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WOULD PRIVATE ACCOUNTS PROVIDE A HIGHER RATE OF RETURN THAN SOCIAL SECURITY?

by Jason Furman¹

Executive Summary

Administration officials and other proponents of private accounts often compare the rate of return in Social Security to the rate of return they say would be achieved through private accounts. For example, in his State of the Union address, the President stated, "Here's why the personal accounts are a better deal. Your money will grow, over time, at a greater rate than anything the current system can deliver -- and your account will provide money for retirement over and above the check you will receive from Social Security."

Similarly, in January the Vice President said: "In fact, young workers who elect personal accounts can expect to receive a far higher rate of return on their money than the current system could ever afford to pay them. For example, if a 25-year-old invested \$1,000 per year over 40 years at Social Security's 2 percent rate of return, in 40 years she would have over \$61,000. But if she invested the money in the stock market, earning even its lowest historical rate of return, she would earn more than double that amount — \$160,000. If the individual earned the average historical stock market rate of return, she would have more than \$225,000 — or nearly four times the amount to be expected from Social Security."³ Cato, the Heritage Foundation and a number of other organizations that support private accounts also routinely make such comparisons.

Yet economic research and basic economic principles show that such comparisons simply are not valid. They seriously mislead the public.

Analyses by some of the nation's leading economists have convincingly demonstrated that the comparisons which private-account proponents often make of rates of return in Social Security to past rates of return in private capital markets are apples-to-oranges comparisons and do not

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² President's remarks, February 2, 2005.

³ Vice President's remarks, January 13, 2005.

withstand scrutiny.⁴ For example, a landmark paper co-authored by economists Olivia Mitchell, a member of the President Bush's Commission to Strengthen Social Security and a supporter of private accounts, John Geanakopolos, and Stephen Zeldes found that "the popular argument that Social Security privatization would provide higher returns for all current and future workers is misleading, because it ignores transition costs and differences across programs in the allocation of aggregate and household risk." The paper states: "A popular argument suggests that if Social Security were privatized, everyone could earn higher returns. We show that this is false."⁵

A recent analysis that the investment firm Goldman Sachs sent to its subscribers explains these basic economic findings. The analysis, entitled "Seven Myths About Social Security Reform," includes as a leading myth that "Privatization is a much better 'deal' for Social Security participants." Goldman Sachs explains that "after adjusting for these two factors [transition costs and risk, which are described below], the difference in returns between personal saving accounts and the current system disappears. There is no free lunch available via privatization."

Similarly, in a new article, conservative Harvard economist Robert Barro cites the same two factors in explaining why the claim that private accounts would provide higher rates of return is misleading:

"Advocates of personal accounts cite the low rates of return in the current system, but this is misleading. Prospective returns to young people are low mostly because we gave benefits to older generations of retirees who did not contribute their share of taxes to pay for them. One way or another, the burden of this generosity has to be borne by the young. From the perspective of the trust fund, returns look low because the fund's government bonds have paid less than stocks. But the premium on stocks is compensation for risk, as gauged by financial markets. Although the ability to hold stocks is a plus, there is no free lunch of assured higher returns."⁶

This paper explains the basis of findings that economists broadly agree upon — that the type of rate-of-return comparison that some Administration officials and other private-accounts proponents are using is not valid, and that when analytically valid comparisons are made, the supposed differences in rates of return essentially disappear. There are three principal reasons why this is so.

1. Social Security is not only a retirement program but also an insurance program. About one-third of payroll taxes go to fund Social Security disability insurance and survivors insurance. Comparable insurance products would be extremely expensive to buy in the private insurance market, if one could even find such products. Social Security also provides an inflation-indexed annuity: Social Security benefits are adjusted each year for inflation and are paid until death, regardless of how long a beneficiary lives. These features of Social Security provide a valuable form of insurance against the risks of inflation and of outliving one's savings.

