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Social Security in the United States: Overview and Outlook.

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Acronyms and Glossary:

COLA: Cost-of-Living Adjustment

SSA: Social Security Administration

OASDI: Old Age, Survivor's and Disability Insurance

SSI: Supplemental Security Income

AIME: Average Indexed Monthly Earnings

FRA: Full Retirement Age

PIA: Primary Insurance Amount

PAIG: Pay-As-You-Go Financing

HI: Medicare Hospital Insurance

SMI: Supplemental Medical Insurance

BBA: Balanced Budget Act

MMA: Medicare Prescription Drug, Improvement and Modernization Act

First Tier: Redistributive schemes

Second Tier: Earnings-related schemes

DB: Defined Benefit

DC: Defined Contribution

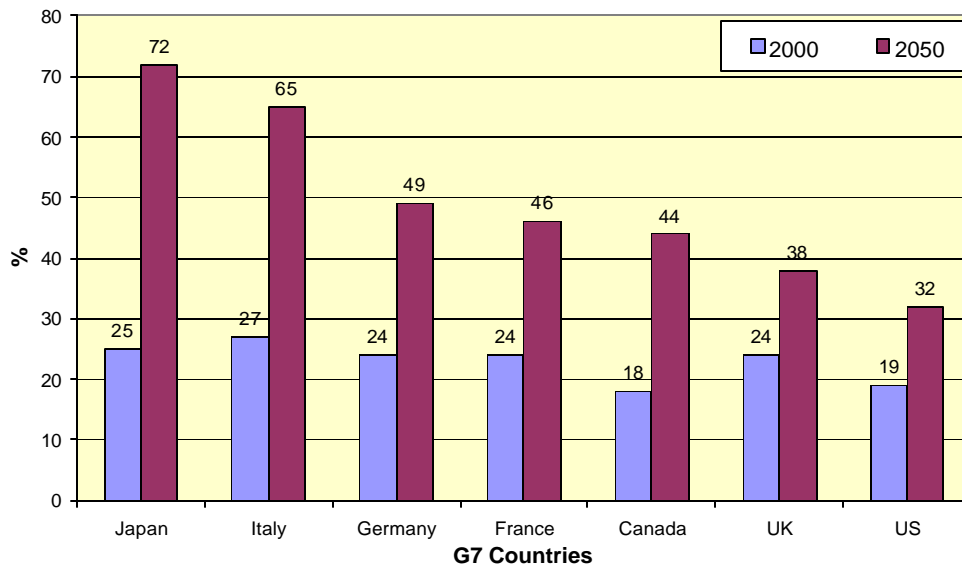
ESOP: Employee Stock Ownership Plan

CSRS: Civil Service Retirement System

Introduction

In response to the challenges posed by an aging population, countries all over the world are currently considering, or may have already enacted, fundamental structural reforms of their Social Security Pension programs. Demographic trends and other pressures on these programs are expected to increase sharply in coming decades. In particular, the looming retirement of the baby-boom generation, declines in fertility rates, and increases in longevity are projected to cause a significant increase in the old-age dependency ratio: the ratio of retirees to the working-age population (Chart 1).

**Chart 1:
Old-age Dependency Ratio***



* Age-dependency ratio: population aged 65 and over as a percentage of population aged 15-64.
Source: OECD (2005a)

Social Security is considered one of the United States' most successful government programs. Despite its success in helping millions of senior Americans avoid poverty, it faces a long-term deficit and policymakers have been considering changes to address these problems. The Trustees of the Social Security and Medicare systems (programs including age-related social expenditures) continue to stress the actuarial deficits of both systems in face of the imminent retirement of the baby-boom generation and pressures on health care costs. Moreover, the erosion of the U.S. fiscal situation since 2001 (when projections were for large surpluses and the elimination of public debt by 2009) and the re-emergence of budget deficits have revived concerns regarding the impact of these demographic trends on the longer-term fiscal position.

This paper describes the Social Security system in the United States, discusses the state of the program today and the challenges ahead. Part I is an overview of the federal programs that are part of the social security system and provide support for the elderly, as well as of employer-sponsored and private pension plans. Part II discusses the system's balance between fairness, efficiency and sustainability, as well as income and retirement trends. Part III discusses reform proposals, and the last section offers some concluding remarks.

