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**Testimony before the U.S. Senate Special Committee on Aging on “Strengthening Social Security: What Can Personal Retirement Accounts Do for Low Income Workers?”**

## **The Cost of a Free Lunch**

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## I. Introduction

Good morning. Thank you very much, chairman Craig, ranking member Breaux, and members of the committee for this invitation to speak to you today on the issue of individual accounts and Social Security.

The future of retirement is a story of good and bad news. People are living longer than any generation before them, yet improvements in retirement income security appear elusive. In the private pension sector, lacking pension coverage, insufficient wealth accumulation and growing risks stand in the way of giving the vast majority of household adequate retirement savings. Yet, Social Security offers almost universal coverage, distributes benefits progressively, and offers guaranteed lifetime benefits, i.e. many households enjoy a basic level of retirement income security due to Social Security.

The broadly shared benefits of Social Security need to be kept in mind when considering changes to the system. Specifically, changes to Social Security need to accomplish two things. First, they need to maintain or enhance the level of Social Security benefits for all workers given that Social Security's benefit levels are generally considered a basic benefit. Second, changes to Social Security's financial structure need to protect the level of future benefits since improvements in retirement income security have been rather elusive, despite the fact that workers can expect to spend ever longer periods in retirement.

The replacement of Social Security with individual accounts – privatization – is inconsistent with these goals. Privatization constitutes an erosion of benefits since it exposes individuals to greater risks that can only be partially compensated for by incurring substantial costs. Second, privatization significantly weakens the financial outlook of Social Security, which is reflected in significant reductions of future benefits or higher burdens on tax payers than would otherwise be the case.

Reforming Social Security within its parameters is not impossible, but it does require some hard choices. In particular, it requires choosing from a range of options that includes a willingness to acknowledge that improving Social Security's long-term financial outlook may necessitate either tax increases or benefit cuts or other revenue raising options. But these changes, if necessary, are small in comparison to the costs associated with privatization. Thus, improving Social Security's finances within its existing parameters would maintain current and future benefit levels, without skyrocketing costs for beneficiaries and tax payers.

## II. Retirement Income Adequacy

Calculations of retirement income adequacy are a critical measure of the future state of retirement security. Calculations of retirement income adequacy relate retirement consumption to pre-retirement consumption in three possible ways. First, a household may be considered adequately prepared for retirement if it can maintain a similar real level of consumption as during its working years. Usually, 80% of pre-retirement income is considered adequate since the income needs of retirees are likely to be lower than those of workers (Aon, 2001). Households no longer need to save for retirement, taxes are lower, work related expenses disappear, the family size of retirees is smaller than that of workers, and households eventually pay off their debt (McGill et al., 1996). Second, retirement income adequacy may be defined as a constant nominal level of consumption during retirement as during working years. This means that consumption needs are expected to decline during retirement over time. Third, real consumption may decline if the marginal utility of consumption is held constant due to uncertainty about income and life expectancy (Engen et al., 1999). With uncertainty, households' marginal utility of certain present consumption is higher than the marginal utility of uncertain future consumption.

A number of studies have analyzed retirement savings adequacy, with differing results. For instance, Gustman and Steinmeier (1998) found that the average household could replace 60% of pre-retirement income in real terms, and 86% in nominal terms, leading the authors to conclude that households are adequately prepared for retirement. Further, Engen et al. (1999) found that 40-50% of households fell short of what they needed for adequate retirement income. The average replacement ratio for the median household calculated by Engen et al. (1999) is still 72%, leading the authors to conclude that households are close to being adequately prepared for retirement. Further, Haveman et al. (2003) found that retired beneficiaries had a median replacement ratio of about 80%, and that only 30% of households had a replacement ratio of less than 70% in 1982.

In comparison, several studies concluded that many households were inadequately prepared for retirement. For instance, Moore and Mitchell (2000) found that the median household would have to save an additional 16% annually of earnings if it were to retire at age 62 and an additional 7% annually for retirement at age 65 to finance an adequate real replacement ratio. Their estimate of a savings rate of 7.3% for households wishing to retire at age 65 was three times as much as what households actually saved (Moore and Mitchell, 2000). This meant that households had on average between 75% and 88% - depending on marital status - of what it needed when retiring at 65 in 1992 (Mitchell and Moore, 1998). Similarly, Bernheim (1997) calculated that on average baby boomer households were only saving at 34% of their target savings rate. Also, Gustman and Steinmeier's (1998) figures show that, based on real replacement ratios, the average household had 28% less than adequate retirement savings. And Wolff (2002a) concluded that 61% of households could not replace 75% of their pre-retirement income in retirement based on data from 1998, up from 56% of households in 1989.

