

A bird's eye view of the Social Security debate

Author: Alicia Haydock Munnell

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Chestnut Hill, Mass.: Center for Retirement Research at Boston College, December 2004

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A BIRD'S EYE VIEW OF THE SOCIAL SECURITY DEBATE

By Alicia H. Munnell*

Introduction

President Bush plans to use his political capital to “privatize” a portion of the Social Security program. Whether or not such a change is desirable and the extent to which it solves Social Security’s financing problems will dominate much of the policy agenda over the next few years.

This Issue in Brief is intended to highlight the key points in the debate. First, it documents the magnitude of the Social Security financing problem. An enormous problem may justify a complete restructuring, while a more modest problem may call for marginal adjustments. Second, it clarifies that the privatization debate usually encompasses two separate issues — how to close Social Security’s financing gap and how to structure benefits. Third, it addresses the slightly esoteric, but quite important, issue of how to account for the higher expected returns earned on more risky assets. The conclusion, to the extent that one emerges from this overview, is that the issues are extremely complicated and that fixing Social Security’s solvency problem requires serious decisions — rather than a silver bullet.

Social Security’s Financing Problem

Under Social Security, workers pay into the program while they are earning, and they or their families receive benefits when they retire, become disabled, or die. The system functions mostly on a pay-as-you-go basis — roughly 75 percent of current revenues go to pay current benefits.¹ Over the next 75 years, however, the benefits promised under the Social Security program exceed scheduled revenues (see Figure 1).

Without any change, future revenues combined with the assets in the trust fund will allow Social Security to pay 100 percent of benefits until 2042. But once the trust fund is exhausted, revenues will cover only about 70 percent of scheduled benefits (see Figure 2). The federal budget, of course, will be affected earlier when Treasury begins to redeem the assets in the trust funds.

*Alicia H. Munnell is the director of the Center for Retirement Research at Boston College and the Peter F. Drucker Professor in Management Sciences at Boston College’s Carroll School of Management. The author thanks Francesca Golub-Sass for excellent research assistance.

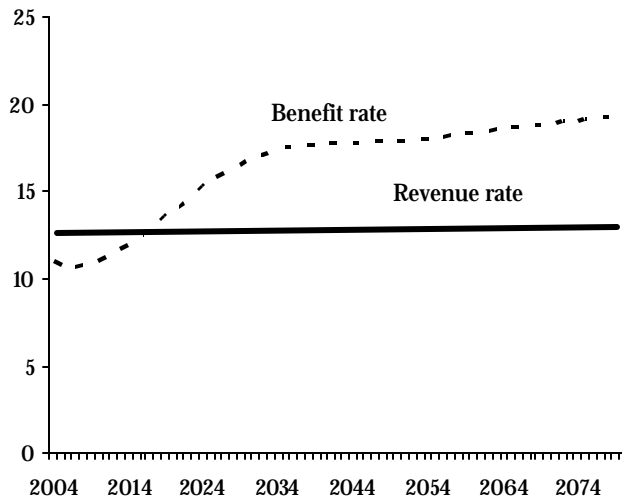
AN ISSUE IN BRIEF CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

DECEMBER 2004, NUMBER 25

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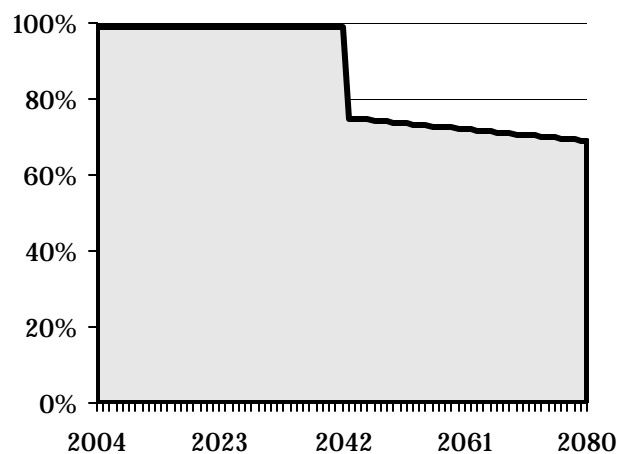
Figure 1. Projected Social Security Revenue and Benefit Rates, 2004-2080, as a percent of total payroll



Source: 2004 Social Security Trustees Report, Table VI.F2.

