

**RESTRUCTURING PENSIONS
FOR THE 21ST CENTURY:
THE UNITED STATES' DEBATE**

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Abstract

This paper focuses on the debate over the future of pay-as-you-go Social Security in the United States and explores the extent to which the U.S. is likely to restructure its pension system for the 21st century. The discussion addresses three questions. First, how is the U.S. dealing with the demographic, financial, and political pressure on its public pension system? Second, to what extent will these pressures redraw the boundaries between public and private responsibilities? Third, how would such shifts, if they should occur, affect individuals, financial markets, and future low-wage workers?

1. Introduction

Most industrialized countries have a government pension scheme that requires employed workers to pay taxes on their earnings while they work in return for pension benefits when they retire. Through this collective action, governments provide predictable retirement income to most aged in a way that preserves their dignity and self-respect. These contributory programs, which are generally financed on a pay-as-you-go basis, have historically been viewed as valuable institutions that enhance social cohesion.

Today, the consensus about the value of pay-as-you-go social insurance is breaking down. Critics argue that these plans cost too much, hurt the economy, and reflect out-moded social philosophies. They contend that workers – to a much greater extent than they do now – should decide how much, when, and in what form to protect themselves once they stop working. Advocates for change say that privatization will boost private saving, control costs as the baby boom generation retires, and reflect changes in social philosophy about the relative importance of individual and collective effort.

This paper focuses on the debate over the future of pay-as-you-go Social Security in the United States and explores the extent to which the U.S. is likely to restructure its pension system for the 21st century. The discussion addresses three questions. First, how is the U.S. dealing with the demographic, financial, and political pressure on its public pension system? Second, to what extent will these pressures redraw the boundaries between public and private responsibilities? Third, how would such shifts, if they should occur, affect individuals, financial markets, and future low-wage workers?

Four conclusions emerge from this analysis. First, the U.S. faces a relatively manageable financial challenge, because its program has always been modest and the projected aging of the population is less pronounced in the U.S. than in other industrialized countries. Second, the push for shifting responsibilities for retirement income from the public to the private sector emerges from the political climate and the 1990s stock market boom rather than from the demographics. Third, the important considerations are not public versus private but rather the amount of money going into and out of the program, how those

monies are invested, and whether pensions are provided under a defined benefit or defined contribution arrangement. The introduction of private accounts without additional funding will not improve the program's finances or raise returns on individuals' payroll tax contributions. Finally, private accounts shift the financial risk of the basic pension to the individual and contain the seeds for unraveling the U.S. social insurance system.

2. Demographic, Financial, and Political Pressures on Pensions in the U.S.

Like other developed countries, the U.S. faces an aging population that will increase the costs of its pay-as-you-go Social Security system. Like other developed countries, the U.S. is engaged in a major debate about restructuring its national retirement program. What is unique to the U.S. is that the financing problems facing its Social Security system are relatively modest, and political rather than economic considerations are driving the debate on privatization. Nevertheless, the debate culminated with President Bush establishing a commission to come up with specific recommendations to privatize at least a portion of the program. The Commission reported on December 21, 2001 with three alternative proposals to introduce private accounts into the existing Social Security system

2.1 U.S. Social Security Problems Are Modest

The Social Security financing problems in the U.S. are relatively modest for two reasons. First, Social Security plays a limited role; it is only one portion of the nation's retirement system. As a result, public social insurance benefits – and therefore costs – are lower in the U.S. than elsewhere. Second, while the U.S. population is aging, the demographic shifts are much more muted than in other developed countries.

2.1.1 Social Security Only One Component of a Three-Tiered Retirement System

The U.S. public pay-as-you go Social Security program, which covers virtually all workers, is only one component of a three-tiered retirement system. The second tier consists of employer-provided supplementary pensions, which cover roughly half the workforce. These tax-subsidized plans are sponsored by private employers, by the federal

government for its employees, and by state and local governments for their workers. The third tier consists of individual saving. Those 65 and older currently receive roughly half of their non-earned income from Social Security, one quarter from employer-provided pensions, and one quarter from private saving. Not surprisingly, Social Security accounts for virtually all retirement income at the low-end of the income scale, and income from assets accounts for the bulk at the high end.

Much of the U.S. retirement system faces no funding problems. Employer-provided pensions – the second tier – are for the most part fully funded. The growth in assets in employer-provided plans has been remarkable.¹ Pension assets have increased from barely over one percent of household wealth in 1945 to about 22 percent in 2001. In 2001, pension assets (\$8.9 trillion) approached the market value of all household-owned real estate (\$11.6 trillion) in the U.S.. The enormous growth in pension assets reflect two factors: 1) pensions were in their infancy in the 1940s, and 2) pension reserves reflect the large contributions made on behalf of the baby-boom generation. Individual saving, the third tier, is also fully funded by definition.

Because the U.S. relies heavily on the private sector and individual saving for the provision of retirement, it provides relatively modest Social Security benefits.² Several studies have examined the replacement rates (ratio of benefits to pre-retirement earnings) for various social security programs throughout the world, and the U.S. consistently comes out on the low end (for example, U.S. Social Security Administration 1999 and Weaver 1998). Figure 1 reports the most recent of these replacement rate comparisons and, with the exception of Canada, the U.S. shows the lowest benefit levels relative to earnings. The U.S. replacement rate of 41 percent is less than half that in France and the Netherlands, both 91 percent. It is also significantly below that in Belgium (77 percent), Italy (75 percent), Spain (63 percent), and Germany (62 percent) (Gruber and Wise 1999).³ Another dimension of program generosity is the adjustment to benefits after retirement. Adjusting for inflation, as the U.S. does, allows retirees to retain the purchasing power of their benefits, but as retirees age their position declines relative to workers whose earnings reflect productivity gains as well as inflation. Some countries

provide more generous adjustments that allow retirees to retain their relative position, but adjusting benefits for the growth in wages or GDP is quite expensive. The U.S. does not incur this additional expense; rather, it starts with modest benefits and adjusts them after retirement only for changes in prices.

Figure 1 here

2.1.2 Demographic Changes Less Dramatic in U.S. than Elsewhere

In addition to having a less costly Social Security program today, the U.S. faces less dramatic demographic shifts in the future – and therefore less increase in costs – than other countries. Demographics affect the cost of any pay-as-you-go social insurance program, and the U.S. is no exception. Like in other countries, the number of beneficiaries per 100 workers has already increased, from 20 in 1960 to 30 today, and is scheduled to rise, to 40 by 2020 and 54 by 2075. An increasing ratio of retirees to workers brings commensurate increases in pay-as-you-go costs. Indeed, costs as a percent of taxable payrolls are projected to rise from 10.5 percent today to 19.4 percent in 2075 (The 2001 Annual Report).

Although the projected increase in beneficiaries in the U.S. is significant, the beneficiary/worker ratio is lower today and is projected to remain lower than in other developed countries. One important reason for the more moderate burden is that the fertility rate in the United States remains at two children per woman – the level required to keep the population from declining (Figure 2). In contrast, fertility rates are significantly below replacement for a large number of developed countries. At the same time, life expectancy at age 65 in the U.S. is roughly the same as the average for the other developed countries for men and less than average for women. Higher fertility and less than average life expectancy means that the population shifts will be less dramatic in the U.S. than elsewhere.

Figure 2 here

The U.S. not only faces less challenging demographics, it also has a greater proportion of older workers in the labor force than other countries. If older people continue working, they contribute to the pensions of retirees rather than drawing benefits. Although U.S. analysts often emphasize the dramatic decline in labor force participation of older men from 82 percent in the 1960s to 53 percent today, the current labor force activity of older workers is high compared to European countries. Figure 3 shows the average labor force participation rates today for men aged 55-65. The greater labor force participation in the U.S. eases the burden in a pay-as-you-go system.

Figure 3 here

2.1.3 U.S. Social Security Financial Shortfall Relatively Modest

Although U.S. Social Security costs are relatively low, any pay-as-you-go program needs a committed stream of income to be financially sound. While today's payroll taxes are more than adequate to cover current benefits and the program is running substantial annual surpluses, the U.S. Social Security system faces a shortfall when looked at over the 75-year projection period. How big is that shortfall? According to the most recent official projections, between now and 2016 the U.S. Social Security system will bring in more tax revenues than it pays out. From 2016 to 2026, adding interest on trust fund assets to tax receipts produces enough revenues to cover benefit payments. After 2026, the government can meet the benefit commitments by drawing down trust fund assets until the funds are exhausted in 2038 (The 2001 Annual Report).⁴ The exhaustion of the trust funds does not mean the program ends; even if no tax or benefit changes were made, current payroll tax rates and benefit taxation would provide enough money to cover more than 70 percent of benefits thereafter.

