costs associated with it but staying with it does not. That is not the case since the current benefit structure is underfunded in present value terms to the tune of $3.2 trillion over the next 75 years. In moving to current law from something else, it is only possible to estimate the transition costs of doing so, how to pay them, and the incidence of those costs within the context of specific proposals. There are a number of proposals that have been put forward for reforming our Social Security system that allow us to assess their transition cost.
implications. Before addressing them, a word on what other countries have done will help to provide context for our situation. Most of the transition financing approaches that have been used in reforming Social Security systems elsewhere in the world have been considered in one or the other of the reform options that has been discussed here in the United States.

In Canada, most of the transition of moving to their increased funding of their national defined benefit plan is being borne through increases in payroll taxes. Most of the burden will fall on current and future workers. Sweden has adopted a combination of benefit adjustments and increased contributions. On the benefit side, they are not only moving toward a system where benefits depend on each worker's lifetime contributions and age at retirement, they are implementing a special adjustment factor that will keep expected benefits in line with expected contributions over time. If the former exceeds the latter, retirees will simply have their benefits reduced by the ratio of the two. The adjustments are going to be imposed on future retirees on a phased basis with the full effects being implemented for workers born from 1954 onward. In part, the added contribution for the funded individual accounts is to make up for some of the benefit reductions future retirees will incur. Part of the reduction will be covered by the contribution themselves and part by the earnings on these contributions over workers' careers. In other words, they are trying to cover the transition costs on the benefit side with added contributions that workers will make into individual accounts. The United Kingdom is basically phasing out the support provided by its basic pension on a gradual basis by price indexing the initial benefit over time rather than wage indexing it. This reduces the wage replacement
capacity of the benefit over time. The cost of the transition will be largely borne by future retirees. To the extent that they will be relying more on a funded pension in the future, they are reducing the redistributive nature of the current system. Other elements of their welfare system may make up for this to a greater extent than ours would. Chile has used surpluses in the general government budget to continue paying residual pensions under the old system while they allow workers to accumulate the wealth to finance their own benefits under the new one. Chile's population age structure is much younger than that of the United States and the relative cost of this approach is reduced accordingly.

In the United States we could attempt to rebalance our system along the lines proposed by Senators Moynihan and Kerrey as discussed earlier. They proposed making the system more dynamically pay-as-you-go than it is now. They have recommended that this be largely accomplished by reducing benefits over time. Alternatively, we could legislate that the payroll tax rate simply increase as the age structure of our society drives up benefit costs. If we do any of these things, the present value of benefit reductions or tax increases will have to sum to $3.2 trillion to restore actuarial balance to the system. Tax increases will be absorbed by workers and the incidence of the cost will depend on the nature of the tax increase. Increased payroll tax rates will be spread broadly. Taxation applied to higher levels of earnings than now covered would concentrate the increased taxes on higher-level earners.

Benefit reductions will be absorbed by retirees and would likely be disproportionately concentrated on future retirees. I reach this conclusion by reading prior history. When we have
amended Social Security benefits in the past we have invariably made a bigger adjustment to future retirees' benefits than to those already retired at the time the adjustments were made. I do not want to get into the debate about whether the trust fund holds real assets or not, but I will assert that when the Social Security expenditures start to exceed the tax collections there will be tremendous budgetary pressure on Congress to bring the two back into balance. Expenditures will not exceed tax revenues in OASDI until 2016 according to current projections but that is well within the normal life expectancy of most people retiring under the program this year.

Let's assume for discussion purposes that we defer making any changes to the system until 2020. In that year, expenditures will exceed tax revenues by 12 percent. I believe it is highly unlikely that we would consider having an across the board reduction in benefits of 12 percent at that time. We are not going to cut the benefits of people in their 70s and 80s by 12 percent, even on a prospective basis. But the mass of people that will be drawing benefits in 2021 and even the majority of people drawing benefits in 2030 may be retired by 2020. If we want to cut benefits enough in 2020 to make up the financing shortfall but largely exempt those already retired, we will have to reduce their benefits by much more than the average underfunding at that point in time. While the tax revenue shortfall in 2020 may only be 8 percent of expected benefits, for people retiring that year, revenues over their retirement life expectancy will fall more than 30 percent short of benefits defined in current law. If we delay dealing with this issue but ultimately decide to deal with it on the benefit side of the equation, the transition
costs that future retirees incur will be much greater than the average funding shortfalls themselves suggest.