The Social Security Trustees publish a number of summary measures of the financing shortfall (see Table 1). The most well known is the 75-year deficit as a percent of payroll, which is equal to 1.89 percent. That figure means that if the payroll tax rate were raised immediately by roughly 2 percentage points — 1 percentage point each for the employee and the employer — Social Security would be able to pay the current package of benefits for everyone who reaches retirement age at least through 2078.

Figure 2. Percent of Promised Benefits Social Security Can Support, 2004-2080



Source: 2004 Social Security Trustees Report, Author's calculations using Table VI.F2.

Social Security's long-term financing problem is somewhat more complicated. If the only change made were to restore balance over the next 75 years, the system would still face a big deficit in the 76th year. Most policymakers believe that such an outcome is undesirable and support proposals to avoid this type of "cliff" by providing additional financing or benefit reduction.

Sometimes the press reports Social Security's shortfall in dollar terms. One very big number is \$4.0 trillion. This number is the present discounted value of the difference between benefits and revenues over the 75-year period. Any number associated with a program as significant as Social Security over a 75-year period will be very large. But the economy will also be growing over those 75 years, so the most sensible way to look at the shortfall is its size relative to the nation's ability to pay. Taking it as a percent of taxable payrolls produces the 1.89 percent discussed above. (Interestingly, comparable calculations from the Congressional Budget Office (2004a) are somewhat smaller).

Table 1. Social Security's Financing Shortfall

Period	Present Discounted Value (Trillions)	As a percent of	
		Taxable payrolls	GDP
2004-2078	\$4.0	1.89	0.70
2004-Infinity	\$10.4	3.52	1.23

Source: 2004 Social Security Trustees Report, Table IV.B7.

*Note: The \$4.0 trillion includes \$3.7 trillion, the difference between scheduled benefits and projected revenues, and \$286 billion required to bring the trust fund to 100 percent of annual cost by the end of the period.

An even larger number that sometimes appears is \$10.4 trillion.² This number represents the present discounted value of the difference between revenues and benefits from now to infinity. Infinity is a very long time, and most analysts think this number places too much weight on what may happen in the very distant and uncertain future. After all, the years between 2079 and infinity far exceed those between now and 2079. Nevertheless, dividing even this infinite shortfall by the present discounted value of taxable payrolls over the infinite horizon produces a shortfall equal to 3.5 percent of taxable payrolls.

Finally, taxable payrolls are only a portion of national income. If Social Security's shortfall is expressed as a fraction of GDP, the shortfall drops to

0.7 percent over the next 75 years and 1.2 percent over the infinite horizon. As a basis for assessing whether these numbers are big or small, consider that the comparable measures for Medicare are 1.4 percent and 2.4 percent of GDP — roughly double the Social Security shortfall. Another useful comparison is the defense budget, which fell by 3.2 percent of GDP between 1986 and 1999 and rose by 0.7 percent of GDP between 2001 and 2004.

The Role of Private Accounts

Regardless of whether one considers the Social Security financing problem to be large or small, restoring balance to a system where projected expenditures will exceed projected revenues requires changes in cash flows. The only ways to improve cash flows are to increase revenues or decrease benefits. “Private accounts,” which divert payroll taxes to private sector investments, by themselves do nothing to improve cash flows.

One way to think about establishing private accounts, without increasing the program’s revenues, is to divert into private accounts the income not currently used to finance benefits — about 25 percent of the total. (Assume for now that private accounts, like the trust funds, are invested in bonds.) That is, the accumulation of assets in private accounts would simply replace the accumulation of reserves in the Social Security trust funds. The remaining 75 percent of revenues would continue to pay current benefits. Down the road, fewer Social Security reserves would be available to pay benefits, but public benefits would be cut by an amount roughly equal to the money previously diverted into the private accounts. The net long-run impact on the system would be zero. Thus, if invested in bonds, the creation of private accounts would do nothing to close the current 75-year financing gap.³

But if the private accounts were invested in equities instead of bonds, it would appear that the higher returns would increase cash flow into the system and reduce the deficit. After all, over the last 75 years the yield on equities averaged seven percent compared to about three percent on bonds. But this simple comparison ignores the fact that investing in stocks involves much more risk than investing in bonds. Otherwise, why would people put their money into bonds when they could invest in higher-yielding equities? Yet, most investors hold a mix of stocks and bonds. The reason is that investors implicitly discount the higher equity returns for the greater risk, and most experts these days think that the returns on equities within the context of Social Security finance should also be adjusted for risk.