But what does a savings shortfall mean? Often, shortfalls will still allow households to finance most of their expected consumption. Engen et al. (1999) point out that the households used in Mitchell and Moore (1998) could still finance more than 90% of the consumption prescribed by their model with no additional savings. Similarly, Haveman et al.'s (2003) study shows that about 20% of households have a replacement ratio between 70% and 80%. That is, one fifth of households have more than 90%, but less than 100%, of a typical 80% replacement ratio.

However, as wealth is unequally distributed, the shortfalls are larger for many households. Engen et al. (1999) calculated that households in the 75% percentile - the closest income group for households with average incomes - had 121% to 172% of what they needed for retirement. For the median household, the same ratios ranged from 47% to 124%. Thus, the median household reached only 62% of the preparedness of the average household in 1992. Moreover, the gap between average wealth and median wealth to income ratios increased further by 1998 (Wolff, 2002a). Following the unequal distribution of wealth, a large share of households is likely to experience retirement consumption shortfalls.<sup>1</sup> Gustman and Steinmeier (1998) found that households in the bottom quartile had nominal replacement ratios of 50% and real replacement rates of 33%, compared to nominal replacements of 121% and real replacement rates of 81% for the top quartile. Lastly, Haveman et al. (2003) found that single men were more likely to be inadequately prepared than single women, who were in turn less likely than married couples to be adequately prepared for retirement.

To make ends meet in retirement, when facing an income shortfall, households will have to curtail their retirement consumption. In fact, one of the distinguishing features between studies that conclude that households are adequately prepared for retirement and those that do not is the consumption pattern in retirement. For instance, Engen et al. (1999), Gustman and Steinmeier (1998), and Haveman et al. (2003) all assume that real retirement consumption declines with age.

A large minority of households are consistently found to be inadequately prepared for retirement. Little research exists to compare retirement income adequacy over time. Intertemporal comparisons, though, indicate that retirement income adequacy improved for the average household in the 1990s, but not for the median household (Weller, 2004a). Similarly, the share of households that could expect to replace more than half of their current income fell from 1989 to 1998 (Wolff, 2002a).

The number of studies indicating the many households are inadequately prepared for retirement can be explained in large measure by the failure of the existing pension system to adequately fund retirement savings. There are three reasons for the failure of the private pension system to make inroads in improving retirement income. First, for decades, the share of private sector workers covered by a pension plan has stagnated at

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<sup>1</sup> Retirement savings shortfalls vary with demographics. Mitchell et al. (2000) and Engen et al. (1999) found that black and Hispanic married households experienced a larger shortfall than whites, and that less education resulted in a worsening of retirement income adequacy. Mitchell and Moore (1998) also found that single households were less adequately prepared than married ones.

about 46% (EBSA, 2002). Coverage is lower for minority workers than for whites (Purcell, 2003). Wolff (2002a) found that more than one-fourth of households between 47 and 64 had no pension benefits.

There are several explanations for this widespread lack of coverage. Many employers – especially small employers -- simply choose not to offer pension plans to their employees. Other employers offer a plan to only some of their employees. Further, some features of pension plans, such as vesting, age, and minimum tenure and hours worked requirements, can exclude workers from participating. Moreover, even if an employer offers a defined contribution (DC) plan to all employees, some employees may not contribute because they do not have sufficient discretionary income or otherwise choose not to contribute (Joulfaian and Richardson, 2001).<sup>2</sup> In addition, the tax incentives to contribute are modest or nonexistent for low and moderate-income households, but they can be substantial for higher income households.