What would investing the trust funds on a centralized basis do to reduce the transition cost burden that workers and retirees would incur? In the 1994-1996 Advisory Council on Social Security deliberations, Robert Ball proposed an option that was almost identical to the one I discussed earlier. At that time, the Social Security actuaries estimated that the proposed swap in government bonds for equities would reduce the financing deficit by 0.82 percent of payroll.\(^3\) Using this as a back of the envelope estimate of the current effect if we were to implement such a policy, it would reduce the current estimated deficit from 1.86 percent of covered payroll to 1.04. If we start with an unfunded liability of $3.2 trillion as estimated by the actuaries, the alternative investment strategy would cover about $1.4 of it and would leave a residual $1.8 trillion to be addressed through other tax or benefit mechanisms. If we pursue this policy, however, without creating new savings, the $1.4 trillion that the trust fund gains from the equity investment would be a cost imposed on other investors who would get reduced returns on the new bonds they would be holding. Unless policymakers put on the table how they would cover the remaining $1.8 trillion in unfunded liability over and above the returns on equity investment, the investment swap would actually return much less than the $1.4 billion estimated here. The reason is that Ball's proposal included a variety of other elements that would keep the trust funds from being

depleted during the 75-year projection and thus would result in equity investment for the whole valuation period. If we don't do anything else, the system still would run out of money by 2050 and there would be no equity returns beyond that.

What about using general revenues to cover the financing shortfall? This strategy would not change the cost of transition, it would merely distribute it differently than by using more traditional methods that have been used to adjust Social Security in the past. It would also raise some fundamental questions about the program that date back to its inception. Franklin Roosevelt was adamant that his Social Security program not be financed with general revenues. He was convinced that doing so would change the nature of the program to that of means tested welfare--what he characterized as the "dole." The issue of general revenue financing has been raised repeatedly throughout the history of Social Security and has consistently been resisted for two reasons. The first is that payroll tax financing puts a good governor on the program limiting the appetite of participants and of policymakers for benefits largely paid to middle class members of our society. The second is that if these benefits are thrown into the cauldron of annual budget negotiations on our national priorities, they will ultimately become much less secure than they have been under the current contributory structure.

Why will increases in personal savings help to solve this problem more effectively than any of the other options discussed thus far? There are two reasons, one microeconomic and the other macroeconomic. If a worker regularly contributes to a funded retirement account starting at an early age, say 21 years of age, and continues to contribute to that until reaching retirement, say
at age 65, under reasonable assumptions, 60 to 75 percent of the accumulated funds at retirement will be from interest earnings. In an economy where there is little or no growth in labor supply and where the return on assets regularly exceeds general wage growth, a savings based system will generate larger benefits, on average, than a wage-based pay-as-you-go retirement system. The savings that workers do in such a system can be used to grow the capital base of the economy over time and to help improve the productivity of workers. Higher levels of productivity reduce the relative burden of providing for a dependent population. Both the micro and macro effects of funding a share of our Social Security system have the potential to reduce the costs of financing that system.

Doesn't expecting that workers do additional saving add to transition costs rather than reducing them? If we use the current model of financing Social Security benefits primarily on a pay-as-you-go basis, we have to come up with $3.2 trillion in present value terms to get the program back into balance. In the current system almost all of that amount would come out of either added taxes on workers' wages or reduced benefits for retirees. If we can begin to save some added amount, then the added savings will generate interest returns that will also help to pay off part of the $3.2 trillion. By saving and earning returns on those savings, we can reduce the direct burden on workers or retirees. The more savings we can generate, the more interest returns can help to work us out of the current funding deficit.