⁴ Goldman Sachs, "Seven Myths About Social Security Reform," Daily Financial Market Commentary, February 1, 2005.

⁵ John Geanakopolos, Olivia Mitchell, and Stephen Zeldes, 1999, "Would a Privatized Social Security System Really Pay a Higher Rate of Return," National Bureau of Economic Research Reprint No. 2266.

⁶ Robert Barro, "Why Private Accounts Are a Bad Idea," *Business Week*, April 4, 2005.

As with any type of insurance, a "rate of return" is an inappropriate standard for measuring the value that these features of Social Security provide. For example, when one buys automobile or homeowners insurance, one is not looking for a good rate of return, since one's money will be returned only if one has an accident or one's home is vandalized or damaged in a fire or other such event. Indeed, no one would decide *not* to buy homeowner's, auto, or health insurance because those products generally produce a lower rate of return than investing in the stock market would.

2. There is no "free lunch:" higher average returns in the stock market come with higher risk. The comparison that some private-accounts proponents make between the rate of return in Social Security and the rate of return in private financial markets ignores the cost of the risk associated with investing in the stock market. The nonpartisan Congressional Budget Office (CBO), the Bush Administration's own Office of Management and Budget (OMB), and a wide range of economists agree that the cost of the added risk involved in investing in stocks must be incorporated in any analysis of rates of return.

In addition, past stock market returns may not be a good predictor of average stock returns in the future. Stocks may have been undervalued in earlier decades when "price-to-earnings" ratios for corporate stocks were much lower than they are today, and part of the increase in the stock market in recent decades may have reflected an upward adjustment to a more reasonable level of valuation. If so, stocks are unlikely to rise as much in future decades as they have in the past. Furthermore, stock market performance is related to the overall performance of the economy, and most forecasters — including the Social Security Trustees and the Congressional Budget Office — project slower economic growth in future decades, in part because the aging of the population will result in a marked slowdown in the growth of the U.S. labor force.⁷ A wide range of leading financial economists surveyed by the *Wall Street Journal* in February projected average stock returns substantially lower than those assumed by the Social Security actuaries.⁸

3. Comparing the rate of return on Social Security to the rate of return in a system of private accounts is an apples-to-oranges comparison *unless* the transition costs associated with private accounts are factored into the comparison. Current payroll taxes are largely used to pay current Social Security benefits. If a portion of payroll tax revenues is diverted into private accounts, the diversion will have to be financed either by benefit reductions for current retirees, tax increases, or government borrowing that will eventually have to be repaid. Once these cuts in current benefits, tax increases, or reductions in benefits for future retirees (to repay borrowed funds) are taken into account, much of the claimed increase in rates of return under private accounts disappears. Stated another way, comparisons that ignore the substantial added sums being injected into the system under a move to private accounts "stack the deck:" they compare returns under a Social Security system with one level of financing to rates of return under a private-accounts system with *additional* financing, without taking the cost of the added financing into account.

⁷ The rate of economic growth is essentially the sum of the rate of labor-force growth and the rate of productivity growth. If labor force growth slows, as it is expected to do, economic growth must slow as well unless productivity growth accelerates.

⁸ Mark Whitehouse, "Social Security Reform Plan Leans on Bullish Market," *Wall Street Journal*, February 28, 2005.

The bottom line is that private accounts do *not* raise the rate of return. In fact, they can lower the rate of return if they result in higher administrative costs that eat up a portion of the payroll tax revenues that have been diverted to the private accounts.

This "bottom line" finding is reflected in the analyses that the Social Security actuaries issued of three Social Security plans developed by the 1994-1996 Advisory Council on Social Security. One of those plans replaced part of Social Security with private accounts. A second plan added private accounts on top. The third plan did not include private accounts. When the actuaries analyzed the rates of return under the three plans in an analytically valid manner (taking care to avoid apples-to-oranges comparisons), they found that *all three plans produced roughly the same rate of return*. (For average two-earner couples born in 1997, the rate of return under the two private account plans ranged from 2.2 percent to 2.6 percent, while the rate of return under the plan that did not include private accounts was 2.7 percent.⁹)

The Advisory Council's private-account plans were designed by some of the leading experts and private-accounts proponents in the country. The reason these plans did not produce higher returns was *not* due to any flaw in their design. It simply reflected the basic reality that there is "no free lunch" here — in Social Security reform as elsewhere in fiscal policy, you cannot get something for nothing.