Second, retirement wealth is unequally distributed. Kennickell et al. (2000) found that only 25% of families earning between \$10,000 and \$25,000 in 1998 had any retirement account from a current or past job, whereas 87% of households with incomes over \$100,000 did.<sup>3</sup> Many households do not have enough income to save for retirement, even if they have the opportunity to do so. In 2000, the bottom 20% of households had incomes of less than \$25,000 (Mishel et al., 2002), but a working family typically requires more than \$35,000 per year to cover its basic needs (Bernstein et al., 2000), leaving little income to save. Ed Wolff (2002b) reports that the 40% of households with the lowest incomes had negative financial wealth, i.e., they owed more than they owned, in 1998. Further, there are larger tax incentives for higher income earners to save with a tax-advantaged plan, such as a 401(k), since contributions are not subject to income taxes until they are withdrawn. This is reflected in the share of tax subsidies accruing to high-income earners. For instance, Peter Orszag and Jonathan Orszag (2001) found “that two-thirds of the existing tax subsidies for retirement saving (including both private pensions and IRAs) accrue to the top 20% of the population.”

An important contributing factor to the differential accumulation by income is that smaller account balances tend to incur larger relative costs. Due to economies of scale, the administration of a large number of small accounts is greater than the administration of larger account balances. Consequently, costs for private sector investments tend to be greater for smaller account balances (Geneakoplos et al., 1998).

Further, in the current system, a worker whose employer does not offer a pension plan will have a difficult time accumulating sufficient retirement wealth to provide adequate retirement income. The tax-sheltered retirement savings device Congress created – the IRA -- has been most helpful to upper income savers, for the same reasons that DC plans have been most beneficial to high-income earners. Higher income earners have fewer income constraints and stronger tax incentives to contribute. Only 6% of all

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<sup>2</sup> Low-income households save less than higher income ones (Lawrance, 1991; McCarthy, 1995).

<sup>3</sup> Minorities have less adequate savings than whites and households with higher incomes and wealth raise their savings faster than others (Mitchell and Moore, 1998; Mitchell et al., 2000; Wolff, 2002a, 2002b).

workers eligible to contribute to an IRA actually contributed to one in 1996. Moreover, only 2% of tax payers earning less than \$25,000 in 1996 contributed to an IRA, whereas 22% of tax payers with incomes above \$75,000 contributed to an IRA (Smith, 2002).

Third, households are facing increasing risks with their retirement savings, mainly because of the growth of DC plans (Weller and Eisenbrey, 2002).<sup>4</sup> For one, there are a number of financial market risks that are borne by employees under DC plans. One risk is the chance of misjudging the market and investing in a losing asset.

There is also the possibility that markets will stay down for long periods of time, generating low rates of return even for the savviest investor. Such market swings mean that two people of similar means who invest similar amounts can end up with vastly differing retirement savings. After 40 years of contributing to a hypothetical account invested solely in stocks, a worker retiring in 1966 could have replaced 100% of her career-high earnings, whereas a similar worker retiring in the late 1970s could have replaced only a little more than 40% (Burtless, 1998). Moreover, stock markets are driven to some degree by fads, such as the Internet bubble of the late 1990s, thus enticing investors to put too much money in one basket. Further, there is the risk that the information that investors rely on is manipulated as recent corporate scandals painfully illustrated. Misleading accounting statements attracted investors to presumably good investments that later turned out to be losing propositions. There is also the chance that violent swings in the market will lead people to save too little over the course of a lifetime. For instance, Gregory Mankiw and Stephen Zeldes (1991) found that savings by households that owned stocks were more volatile than consumption of households that did not, and that the volatility of savings varied with excess stock market returns. In other words, greater risks associated with retirement savings, reflected in more portfolio volatility, should result in fewer savings over the course of a worker's lifetime.

Another crucial risk associated with many private pension plans is longevity risk, i.e. households could outlive their savings. This risk is lower in defined benefit (DB) plans than in DC plans. But DB plan participants could face longevity risks if they choose a lump sum distribution option and do not annuitize their savings, whereas DC plan participants could reduce longevity risks by annuitizing their savings in the private insurance market.

### **III. Social Security's Role in Securing Retirement Income Security**

As there are continued obstacles to substantially improving retirement income for many working families through the private pension system, especially at the low end of the income scale, Social Security plays a fairly important role. Its coverage is almost universal, its benefits are skewed towards lower lifetime earners, and its benefits are insulated from the vagaries of financial markets.

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<sup>4</sup> Additional risks include the risk that people cash-out of their retirement plans when they leave a job, thus reducing their life time accumulation, and the risk that households outlive their savings.

Over time, the coverage of Social Security has become almost universal. Wolff (2002a), for instance, reports that the share of households with Social Security wealth – the capitalized claim of future benefit streams – rose from 86.1% in 1983 to 97.7% in 1998. Legislative changes and increasing labor force participation rates contributed to this increase in Social Security’s coverage.