Why not do the added saving and pension funding through the centralized defined benefit plan with the trust fund investing some of the new funding in the equity markets? I personally
believe that such an investment policy will simply create one more area of political tension in our country that is ill advised. I sat across the 1994-1996 Advisory Council on Social Security table and heard one of the members representing the organized labor community say that investment of these trust funds in equities would be okay as long as they were invested in companies that build American and buy union. Ultimately the senior management of the AFL-CIO came out against such investing. I believe here are also conflict of interest issues that would invariably arise if this policy were pursued. If investing in equities by the trust fund is to be a serious option, then proponents for it in the respective houses of Congress should call for a discussion and vote on the "sense of the Congress" on the matter. If there is no way this is going to be seriously considered then we have to find alternative ways of resolving the Social Security financing issues.

Moving from a pay-as-you financed retirement system to one that is funded will be somewhat akin to changing from renting your home to buying it. During the initial period, at least, there may be some added annual costs with buying the home, but in the long term the owner ends up better off than in renting. As in buying a home, there may be a period where some form of mortgage will be required to facilitate the transaction. But in the long term, the goal of any reform should be that such a mortgage be fully paid off. When that is accomplished, the ongoing cost of a funded system should be considerably lower than the current one.

President George W. Bush and Social Security Reform

During his presidential campaign, George W. Bush repeatedly indicated that if elected he would form a commission to put together a Social Security reform proposal subject to a set of
principles that he stipulated. These included that no current beneficiaries or people close to eligibility status have their benefits cut, that the disability program be left as is, that there be no new taxes, that the system include some form of individual accounts, and that it be voluntary. His statements gave the impression that he favored individual accounts that would receive at least 2 percent of covered payroll. He has now appointed a commission, as he said repeatedly that he would during his campaign, and the members have now set upon their task with a great deal of public and political scrutiny.

Without the Bush Commission specifying any inkling of a plan there already has been a great deal of criticism of this commission and its members. For example, one widely cited analysis of the commission's activities to date concludes that: “diverting revenue from Social Security into individual accounts would exacerbate Social Security's projected long-term deficit by reducing the revenue available to the system.” No one can possibly know what setting up an individual account program will do to the long-term deficit of Social Security without knowing the details of the plan. If the use of Social Security funds in the creation of an individual account is exactly offset by adjustments to the residual Social Security benefits, then the creation of an account will have absolutely no effect on the projected long-term deficit of the system.

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This same analysis concluded that: "Since an individual account system would favor people who live longer and would include a benefit formula that does not favor lower earners, it would be regressive on a lifetime basis." Once again, a conclusion has been drawn about a plan that the Bush Commission might devise without one iota of information on what the members will propose in terms of a plan structure that might include more redistribution than the current system. I have personally been centrally involved in the development of a Social Security reform proposal that would be as redistributive as the current system if not more so. The proposal that was originally put forward by Senators John Breaux and Judd Gregg and Representatives Jim Kolbe and Charles Stenholm (BGKS) would provide a poverty benefit to anyone who worked a full career, a more redistributive benefit pledge than in current law.

I fully understand that President Bush has set a table for his commission that increases the likelihood that their ultimate proposal, assuming they come up with one, will not be judged satisfactory by many people concerned about individual account reforms of Social Security. However, before we rush to judgement on the Bush Commission's proposals, it might be better for people who are concerned about this issue to put on the table their own criteria for judging such a proposal. Then we all have a better chance of the commission devising something that can be the basis for a political dialogue rather than a tool to incite political "cleansing."

Is the task facing the Bush Commission impossible? I do not believe so. Sometimes our perspective on our own potential is inhibited by our closeness to our situation. In my work, I

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5 Ibid., p. 21.
often interact with people from elsewhere in the world who are themselves involved in various aspects of retirement programs in their home countries. One of the amazing things is the perspective that many of such people have on the "miracle" of our 401(k) system. Indeed, national pension reform discussions in both Germany and Japan over the last couple of years have focused on emulating the environment we have created here in the United States to empower people to make provisions for their own funded retirement. Maybe we should look at our own successful retirement model as we attempt to achieve additional Social Security funding.