Over the next 75 years, Social Security's long-run deficit is projected to equal 1.86 percent of covered payroll earnings. 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 – the government would be able to pay the current package of benefits for everyone who reaches retirement age at least through 2075.⁵

To put the U.S. shortfall in perspective, it is helpful to compare it with that of other countries. In 1996, OECD economists estimated the net present value of pension contributions, expenditure, and unfunded liability for the major social security systems. The U.S. unfunded liability for Social Security over the 75-year projection period was equal to 23 percent of 1994 GDP, approximately where it remains today. The comparable burden was three or four times larger for most of the other countries studied. Some countries, such as Canada and Sweden, have undertaken major reforms since the 1996 study, so their numbers are no longer relevant. Nevertheless, the fact is the U.S. Social Security system faces one of the smallest financing shortfalls of any developed country.⁶

In short, modest benefits and relatively favorable demographics means that the U.S. does not face the same financial challenge as other developed countries. Nevertheless, proposals abound to replace at least a portion of the current Social Security program with private accounts.

2.2 Despite Benign Outlook, Political Push to Restructure Social Security

Despite the benign outlook for the U.S. Social Security system, President Bush established a commission to come up with specific recommendations for cutting back on the existing program and replace a portion of the program with private accounts. The Commission's report in December 2001 included three alternative private account proposals. In each case, individuals would contribute part of their payroll taxes to these accounts and invest the tax payments in private sector assets. At retirement, people would receive some of their income from the traditional Social Security program and some from the accumulated assets in the private account. Why the enthusiasm for dramatically restructuring the program given the modest size of the problem? The answer rests in a confluence of events and politics and the special role played by the 1994-1996 Advisory Council on Social Security.

2.2.1 Confluence of Events and Politics

At least six factors have been driving support for private accounts – the emergence of a long-term deficit, the maturation of the system and decline in returns, the 1990s stock market boom, Wall Street’s interest in this potential market, the desire to increase national saving, and the appeal of an asset development social policy.

- *Emergence of a Deficit.* Social Security would in all probability not be on the national agenda if the system were in actuarial balance, instead of facing a deficit over the 75-year projection period. The reemergence of a deficit was particularly disconcerting in the wake of the 1983 Amendments that were supposed to keep the Social Security system solvent for 75 years and produce positive trust fund balances through 2060. Yet, only a year after the 1983 legislation the Trustees began to project a small deficit, and the deficit grew more or less steadily for the next decade (Figure 4). The reemergence of a deficit made Social Security vulnerable to critics’ attacks, and the critics often exaggerated the problems in order to justify dramatic solutions.

Figure 4 here

- *Maturation of the System and Decline in Returns.* A modest deficit by itself would probably not have been enough to stimulate a major movement to restructure Social Security. The deficit emerged, however, just as the system matured, making apparent the full cost of the program and the low expected returns on Social Security contributions as compared to those available on market investments – the so-called "money's worth" issue. Since raising taxes or reducing benefits only worsen returns, almost all reform plans involve some form of equity investment.⁷ Given that equity investment is desirable, those who do not have confidence in government-administered investment plans conclude that private accounts are the only mechanism through which to achieve financial diversification.

- *A Booming Stock Market.* At the same time that it became clear that Social Security required more money and that returns on contributions had declined, the stock market started to boom. Real (inflation-adjusted) returns on equities, which had averaged 7.4 percent between 1926 and 1995, surged to 18.8 percent between 1995 and 2000 (SBBI 2000). The stock market clearly looked like a more attractive option than Social Security. The simultaneous rise of defined contribution pension plans in the private sector also increased the number of people who participated in the stock market. Many who observed rapidly rising balances in their pension accounts believed that they were brilliant investors and could do much better saving on their own.
- *Wall Street.* The potential for "taking the system private" quickly caught the attention of the nation's financial institutions, and they have been supportive of conservative think tanks leading the charge toward privatization. Interestingly, financial institutions, which once thought that private defined contribution accounts would be an attractive line of business, now seem to have backed away from wholehearted endorsement of efforts to privatize Social Security. Their reversal appears to reflect the recognition that the administrative costs associated with setting up and maintaining accounts for millions of low-wage workers would be very high and that the profit potential is much less than originally envisioned. Moreover, such an effort would likely bring increased scrutiny and regulation from the federal government that might harm other aspects of their business. Nevertheless, the initial enthusiasm on the part of financial institutions and the support they provided for conservative think tanks was a major factor behind the push for private accounts.
- *Desire to Increase National Saving.* Longer life expectancies and a rapidly aging population will greatly increase the cost of supporting the aged, and almost everyone agrees that it is prudent to save in anticipation of such an event. Like the debate about government investing in equities, however, the issue is whether saving can be done at the government level. Supporters of the current program argue that it is politically possible to save through Social Security trust funds, particularly if Social

Security accounts are separated from the rest of the budget; advocates of private accounts disagree.

- *Asset Development Social Policy.* Researchers and policy makers increasingly view allowing households to accumulate financial assets as a valuable social policy goal. Financial assets can help alleviate poverty by increasing people's capacity to initiate new expanded ventures. Accumulated assets can also serve as a protection against risks, and as a means to withstand crises and cope with transitions. Millions of Americans currently have no appreciable financial assets, and private accounts as part of the mandatory Social Security system will help this population

2.2.2 The Pivotal Role of the 1994-1996 Advisory Council on Social Security

While these broad trends laid the groundwork for the privatization debate, the role of the 1994-1996 Advisory Council on Social Security was pivotal. This group was appointed by President Clinton's Secretary of Health and Human Services under a statute requiring a quadrennial review of Social Security.⁸ The report of the 1994-96 Advisory Council was the first official document to include privatization proposals. Conservative analysts in the United States, who placed great weight on the merits of private control, had advocated privatization of Social Security during the 1970s and 1980s, but such proposals were viewed as extreme and garnered little support. The Advisory Council report was also the first attempt to cost out the financial implications of moving from the current system to one with funded defined contribution accounts, fully recognizing the burden of the transition.

The Council took up its work in 1994 just as Social Security's 75-year deficit, which had increased very gradually between 1983 and 1991, suddenly doubled. The Council quickly recognized that the tax increases or benefit cuts required to eliminate the growing deficit would further reduce returns on payroll tax contributions, which had already declined sharply as the system had matured. Council members also saw that equity investment in one form or another would provide additional revenue, and reduce the magnitude of the tax increases or benefit cuts needed to restore solvency. The question was how to introduce equity investment into the program, but the Council was sharply

divided and unable to agree on a single proposal. Instead, it issued a report with three separate alternatives. One option attempted to solve the problem within the defined benefit structure. The second cut benefits to fit within the existing payroll tax, and then created supplementary savings accounts equal to 2 percent of taxable payrolls. The third called for a dramatic restructuring of the system, by diverting 5 percentage points of the 12.4 percent payroll tax into mandatory personal security accounts. Unlike the second alternative, where the accounts would be held by the government and annuitized upon retirement, these accounts would be invested privately at the discretion of the individual, and individuals would have the choice of when and how they were paid out after retirement age. With these three alternatives on the table, the debate over privatizing Social Security began in earnest. Many argued that the time had come to redraw the boundaries between public and private responsibilities in the provision of retirement income.

3. Redrawing the Boundaries between Public and Private Responsibilities?

Most proponents of redrawing the boundaries between public and private provision of retirement income – that is, privatizing a portion of the program – couch their arguments in terms of “saving Social Security.” To what extent would privatizing “save” Social Security? That depends on the nature of Social Security’s problems. One problem, certainly, is the 75-year deficit; it undermines confidence in the program and should be eliminated. A second problem is the increase in future pay-as-you-go payroll tax rates that place a large burden on the next generation. A third problem could be the low return on Social Security contributions, which allows critics to say that people are not getting their “money’s worth” from their payroll tax payments. Restoring balance requires improving the program's cash flows. Reducing the burden on the next generation requires moving the program to a partially funded program. And improving returns on payroll tax contributions requires diversifying investment options to include private sector assets, such as equities. How would privatization contribute to the financing, prefunding, and diversification efforts? In fact, privatization alone would do nothing to restore balance to the program, and prefunding and diversification can be accomplished in the existing program as well as in private accounts.