Also, by its very structure, Social Security benefits tend to be skewed towards lower life time earners. According to SSA (2004a), a worker with low life time earnings, defined as 60% of average earnings, could replace 57% of his or her pre-retirement earnings with Social Security benefits in 2004. In comparison, a worker with average earnings could expect a replacement ratio of 43%, and a worker with high earnings, defined as 131% of average earnings, could expect a replacement ratio of 36% in 2004. These replacement rates, though, also show that, although Social Security’s benefits are tilted towards lower income workers, they typically constitute a basic benefit as they fall far short of what is typically considered an adequate replacement ratio of 75-80% of pre-retirement income.

Similarly, Cohen et al. (2001) find that the expected internal rates of return under Social Security are higher for low income earners than for higher ones. Also, women, minorities and those with less than a college education can expect to have higher rates of return than their counterparts. That is, the combination of benefits that Social Security offers makes it a more attractive benefit for some groups than for others.<sup>5</sup>

The fact that Social Security offers a bare bones benefit is reiterated by the fact that the average benefit amounts are typically low. In 2002, Social Security paid out average retirement benefits of \$851.40 per month, average survivorship benefits of \$768.70 per month, and average disability benefits of \$696.00 each month (SSA, 2004b). Women typically receive fewer average benefits than men, and African-Americans receive fewer benefits than whites (SSA, 2004b).

Yet, despite low replacement ratios and average benefit amounts, Social Security plays a disproportionately large role as source of retirement income for those 65 and older. The average share of income originating from Social Security benefits for households 65 and older in 2000 was 58.0% (SSA, 2002). For households in the bottom 40% of the income distribution, Social Security benefits constituted on average about 80% of their income (SSA, 2002). Even the middle quintile still received the majority of its retirement income – 64% - from Social Security. And for all but the top 20% of income recipients 65 and older, Social Security was the single most important source of income. The fact that Social Security benefits constitute a larger share of income for households 65 and older than the average replacement ratios and low average monthly payments reflects the lack of private pension benefits for many households.

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<sup>5</sup> Although Social Security has a rather progressive benefit formula in comparison with other industrialized economies, its average benefit is comparatively low, often constituting only close to half the benefit of the average benefit of other industrialized economies, such as Italy or Germany (Weller, 2004b).

Lastly, the fact that Social Security benefits are guaranteed life time benefits that are annually adjusted with inflation makes them particularly valuable benefits for older retirees. For households between the ages of 62 and 64, Social Security constituted 27% of their income in 2000. But for households 65 to 74 years of age, the share of household income from Social Security was 52% and for households 75 and older it was 65% (SSA, 2002). Because many private pension benefits are not indexed to inflation, because important income sources, such as earnings, diminish in importance with age, and because households tend to draw down financial assets the longer they are retired, Social Security gains substantial importance with age.

#### **IV. Social Security's Insurance Value**

Although Social Security is typically associated with its importance for retirement benefits, it is crucial to keep in mind that Social Security offers benefits in addition to retirement benefits. In particular, Social Security offers benefits to the surviving family members of a deceased worker and to a worker and his or her family if the worker has become disabled. In 2002, Social Security paid \$281 billion in benefits to retirees, \$84 billion in benefits to the surviving family members of deceased workers, and \$66 billion in benefits to disabled workers and their family members (SSA, 2004b). That is, more than one third of Social Security benefit payments went to non-retired beneficiaries.

A large number of Social Security beneficiaries are children. Social Security paid benefits to 1.9 million surviving children of deceased workers and to 1.5 million children of disabled workers in 2002 (SSA, 2004b). The fact that in 2002, more than three million children received benefits from Social Security, including more than 100,000 students, shows the value of Social Security as an insurance benefit for working families.

These insurance benefits are similarly at stake, when Social Security benefits are reduced to account for the loss of payroll tax income under privatization (Diamond and Orszag, 2002).

#### **V. Social Security's Long-term Financial Outlook**

The perceived future need to change Social Security arises not so much from its levels of benefits, although changes may be occasionally warranted, but more so from the fact that Social Security's trustees predict a financial shortfall in the long-term future, unless changes to the system are implemented. According to the Social Security's 2004 Trustees Report (SSA, 2004a), it is anticipated that by 2042, Social Security will have exhausted its trust fund and that – without any changes to the system – tax revenues will cover more than two thirds of promised benefits. An immediate and permanent increase of the payroll tax by 1.89% would allow Social Security to pay all of its promised benefits for the 75-year projection horizon (SSA, 2004a).

