I have done research on Social Security for roughly twenty-five years and I am greatly encouraged by the initial draft report of the President’s Commission showing that the long-run financial solvency problems of the system are finally being taken seriously. The Commission relies on the official Social Security Trustee’s Report when it concludes that Social Security has long-run solvency problems and when it states that the best current estimate of when payroll tax receipts will fall short of benefit obligations is 2016, less than fifteen years from now. If currently legislated Social Security benefits are to be honored, then the choices for the government as a whole at that time will be to raise taxes, lower benefits, reduce spending on other government programs or borrow money from the public and pass the problem on to future generations. The special issue government bonds in the Social Security Trust Fund will not alter this set of choices. The basic solvency problem facing Social Security is that currently legislated payroll taxes are insufficient to finance the currently legislated benefits over the long run. Even more succinctly, the system is short on money. The first step in solving a problem is recognizing its existence. The Commission has taken that first step.

The second point that I want to make is that a two-part Social Security system has some fundamental advantages over one-part program. Social Security has always been a one-part program of the defined benefit type. What that means is that Social Security benefits have always been determined by a legislated formula. The formula gives monthly benefit amounts depending on the wage history of the participant, marital status, and the age at which benefits commence. This formula-based benefit structure also occurs in the private sector and such plans are referred to as defined benefit plans. What the Commission is considering is adding an individual account component to Social Security so that it would become a two-part or two-tier program. The individual account part of the program could be considered as a defined contribution plan similar to a 401(k) account. For that part of the program, benefits would not be determined by legislated formula, but rather would depend on the asset returns and the account balance at the time withdrawals are begun. This addition of individual accounts to the existing formula based benefit has a number of important advantages for a strengthened Social Security system.

First, it is important to note that traditional Social Security benefits are risky over the long run. The program can be changed and benefits can be reduced legislatively. This is not only a theoretical possibility, but also a historic reality. Benefits were cut for many participants in 1977 and again in 1983 and 1993. Some of the benefit reductions took the form of raising the age at which full benefits could be claimed, while others involved the introduction and later increase in the taxation of Social Security benefits. The largely pay-as-you-go program backing the legislated benefits is subject to a number of risks. Among the most important sources of risk are future rates of mortality improvement, future changes in fertility rates, future immigration policies, future rates of improvement in worker productivity,
and future changes in labor force participation. Since all of these factors are uncertain, the financial stability of the system is uncertain. In addition, since benefits are determined by legislated formulas, there is a certain amount of political risk – i.e. future politicians can change the system. The point is that the traditional defined benefit Social Security program is risky.

It should be immediately acknowledged that any new individual accounts program would also involve risk. The retirement benefits that can be financed by the individual accounts will depend on the rates of return earned on the underlying assets – stock and bond returns – and on the contribution history, which in turn depends on future earnings. The risk of individual accounts will be reduced somewhat by the fact that they represent the ultimate in dollar cost averaging. People will contribute money to the accounts over their entire career. Sometimes they will buy assets when they are expensive and other times they will buy them when they are cheap. Still, even with the averaging, individual accounts must be classified as assets involving risk.

A couple of points are important regarding risk and Social Security. First, the risks underlying the traditional defined benefit Social Security program are different than the risks of individual accounts. In particular, any pay-as-you-go defined benefits program is subject to important demographic risks (e.g. mortality, fertility, immigration, etc.). The first principle of portfolio diversification is that when you have two investments with different types of risk, you should invest in some of each. By doing so, you can reduce the total risk faced by the participant. The point is by including two types of assets or plan designs in the total portfolio; some of the risks of each component are reduced by the presence of the other component. This is simply an example of the old maxim, “don’t put all of your eggs in one basket.”