In the spirit of trying to move the discussion on Social Security reform in a more constructive direction, I offer a voluntary variant on a plan that I have worked on previously. Within the context of such a plan, it would be possible to explore the costs to various segments of society, the timing, and how a plan might be adjusted to deal with equity issues that invariably arise in doing something like this. In drafting this proposal I have attempted to create a reform option that would generate some additional savings in the economy but still comply with President Bush's principles that participation in the individual account program be voluntary and include no new taxes. I have also attempted to devise a Social Security reform option that would respond to some of the criticisms of individual account plans. This proposal is far from complete but might be a framework to change the nature of much of the current discussion that is now underway.
A Partial Outline of a Potentially Popular Approach to Social Security Reform

The major problem with Social Security today is that we are not contributing to it at sufficient rates to allow people in the future to retire in patterns similar to those exhibited by the current population at similar relative benefit levels. There is a strong reluctance on both sides of the political aisle to raise payroll tax rates to make up the shortfall. There is similar reluctance to reduce benefits, including such reductions through further increases in the normal retirement age. No matter how magical compound interest is, by itself, it is not sufficiently powerful to get us out of our current situation. We need a larger share of wages going into the system than today.

Social Security reform is not likely to help resolve the long-term retirement burden in this society if we do not figure out how to increase our national saving as part of the process. I argued earlier that having the centralized trust fund invest in equities will not make our society better off if we simply swap its bond holdings for equities. Exactly the same logic applies to individual accounts. Indeed, most individual account approaches could use up some of the equity returns in higher administrative costs than through central investing. So one criterion that someone concerned about the plan the Bush Commission might stipulate is that the plan should create added saving. Another might be that the revised system retain redistributional characteristics similar to those in the current system. Such a condition might even stipulate that the new system provide some characteristics to address the commission's concerns about short-lived groups in our society through the provision of life-certain annuities or something similar.
John Shoven at Stanford University and I have advocated a Social Security reform option that is an evolutionary derivative of a plan that Carolyn Weaver and I developed when we were on the 1994-1996 Advisory Council on Social Security. Our proposal results in a much larger individual account component than would result under most reform options.6 We propose that workers and their employers be required to put a combined 2.5 percent of covered pay into a Personal Security Account (PSA) and that their contributions would be matched dollar for dollar from Social Security. We have proposed that the remaining Social Security system be gradually transitioned to pay a flat benefit, i.e., equivalent benefits to everyone with at least 35 years of covered earnings at retirement. The flat benefit from the remaining defined benefit system would be a floor of protection provided to all workers in society. The variable benefit that would be paid out of the PSA would reward workers based on their lifetime earnings.

If we reform Social Security along lines that begin to give people some true ownership of part of their contributions in the form of individual accounts, the residual Social Security system has to be modified. The residual system could take on a variety of forms and it makes little difference whether it takes the form that John Shoven and I have proposed, the form that Carolyn Weaver and I devised earlier, the form that Senators Breaux and Gregg and Representatives Kolbe and Stenholm have put forward, or some alternative pattern. As a practical matter, I

believe the current Social Security provides insurance for four hazards that workers face. It provides insurance for workers:

1. Who die and leave juvenile dependents;
2. Who become disabled and can no longer earn a living;
3. Who experience bad labor market outcomes; and
4. Who suffer from the myopia that workers have about making adequate protection for their own retirement needs.

In addition to these sorts of hazards that workers face, Social Security provides longevity insurance and inflation insurance during retirement.