The remainder of this analysis explores these issues in more detail.

Social Security Is More Than Just a Retirement Program

One reason that the rate of return is a misleading benchmark for evaluating Social Security's value is that Social Security is an insurance program. One-third of Social Security benefit payments — \$166 billion in benefits in 2004 — go for survivors insurance and disability insurance benefits. Equivalent products would be extremely expensive in the private market, if they could be purchased at all in the market.

Social Security also provides other forms of insurance that are difficult to purchase in the private market, such as benefits that last as long as one lives (providing insurance against the possibility of outliving one's assets) *and* that are fully adjusted for inflation each year. The progressive structure of Social Security also provides a form of insurance that is impossible to obtain in the private market — insurance against the possibility of a worker's lacking adequate income in retirement because the worker earned low wages through much of his or her career or experienced a number of years of unemployment.

⁹ All three of these plans included equity investment, through either the trust fund or private accounts. The Social Security actuaries did not "risk-adjust" the returns on the equity investments. As discussed below, risk adjustment is viewed by institutions such as the Congressional Budget Office and many economists as being the best way to conduct analyses of returns on systems or accounts that include equity investment. If the returns under the three Advisory Council plans had been risk adjusted, all three plans would still likely have similar rates of return, albeit lower rates of return than those that the Social Security actuaries reported.

Insurance is not something from which people seek positive "rates of return." As noted earlier, no one would decide not to buy fire, automobile, or health insurance because those products generally produce a lower rate of return than investing the funds. For most people, these types of insurance generally have a *negative* rate of return: most people pay premiums for these types of insurance and do not expect to get all of their money back. Yet these types of insurance products are greatly desired, because they can be extremely valuable in



circumstances when an individual or family meets a major misfortune and needs very large amounts of financial assistance as a consequence.

Consider Social Security disability insurance. According to the Social Security Administration, a 20-year old worker has a three in ten chance of becoming disabled at some point in his or her career. Suppose a worker becomes disabled at age 25 and is not able to work for the rest of his or her life. The worker will get Social Security benefits for the rest of his or her life potentially for 55 years. The benefit would be about \$10,000 *each year*, on a *total* payroll tax contribution of \$10,000 over the five years the individual worked before becoming disabled — an extremely high rate of return. The situation this worker encounters is like that of a family whose house burns down; such a family receives a very high return on its homeowners insurance.

"Rates of return" for Social Security thus are not really comparable to rates of return on investments, because a significant portion of workers' payroll taxes essentially are used to purchase insurance that greatly decreases the financial risks the workers otherwise would face from the vicissitudes of life. Because of these insurance aspects of Social Security, people who are hit with severe misfortunes receive extremely high rates of return. Others consequently receive lower rates of return. A worker choosing between Social Security and a financial product with the same average rate of return would generally prefer Social Security benefits because of the value of all of the insurance it provides.

The stock market itself also produces wide variation in rates of return. The variation in stock-market returns, however, is unrelated to personal need. You do not secure a higher rate of return in the stock market because you become disabled, or are at risk of dying at a young age and leaving children behind, or earned low wages and consequently will need retirement income that replaces a higher share of your wages than a wealthy retiree will. Moreover, private accounts would be a particularly *in*effective form of insurance against disability or premature death. Such an account cannot provide a worker (or his or her family) with more money than has accumulated in the account before disability or death may occur. And disability or death can strike a worker at any age, including a relatively young worker who has had little time to accumulate much in the way of assets in his or her account.