3.1 Private Accounts on Their Own Do Not Help Financing

Although the debate in the U.S. over private accounts occurs in the context of restoring balance to the Social Security program over the next 75 years, proponents rarely articulate how shifting responsibilities from the public to the private sector will contribute to the financing effort. Restoring balance to a system where expenditures are projected to exceed revenues requires changes in cash flows. The only ways to improve cash flows are to increase revenues, lower benefits, or improve returns on trust fund assets. Notice that the list of options does not include “private accounts.” They are not on the list because, by themselves, private accounts do nothing to improve cash flows. In other words, the creation of private accounts alone – that is, without prefunding or diversifying investments – will not help restore financial balance of the Social Security program.

Consider what it means to introduce private accounts without making any changes in cash flows. Currently about 75 percent of Social Security revenues go out immediately to pay benefits and cover other expenses. This transfer of funds is necessary because past Congresses authorized larger benefits for retirees than their payroll taxes could justify. No one – neither supporters of Social Security or advocates of private accounts – suggests that benefits payable to current retirees or those soon to retire should be cut significantly. Thus, workers must continue to transfer an amount equal to 75 percent of current payroll taxes to maintain these benefits regardless of whether the nation retains Social Security or partially replaces it with private accounts.

The relevant scenario for establishing private accounts without increasing the program’s prefunding is one where the payroll tax not currently used to finance benefits – about 25 percent of the total – was diverted into private accounts. (Assume for now that private accounts like the trust funds are invested in bonds.) Such a shift would not change the amount of prefunding, since the accumulation of assets in private accounts would simply replace the accumulation of reserves in the Social Security trust funds. In addition, since annual revenues exceed current outlays such a shift would have no immediate impact on the program’s ability to pay benefits. Down the road, fewer Social Security reserves would be available to pay benefits, but public benefits could be cut by a roughly

equivalent amount to reflect the payments from the accumulation in the private accounts. The net long-run impact on the system would be zero. Thus, the creation of private accounts, without prefunding or diversifying investments, would do nothing to close the current 75-year financing gap.

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 methods listed for improving Social Security cash flows. For example, Edward Gramlich, former Chair of the 1994-96 Advisory Council on Social Security, favored private accounts, because he thought that 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 benefits in anticipation of the benefits that will be financed by the money in the private accounts. If the cuts in benefits exceed what can be plausibly financed from the accounts for some future workers, then this becomes a political device for cutting benefits.

Alternatively, private accounts might be viewed as a politically acceptable way of broadening investment options. Indeed, most observers would like to see Social Security participants – particularly those with no other assets – have access to the higher returns associated with equities. Some conclude that the only way to broaden the investment option is to have workers invest their payroll tax contributions individually. This issue will be discussed further below.

The point is that simply introducing private accounts will not bring more money into the system or reduce outflows from the program. Private accounts – in economic terms – are not a solution to Social Security's 75-year financial shortfall. An argument for private accounts must rest of the contention that their introduction will facilitate the needed changes in cash flows.

3.2 Private Accounts Not the Only Way to Prefund Social Security

In addition to restoring balance, many involved in the Social Security debate would like to see some prefunding of the system's benefit commitments. Prefunding would reduce the required payroll tax increases down the road and ease the burden on future generations. Advocates of private accounts see privatization as the only way to accumulate "real" reserves. Supporters of the current program conclude that the Social Security trust funds have already accumulated economically meaningful reserves, and can continue to do so in the future.

3.2.1 Benefits and Costs of Prefunding

The primary purpose of prefunding in the U.S. is to reduce the burden on future generations. That burden will depend on two factors: 1) the portion of future output of goods and services that future workers will have to give up to support the retired, and 2) the total amount of goods and services produced at that time. The portion going to the elderly can be reduced through explicit benefit cuts or the more politically acceptable option of increasing the retirement age. Prefunding can increase the size of future output.

Prefunding increases future output by increasing national saving, assuming that the accumulation of pension reserves is not offset by a decline in other government, personal or business saving. If prefunding increases national saving, and that saving is transformed into productive investment, it will increase the size of the capital stock and future output. Greater future output means that for any given share, workers will have more left over after they transfer resources to the elderly.

Note that it does not matter from an economic perspective whether the elderly's claim on output, in say 2040, is in the form of accrued rights under Social Security or in the form of purchasing power gained through the sale of accumulated assets (Thompson 1998). *Given the size of the total national output*, the question is simply how much the working population in 2040 will have transfer to the elderly and how much of total output will be left over for their own consumption. In other words, prefunding does not affect the burden by changing the nature of retirees' claims, but rather by increasing future output.

Prefunding not only adds to national saving, but also would avoid the high pay-as-you-go costs projected for the current system. Under current law, the costs for retirement and disability benefits are scheduled to rise from 10.5 percent of payroll today to 19.4 percent in 2075. Many conclude that the high payroll tax may be politically unacceptable, and thereby put the program in jeopardy. By providing interest income, prefunding would reduce the required payroll tax rates in the future.

Moving from pay-as-you-go finance to the buildup of reserves within either the Social Security system or private accounts is designed to increase national saving. For this effort to be meaningful, however, the current generation of workers will have to forego some additional current consumption. That means that they will in effect pay twice: they already have to reduce their consumption to cover promised benefits for the retired and those about to retire; now they will also have to reduce consumption to build up assets either collectively or individually. This is an inescapable outcome of the decision to move from a pay-as-you-go system to prefunding. Despite the additional burden on the current generation, policymakers generally view some prefunding as desirable.

3.2.2 Prefunding: Public or Private Responsibility?

If the decision is made that prefunding is desirable, does that mean that responsibility for pensions has to be reallocated from the public to the private sector? That is, are individually controlled private accounts the only option for accumulating reserves in anticipation of benefit payments? Certainly, those who do not have confidence in the government's ability to administer pension assets conclude that private accounts are the only mechanism to prefund benefit commitments. But supporters of the existing program believe that it is possible to accumulate reserves within the Social Security trust funds.

The U.S. Social Security program has already begun to amass reserves. Since 1983, payroll taxes have exceeded benefit payments, and the trust funds now hold reserves equal to 2.5 times annual outlays. One political impediment to the further accumulation of trust fund reserves is the debate in the U.S. about the extent to which these surpluses are economically meaningful – that is, the extent to which they constitute “real”

prefunding. Large deficits in the overall budget during the 1980s and most of the 1990s made it difficult for many to appreciate that Social Security surpluses had increased national saving. Critics contended that surpluses in Social Security simply went to cover deficits in the rest of the budget, and had no impact on government or national saving. They were wrong, of course; reducing government deficits is just as important in economic terms as increasing government surpluses.

In the late 1990s, the fiscal outlook changed in a fashion that was particularly conducive to clarifying the contribution of Social Security reserves to saving. The budget had reached the point where both the non-Social Security and Social Security portion were in surplus, and Congress decided that it was important to keep the two accounts separate. In fact, it created a “lock box” to ensure that revenues covered outlays in the non-Social Security portion of the budget, freeing up Social Security surpluses to pay down the outstanding government debt. This separation of accounts would make it very clear that “real” prefunding was occurring.

Two factors eroded this separation of accounts. The first was a massive tax cut enacted in May 2001 that sharply reduced non-Social Security revenues; the second was the terrorist attack of September 11 that further weakened a faltering economy and led to a major increase in spending. As a result, the non-Social Security portion of the budget is in deficit, and is borrowing funds from Social Security to cover the shortfall. Even in the new environment, of course, Social Security reserves continue to add to national saving, because, as just noted, reducing a budget deficit is just as important as increasing a surplus.⁹ Nevertheless, the deterioration in the overall budget condition makes it difficult, once again, to convince the public that the accumulation of Social Security reserves increases national saving and actually prefunds future benefit commitments. But this is a political and public relations problem, not an economic barrier to prefunding a government retirement program.