Not only is the size of Social Security's anticipated shortfall manageable, it is also not going to increase in the long-term. Under Social Security's own projections, the share of GDP that will be dedicated to paying Social Security benefits will rise from currently



4.3% of GDP to 6.5% in 2034. After that, the share of GDP dedicated to Social Security will remain virtually unchanged. By 2080, the projected share of GDP going to pay for Social Security benefits will be 6.6%. That is, an average annual increase of 0.003 percentage points relative to GDP over a 36 year period (SSA, 2004a). In comparison, the federal government's spending on defense, without homeland security, increased from 3.8% of GDP at the end of 2000 to 4.7% in the first quarter of 2004. On an annualized basis, this is an increase that is almost five times faster than the expected increase from 2004 to 2034 - 0.09 percentage points compared to 0.02 percentage points (BEA, 2004). Put differently, the expected increase in Social Security expenditures is manageable within the parameters of the U.S. public finance system.

While Social Security's expenditures as share of the economy are expected to stabilize, payroll tax rates are not. The share of taxable payroll income that would need to be dedicated to paying promised Social Security benefits is expected to continuously rise from 11.0% in 2004<sup>6</sup> to 17.5% in 2034 and to 19.4% in 2080 (SSA, 2004a).

The divergence between the economic costs of future Social Security payments and payroll tax rates suggests that part of Social Security's anticipated financing shortfall is not a result of economic factors, but of the particular design of Social Security. Specifically, the share of payroll that is taxable is expected to decline as is the expected share of payroll relative to GDP. The share of payroll that is subject to Social Security taxation will likely decline because a growing share of payroll income will fall beyond the income cap, above which income is no longer subject to Social Security taxes.<sup>7</sup> And the share of payroll of GDP is expected to decline as a growing share of employee compensation is projected to come in the form of non-taxable benefits, such as private pensions or health insurance benefits. That is, Social Security will ultimately have to pay for a stable benefit stream, relative to the size of the economy, out of a shrinking tax base.

Social Security's expected financial shortfall can be addressed within the parameters of the system. Diamond and Orszag (2004), for example, combine several changes to the system to ensure its long-term financial balance. Those changes in particular are a continuous across-the-board benefit cut by indexing average benefits to longevity, increasing the cap for taxable income, such that only 10% of national income escape taxation, a reduced replacement ratio for high income earners, universal coverage through the inclusion of all newly hired state and local government employees, an additional payroll tax of 3% for all earnings above the income limit, and a continuous increase in the payroll tax (Diamond and Orszag, 2004). Additional examples of changes to Social Security's structure and their positive fiscal effects were included in the final report of the 1994-1996 Advisory Council on Social Security (SSA, 1997).

## **VI. Privatization Too Risky and Too Costly**

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<sup>6</sup> Social Security's cost rate in 2004 is below the combined tax rate of 12.4% since Social Security is currently generating a cash surplus.

<sup>7</sup> In the past, this problem has been exacerbated by the fact that earnings inequality has risen as well, pushing even more aggregate income beyond the taxation limit (Diamond and Orszag, 2004).

To address the projected long-term shortfall of Social Security's finances, a number of proposals have been made to replace part or even all of Social Security with individual accounts. For instance, President Bush's Commission to Strengthen Social Security (CSSS) called for a number of options to allow a voluntary diversion of part of the current Social Security payroll taxes into individual accounts. One of the options would allow workers to put 4 percentage points of their payroll taxes (up to an annual limit of \$1,000) into individual accounts (Diamond and Orszag, 2002). Another proposal recommends the diversion of an average of about 6.4% of payroll into individual accounts: 10% of the first \$10,000 dollars of wages and 5% of taxable payroll thereafter (Ferrara, 2003).

### **VI.1 Costs and Risks to the Individual**

Such proposals pose a number of large and seemingly insurmountable hurdles to making them an efficient replacement of part or all of the current Social Security system. Two problems arise in particular. First, by replacing the current Social Security system with a system of individual accounts, an effective insurance mechanism is replaced with individual savings accounts. That is, the risks that are shared under the current insurance system are individualized. These risks can, at best, be mitigated by incurring often substantial costs in the private insurance market. Yet, a number of risks remain that cannot be eliminated.