We can consider the survivor and disability insurance programs to be term-insurance programs that should not provide an overly burdensome obligation on society to operate on a pay-as-you-go basis. There are certain public good features to them and there are likely relative efficiencies that might be realized by running them through government, although I believe that some consideration might be given to reforming the administration of the disability program under any circumstances. The potential reform of the administration of the disability programs is an issue that should be considered outside the realm of reform to the retirement plan or basic benefit structure of Disability Insurance or any other facet of Social Security. Insurance against bad labor market outcomes suggests the need for some continued redistribution in the new program and that is why I have advocated the maintenance of some residual redistributive retirement system.
I believe that the fourth sort of worker insurance provided by Social Security is distinctly different than the first three. For the overwhelming majority of workers, the prospect of reaching an advanced age is a near certainty and retirement patterns developed during the twentieth century suggest most people will end up with a period at the end of their lives when they no longer earn a direct wage. To the extent there is a public interest that elderly people maintain some minimum standard of living, it is reasonable to force people to "save" some portion of their earnings to provide for their needs when they no longer work. If we do not require that workers save, they may fail to do so on their own and become wards of the state. Given the relative certainty that most workers will get old and most will quit working before death, I believe this form of insurance should be funded given future economic and demographic prospects in our society. The extent to which we want to require indexed annuitization of accumulations in the "saving" component of the retirement system depends on one's perspectives about the role of government, the public interest in elderly folk's consumption patterns, and the like.

I believe that there are reasons why a mandatory system of this sort is preferred and I also believe that the system would be more robust if we required added contributions at least for some period of time. However, I understand there may be reasons that we lack the political will to mandate such added contributions at this time. That said, it seems to me the proposal that John Shoven and I have retooled from the one that Carolyn Weaver and I originally crafted has significant potential to generate added retirement contributions even if implemented on a voluntary basis that could substantially ameliorate the Social Security financing problem. The
difference between what we originally proposed and a voluntary system would simply be that workers would decide whether or not they wanted to participate rather than being forced into the new system with its added contribution obligations.

Assume for the moment that the Personal Security Account system that John Shoven and I have proposed (PSA 2000) called for contributions on a voluntary basis. Basically, it would allow workers to make a voluntary contribution of up to 2.5 percent of their pay to their PSA. For each dollar that the worker contributed to the account, Social Security would match it dollar for dollar. This would essentially replicate the way many employers sponsor and structure their 401(k) plans.

We know how people behave under 401(k) plans and might expect that they would behave somewhat similarly under this version of a PSA plan. For example, Table 1 shows the participation rates in a sample of 401(k) plans in 1995. We excluded workers who were earning less than $5,000 per year and who had not been with their employer for at least a year when we derived the table. In addition, we excluded workers who were not yet 20 years of age. We excluded low-wage workers because most workers with very low earnings in a firm sponsoring a 401(k) will only be temporary or low-level part-time workers. These are not the targets of most 401(k) plans but would be included in a national PSA-type plan. We excluded workers with less than one year of service because many plans do not cover workers until they have been employed for a year. This happens primarily because most employers experience relatively high turnover during workers’ first year of employment and because covering such workers add considerably to
administrative expenses. Such workers presumably would not be excluded from a national PSA plan. We excluded workers not yet 20 years of age in our 401(k) analysis because most of them have not yet begun their career nor would they be expected to contribute to a voluntary retirement saving plan until they do.

The table shows relatively high participation in these 401(k) plans across the age and earnings dimensions presented. It is clear, though, that older workers participate at higher rates than younger ones and that lower-wage workers participate at lower rates than their higher-wage counterparts. Overall, however, nearly 80 percent of all workers included here participated in their plans on a totally voluntary basis.

The results in Table 1 may be perceived as not representing the potential of 401(k) plans because of the restrictions we put on the workers considered or because of the restricted number of plans that we considered. Table 2 considers the participation in 401(k) plans during 1993 by a representative sample of the U.S. population based on the Current Population Survey done by the Census Bureau for the Department of Labor. The table considers the participation rates in 401(k) plans by workers who were offered such plans. It shows the participation rates by earnings decile grouping, where a decile is one tenth of the total population group, where the definition of each group is based on the workers’ earnings levels. In this case, workers’ participation rates are somewhat lower than in Table 1, but they are still quite impressive. Part of the reason that they might be lower is that some workers may not have responded appropriately to the questions of whether their employers offered 401(k) plans and whether they participated in them.
There are two important reasons that many workers participate in 401(k) plans. The first is that they get the advantage of the income-tax preference accorded their 401(k) accumulation. The second is that many of them work for employers who match their own personal contributions to their retirement savings. We presume that the tax preference that accorded workers participating in 401(k), 403(b), or section 457 plans would also be accorded to participants in voluntary PSAs and, thus, would encourage workers to set up such accounts. In addition, we have the Social Security matching contribution that should further enhance participation in the system.