Less controversial evidence that government entities in the U.S. can prefund benefits comes from the experience of state governments. In addition to their general operations,

these governments accumulate reserves to fund pension obligations for their employees. They generally balance their budgets excluding the retirement systems, and run annual surpluses in their retirement funds of around 1 percent of GDP. Thus, states are clearly prefunding their pensions and adding to national saving through the accumulation of pension reserves

In short, prefunding some of the U.S. pension obligations has widespread support from both supporters and opponents of privatization. The debate centers on whether prefunding requires a shift from public to private responsibility for providing retirement income.

3.3 Public versus Private Responsibility for Equity Investment

The debate over public versus private responsibility really heats up when the question of prefunding is combined with the possibility diversification – that is, the possibility of investing accumulated Social Security reserves in equities. Supporters of private accounts claim that allowing Congress into the investment business will result in government interference in private sector activities. But supporters of the existing structure believe that it is possible for the government to accumulate reserves in advance of benefit payments and to invest part of those reserves in equities without political interference (Advisory Council on Social Security Reform, 1996; Munnell and Balduzzi 1998; and Aaron and Reischauer 1999).

Everyone involved in the debate in the U.S. agrees that having the federal government in the business of picking winners and losers in the stock market and voting on corporate proposals is undesirable. Thus, allowing the Social Security trust funds to purchase equities would require establishing mechanisms to ensure that the government does not interfere in private sector decisions. One such mechanism would involve indexing trust fund equity investments to a broad market average to avoid picking individual stocks. Another would require establishing an expert investment board to select the index, to choose portfolio managers for the accounts, and to monitor the performance of the managers. To ensure that government ownership does not disrupt corporate governance, most proposals require that voting rights be given to the asset managers, not voted at all,

or voted in the same fashion as the other shareholders, which is equivalent to not voting at all.

Two types of government pensions in the U.S. already invest in equities with no apparent ill effects. The federal Thrift Savings Plan (TSP) for government employees has established a highly efficient stock index fund. TSP designers insulated investment decisions by setting up an independent investment board, narrowing investment choices, and requiring strict fiduciary duties. The TSP also operates in a political culture of noninterference. Its creators made clear from the beginning that economic, not social or political, goals were to be the sole purpose of the investment board (Cavanaugh 1998).

State and local pension funds also invest in equities. Some opponents of trust fund investment in equities contend that state and local pensions interfere in private sector activities (Greenspan 1999). The contention is that these funds often undertake investments that achieve political or social goals, divest stocks to demonstrate that they do not support some perceived immoral or unethical behavior, and interfere with corporate activity by voting proxies and other activities. Recent research, however, documents that political considerations have had almost no effect on investment decisions at the state and local level (Munnell and Sunden 2000). Indeed, public pension plans appear to be performing as well as private plans.

In addition to the U.S. examples, several countries – most notably Canada, Japan and Sweden – have undertaken prefunding of their social security systems and broadened their investment options to include equities. Perhaps, the most relevant example for the U.S. is Canada, since its Social Security system is similar to that in the U.S.. In the early 1990s, Canada’s public pay-as-you-go pension plan known as the Canada Pension Plan (CPP) was in serious financial trouble. In response, the Canadian federal and provincial finance ministers decided to re-examine the current program and make changes to ensure its solvency. In the resulting reforms, Canada increased payroll contributions and took the radical step of investing its public pension funds in the stock market to raise pension returns. In order to ensure that the investments were undertaken in “the best interests of

the contributors and beneficiaries of the plan,” the government created the Canada Pension Plan Investment Board (CPPIB).¹⁰

The Canadian program is up and running, and board members have already started to move from passive investment to partially active investment.¹¹ According to the most recent figures, by the end of their fiscal year 2001, the CPPIB had C\$7.1 billion in equity assets under management. This amounts to about 14 percent of all consolidated public pension assets available in Canada.¹² And that number is expected to grow in the near future; according to CPPIB estimates, the value of assets under management is expected to exceed C\$130 billion by 2011. Although CPPIB experienced a loss due to market fluctuations in fiscal 2001, the CPPIB is highly confident that its equity investments will eventually produce returns that meet or exceed their long-term targets (CPPIB 2001).

To summarize, the debate in the U.S. is not about the desirability of prefunding, nor is it about broadening investment options. Most observers would like to see some prefunding of benefit commitments and would like to see Social Security participants – particularly those with no other assets – have access to the higher returns associated with equities. Rather, the debate is about the ability of the public sector to accomplish prefunding and diversification. In practical terms, achieving the economic goals of restoring balance to the system, raising return on system assets, and increasing the amount of prefunding does not require a shift from the public to the private sector. These goals could be accomplished within the current structure by increasing the accumulation of reserves in the Social Security trust funds and investing part of those reserves in private stocks and bonds.

Nevertheless, until recently, the politics in the U.S. appeared to favor shifting responsibilities for the provision of retirement income toward the private sector. Not only did the political climate support individual over collective responsibility, but also there was – and still is – considerable opposition to broadening investment options within the Social Security system. Alan Greenspan’s rejection of the notion of investing the Social Security trust funds in equities is particularly important. His allegation that

government investment in equities will hurt private sector rates of returns makes it extremely difficult to achieve the funding and diversification goals within Social Security. My sense is that in the wake of the sharp decline in the stock market, interest will wane in introducing equities in any form into the Social Security system. At the same time, efforts to restore long-run balance to the program will also be deferred.

4. How Would Privatization Affect Individuals, Financial Markets, and the Nation?

If the government and the private sector were equally capable of providing benefits to retired and disabled workers, the debate would not be so intense. However, the nature of the pension promise changes fundamentally depending on whether the benefits are provided through social insurance or through private accounts. Private accounts shift substantial investment risk to the individual. This increased risk might be worthwhile if privatization increased returns that individuals could earn on their Social Security contributions or greatly improved financial markets, but neither is the case. Moreover, privatization contains the seeds of unraveling the entire social insurance structure in the U.S., and thereby putting the welfare of future generations of low-income individuals at risk.

4.1 Impact of Private Accounts on the Welfare of Individuals

Private accounts shift risks to individuals. This may be fine for supplementary retirement income, but is harder to justify for people's basic retirement benefit. Moreover, individuals do not earn higher returns in exchange for this increased risk.

4.1.1 Private Accounts Are Risky and Costly

The current Social Security pension promise is a defined benefit based on lifetime earnings, paid out as a lifetime annuity, and fully adjusted for inflation after retirement. Private accounts are defined contribution plans where benefits depend on contributions and investment returns. The change in the benefit commitment shifts substantial risks to the individuals and makes the benefits unpredictable. Such a shift is inconsistent with the goals of the Social Security program; the whole point of having a Social Security system is to provide workers with a predictable basic retirement income to which they can add

income from private pensions and other sources. If it is appropriate for the government to interfere with private sector decisions to ensure a basic level of retirement income, it does not make sense for that basic amount to be uncertain, reflecting one's good luck or investment skills.

In addition to the fundamental philosophical argument, private accounts raise a host of practical problems, including potential access before retirement, lack of automatic annuitization, and cost:

- *Access Before Retirement.* 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 (IRAs) and employer-provided defined contribution plans suggests that holding the line is unlikely. To the extent that Congress acquiesces and allows early access – no matter how worthy the purpose – many retirees will end up with lower, and in some cases inadequate, retirement income.
- *Lack of Automatic Annuitization.* Another risk is that individuals stand a good chance of outliving their savings, unless the money accumulated in their private accounts is transformed into annuities. However, few people purchase private annuities, and costs are high in the private annuity market.¹³ Even if costs were not high, the necessity of purchasing an annuity at retirement exposes individuals to interest rate risk; if rates are high when they retire, they will receive a large monthly amount, if rates are low, the amount will be much smaller. Moreover, the private annuity market does not offer full inflation-adjusted benefits. In contrast, by keeping participants together and forcing them to convert their funds into annuities, Social Security avoids adverse selection and is in a good position to provide inflation-adjusted benefits.
- *Cost.* The 1994-96 Social Security Advisory Council estimated that the administrative costs for an IRA-type private account would amount to 100 basis

points per year.¹⁴ A 100-basis point annual charge sounds benign, but it would reduce total accumulations by roughly 20 percent over a 40-year work life. Moreover, while the 100-basis-point estimate includes the cost of marketing, tracking, and maintaining the account, it does not include brokerage fees. If the individual does not select an index fund, then transaction costs may be twice as high. Indeed, the United Kingdom, which has a system of personal saving accounts, has experienced considerably higher costs (Murthi, Orszag, and Orszag 1999). Finally, unless prohibited by regulation, these transaction costs involve a flat charge per account that will be considerably more burdensome for low-income participants than for those with higher incomes.