Part I: An Overview of the Retirement Income System in the United States

The Social Security Act was enacted by Congress in 1935 at the request of President Franklin Delano Roosevelt, as part of the New Deal. It created a program to provide lifetime payments to retired workers beginning at age 65, laying the basis for today's Social Security program. The program began as a measure to implement "social insurance" during the Great Depression, against uncertainties brought by death, disability and old age. In 1939, amendments were implemented, adding two new categories of benefits: payments to the spouse and minor children of a retired worker (dependent benefits) and survivor benefits paid to the family in the event of the premature death of a worker. The 1939 amendments also increased the benefit amounts and anticipated the start of monthly benefit payments to 1940 from 1942.

In the 1940s, retirement benefits were low, since the program was just beginning, and only 50% of workers were covered. Virtually no changes were made in the program. In 1950, however, major amendments were enacted, raising benefits and placing the program in the path to the virtually universal coverage it has today. Congress approved the first Cost-of-Living Adjustment (COLA), a 77% increase in benefits to offset the effect of inflation on fixed incomes.¹

The Amendments of 1954 initiated a disability insurance program. While this measure did not offer cash benefits, it prevented periods of disability from reducing or wiping out retirement and survivor benefits, by "freezing" workers' Social Security records during years they were unable to work. On August 1, 1956, the Social Security Act was amended to provide benefits to disabled workers aged 50-65 and disabled adult children. The Congress broadened the scope of the program in the following two years, allowing workers under age 50 and their dependents to qualify for benefits, until eventually disabled workers at any age could qualify.

The 1960s brought additional changes to the program. Among them, the most significant was a provision in the Amendments of 1961 lowering the age at which men are first eligible for retirement benefits to 62 (women were given this option previously, in 1956). During this period Medicare was enacted by Congress. Under Medicare, health coverage was extended to Social

¹ In 1972, the law was changed to provide for automatic annual COLAs based on the annual increase in the Consumer Price Index (CPI), beginning in 1975.

Security beneficiaries aged 65 and older (and eventually to those receiving disability benefits as well). Nearly 20 million beneficiaries enrolled in Medicare in the first 3 years of the program.

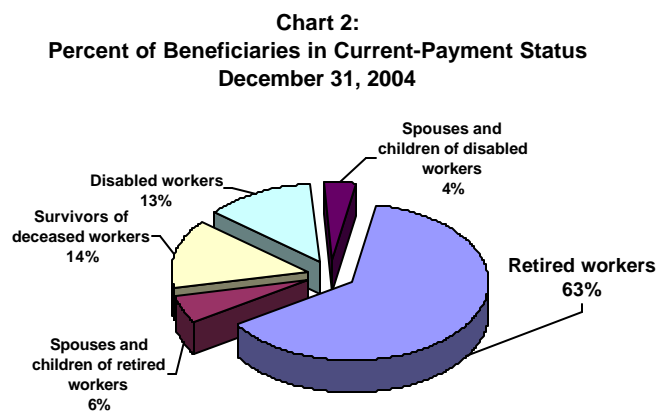
In the Amendments of 1972, Congress created the Supplemental Security Income (SSI) program, and assigned it under the responsibility of the Social Security Administration (SSA). The program was created to provide cash payments to low income people aged 65 or older, or disabled.

In the early 1980s, the program faced a serious financial crisis. Then President Ronald Reagan appointed a panel, known as the Greenspan Commission, to study these financing issues and make recommendations for legislative changes. The final bill, signed into law in 1983, introduced several changes in the program, including the taxation of benefits, the first coverage of federal employees, raising the retirement age starting in 2000, and increasing the reserves in the Trust Funds.

Since its creation, Social Security has grown to become the United States' largest federal program. In 2004, the federal government paid monthly benefits to 48 million retired or disabled workers, their families and their survivors. As of December 31, 2004, about 92% of the population aged 65 and over were receiving Social Security benefits. Benefit payments amounted to US\$487 billion in 2004, roughly 1/4 of the entire federal budget.

The Social Security program today

There are two principal federal programs offering support for the elderly: *Old Age, Survivor's and Disability Insurance (OASDI)*, commonly known as Social Security, and *Medicare*. Social Security provides retirement income to the elderly, and is funded from payroll taxes on the working-age population. Medicare provides the elderly with medical insurance. It is only partly funded by payroll taxes and premium payments by retirees, with the balance of its resources coming from the general revenues of the federal government. In addition, the *Supplemental Security Income (SSI)* program, serves as a safety net to ensure that the elderly and disabled have a minimum level of income if their pension benefits are very low or they do not qualify for Social Security (OECD, 2005b).



Source: ECLAC, on the basis of data from the Social Security Administration, Office of the Chief Actuary.

Old-Age, Survivors and Disability Insurance Program (OASDI)

Participation in the OASDI system is mandatory and virtually universal. It covers 154 million workers, or more than 95% of the workforce. At the end of 2004, about 48 million people were receiving benefits, including 33 million retired workers and their family members (representing 69% of the total), 7 million survivors of deceased workers and 8 million disabled workers and their dependents (Chart 2).