Second, individual participants cannot control the risks associated with the defined benefit component of Social Security. Young people today simply live with the risk and uncertainty about what benefits they will be entitled to from Social Security. The risks of the defined benefit part of Social Security are “one size fits all.” In contrast, individual accounts would allow workers to choose how much risk they can tolerate. At one extreme, they could choose to invest their entire individual account in Treasury Inflation Protected Securities (TIPS). Such a strategy would offer an extremely safe inflation-adjusted rate of return. If they were less averse to risk, they could invest in a diversified portfolio of common stocks. Such a choice would have a higher average return, but expose the account holder to additional risk. The ability to individually choose how much risk to take is another advantage of individual accounts.

A third advantage of individual accounts is that contributions to them create private property. Such contributions are not taxes, but rather deferred compensation. And finally, individual accounts have the potential to raise national saving and therefore raise future real wage rates throughout the economy.

Part of the Commission’s task is to propose a workable two-tier structure for Social Security. One concern is to keep the administrative costs low enough to retain the advantages of individual accounts. Quite a bit of work on the administrative aspects of a two-tier system has already been accomplished. Last year I edited a University of Chicago/National Bureau of Economics book with the title Administrative Aspects of Investment-Based Social Security Reform (Shoven, 2000). The book resulted from a December 1998 conference that brought together leading academics, former government officials, and financial services executives to explore ways to make individual accounts cost effective. The participants included the former head of the Internal Revenue Service, a high-level Treasury Department official, executives from Aetna, Fidelity, State Street, TIAA-CREF, Vanguard, and Watson Wyatt Worldwide and academics from Harvard, MIT, Penn, Stanford, and Yale. The bottom line is that everyone thought that a cost-effective individual accounts program could be designed. In four separate papers, different authors suggested the administrative details various plans to accomplish such a task. There were common elements in all of the proposals.
First, cost-effectiveness can be achieved by piggybacking on existing payroll deduction programs for the collection process. The incremental cost of collecting the funds can be minimal for firms already engaged in tax withholding. The second point relates to the fact that there would exist roughly 140 million accounts, many of them very small, at least initially. The presence of these many small accounts means that there are important advantages for having a strong low-cost default option. This low cost offering would be bare bones; it would have limited choices (three to five different assets) and might be valued only monthly or quarterly rather than daily. The default option might feature a life-cycle fund (where the stocks-bonds allocation is automatically adjusted according to the participant’s age). It also might offer a government bond fund, corporate bond fund and one or two index funds of common stocks.

Fred Goldberg and Michael Graetz offered a detailed proposal that featured this kind of low-cost, limited options program. Goldberg is a former Commissioner of the IRS and Graetz is a Yale Law Professor and former Assistant Secretary of Treasury. They estimate that the entire administrative cost of the “no-frills” program would be between 0.3 to 0.5 percent of assets within five years of the start of a two percent of covered payroll program of individual accounts. Since most of the costs are independent of asset size, these costs would continue down as the accounts grew, eventually reaching the 0.09 percent per year level of the federal employees’ Thrift Savings Plan. Goldberg and Graetz would allow people to shift their funds to more expensive, higher service options. Other plans were presented, with different details. The point, however, is that everyone agreed that programs that relied as much as possible on existing infrastructure and indexed investments could be administered quite efficiently.

We are not the first country to move towards individual accounts as part of Social Security. Such countries as Australia, Sweden, the UK, Chile and Mexico have all gone this way. Our financial services industry is by far the most competitive and cost efficient in the world. Within five years of introducing individual accounts, the average administrative costs in Australia were about 0.80 percent of assets per year. We should easily be able to design a system with substantially lower administrative costs.