There is No Free Lunch: Higher Average Returns in the Stock Market Come With Higher Risk

A second reason that comparisons claiming private accounts produce much higher rates of returns than Social Security are not valid is that these comparisons generally overlook the fact that investing in the stock market is associated with greater risk and that risk has a cost. Nobel Prize laureate Gary Becker, a conservative economist who favors private accounts, wrote in a recent oped: "Contrary to the Bush position, however, I do not believe that the main advantage of a private-account system is that individuals can get a higher return on their old-age savings by investing in stocks. There are no freebies from such investments since the higher return on stocks is related to their greater risk and other trade-offs between stocks and different assets."¹⁰

The difference between the average return on stocks (often referred to as "equities") and the average return on risk-free Treasury bonds is known as the "equity premium." According to standard economic theory, this premium represents compensation for the additional risk that is associated with investing in stocks. In other words, since investments in stocks are riskier and can lose money, *average* returns on stocks *have to be* higher over time, or else no one would invest in them. Policy analysts subtract this risk premium when projecting the returns on a portfolio. This produces what is known as a "risk-adjusted" rate of return.

Such risk adjustment is essential; the risks associated with the stock market are real, even over long periods. Even if average returns over 40 year periods are consistently strong, there is still a substantial risk for workers retiring in a down market.¹¹ Suppose, for example, that a worker experienced a rate of return of 5 percent above inflation annually for 43 years but then experienced a negative 40 percent return in the 44th year, as can occur. This would lower the worker's annual lifetime rate of return to less than 3 percent above inflation, because the bad return in the last year would affect all annual contributions made up to that time. (If, instead, the worker had experienced the negative return in the first year, that would only affect the first account contribution and have a negligible impact on the worker's lifetime return. The appendix at the end of this paper discusses additional reasons why the data on returns over 30 or 40 years provide a misleading gauge of the risks associated with contributing to an account.)

It is impossible to access the opportunity for the higher average returns offered in the stock market without subjecting oneself to a substantially greater risk of lower returns. The President has proposed "life-cycle portfolios" that would shift workers toward a safer portfolio, with a greater bond allocation, as they approach retirement. But even this life-cycle portfolio carries risk and does not insulate workers from the risks of retiring in a down market. A paper by leading financial economist Robert Shiller of Yale University found that if future stock and bond returns are as high as the Social Security actuaries project, investors with life-cycle accounts along the lines that the President has proposed would end up losing money 32 percent of the time.¹² (Under the President's proposal, people whose private accounts produced a rate of return less than three percent above inflation would lose money, because an amount equal to the funds placed in their private accounts

¹⁰ Gary Becker, "A Political Case for Social Security Reform," Wall Street Journal, February 15, 2005.

¹¹ See Gary Burtless, "Risks and Returns of Stock Market Investments Held in Individual Retirement Accounts," Testimony to the House Budget Committee Task Force on Social Security Reform, May 11, 1999.

¹² Robert Shiller, "The Life-cycle Personal Accounts Proposal for Social Security: An Evaluation," March 2005.

plus a three percent real rate of return would be subtracted from their Social Security benefits as an "offset.")

Furthermore, as discussed in the box on page 8, there is good reason to believe that future stock returns may not be as strong as past returns, and hence not as strong as the Social Security actuaries predict these returns will be. Professor Shiller endorses this view. Using what he regards as a more realistic projection of future financial-market returns, Shiller estimates that under what he regards as the most likely course for the financial markets to take, workers would lose money 71 percent of the time under the President's life-cycle accounts.