While saving for retirement with individual accounts, investors face three important risks that can be mitigated, but not completely eliminated. For one, there is idiosyncratic risk, which can take two forms. Workers make their own investment decision, depending on their individual circumstances, which can result in above or below average rates of return. Workers also face their individual earnings histories that determine their ability to save. Another form of risk is the possibility that financial market rates of return remain below average for prolonged periods of time during somebody's working life. For instance, after 40 years of contributing to a hypothetical account invested solely in stocks, a worker retiring in 1966 could have replaced 100% of her career-high earnings, whereas a similar worker retiring in the late 1970s could have replaced only a little more than 40% (Burtless, 1998). And lastly, there is the chance that workers will outlive their retirement savings, so-called longevity risk.

The literature addressing the economic effects of the switch from DB plans to DC plans shows two important lessons that apply to varying degrees to the privatization debate. First, the costs and risks of individual accounts are higher than those of defined contribution, pooled plans. In individual accounts, the workers bear all the risks and responsibilities. Importantly, there is no guarantee of future benefits. Most notably, assets are no longer pooled and workers can no longer take advantage of economies of scale to the same degree that Social Security can. In addition, employees lose the potential of a guaranteed benefit and thus incur more uncertainty with respect to their expected retirement benefits.

Because workers are less likely to take advantage of economies of scale, their administrative costs rise on average, and even more so for smaller account balances or participants in small plans. At the low end, the Congressional Budget Office (CBO, 2004) estimated the costs for existing DC plans to amount to an average of 0.8% of assets for large plans, and fees for smaller plans of about 1% of assets annually. Assuming annual contributions of 2% of earnings, total account balances would be reduced by 21% over an entire working life for large plans and by 30% under small plans. These costs, though, may understate the administrative costs of a privatized system of individual accounts, where economies of scales would likely be reduced further. Already, the administrative costs of mutual funds are substantially larger than those of existing DC plans. CBO (2004) reports average annual administrative costs of 1.28% for equity mutual funds.

With individual accounts, savers also face implicit cost increases as the uncertainty of their retirement savings has grown. To reduce the financial market risks associated with individual accounts, savers could purchase insurance. Specifically, workers could purchase lifetime annuities upon retirement to minimize longevity risks, and they could purchase minimum investment guarantees for their portfolios during their working careers to reduce market risks. The costs of a lifetime annuity amount to an average of about 5% of total accumulated savings, with smaller account balances accruing larger costs (Poterba and Warshawsky, 2000). To see what this means in terms of lifetime benefits, consider that for a person retiring at 65 with an average life expectancy, private annuities are about 15 to 20% less than they would be without the costs of purchasing the insurance (CBO, 2004, 1998; Poterba and Warshawsky, 2000; Geneakoplos et al., 1998). And the costs of guaranteed minimum benefits are also non-trivial. For instance, to guarantee the rate of return on bonds with a balanced portfolio (50% stocks and 50% bonds) over a 40-year investment horizon, investors would have to spend 16.1% of their contributions to their retirement account on the guarantee (Lachance and Mitchell, 2002).

Individual accounts incur another risk that workers can typically not insure against, but that Social Security offers some measure of protection against. Specifically, because workers usually get labor income – the primary source for savings – from just one employer, they are not diversified on their income side and consequently vulnerable to large fluctuations in income arising, for instance, from lay-offs, reduced overtime, and the employer's bankruptcy. But shocks to labor income are not randomly distributed. Some groups of workers are more likely than others to have a more tenuous attachment to the labor market. For instance, women, minorities, those with less education, among others, have higher unemployment rates, longer spells of unemployment, and greater variability in earnings than their counterparts. These groups, thus, face systematically greater labor market risks than their counterparts.

Not only do shocks to labor income vary systematically by demographic groups, they are also systematically related to the business cycle and thus to financial returns. Employment and wage growth are higher during an economic expansion than during a contraction. In fact, both systematic variations are linked, such that the labor income of those groups with a more tenuous attachment to the labor market see their labor income

vary more with the business cycle than the labor incomes of their counterparts. As labor income fluctuates with the business cycle, so do savings. Put differently, some groups are more likely than others to see their labor income decline during bad economic times, when financial returns tend to be low and opportunities for dollar cost averaging are high. Consequently, their total accumulations per dollar invested should be lower than those of their counterparts, imposing an additional cost of individual accounts for some workers.