Two government agencies — the Congressional Budget Office and the Office of Management and Budget — currently make an adjustment for risk when assessing the impact of private sector investments on the Railroad Retirement system. That is, they subtract the equity premium from the system’s expected return and use a Treasury rate in their calculations. The Congressional Budget Office also reports risk-adjusted returns when assessing Social Security reform proposals.⁴ To date, the Social Security actuaries have not adjusted for risk. Without such an adjustment, however, the scoring of various plans for Social Security that include equities — either in private accounts or in the trust funds themselves — makes them seem more attractive than they really are from a societal perspective. Once the equity returns are risk adjusted, private accounts will most likely not improve Social Security finances even if invested in equities.

Most experts these days think that returns on equities should be adjusted for risk.

The legitimate case for private accounts as a means of improving Social Security’s long-run financing rests on identifying a political link between private accounts and the improvement of Social Security cash flows. For example, Edward Gramlich, former Chair of the 1994-96 Advisory Council on Social Security, favored private accounts for this reason. He thought the only way to get Congress to legislate a payroll tax increase was to have the increased tax revenue go into private accounts.

Similarly, private accounts might be a device to improve the political chances of cutting future benefits. If some payroll tax revenues are diverted into private accounts, then there is clear logic for making some cuts in traditional benefits in anticipation of the benefits that will be financed by private accounts. If the cuts in traditional benefits exceed what can be plausibly financed from the accounts for some future workers, then this becomes a political device for cutting benefits.

Thus, the argument for private accounts as a way to solve Social Security’s financing problem must rest on the contention that their introduction will facilitate the needed changes in cash flows. Introducing private accounts alone will not bring more money into the system or reduce outflows from the program. It may increase returns on assets but at the cost of additional risk, so it does not improve the overall financial status of the program. In short, private accounts — in economic terms — are not a solution to Social Security’s 75-year financial shortfall.

Proposals with and without Private Accounts

The debate over the future of Social Security is not simply whether to “privatize” or not. Rather, it requires the resolution of two separate issues. The first is how big future benefits should be — that is, should the existing financing gap be eliminated by raising revenues or by cutting benefits. The second is how to structure benefits — that is, should benefits be based on previous earnings (as under the current system) or on private market returns.

One useful way to clarify these choices is to examine two recent proposals. One comes out of President Bush’s 2001 Commission to Strengthen Social Security. It eliminates the financing gap by cutting benefits to fit within current revenues, and then introduces private accounts into the scaled-back program. The other approach, developed by former commissioner of Social Security Robert Ball, closes the financing gap primarily by raising revenues and retains the current benefit structure.

President’s Commission to Strengthen Social Security

The President’s Commission produced three proposals to restore balance to the Social Security program and introduce private accounts. Since Model 2 was discussed at length in the 2004 Economic Report of the President, it has received the most attention and may perhaps provide the best indication of how the Administration plans to proceed.

The plan has two components. The first slows the growth of benefits by indexing future benefits to the growth of prices rather than wages. That is, under the current system, initial benefits received by each cohort of new retirees rise at the rate of wage growth. (After retirement, benefits rise annually in line with inflation). Wage indexing ensures that benefits relative to pre-retirement earnings — replacement rates — for each cohort remain constant over time. For example, the worker retiring at age 65 with a history of average earnings received benefits equal to about 40 percent of prior earnings in 2000, just as his counterpart did in 1990. In contrast, price indexing would keep the initial benefit for each cohort up to date only with inflation. With rising wages and inflation-adjusted benefits, replacement rates would decline constantly over time. This decline in replacement rates more than eliminates the entire 75-year deficit.

The second component of Model 2 would allow typical workers to put about 3 percent of their payroll tax in a private account and receive a smaller

benefit from the Social Security system when they retire.⁵ The private accounts are not needed to eliminate the deficit; price indexing benefits more than does the job.

The extent to which the Commission’s plan reduces benefits depends on two factors. The first is whether the worker opts for the private account. Private accounts are voluntary in this plan. Outcomes for those who do not opt for private accounts are shown in the column “Traditional Benefits” in Table 2. For those who do opt for private accounts, the benefit reduction hinges on the treatment of market returns. If the higher market returns are adjusted for risk, the pattern looks very similar to the reductions in traditional benefits. If returns are not adjusted, the reductions appear substantially smaller.