Measurement of the cost of the additional risk involved in investing in the stock market is grounded in a basic observation: if there were no greater risk in stocks, people would invest solely in stocks and no one would buy Treasury bonds. People do not invest in this fashion, because stock investments do carry significantly greater risk than investing in bonds. The difference in the *average* rate of return over time between stocks and bonds is essentially the compensation that investors demand for bearing the increased risk of loss or poor performance that is unavoidably associated with investment in the stock market. Stated another way, the cost of stock-market risk is regarded by economists as being equal to the difference between the average return on stocks and the average return on Treasury bonds. As a result, what is known as the "risk-adjusted" rate of return on stocks is equal to the rate of return on Treasury bonds.¹³

This is the view of the Congressional Budget Office, the Office of Management and Budget, and many economists. The Congressional Budget Office discussed this matter in a report it issued several years ago, in which it examined the effect of having the U.S. Government shift some of its assets from Treasury bonds to stocks. CBO noted: "Government investment in private securities does not offer a free lunch: although it would increase the expected value of budgetary resources, it would do so at the cost of exposing the government, future taxpayers, and beneficiaries of federal programs to greater risk. *If that risk was taken into account, the returns on private securities would be no greater than the returns on government securities*" (emphasis added).¹⁴

Accordingly, CBO uses risk adjustment when it estimates the returns that private accounts included in Social Security plans would produce. CBO has explained, "…the effects of the higher expected returns in [individual accounts] investments are computed net of the cost of the additional risk. Thus, the returns are 'risk-adjusted' and set equal to the returns on Treasury bonds."¹⁵

¹³ Put another way, \$1 of stocks has the same worth as \$1 of bonds, even though the stocks have a higher average rate of return.

¹⁴ CBO, Evaluating and Accounting for Federal Investment in Corporate Stocks and Other Private Securities, 2002.

¹⁵ CBO, Long-term Analysis of Plan 2 of the President's Commission to Strengthen Social Security, 2004.

Is Past Stock Market Performance a Guide to Future Returns?

Recently, the *Wall Street Journal* surveyed ten leading financial economists and investment bank economists. Their projections of stock market returns over the next 44 years ranged from 4.0 to 6.5 percent above inflation, with a median forecast of 4.6 percent.^a Their median forecast is substantially below the 6.5 percent real rate of return assumed by the Social Security actuaries. There are several reasons that future returns could be lower than historical returns:

First, as Harvard Professor N. Gregory Mankiw, former Chairman of the President's Council of Economic Advisers, wrote in 1999, "Some economists see the large historical equity premium [i.e., the average high stock returns of the past] as an anomaly that's already been corrected. Most measures of stock market valuation are now [i.e., in 1999] at historical extremes. Perhaps this is because investors, realizing stocks were undervalued in the past, have corrected the problem. If so, stocks are unlikely to keep outperforming bonds by the same margin." Mankiw also observed that "the stock market's historical performance reflects a large amount of good luck. We live in the world's richest country, at the end of the most prosperous century ever; it should come as no surprise that the market has done so well. The future may give us a similarly lucky draw, but let's not count on it."^b

Second, economists Dean Baker, Brad DeLong, and Paul Krugman have demonstrated that stock market returns are related to economic growth and that the Social Security Trustees project a large *slowdown* in economic growth in the future.^c As Baker, DeLong and Krugman have explained, for the future stock returns that private-accounts proponents count on to materialize, future economic growth would have to be stronger than the Trustees project. If economic growth is in fact stronger, Social Security's financial strategists by Bloomberg News, two-thirds of those surveyed said that if future economic growth matches the Trustees' forecast, stock-market returns will be lower than the Social Security actuaries assume.^d

Finally, shifting money into the stock market through private accounts might drive up stock prices somewhat (since more money would be competing to buy the same volume of stocks). If so, that would drive down future returns on stocks, since workers would have bought into the stock market at an elevated level. According to the a leading textbook by Harvey Rosen, Chairman of President Bush's Council of Economic Advisers, establishing private accounts would drive up bond yields "or the yield on stocks must fall, or both." ^e If this occurred, private accounts would lead to windfall gains for affluent Americans who already own stocks, which would be offset by *lower* returns for younger, generally less affluent workers who invested in stocks through their private accounts.