In short, private accounts shift investment risk to the individual, are costly to administer, and raise a host of complex issues about how to deal with accumulated assets at retirement. It is virtually impossible for the private sector to duplicate the inflation-indexed annuity currently provided by Social Security system. The increased risk and costs might be worthwhile if they brought higher returns and improved financial markets, but neither is the case.

4.1.2 Private Accounts Do Not Produce Higher Returns

The creation of private accounts alone – that is, without prefunding or diversification – will have no effect on the returns earned by participants. It is true that the expected inflation-adjusted return on private sector assets exceeds the expected return on Social Security taxes. Even the return on intermediate government bonds – 2.2 percent over the period 1926-2000 – is better than the 1.3 percent projected for Social Security. But that comparison ignores the fact that 75 percent of revenues are dispensed immediately to cover promised benefits. The debate about rates of return should concern only whether returns on the remaining 25 percent of Social Security income would be higher if they were invested in private accounts than in the Social Security trust fund. In fact, the two entities could hold the same securities and, before considering administrative costs, earn the same *gross* return. Once administrative costs were considered, however, the *net*

returns would be higher under the trust fund approach, since it costs a lot less to invest aggregate trust fund assets than to set up 150 million private accounts.

Suppose that the funds transferred to private accounts were invested in equities instead of bonds. In that case, projected returns on privatized accounts would appear much higher than returns under the current system. But the comparison ignores the fact that stocks involve more risk than bonds, and returns need to be adjusted for risk. If all households held both stocks and bonds, they should value an additional dollar of stocks the same as an additional dollar of bonds, even though stocks have a much higher expected return before adjusting for their added risk. That is, the risk-adjusted return on stocks and bonds would be identical. This conclusion has to be modified to the extent that some households currently do not have access to equity investment. In this case, the risk-adjusted returns would be higher than those currently earned on the bonds held by Social Security.

The added returns could be secured without introducing private accounts, however. As discussed above, the revenues not required for current benefits could be invested in equities by private fund managers on behalf of the Social Security trust fund. Although the two approaches would appear quite different from the perspective of participants, the impact on *gross* returns would be equivalent. As noted earlier, for any given investment, private accounts always earn lower *net* returns because of the administrative costs.

Consider a second scenario where individuals transfer not only the 25 percent of payroll taxes not required for current benefits, but also an additional 25 percent that is earmarked for current benefits. That is, suppose they send 50 percent of their payroll taxes to Merrill Lynch or Fidelity rather than the U.S. Treasury. Assume that, like the rest of the funds, this additional 25 percent is invested in intermediate government bonds, which return 2.2 percent. That return seems like an improvement over the 1.3 percent projected for Social Security, 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 (since, as noted above, no one suggests renegeing on these commitments). One approach would be 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.

In short, the introduction of private accounts alone cannot raise the return that workers earn on their payroll tax contributions. The only way to improve returns is to build up a trust fund so that people do not have to contribute so much in payroll taxes in the future. But building up reserves can take place in either the trust funds or private accounts. Either approach would eventually raise returns once the unfunded benefit commitment was paid off. Higher returns to future generations, however, would be gained at the expense of lower returns to current generations who have to pay twice, first to cover promised benefits for others and second to build up reserves in their own accounts. The question of how much to prefund requires weighing the welfare of one generation against that of another. Without prefunding, however, a shift to private accounts cannot raise returns. The implications for financial markets are similar; the introduction of private accounts without new funding has little impact.

4.2 The Impact of Private Accounts on Financial Markets

Two aspects of the interaction of private accounts and financial markets merit consideration. The first is the extent to which a shift from public to private provision of retirement income affects financial flows and relative rates of returns on bonds and equities. The second is the extent to which the introduction of private accounts fundamentally alters the level of government activity.

4.2.1 The Impact of Private Accounts on Financial Flows and Returns

The introduction of private accounts without any additional funding would have virtually no effect on financial markets. Consider first the case where both the trust funds and

private accounts are invested in bonds. In this event, the increase in bond holdings from the private accounts would be exactly offset by the reduction in bond holdings by the trust funds. The transaction would have no impact at all on financial markets. Next consider the case where the private accounts were invested in equities. Even this scenario produces only a minimal effect on financial markets, since the shift would involve little more than a restructuring of portfolios. That is, individuals would purchase, say, \$100 billion of equities through the private account component of the Social Security system, and the public would hold \$100 billion less of equities outside of Social Security. Similarly, Social Security through the reduction in trust fund reserves would hold \$100 billion less in bonds, and the public would own \$100 billion more. From the perspective of financial markets, this is virtually the same transition that would occur if the trust fund investments were broadened to include equities. In both cases, the portfolio restructuring might have some effect on relative rates of return of equities and bonds, but the changes would be expected to be very small (Bohn 1998).

The alternative scenario is one where an increase in funding accompanies the creation of private accounts. This is more than a portfolio restructuring, and increased funding would affect real variables such as national saving. The primary impact of an increase in national saving would be a reduction in real interest rates due to the increased availability of funds. If the pre-funding were accompanied by an increase in equity investment either through private accounts or the trust fund, relative rates of returns again might be affected slightly. But the primary impact of the prefunding would be lower rates, which would encourage investment and higher national income in the future.

In short, private accounts alone do nothing to enhance Social Security financing, improve returns to individuals, or affect financial markets. Diversifying investments – that is, expanding Social Security investments to include equities – either through private accounts or through the trust funds – would increase the return on system assets but not by as much as first thought because of the necessary adjustment for risk. The only way to have a real impact on the economy is to increase the funding through the accumulation of reserves, and again this can be accomplished either through the trust funds or through

private accounts. Prefunding – if not offset by decreased personal or business saving – will lower interest costs and encourage investment. It will also improve returns down the road once the system’s current unfunded liability is paid off. In other words, prefunding is the key economic factor, not private accounts. Advocates of private accounts are often unclear about this fact.

4.2.2 The Political Economy of Private Accounts versus Trust Fund Investment

Advocates of private accounts also exaggerate the political advantages to private accounts. Although proposals to introduce private accounts as compared to proposals to invest Social Security trust fund reserves in equities elicit very different responses from policymakers, the two approaches are remarkably similar. As discussed earlier, the 1994-96 Social Security Advisory Council put three alternatives on the table. The most extreme – individually managed private accounts – has been all but eliminated from consideration because of the extremely high administrative costs. The remaining candidates are government-managed private accounts and direct trust fund investment. Government-managed private accounts would work very much like the existing Thrift Saving Plan, where the federal government deposits workers’ contributions in a private account and, following the workers’ preferences, allocates the money among a designated series of index equity funds, bond funds, and fixed-income investments. Except for the worker direction, this process is virtually identical to what would occur in the case of direct trust fund investment, where the government would invest a portion of payroll tax receipts in an appropriate broad market index.

Those who fundamentally do not trust the government should find neither option appealing. Opponents of investing in equities through the trust funds contend that the government might use its equity holdings to directly influence corporate decisions and might also invest on the basis of social rather than risk and return considerations. For example, the current controversy over tobacco litigation might create pressure to take tobacco holdings out of the index. But note that a system of government-administered private accounts also requires the government to designate a series of index equity funds for investment. Hence, questions about which stocks to include in the indexes, and how

shares are to be voted are just as much issues for the government-administered private accounts are as for the centrally managed approach. The only difference is that individuals have a propriety interest in their own account, and this interest might make the government more reluctant to interfere for its own purposes.

Not only are the mechanics of government-managed individual accounts and trust fund investment nearly identical, but also the introduction of private accounts does not mean that the government would be out of that portion of the retirement business. Government regulation of employer-sponsored plans, which as noted above in the U.S. provide about one quarter of retirement income, serves as a useful benchmark. The primary regulatory structure is the federal income tax system, reflecting the notion that pensions are tax preferences or indirect government expenditures. But regulation goes beyond the Internal Revenue Service, which administers the tax laws, and includes three other government agencies.¹⁵ In addition to government agencies, the federal Courts and multiple sets of laws regulate the pension system. Some observers have suggested that firms that get involved in providing private accounts for Social Security may see the regulation of those accounts spill over to other aspects of their business.