Table 2. Impact of President’s Commission Model 2 on Scheduled Benefits for Average Earning Two-earner Couple

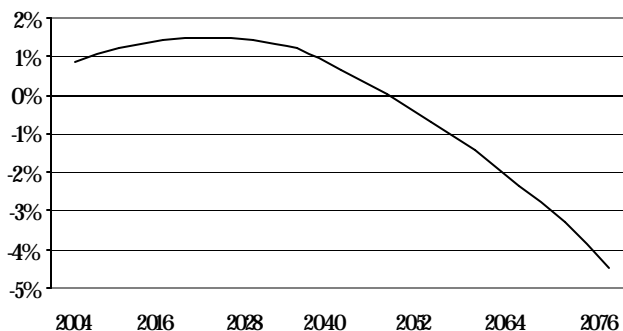
Year turning age 65	Traditional Benefits (for those who do not opt for private accounts)	Expected Combined Benefits (for those who opt for private accounts)	
		Adjusted for risk	Not risk adjusted
2012	-0.9	-0.5	0.0
2032	-18.2	-15.2	-8.3
2052	-32.5	-26.0	-6.3
2075	-45.9	-39.6	-20.5

Source: Report of the President’s Commission to Strengthen Social Security. December 2001, p. 246.

One other aspect of the Commission’s plan deserves mention. It requires substantial borrowing over the next 45 years to finance benefits for current retirees as workers divert their payroll taxes to private accounts. As shown in Figure 3, this will temporarily increase the budget deficit by as much as 1.6 percent of GDP in 2022, raising the amount of debt outstanding by about 25 percent. After that point, borrowing will be less than it would have been in the absence of private accounts. Some claim that the additional debt will have no impact on the market because it involves substituting implicit debt in the form of future

promised Social Security benefits for explicit U.S. Treasury debt. Others argue that with the federal deficit already equal to 3.6 percent of GDP, it may be difficult to persuade foreign governments and other purchasers to buy more at existing rates.

Figure 3. Impact of Presidential Commission's Model 2 on the Deficit, as a Percent of GDP



Source: 2004 Economic Report of the President, Chart 6-4, p. 144.

THE BALL PLAN

The Ball plan takes a diametrically opposite approach to reforming Social Security. It restores solvency primarily by increasing revenues, thereby maintaining virtually all currently scheduled benefits. It discusses private accounts only as an additional level of protection over and above Social Security. The revenue increases come from returning the maximum covered earnings level (\$87,900 in 2004) to cover 90 percent of all earnings — the level set by Congress in 1983; retaining the estate tax and dedicating the revenues to Social Security; and introducing a tax increase around 2056 that would be adjusted from time to time to keep the system in balance. The only benefit change that Ball advocates is the adoption of a more accurate consumer price index, which would result in slightly lower benefits.

The President's Commission and the Ball plans represent opposite ends of the spectrum. That is, one approach cuts benefits to bring the program into balance and introduces private accounts while the other retains most scheduled benefits and increases revenues. A number of other plans are floating around that fall in between these approaches. For example, one recent plan retains the existing benefit structure but cuts benefits somewhat from their scheduled amounts (Diamond and Orszag 2004), and another introduces private accounts but infuses additional money into the system (Schieber and Shoven 1999).

Factors to Consider Regarding the Size of Benefits

There is no free lunch here. Higher benefits cost money. A critical piece of information often overlooked in the debate over solvency is the level of benefits under current law. Today, a person with average earnings retiring at 65 receives benefits equal to \$1,184 per month or 41.9 percent of previous earnings. After paying the Medicare Part B premium, which is automatically deducted from Social Security benefits, the replacement rate is 38.7 percent. Under current law, this Social Security replacement rate at any given age is scheduled to decline. The increase in the normal retirement age from 65 to 67, currently in progress, is equivalent to an across-the-board benefit cut. Medicare Part B premiums are slated to increase sharply due to rising health care costs. Benefits will also be taxed more under the personal income tax, as the exemption amounts are not indexed to inflation. As shown in Table 3, these three factors will reduce the net replacement rate from 38.7 percent today to 29.4 percent in 2030, or \$831 in today's terms.