- ^c Dean Baker, Brad DeLong and Paul Krugman, "Asset Returns and Economic Growth," March 2005.
- ^d Alison Fitzgerald and Michael Forsythe, "Stock-Market Returns May Not Meet Bush's Social Security Hopes," *Bloomberg*, March 28, 2005.
- ^e Harvey Rosen, *Public Finance*, McGraw Hill, Boston, 2005.

Moreover, the Bush administration's Office of Management and Budget applies the same principle in projecting the rate of return on stock investments made by the Railroad Retirement Board, which is the equivalent of the Social Security system for railroad workers. In the fiscal year 2006 budget, OMB explains that "Equities and private bonds earn a higher return on average than the Treasury rate, but that return is subject to greater uncertainty. Sound budgeting principles require that estimates of future trust fund balances reflect both the average return and the cost of risk associated with the uncertainty of that return... Economic theory suggests, however, that the difference between the expected return of a risky liquid asset and the Treasury rate is equal to the

a Mark Whitehouse, "Social Security Reform Plan Leans on Bullish Market," Wall Street Journal, February 28, 2005.

^b N. Gregory Mankiw, "How to Screw Up Social Security," Fortune, 1999.

cost of the asset's additional risk as priced by the market. Following through on this insight, *the best* way to project the rate of return on the Fund's balances is to use a Treasury rate" (emphasis added).¹⁶ In other words, in projecting the returns on the stock investments made by the Railroad Retirement Board, OMB adjusts the returns for risk by assuming that the rate of return is equal to the rate paid on Treasury bonds.

A number of economists who support private accounts have written similarly about risk adjustment. For example, Olivia Mitchell, a number of President Bush's Social Security Commission and a supporter of private accounts, co-authored a paper that explained that for the typical household that holds both stocks and Treasury bonds, "the risk-adjusted rate of return on an additional dollar of stocks is identical to that on bonds."¹⁷

This is not to say that it is never appropriate to take risks or invest in stocks. Stocks should generally be part of any balanced portfolio. But shifting money from bonds to stocks does not offer a free lunch. Moreover, there are better ways to encourage stock ownership for workers who are not currently invested in the market than by reducing secure, relatively risk-free Social Security benefits.

Transition Costs and Apples-to-Oranges Comparisons

The most fundamental reason that one cannot compare the rate of return on Social Security to the rate of return in the private market is that one cannot secure private-market returns via private accounts without incurring heavy transition costs. Comparisons of the returns on Social Security to the returns in capital markets that *ignore* these transition costs are not valid. They represent apples-to-oranges comparisons.

From the date it first began paying benefits, Social Security has been a pay-as-you-go system. Current payroll taxes are largely used to pay for current beneficiaries. If some of these taxes are redirected into private accounts, some other revenue source is needed to pay current beneficiaries. This is the transition cost.

This point was forcefully made by economists John Geanakopolos, Olivia Mitchell and Stephen Zeldes. Their analysis concludes:

"If projected returns on Social Security are significantly lower than those offered in U.S. capital markets, doesn't it immediately follow that we would all be better off if we were allowed to invest Social Security contributions directly in private securities? Frequent arguments in the popular press and some studies by advocates of privatization suggest that this is the case. Yet, this conclusion is misleading for two

¹⁶ Office of Management and Budget, Analytical Perspectives, Fiscal Year 2006 Budget, February 2005, p. 421.

¹⁷ John Geanakopolos, Olivia Mitchell, and Stephen Zeldes, 1999, "Would a Privatized Social Security System Really Pay a Higher Rate of Return," National Bureau of Economic Research Reprint No. 2266.

reasons: it ignores transition costs (that is, how do we eliminate the implicit Social Security debt); and it does not account for changes in risk borne by participants."¹⁸

To illustrate their first point, consider the following. Social Security has a rate of return of about 2 percent above inflation, while Treasury bonds have a rate of return of 3 percent above inflation. So won't allowing current workers to invest their payroll taxes in Treasury bonds raise their rate of return? Isn't it a free lunch?