I should mention one final thought. I started by saying that the fundamental problem of Social Security is that it is short on money. Simply creating individual accounts will not solve this problem. Almost certainly, the system needs to find more revenue. The plan I favor for that is to fund the individual accounts with new voluntary contributions matched by the government on a 1:1 basis. For instance, workers would be allowed to contribute up to 2 percent of earnings (up to the covered earnings ceiling) and the government would match the contribution. This would result in total contributions to the accounts of up to 4 percent of covered earnings. These relatively large accounts would be more cost effective than smaller ones. I believe that low-income households could and should be offered cashable tax credits to make their 2 percent contribution. With that provision, essentially all low-income households would be accumulating 4 percent accounts and most higher income households would also. We know from 401(k) plan evidence that more than 90 percent of households choose to participate when offered a 100 percent match. With these robust accounts accumulating assets, the basic formula based benefits could eventually be lowered to restore the financial solvency of the system. This eventual lowering of tier one benefits could be accomplished without lowering the total retirement benefits received by elderly Social Security recipients. Such is the magic of getting new money into the system and thereby solving the long-run cash shortfall of Social Security.

Individual accounts can be a key element in strengthening Social Security. They offer people choice and ownership in the U.S. system of capitalism. They can be designed to be cost efficient way to accumulate assets and expand national saving. On the other hand, traditional Social Security benefits should be an important part of the program going forward. They allow the system to maintain its important safety net features. A couple of years ago I gave a talk at Harvard with the title, Two Tiers Are Better Than One. The title told the whole story.
Advantages of Two-Tiers vs. A Centralized Trust Fund Investing in Stocks

By

John B. Shoven
Charles R. Schwab Professor of Economics
Wallace R. Hawley Director, Stanford Institute for Economic Policy Research
Stanford University

Supplement to my August 15th, 2001 submission to
The President’s Commission to Strengthen Social Security

Individual accounts as part of a two-tier or two-part Social Security system have several advantages over a single defined-benefit system with a central trust fund investing in private securities. I list several advantages here:

1. Asset Ownership.

A key difference between individual accounts and the central trust fund investing in private securities is that in one case the ownership of the assets is transferred to individuals and in the other the ownership remains with the government. The government can deplete its trust fund portfolio by creating new benefits or lowering payroll taxes. There have been proposals to do both in recent years. Central trust fund assets are not secure partly because ownership has never been transferred. For instance, in 1994 Congress voted to divert revenue from the Social Security trust fund to the disability insurance program rather than reform the disability program’s rules. The result was a raid on the Social Security trust fund. This can happen with or without private securities in the trust fund. This would be impossible to do if the investment assets of Social Security were held in millions of individual accounts of Social Security participants.

2. The History of Failure of Large Government Trust Funds.

The original Social Security law in 1935 planned for the accumulation of a large trust fund. There have been times when the trust fund has been either large or growing rapidly. These times have been repeatedly followed by large benefit increases, thus depleting the trust fund. Large trust funds have not been allowed to accumulate. Why should we think that the government can accumulate a large trust fund going forward, whether invested in stocks or not, when it was unable to do so in the 1950s, 60s and 70s. There always are good ideas for ways to improve benefits. Right now there are ideas to increase widows benefits and to give people earnings credits for time spent out of the market caring for children or elderly parents. The Medicare Trust Fund has the same problem. Currently, we are in the process of introducing a prescription drug program even though the Medicare Trust Fund is insolvent over the long run. History tells us that
large central trust fund accumulations will be used to increase benefits, not to prefund existing obligations.


A defined benefit pension system is one where the participant is offered a safe benefit and doesn’t bear any investment risk. With private DB plans, the investment risks are transferred to the stockholders of the employer. The risks are still there, it is just that they are not borne by the participants. The problem with a universal defined benefit program (such as Social Security) owning risky assets in its portfolio is that the risks must be borne by the participants. There is no one to transfer the risks to. The result is that the participants bear investment risk – i.e. the program is not a truly defined benefit in nature. If the trust fund invests in risky securities, then we need to recognize this, figure out who bears the risk and recognize that the program has changed its nature fundamentally.