Table 3. Social Security Replacement Rates for Average Earner Retiring at Age 65, 2004 and 2030

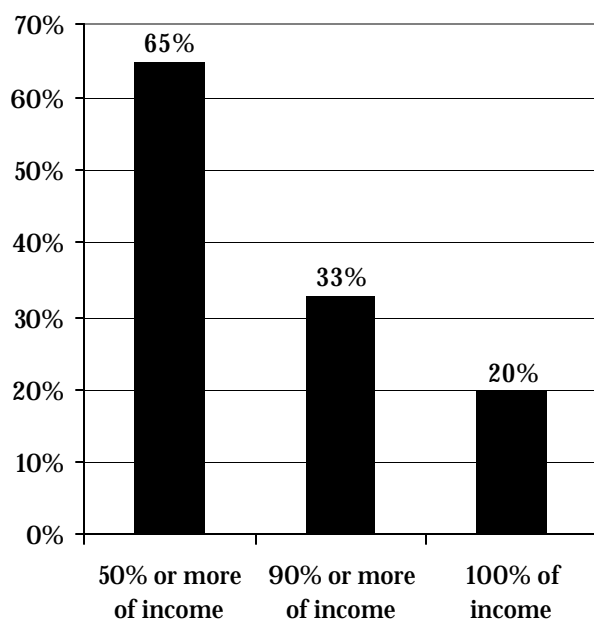
Provision	Replacement Rate
<u>2004</u>	
Reported Replacement Rate (RR)	41.9
After Medicare Part B deduction	38.7
<u>2030</u>	
RR after extension of Normal Retirement Age	36.3
After deduction for Medicare Part B	32.1
After personal income taxation	29.4
After 15% benefit cut	24.0

Source: Author's updates to Alicia H. Munnell. 2003. "The Declining Role of Social Security." Issue in Brief. Center for Retirement Research at Boston College.

The question of whether to cut benefits further hinges on one's view of the tradeoff between paying higher taxes or having the average wage earner end up with a further reduction in a fairly modest benefit. For example, the President's Commission

plan would reduce benefits in 2030 by about 15 percent (as shown earlier in Table 2). As a result, the average earner would receive, in today's terms, \$678 per month. Those who retire at 62 — the typical retirement age today — would get less. Will those amounts be enough? Today, older Americans are very dependent on Social Security (Figure 4), and such a cut could imperil the security of many older people. Perhaps, in the future, people will compensate for such a cut with additional years of earnings and more saving, but this may be difficult for many older people and low-wage workers.

Figure 4. Percent of Aged Receiving Social Security Benefits, by Importance Relative to Income



Source: U.S. Social Security Administration, Fast Facts and Figures 2003.

Factors to Consider Regarding the Structure of Benefits

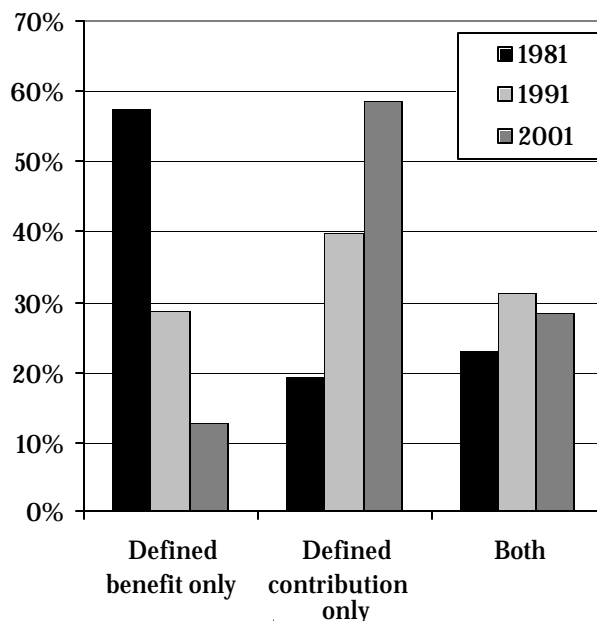
The second issue in the Social Security debate is the structure of benefits. That is, should benefits be based on earnings history as under the current system or depend on market returns? Many economists argue that a retirement system should have two or even three tiers. They argue that defined benefit and defined contribution plans — of which private accounts are a subset — are subject to different types of risks and a system that combines the two approaches will function better than a single model. That seems correct. When the employer-sponsored pension system was dominated by defined benefit plans, it may have made sense to introduce private accounts into the public pension

system. Today, however, most workers with a pension have a 401(k) plan and therefore already bear substantial investment and interest rate risk (see Figure 5). In the future, Social Security may be the only defined benefit plan around. And, of course, the 35 percent of households who arrive at retirement with no pension coverage could be even more vulnerable if their basic pension were subject to market risk.