In research that I am conducting with Professor Jeff Wenger of the University of Georgia, we found that the size effect of the interaction between labor income shocks and the stock market can generate some degree of variance in account balances. In particular, women tend to see substantially lower real accumulations per dollar invested than men. Also, African-Americans experienced somewhat smaller account accumulations per dollar invested over the period from 1979 to 2002 than whites (Weller and Wenger, 2004).

Since labor income cannot be diversified, households have limited means to insulate themselves from this labor market risk with individual accounts. In comparison, the calculation of Social Security's benefits does not expose workers to this risk. For one, there is no direct connection between Social Security contributions and financial market performances. Second, because Social Security calculates an average wage for a worker's entire career as part of its benefit calculation and then replaces lower lifetime averages with a higher relative benefit, workers who are more likely to experience adverse labor income shocks are partially compensated for these shocks.

Second, the economic assumptions underlying the Social Security forecasts, which are often used to justify privatization, are inconsistent with the assumed rates of return that many advocates of individual accounts make. Baker (1999, 1997) points out that the Social Security's trustees assumptions of well below average wage and productivity growth imply economic growth that will also fall below long-term historic averages. Yet, over the long run, stock market returns closely mirror the pattern of economic growth. If stock market rates of return diverged substantially and for a prolonged period of time from this pattern, it would imply that an ever increasing share of national income would have to be accrued in the form of profits to avoid unrealistically high stock market valuations. However, logically this would imply that an ever shrinking share of national income would be paid in the form of wages. Baker (1997) demonstrates that the labor share of national income can quickly approach unrealistically low levels. More realistic and more consistent with the overall economic assumptions of the Social Security trustees report would be real rates of return that are below their historical averages. Consequently, the account balances that could realistically be expected would be substantially lower than is often forecast by those favoring the replacement of Social Security with individual accounts (Baker, 2001). In other words, beneficiaries are less likely than is typically argued to replace reduced Social Security benefits with higher earnings on their individual accounts.

## **VI.2 The Macro Economic Costs of Privatization**

Third, despite claims to the contrary, these proposals typically do not improve the financial outlook for Social Security in the long-run, unless they cut benefits substantially. In principle, replacing part of Social Security with individual accounts means that Social Security receives less income to pay for promised benefits. To fill this growing gap, Social Security would either have to receive large transfers from general revenue, raise payroll taxes, or cut benefits. In the two examples mentioned above, the solutions appear to be transfers from general revenues and reduced benefits, although the options are often not clearly detailed. Specifically, it is often unclear how the increased transfer from general revenue would be financed, i.e. which taxes would grow.

To fully understand the macro economic costs of individual accounts, two factors need to be considered. First, the rise in costs associated with individual accounts is not offset by an increase in personal savings. Again, research on the shift from DB to DC plans sheds some light on this issue. For one, Papke (1999) concluded that many new 401(k) plans replaced existing DB plans and did not increase net personal savings. Similarly, Engen and Gale (2000) found that savings incentives, such as 401(k) plans, tend to raise wealth for low-income households, but that they have little effect on average savings rates. That is, there is evidence of large substitution effect from traditional DB plans to newer DC plans, but little evidence that the higher cost savings vehicles have substantially raised retirement wealth.

The discussion over the effects of Social Security on savings also sheds an interesting light on the question of whether Social Security privatization would result in more savings. The original debate rested on two propositions regarding the link between Social Security benefits and other savings. First, Feldstein (1974, 1976, 1977) argued that mandatory savings through Social Security resulted in more consumption and fewer savings based on an extended life-cycle model. Barro (1974, 1976, 1978) argued that neither workers nor retirees will alter their consumption, and thus their savings behavior. Instead, beneficiaries will directly or indirectly transfer e.g., in the form of inheritances, to the generations that will have to pay for higher benefits through their payroll taxes. Consequently, lower Social Security benefits should not result in more savings.

Empirical studies have found only small effects of Social Security on savings. Munnell (1974) found that the two countervailing effects of Social Security on savings offset each other, and that there is no substitution between Social Security and savings. In contrast, Feldstein (1996) found that an additional dollar of Social Security wealth translated into a reduction of private savings by 2-3%.