To summarize, privatization alone would have almost no impact on financial flows or rates of return. Only prefunding – by increasing national saving – would affect economic fundamentals. Similarly, the extent to which privatization would eliminate government from retirement income activities is often exaggerated. In the most probable form of private account, the government would be required to select the equity indexes and decide how the shares should be voted, just as in the case of trust fund investment in equities. The government would also play a major regulatory role with regard to private accounts. At the same time that private accounts do not greatly diminish the role of government, they create a serious long-run threat to the stability of the U.S. social insurance system.

4.3 Private Accounts Could Unravel the Social Security System

While private accounts are merely risky and costly for the average and above average worker, they could end up being disastrous for low-income workers in the future. The whole point of shifting funds to private accounts is to emphasize individual equity – that is, a fair return for the individual saver – rather than adequacy for all. Taking part of what the high earner makes to improve the return for the low earner would be contrary to the spirit of such a plan. To meet this objection many advocates of the defined contribution approach provide either a flat benefit amount or a healthy minimum benefit for low-wage workers. Although such provisions will protect low-income workers in the short term, opponents of these accounts believe that maintaining redistribution within the program is unlikely to be sustainable.

A mixed system with a flat benefit and a private account is likely to respond very differently to change over time than the existing defined benefit arrangement. For example, suppose that the overall size of Social Security was viewed as too large as the retirement of the baby boom nears. Benefit cuts under the existing program would likely affect all people at all points in the income distribution proportionately; for example, the extension of the normal retirement age from 65 to 67 in 1983 was a form of across-the-board cut. Congress might even attempt to protect the benefits of workers with low incomes. Cuts under a mixed system are likely to be very different. Congress is likely to view the private account component as individual saving and see little gain from cutting it back. The more plausible target would be the flat minimum benefit, which goes to both those who need it and those who do not. Higher wage workers are going to find they get very little for their payroll tax dollar from such a residual Social Security program and will withdraw their support. As the minimum is cut repeatedly, it will become inadequate for low-wage workers. In response, Congress is likely to replace the flat benefit with a means-tested program.

Observers sometimes argue that the same economic outcome can be achieved either through means-tested benefits or through social insurance payments that are then taxed back. This conclusion ignores psychological, social, political, and institutional factors in

the U.S.. Means-tested and social insurance programs in the U.S. grow out of different historic traditions, have different impacts on their recipients, and are viewed very differently by the public. Social insurance reflects a long history of people getting together to help themselves. This self-help approach means that individuals have an earned right to benefits, since they receive payments based on contributions from their past earnings. The programs involve no test of need, and program benefits can be supplemented with income from saving or other sources. Means-tested programs in the U.S., on the other hand, grow out of the punitive and paternalistic poor-law tradition, which recognizes only begrudgingly a public responsibility for providing for the impoverished. Means-tested benefits tend to be less adequate than those provided under social insurance programs and have a stigma, which means that many who are eligible never claim their benefits. To the extent that people at the low end of the income distribution are forced to rely on means-tested benefits, they are likely to be worse off than they would be under the existing defined benefit Social Security system.

5. Conclusion

How a nation arranges its public pension system can have profound effects on financial markets, on individuals, and on society as a whole. The debate about pension arrangements is often couched in terms of private versus public provision of retirement benefits, but the economic dimensions are the ones with real impact. The economic questions include how much advance funding should be undertaken, how that prefunding should be invested, and whether the program should be structured as a defined-benefit plan or a mixed defined benefit/ defined contribution arrangement. The public/private issue is important only to the extent that it influences the response to one of these questions.

Because privatization alone accomplishes very little in terms of the basic economics, it is not the answer to the U.S. Social Security problems. The introduction of private accounts – with no other changes – contributes nothing toward eliminating the 75-year financial shortfall, nor does it raise the returns that individuals earn on their Social Security contributions. Prefunding and diversification of investments will improve the program's

financial status, but these changes can be made within the context of the existing defined benefit program. A defined benefit arrangement allows Social Security to spread risks across individuals and over generations, and it allows the government to provide fully indexed annuities, a product not available in the private sector in the U.S.

Some proponents of private accounts acknowledge the advantages of defined benefit plans, but contend that because defined benefit and defined contribution plans are subject to different types of risks, a system that combines the two approaches will function better than a system that relies on a single model. But the United States has never tried to provide retirement income through a single plan. By design, Social Security has provided inadequate income – particularly to middle- and upper-income individuals – in the expectation that they will supplement these benefits on their own. It has worked, at least in part; roughly half the work force is covered by supplementary pensions. Many of these the supplementary plans started as defined benefit plans, but increasingly have shifted to the defined contribution model. On top of that, individuals can save independently through a variety of voluntary tax-subsidized Individual Retirement Accounts. In other words, the U.S. already has many tiers that combine the defined benefit and defined contribution approaches to providing retirement income. It does not have to privatize Social Security to create still another tier.