In addition to shifting risk to the individual, private accounts create a very real political risk that account holders would pressure Congress for early access to these accounts, albeit for worthy purposes such as medical expenses, education, or home purchase. Although most proposals prohibit such withdrawals, experience with existing Individual Retirement Accounts and 401(k) plans suggests that holding the line would be difficult. To the extent that Congress acquiesces, many retirees will end up with lower, and in some cases inadequate, retirement income.

Private accounts are also likely to increase the costs of operating the Social Security program. Sweden recently introduced a system of individual accounts, and the cost of operating these accounts amounts to 73 basis points (Sundén 2004). That might not sound like much, but over a 40-year career it would reduce total accumulations by roughly 15 percent.

Figure 5. Percent of Wage and Salary Workers with Pension Coverage, by Type of Plan, 1981-2001



Source: Munnell and Sundén (2004).

Conclusion

Describing the Social Security debate as one about privatization obscures more than it reveals. It should be a debate about the level and structure of benefits. That is, how much of the financing gap will be closed by cutting benefits and how much by raising revenues? And how much of the benefits in the reformed system should be based on earnings history and how much on market returns? Private accounts definitely have a role to play in our retirement income system. Most people with pensions now rely on a form of private account — namely, the 401(k) plan. And private accounts added onto the existing Social Security program could enhance retirement security for future retirees. The controversial question is the introduction of private accounts at the expense of traditional benefits.

Endnotes

- 1 The 75 percent figure is based on all sources of revenues, including interest paid by the U.S. Treasury. The revenue rate shown in Figure 1 excludes interest income and other transfers.
- 2 Another number often seen in the press is \$12.7 trillion. This number represents the present value of future costs less future taxes over the next 100 years for all current participants. Subtracting the current trust fund gives a “closed group” unfunded obligation of \$11.2 trillion. This value represents the shortfall for all past and current participants and the amount required to fully fund the system today. To arrive at the \$10.4 trillion reported in Table 1 requires adding the future costs and revenues associated with future participants. For further information, see Table IV.B8 in the Social Security Administration’s 2004 Trustees Report.
- 3 Even if participants sent 50 percent of their payroll taxes to private accounts rather than the U.S. Treasury, privatization alone would not improve the system’s finances. The 3 percent return on bonds seems like an improvement over the 1 percent projected for the pay-as-you-go Social Security program. But a simple comparison of returns is not the end of the story. Because workers invest payroll tax contributions that were earmarked to pay current benefits, the government needs to find some way to pay off promised benefits to current retirees and those nearing retirement. One approach is to borrow the money. The government, however, would have to raise new taxes to pay the interest on these bonds, and — for identical portfolios — the new taxes would exactly offset the higher returns on private accounts (Geanakoplos, Mitchell, and Zeldes 1998, and Diamond 1998 and 1999b). In other words, participants gain nothing by diverting to private accounts payroll taxes earmarked for benefits.
- 4 CBO 2003 and 2004b; OMB 2002, pp 15-16. OMB provides a full discussion of the need for risk adjusting: “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 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."

- 5 Model 2 allows workers to divert 4 percentage points of their payroll taxes into private accounts up to \$1,000. For the average worker, earning about \$35,000 in 2004, the \$1,000 cap would amount to about 3 percentage points.

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The Center for Retirement Research at Boston College, part of a consortium that includes parallel centers at the University of Michigan and the National Bureau of Economic Research, was established in 1998 through a grant from the Social Security Administration. The goals of the Center are to promote research on retirement issues, to transmit new findings to the policy community and the public, to help train new scholars, and to broaden access to valuable data sources. Through these initiatives, the Center hopes to forge a strong link between the academic and policy communities around an issue of critical importance to the nation's future.

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Contact Information

Center for Retirement Research
Boston College
Fulton Hall 550
Chestnut Hill, MA 02467-3808
Phone: (617) 552-1762
Fax: (617) 552-1750
E-mail: crr@bc.edu
Website: <http://www.bc.edu/crr>

The Center for Retirement Research thanks its research partners for support of this project: CitiStreet, Prudential Financial, AMVESCAP, New York Life Investment Management, AARP, and TIAA-CREF Institute.