Our analysis of participation in plans using administrative records suggests where plan sponsors provide a 100 percent match of employee contributions, 90 to 95 percent of workers earning more than $35,000 per year participate in their 401(k) plan. Slightly more than three-fourths of those earning between $25,000 and $35,000 do so. There is some decline in the participation rates at the very highest earnings levels, but this is typically due to restrictions that plan sponsors put on their most highly-compensated workers limiting their participation in 401(k) plans. These limitations are often imposed to facilitate the passage of discrimination tests required by the tax code and to assure that other workers classified as highly compensated but at somewhat lower earnings levels can participate in the plans. Those at the top end of the earnings distribution who have their participation limited in the tax qualified 401(k) plans, typically have alternative non-qualified benefits that they receive in lieu of 401(k) opportunities to save.
Where the participation rates fall off in a way that should be of concern in considering a voluntary PSA proposal is at lower earnings levels, especially among younger workers. We must also note that there is a positive correlation between age and earnings meaning that workers at younger ages disproportionately represent those with lower earnings levels. Getting workers with relatively low earnings to participate at nearly universal levels in voluntary retirement savings plans, especially very young ones, clearly takes more than just a direct match of their contributions. Many of the young workers with low wages who forego voluntary retirement savings early in their careers will undoubtedly take it up later as they age and their earnings rise. But missing out on saving early in a worker’s career can exact a particularly high price in the long term because of the effectiveness of interest compounding over time. Some workers with low wages throughout their careers may never be able to save voluntarily because of current consumption demands throughout their working lives.

Once workers are motivated to participate in 401(k) plans, their contribution rates are significant as shown in Table 3. Even workers at the lowest earnings levels and at the youngest ages tend to contribute at rates significantly above the 2.5 percent level that would be allowed in the national voluntary PSA plan. This suggests that if a 100 percent match on contributions was proffered, those who entered on their own would likely take advantage of the whole match offered to them. The researchers who developed the data in Table 2 cited above, found that in 1993, contributions by families participating in 401(k) plans averaged 8.7 percent of salary, with employee contributions accounting for roughly two-thirds of the total and employer matching
making up the rest. They also found little variation in contribution rates across the earnings spectrum.\(^7\) These independent research efforts both lead to the conclusion that a voluntary savings program that allowed workers to contribute up to 2.5 percent of pay to an individual account where Social Security matched it on a dollar-for-dollar basis would entice the overwhelming majority of workers to participate in the plan.

One way to address the natural tendency of workers at low earnings levels to forego participation in voluntary retirement savings plans is to provide them with a tax credit to help them participate in a national voluntary PSA plan of the type outlined here. For example, you might want to give a full credit for any worker whose annual covered earnings were less than or equal to full-time employment at the national minimum wage. You could phase the credit out on a sliding scale up to an annual earnings level at twice that amount. The tax credit clearly makes the plan redistributional toward lower-wage workers. This would give you virtually universal participation by workers up to $20,000 per year. If you estimate that 90 percent of the workers above that would buy in on their own, you would end up with 96 percent of all workers participating on a voluntary basis. It would all be voluntary but would potentially be bringing a great deal of new saving into the system.

One reason that I believe this model might work is because of the widespread popularity of 401(k) plans. In fact one of the major criticisms of this element of our retirement system is

\(^7\) James M. Poterba, Steven F. Venti, and David A. Wise, “Informing Retirement-Security Reform, 401(k) Plans and Future Patterns of Retirement Saving,” *The American Economic*
that it is not universally available to all workers. A proposal such as the one briefly outlined here would resolve that problem and give all workers an opportunity to participate in such a plan.