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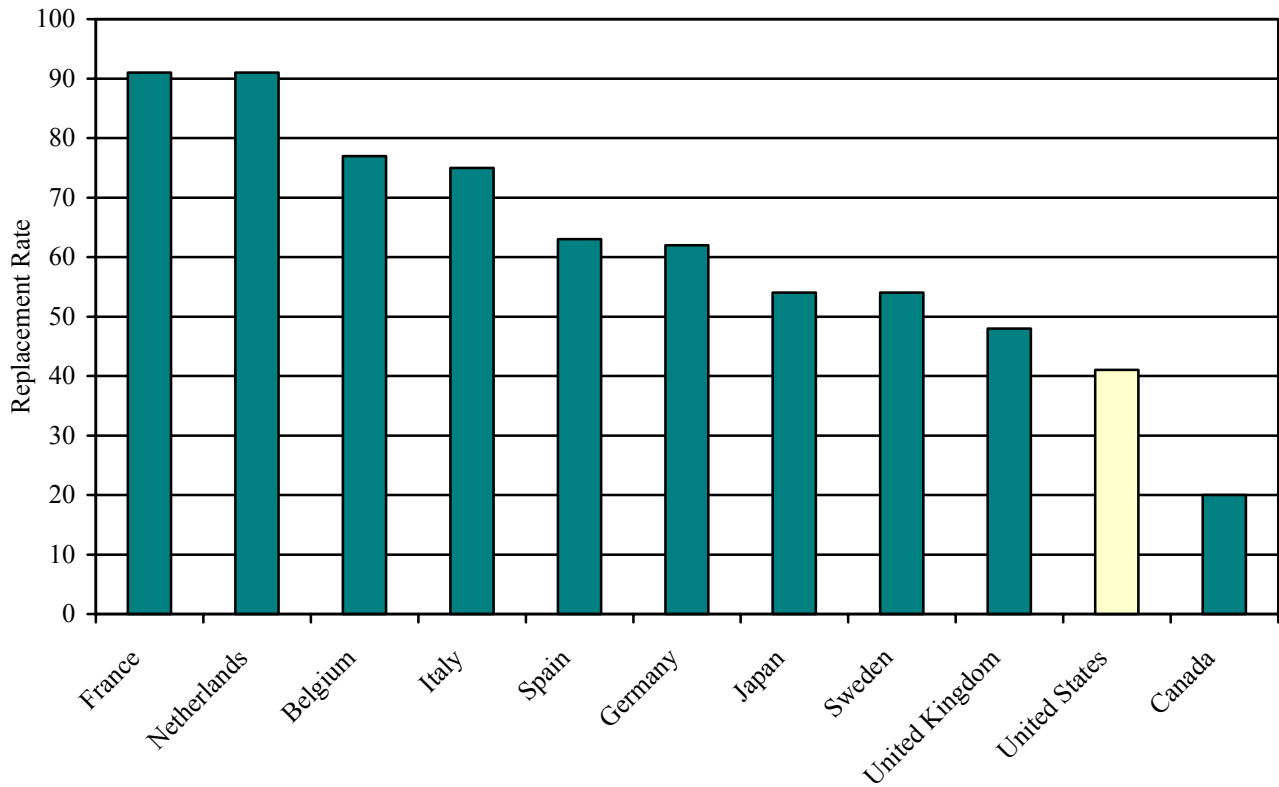
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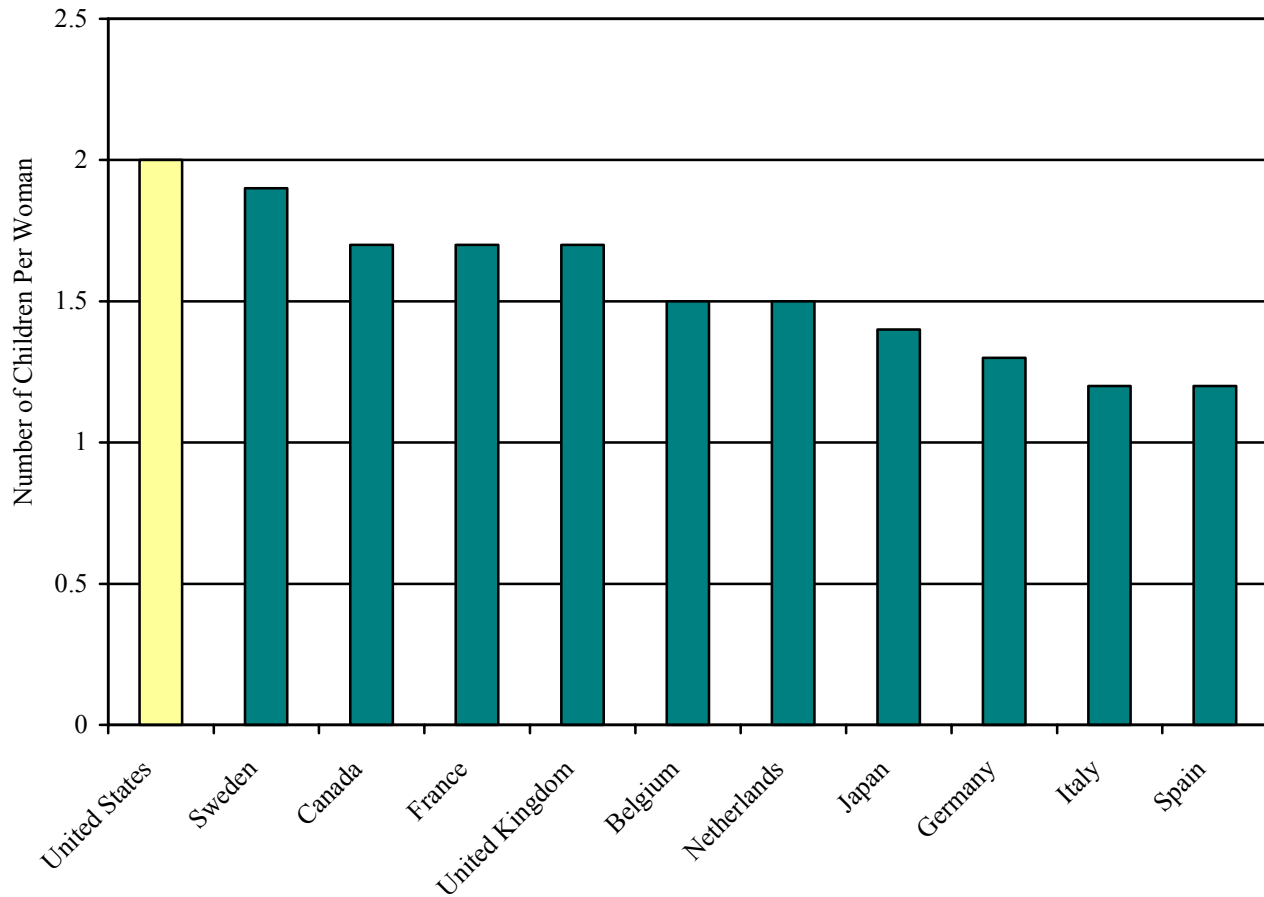
Figure 1. Replacement Rate at Early Retirement Age, 1999.*



Source: Jonathan Gruber and David Wise, eds. 1999. *Social Security and Retirement Around the World*. National Bureau of Economic Research. Chicago, IL: University of Chicago Press, Table 1, p.29.

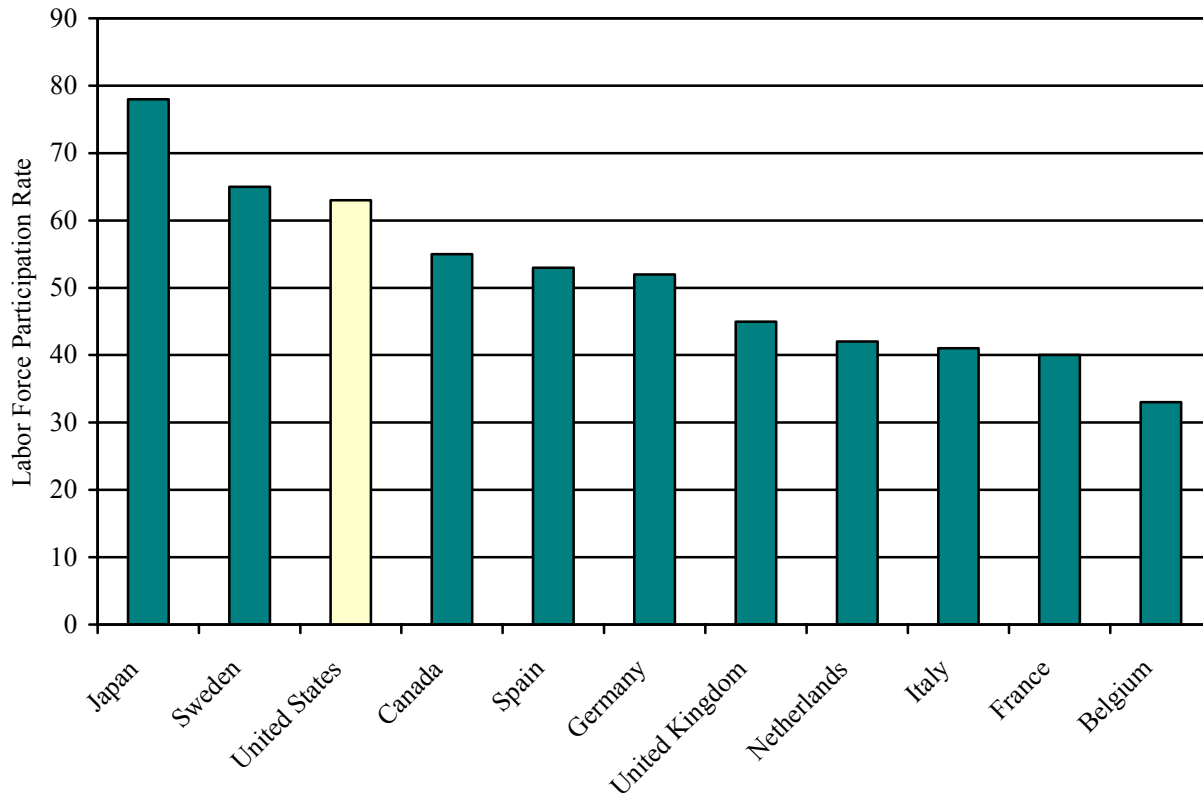
* Many of these countries have undergone recent pension reform, see endnote #3.

Figure 2. Fertility Rates, by Country, 1996.