No, it isn't. The workers might get a 3 percent real rate of return on contributions invested in Treasury bonds. But there would be the problem of how to pay the Social Security benefits of current beneficiaries, which are funded out of current payroll taxes. This is Social Security's "legacy debt;" it is the result of the decision made in the late 1930s to establish Social Security as a pay-as-you-go system, so that the initial generations of retirees — who had not the opportunity to pre-fund their benefits with payroll taxes — could still receive Social Security. Had that decision not been made, individuals who lived through the Depression, may have fought for their country, and then retired in the 1940s, 1950s or 1960s would have been denied adequate Social Security benefits and been subjected to much higher levels of poverty.

There are two general ways to fund the transition costs if payroll tax revenues are diverted from Social Security to private accounts.

- **Cut benefits for** *current* **retirees.** If transition costs are financed by cutting benefits for current retirees, younger workers would indeed receive higher rates of return when they retired. But in that case, the younger workers would be benefiting from a redistribution from current retirees, who would see their rates of return go *down* sharply.
- **Raise additional resources to pay for current benefits**. Alternatively, benefits for current seniors could be maintained and be financed by providing *additional* resources for Social Security through general revenue transfers that are financed through government borrowing (to be repaid by imposing Social Security benefit cuts on future retirees) or through higher taxes on current workers. In this case, younger workers might initially *appear* to get a higher rate of return on their private accounts, but that would not actually be the case. Once the increased costs they would face (through benefit cuts that were imposed when they retired to pay back the borrowed funds, or through higher taxes) were taken into account, their overall return would be no higher than that under the current system.

Consider the following two cases:

 Suppose the transition costs were financed through general revenue transfers to Social Security that were paid for by higher income taxes. In this case, workers would ultimately receive income from their private accounts but would have paid more in income taxes for the

¹⁸ John Geanakopolos, Olivia Mitchell, and Stephen Zeldes, 1999, "Would a Privatized Social Security System Really Pay a Higher Rate of Return," National Bureau of Economic Research Reprint No. 2266.

accounts to be established in the first place. Factoring in their total contributions, including the new taxes, their rate of return would not increase.¹⁹

Alternatively, suppose general revenue transfers to Social Security were paid for by borrowing that was subsequently repaid by imposing Social Security benefit reductions on future retirees. In that case, the future benefit cuts in Social Security would lower its rate of return. When this lower rate of return from Social Security was averaged with the rate of return on the private accounts, the overall result would, once again, be an overall rate of return that was unchanged. (This is the way the individual accounts in the President's proposal would function.) The papers by Geanakopolos, Mitchell, and Zeldes show in detail why these results occur and rates of returns do not increase.

As these examples illustrate, and as Geanakopolos, Mitchell, and Zeldes have explained, Social Security reforms necessarily involve trade-offs between generations. We could raise the rate of return for future generations by cutting benefits — and thus returns — for *current* retirees. Or we could raise payroll taxes for current workers, protecting the rate of return for current retirees but lowering the rate of return for those who are now working. We also could borrow substantial sums to cover the transition costs, paid for by benefit reductions in future decades; this would protect current retirees and those now nearing retirement, but place burdens on younger workers and future generations. All of these choices involve trade-offs.

Private accounts cannot make these trade-offs disappear. Moreover, under a system of private accounts, some money must be siphoned off to cover the costs of administering 100-200 million separate private accounts. These administrative costs reduce benefit payouts, and thus would tend to result in slightly lower rates of return than under the current Social Security system.

Conclusion

There are many issues one should consider in evaluating Social Security proposals, including their impact on national savings, retirement security, Social Security solvency, and long-term fiscal sustainability. But so-called comparisons of the rate of return in Social Security to the rate of return in the private financial markets are *not* one of the relevant issues.