With the careful restructuring of the system, we could maintain its redistributational nature, and concentrate financial market risks in the middle and upper income ranks of the population where they can be most appropriately managed. I believe that many people will be much more inclined to put more money into this vital leg of our retirement system under this approach than under any other alternative that we can devise at this juncture.

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Figure 1: Social Security Trust Fund Balances with and without Equity Investment

![Graph showing Social Security Trust Fund Balances with and without Equity Investment](image_url)


Figure 2: Policy Field of Social Security Reform Options

- Full funding
- Pay-as-you-go

<table>
<thead>
<tr>
<th>Pure defined benefit</th>
<th>Pure defined contribution</th>
</tr>
</thead>
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Figure 3: Location of Selected Nations in Providing Retirement Income Security on the Policy Field of Social Security Options

Table 1: Participation Rates for Workers Eligible for 401(k) Plans by Age and Wage Levels in 1995

<table>
<thead>
<tr>
<th>Age group</th>
<th>10.0-14.9</th>
<th>15.0-24.9</th>
<th>25.0-34.9</th>
<th>35.0-44.9</th>
<th>45.0-59.9</th>
<th>60.0-74.9</th>
<th>75.0-99.9</th>
<th>100.00+</th>
<th>Total</th>
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<tr>
<td>20-29</td>
<td>43.5</td>
<td>61.7</td>
<td>71.4</td>
<td>79.5</td>
<td>86.3</td>
<td>91.3</td>
<td>91.0</td>
<td>91.1</td>
<td>66.2</td>
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<tr>
<td>30-39</td>
<td>59.3</td>
<td>71.5</td>
<td>76.6</td>
<td>81.2</td>
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<td>91.3</td>
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<td>89.0</td>
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<tr>
<td>40-49</td>
<td>63.7</td>
<td>76.0</td>
<td>78.8</td>
<td>81.8</td>
<td>86.1</td>
<td>90.3</td>
<td>92.0</td>
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<tr>
<td>50-59</td>
<td>73.8</td>
<td>81.5</td>
<td>82.4</td>
<td>85.0</td>
<td>87.8</td>
<td>92.9</td>
<td>95.1</td>
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<td>60-65</td>
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<td>96.6</td>
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<tr>
<td>Total</td>
<td>59.6</td>
<td>72.1</td>
<td>77.1</td>
<td>81.8</td>
<td>87.2</td>
<td>91.4</td>
<td>93.2</td>
<td>90.2</td>
<td>78.6</td>
</tr>
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Source: Sample of 87 plans collected by Watson Wyatt Worldwide.
Table 2: Participation in 401(k) Plans in 1993

<table>
<thead>
<tr>
<th>Earnings decile</th>
<th>Participation rate (percent)</th>
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<tbody>
<tr>
<td>First</td>
<td>35.7</td>
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<tr>
<td>Second</td>
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<td>Third</td>
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<tr>
<td>Fourth</td>
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<tr>
<td>Fifth</td>
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<tr>
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<tr>
<td>Tenth</td>
<td>83.7</td>
</tr>
<tr>
<td>All</td>
<td>70.8</td>
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Table 3; Employee Contribution Rates as a Percent of Wages for Workers Participating in 401(k) Plans by Age and Wage Levels in 1995

Wage levels for 401(k) participants stated in thousands of dollars (contribution rates are stated as a percent of pay)

<table>
<thead>
<tr>
<th>Age group</th>
<th>10.0-14.9</th>
<th>15.0-24.9</th>
<th>25.0-34.9</th>
<th>35.0-44.9</th>
<th>45.0-59.9</th>
<th>60.0-74.9</th>
<th>75.0-99.9</th>
<th>100.00 +</th>
<th>Total</th>
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<td>Employee contribution rates</td>
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<tr>
<td>20-29</td>
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<tr>
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<td>6.4</td>
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<td>7.2</td>
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</tr>
<tr>
<td>40-49</td>
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<td>7.3</td>
<td>6.6</td>
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<td>50-59</td>
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<td>9.1</td>
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