4. Choice vs. One Size Fits All Portfolio Allocation.

The financial circumstances of households vary widely as do attitudes towards risk. An all-stock portfolio is attractive to some investors, whereas an all bond portfolio is attractive to others. One advantage of individual accounts with asset choice is that people can choose how much risk to take. The menu of assets might range from a mutual fund of inflation-indexed U.S. Treasury securities (the ultimate in safety) to a total market index fund that replicates the return on a portfolio of all listed equities in the United States. Having the central trust fund make equity investments directly is equivalent to forcing everyone to hold the same portfolio in Social Security. One-size fits all doesn’t work very well in fashion – it also doesn’t work very well in finance. It is better to let people choose portfolios that are consistent with their circumstances and tolerance for risk.

5. Political Pressures on Portfolio Allocation

If Social Security were to invest some of the central trust fund money in equities, there would be tremendous political pressure regarding the investments in the portfolio. The pressure would be to choose investments for social or political purposes rather than simply for their financial return. This is not just a theoretical concern, it is a practical reality. The California Public Employees’ Retirement System (CALPERS) is one of the biggest public pension systems in the country with 1.2 million members. The system traditionally follows a passive investment strategy holding what amount to index funds. Last October, under political pressure, the fund divested itself of all of its $525 million of tobacco holdings. Since October, CALPERS has under performed broad market indices simply because of this action. A Social Security Trust Fund would be under even greater political pressures. Would they invest in tobacco companies? in non-union companies? in companies with poor environmental records? in companies sending work abroad? It would be difficult if not impossible to shield the trust fund from these pressures in Washington, just as it was in Sacramento. While I am not an expert on foreign
experience with central trust fund investing, it is my impression that there are many examples of politics trumping financial economics in terms of asset allocation.

6. Political Pressure re Corporate Governance.

How would the government vote its shares when management proposes a merger? Is it possible that a merger might be in the shareholders’ interest but not in the economy’s interest? Of course it is. You can imagine scenarios where the government is voting in favor of a merger at the same time the antitrust division of the Justice Department is opposing the same merger. Perhaps the government would not vote its shares, but even that position has problems – it increases the power of minority shareholders and means that Social Security participants would have no influence on the management of the companies in their Trust Fund.

7. Young Workers Have Lost Confidence in Traditional Social Security

Survey after survey shows that young workers expect to receive little if anything from Social Security. They are almost certainly overly pessimistic. However, the system is likely to need additional revenues to assure its long-run solvency. The choice will be between higher taxes and higher contributions to individual accounts. It is my opinion that workers will tolerate higher contributions to their own accounts much better than higher taxes for a system in which they have little confidence.

In addition to the above advantages for individual accounts, I have a number of observations to offer the commission

a. The menu of investment choices can be kept simple. I think that the minimum number of choices should be four. These would be (1) inflation-indexed U.S. government bonds, (2) an index fund of high-grade, long-term corporate bonds, (3) a total market index fund of U.S. listed equities, and (4) a balanced (60% stocks, 40% bonds) index fund.

b. Administrative costs can be kept low (approximately $25 per account) by piggybacking on existing payroll deduction systems and prudently economizing on service options.

c. I personally favor individual accounts that are larger than 2 percent of covered payroll. I am a co-author with Syl Schieber of a plan with 5 percent accounts (2.5 percent new money and 2.5 percent matched from existing payroll taxes). I like the idea of matching and note that it is extremely popular in the private sector. One way to go might be to use current cash flow surplus of Social Security as the source for matching funds. For instance, the deal might be that new contributions would be matched on a 1 for 1 basis for the first 2 or 2.5 percent of covered payroll.

d. Finally, the Commission could do the whole country a favor in demanding better overall budget calculations from the government. When the government announces that it expects a $158 billion dollar surplus, but it really doesn’t have any surplus at all because roughly the $158 billion all belongs to Social Security, that is confusing. But, what about the other trust funds such as those for military retirees and for civilian government workers. In fact there are quite a number of trust funds. If the government had a legitimate capital budget structure,
it would show that the real forecast is for a substantial government deficit. I urge you to advocate federal government budget accounting reform so that the American people can get an accurate picture of the country’s fiscal situation.