There are three key points to remember here. First, Social Security is an insurance program; it offers features that cannot be measured by a rate-of-return analysis. Second, the claimed higher returns in the private market come from ignoring the cost of increased risk; when that cost is taken into account, the supposed "free lunch" from stock-market investments disappears. Finally, to

¹⁹ The same logic applies if the private accounts are financed by reductions in government programs. Individuals would lose the benefits provided through these programs. (Alternatively, in the absence of private accounts, the same reduction in expenditures for government programs could have financed a tax reduction.) Here, too, private accounts do not increase the rate of return.

secure the supposedly higher returns of private accounts, one must incur large transition costs. Once the transition costs are taken into account, as they must be for a comparison to have validity, the higher returns in private accounts are seen to be illusory.

As honest proponents of private accounts acknowledge, such accounts do not offer a free lunch. They do not increase the solvency of Social Security. And they do not magically offer higher returns. Legitimate arguments can be made for and against private accounts (although we believe such accounts should not replace Social Security in whole or part). But misleading claims that private accounts produce higher returns is not one of the legitimate arguments.

Appendix

The Misleading Use of 40-Year Periods to Assess Stock Market Risk Associated with Private Accounts

Some have cited the fact that historically, stocks have always outperformed bonds over 40year holding periods as proof that investing in the stock market is not risky. As discussed in the box on page 8, however, future returns may not match historical returns. More important, even with historical data, the comparison to 40-year periods in the past is misleading; the appropriate method to assess what past financial market performance might mean for private accounts in the future is to model the effects of what contributions to accounts made over the course of a career would have returned, based on historical market performance. This is what the Shiller study does.

In the absence of such a model, financial market experience over shorter periods, such as 15 or 20 years, provides a more accurate indication of what the risk of low returns would be under private accounts. In the 134-year period from 1871 to 2004, there have been eighteen 15-year periods in which the cumulative return on stocks was lower than the cumulative return on relatively safe bonds. In six of these 15-year periods (the periods ending in 1920, 1921, 1979, 1980, 1981, and 1982), the inflation-adjusted rate of return on stocks was negative.²⁰

A 30- or 40-year period *is* appropriate for a case in which an individual invests a sum of money in the stock market in the first year and leaves this money in the market to accumulate over 30 or 40 years *without* making any additional contributions in subsequent years. Under the proposed private accounts, however, individuals would contribute to the accounts every year. If a worker contributed to an account every year for 40 years, some of the funds contributed would be invested for 40 years before the individual reached retirement. But other contributions would be invested for as little as one year. A worker's *average* contribution would be in the account for about 20 years.

Moreover, the rate of return that the stock market would produce in the first year would affect only the first year's contributions. The rate of return in the final years would affect nearly all 40 years of contributions and thus would matter more.

In addition, the typical worker reaches his or her maximum earnings level in his or her 50s. As a consequence, the bulk of a worker's contributions to a private account often would be made in the final 10 to 15 years prior to retirement.

Still another factor is that the relevant time period for considering the risk of adverse stockmarket performance on private accounts is shortened further because many private-account plans, including the plan the Administration has proposed, do not envision people investing their portfolios in equities for all years until their retirement. Under the President's plan, individuals who did not affirmatively select another investment option would have their accounts invested largely or entirely in bonds for the last several years before they retired. That would shorten the number of years in which the stock market could rebound to make up for earlier losses.

²⁰ All analysis of historic returns is from data compiled by Yale Professor Robert Shiller available at http://www.irrationalexuberance.com. Note, this analysis used yields on long-term Treasury bonds. Equities were also outperformed by bonds in eighteen 15-year periods when the bond return analyzed is a corporate money market rate.

Finally, not everyone with a private account saves until retirement. Many workers become disabled or die prior to retirement. In these cases, stock market returns over shorter periods are relevant.

For all of these reasons, a 15- or 20-year period is a more appropriate period to use as a shorthand for assessing the stock-market risk associated with private accounts than a 30- or 40-year period.