Feldstein's (1974; 1996) results on the substitution effect of changes in Social Security benefits on private savings have been questioned, though. Meguire (1998) found that correcting for wealth mismeasurement and for structural breaks the effect of Social Security on savings is reduced by more than 90%. Also, Coates and Humphreys (1999) found that the findings are sensitive to model specifications and that the average impact of Social Security on savings is likely to be smaller than originally estimated. Wolff (1988) found no substitution effect, and Bernheim and Levin (1989) found no relationship between Social Security and private savings for couples. Thus, the link

between public retirement benefits and savings is weak at best, suggesting that households will only replace a small share of a benefit cut with private savings.

Second, the costs to general revenue from replacing part of Social Security with individual accounts could be substantial. For instance, Diamond and Orszag (2001) estimate that the option to divert 4 percentage points of the payroll tax into individual accounts that the Commission to Strengthen Social Security proposed would amount to a financing shortfall in 2001 net present value terms of \$2.2 trillion dollars. If disability benefits, which would be reduced from current law levels under this proposal, were maintained, the shortfall would amount to \$2.8 trillion in net present value terms. As Diamond and Orszag (2001) point out, “although the Trust Fund would be “made whole” by the assumed infusion of very large sums of revenue, the Commission Report does not explain where the transferred funds would come from.”<sup>8</sup>

A similar criticism applies to Ferrara’s (2003) proposal. In particular, the expectation here is that greater revenues would be generated from higher capital income that results from more investment financed out of more stock investments. Thus, theoretically the government could pay for current transition costs through higher capital tax revenues in the future.

Leaving practicality issues aside, this argument suffers from the economic shortcoming that the empirical evidence suggests at best a weak link between the stock market and productive investment. For one, as discussed above, there is little evidence that tax advantaged savings have actually increased national savings. It seems reasonable to assume that Social Security privatization would likely be offset by reduced savings elsewhere with, at best, an ambiguous effect on national savings. Also, the 1990s probably serve as the best example against this argument. From 1994 forward, the U.S. corporate sector in the aggregate repurchased more shares than it issued. Put differently, the stock market was a net drain on corporate resources, not a supply of new funds (BoG, 2004). However, despite this qualitative change in the stock market, investment accelerated in the late 1990s (BEA, 2004). But without the link between stock market investment and productive investment, this financing scheme loses its foundation.

In addition to large transfers from general revenue to Social Security that would be required under the Commission’s proposed option, benefits would have to be cut. Diamond and Orszag (2002) estimate that Social Security benefits would be reduced by 41% compared to the benefits scheduled under current law for a worker born in 2002 and retiring in 2066. Similarly, disability benefits would be gradually reduced under this proposal. For a worker starting to receive disability benefits in 2050, benefits would be 19% lower compared to the current benefit schedule (Diamond and Orszag, 2002).

## **VII. Conclusion**

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<sup>8</sup> It should also be noted that, if the source of these general revenue funds are not disclosed, the progressivity of a proposal to privatize Social Security cannot be evaluated.

Improving retirement income adequacy poses a serious challenge to public policy in the US. Specifically, many workers are lacking pension coverage. Retirement wealth is unequally distributed, and the risks of retirement savings have grown with the shift from traditional defined benefit to defined contribution pension plans. In recent decades, the problems have likely grown worse than better.

In light of the obstacles to improving retirement income security through the private pension sector, the relative importance of Social Security has grown. It offers a universal, progressive, guaranteed, yet basic benefit.

Moreover, Social Security's finances are secure for the foreseeable future and the anticipated financial shortfalls are limited both in their size and in their timing. After an adjustment period of three decades, Social Security's expenditures are expected to stabilize relative to GDP. This problem can be addressed within the parameters of the existing structure, i.e. without radically altering its character by privatizing it.

Yet, a number of proposals have been made to significantly alter the face of Social Security. In particular, these proposals envision replacing part of Social Security with a system of individual accounts. Such a system, though, carries unjustifiably large risks and costs to the individual and to the economy as a whole. Importantly, individuals would only be able to partially protect themselves from the greater risks associated with individual accounts, and only by incurring substantial costs. At the same time, though, tax payers would likely face rising costs to pay for the transition from the old Social Security system to a new system of individual accounts. Moreover, while taxes would likely have to rise to pay for this transition, the proposals also advocate the reduction of Social Security benefits relative to the benefits scheduled under current law.

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