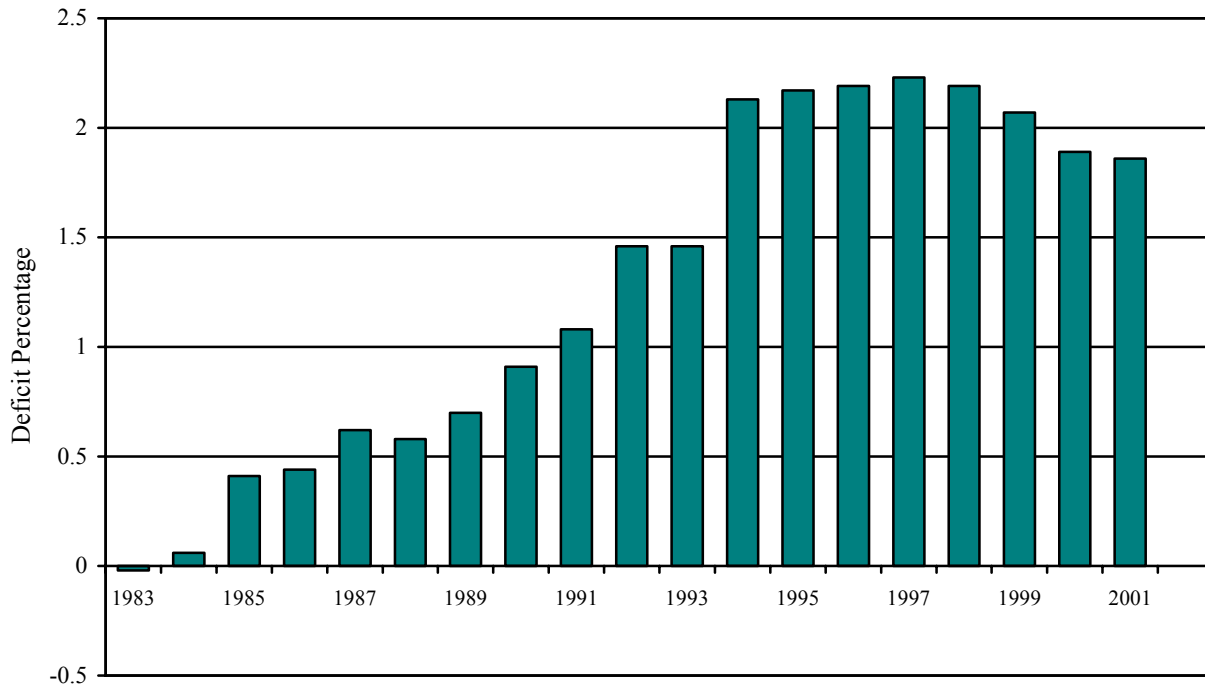
Source: United Nations Department of Economic and Social Affairs. 1996. *Demographic Yearbook 1996*. United Nations.

Figure 3. Average Labor Force Participation Rate for Men Aged 55-65, 1999



Source: Jonathan Gruber and David Wise, eds. 1999. *Social Security and Retirement Around the World*. National Bureau of Economic Research. Chicago, IL: University of Chicago Press, Table 1, p.29.

Figure 4. Social Security Deficit, 1983 – 2001



Source: *The 2001 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds*. 2001. Washington, D.C.: U.S. Government Printing Office.

ENDNOTES

¹ Along with the dramatic growth in assets, the composition of employer-provided plans in the private sector has shifted from defined benefit, with benefits based on previous earnings, to defined contribution, where benefits depend on contributions and investment returns. Currently, defined benefit and defined contribution each account for about 50 percent of the assets in private sector plans. State and local plans remain largely defined benefit. Although in some private-sector defined contribution plans the sponsor makes or controls investment decisions, the defined contribution world is increasingly dominated by plans where individuals make the overall portfolio decisions.

² Esping-Andersen (1990) characterizes the U.S. Social welfare system as “liberal” in his hierarchy of regimes. Liberal welfare states, such as the U.S. Canada, and Australia, are ones in which means-tested assistance, modest universal transfers, or modest social-insurance plans predominate. Instead, the state tries to encourage market mechanisms and institutions as a means of welfare. Full employment, not generous welfare benefits, provides the key to economic well being. Esping-Andersen contrasts liberal welfare states with the social democratic and the conservative. Social democratic welfare states (i.e. Scandinavia) promote a high level of social equality among their own citizens. These regimes, through heavy taxation, provide universal services and benefits at middle class standards. Conservative welfare states (i.e. Southern European countries such as France, Germany, Italy, and Spain), due strong religious histories, institutionalize the family by supporting the male breadwinner/female caregiver model with transfers. Here a generous public welfare policy is a means to preserve status differences, as services and benefits improve with class and status.

³ Replacement rates are for the early retirement age of each respective country. Since the calculation of these rates by Gruber and Wise (1999), many of these countries have undergone pension reform that will effectively lower their replacement rates. For example, Belgium recently raised its normal retirement age to 65, which will lower the replacement rate to 60 percent at the typical retirement age. Italy has eliminated its seniority pensions, began applying a full actuarial reduction to early retirement benefits, created a private system of pensions through tax incentives to subsidize the basic government pensions, and reduced the level of benefits at the normal retirement age. These changes are projected to decrease the Italian replacement rate to 60 percent. In May 2001, Germany replaced the current system with a reduced pay-as-you-go state pension and a tax-subsidized private pension system. The reform lowers the replacement rate at the normal retirement age of 65 from 70 percent to 63 percent. Sweden has made sweeping changes to its pension scheme.

⁴ Social Security financing will put increasing pressure on the unified federal budget before the trust fund balances are exhausted. Although shortfalls between 2016 and 2038 can be met in a technical sense from the program itself, first by drawing on the interest earned on the trust funds and then by drawing on the funds themselves, these actions will

lead to a higher unified deficit unless the government raises taxes, reduces other spending, or increases federal borrowing. However, the fact that workers have paid taxes in excess of contributions since 1983 resulting in the accumulation of trust funds reserves means that the nation has more resources to meet these demands than it would have had otherwise. Social Security reserves represent an increase in government and national saving, and this increased saving encourages investment, which produces more national income.

⁵ Social Security's long-term financing problem is somewhat more complicated than just described. Under current law, the tax rate is fixed while costs are rising, and this pattern produces surpluses now and large deficits in the future. As a result of this profile, under present law, each year the 75-year projection period moves forward, another year with a large deficit is added to the 75-year deficit. Assuming nothing else changes, this phenomenon would increase the 75-year deficit slightly (.08 percent of taxable payroll with today's deficits) each year. Many policymakers believe that the system should not be left with a huge deficit in the 76th year.

⁶ A study by the International Monetary Fund (Chand and Jaeger 1996) came to very similar conclusions.

⁷ For example, all three proposals emerging from the 1994-1996 Advisory Council on Social Security (1997) advocated equity investment.

⁸ The chair was Edward Gramlich, Dean of the School of Public Policy at the University of Michigan and currently a member of the Federal Reserve Board. Gramlich is probably best described as a liberal academic with some government experience who cares deeply about increasing national saving. The Secretary charged Gramlich and his council to look particularly at the long-run financing of the program.

⁹ The only way in which Social Security surpluses would not increase government saving is if Congress decided to increase spending or reduce taxes in the non-Social Security part of the budget *because of* the surplus in Social Security. As noted above, there is little evidence that such offsets have occurred to any significant degree in the past, and do not seem to be occurring now.

¹⁰ The Canada Pension Plan Investment Board operates independently from the Canada Pension Plan under legislation that gives it responsibility for all investment decisions. The Board's powers, however, are not unchecked. Rigorous corporate governance practices, code of conduct, and conflict of interest guidelines have been set up by the directors of the program and are designed to set high standards for performance, disclosure and ethical behavior.

¹¹ Initially, CPPIB was only allowed to invest passively in equity indexed funds. By August 2000, the regulation was relaxed to allow up to 50 percent of the capital allocated to equities to be actively managed. The board's first major active decision was to reduce

exposure to Nortel Networks a stock that represented 28 percent of its current assets. This action avoided C\$535 million in losses that would have otherwise occurred had the board not actively reduced their holdings.

¹² Currently, all investments under the Canada Pension Plan control are in fixed-income portfolios.

¹³ The reason for the high costs is adverse selection: people who think that they will live for a long time purchase annuities, whereas those with, say, a serious illness keep their cash. Private insurers have to raise premiums to address the adverse selection problem, and this makes the purchase of annuities very expensive for the average person.

¹⁴ In addition to costs, a study by the Employee Benefit Research Institute (Olsen and Salisbury 1998) raised real questions about the ability, in anything like the near term, to administer a system of individual accounts in a satisfactory way. Unlike the current Social Security program that deals with the reporting of wage credits, a system of personal accounts would involve the transfer of real money. It is only reasonable that participants would care about every dollar, and therefore employer errors in account names and numbers that arise under the current program would create enormous public relations problems under a system of individual accounts.

¹⁵ The three agencies are 1) the Department of Labor, which oversees rules relating to fiduciary conduct, disclosure of information to plan participants, and enforcement of rights; 2) the Pension Benefit Guarantee Corporation, which assures the security of benefits under defined benefit plans; and 3) the Securities and Exchange Commission, which regulates investments products offered to individuals under defined contribution plans.