Individuals are entitled to Old-Age and Survivor's Insurance (OAS), once they have worked 40 quarters in covered employment between the ages of 21 and 62. Recipients of Disability Insurance (DI) must have 20 quarters of contributions in the 10-year period before disability began. Disabled workers who reach the *full retirement age (FRA)* are automatically transferred to full retirement benefits. At the end of 2004 there were about 6.2 million disabled workers receiving benefits, of which over 60% were aged 50 years and over.

Benefits are financed by a payroll tax of 12.4%, half paid by employers and half by employees, up to an annual (indexed) earnings limit (US\$90,000 in 2005). The earnings ceiling is updated annually in line with growth in wages. Benefits are based on the average of monthly earnings of a worker's 35 highest-earning years prior to eligibility: *the average indexed monthly earnings (AIME)*. A progressive formula (Box 1) is applied to the AIME to produce the *primary insurance amount (PIA)*, which is the amount payable to a worker who retires at the FRA (65 and five months in 2005, and scheduled to increase to 67 by 2022).²

BOX 1: OASDI BENEFIT CALCULATION

- The benefit formula is progressive, and is calculated as follows: the first US\$627 (as of 2005) of relevant earnings a month attracts a 90% replacement rate. Between US\$627 and US\$3,779 a month, the replacement rate is 32%. Between US\$3,779 and the earnings ceiling (US\$90,000 a year in 2005), the replacement rate is 15%. The PIA is thus 90% of AIME up to US\$627, plus 32% of AIME from US\$627 to US\$3,779, plus 15% of AIME exceeding US\$3,779.
- The percentages remain the same from year to year and are known as "PIA factors" or "replacement factors", but the "bend points" (US\$627 and US\$3,779) increase each year, based on increases in the average wage.
- Earlier year's earnings are revalued up to the year in which the beneficiary reaches age 60 in line with growth in wages. There is no adjustment of all previous earnings between ages 60 and 62. Thereafter, previous earnings are adjusted according to prices up to the age of 67. The benefit is based on average earnings for the 35 highest years of earnings (after revaluing).
- Pensions in payment are adjusted in line with prices.

Source: OECD (2005c), and American Academy of Actuaries (2004).

Benefits may be drawn as early as age 62, but a worker claiming benefits before the FRA have their benefits reduced by 5/9ths of one percent per month (about 0.56% a month, and 6.67% a year). A person claiming benefits at age 62, when 65 is the FRA, would receive 80% of his/her PIA. Those delaying retirement beyond the FRA receive a *Delayed Retirement Credit*, for a

² Under the Social Security Amendments of 1983, the FRA was increased from 65 to 67 in two stages. The first stage raised the age by two months a year, each year from 2000 to 2005, so that workers turning 62 in 2005 face a FRA of 66. The second stage is scheduled from 2017 to 2022, when the age will increase from 66 to 67.

worker reaching the age of 65 in 2000, an additional 6% is paid for each year of delay up to the age of 70, with this percentage rising to 8% by 2008. Although individuals may retire at age 62, there is an earnings test until the person reaches the FRA, with pension benefits being reduced by US\$1 for every US\$2 of earning above US\$12,000 (in 2005).

Both contributions and benefits are subject to tax. The employee's portion of the payroll tax (6.2%) is included in earned income for taxes purposes. Benefits are included in taxable income according to a graduated formula.³ Taxes paid on up to 50% of benefits are returned to the OASDI system.

The Social Security system is financed on a *Pay-As-You-Go (PAIG)* basis, and the cash surpluses of the system are credited to Trust Funds. Income has consistently exceeded expenditures by between 0.9% and 2.2% of total payroll over the 1990s, and is likely to continue to do so for at least the next 10 years. Trust Fund assets are invested in interest-bearing securities of the U.S. Government or in other securities guaranteed for both principal and interest by the government.

Medicare

The Medicare program provides health insurance coverage for the aged and disabled. *Part A* provides *hospital insurance (HI)* and is funded by a payroll tax of 2.9%, equally split between employers and employees. There is no ceiling on covered earnings. Part A is generally provided automatically, and free of premiums, to persons age 65 or over who are eligible for Social Security or Railroad Retirement benefits, whether they have claimed these monthly cash benefits or not. In 2003, Part A provided coverage against the costs of hospital and specific other medical care to about 41 million people (35 million aged and 6 million disabled enrollees). Part A benefit payments totaled \$152.1 billion in 2003 (CMS, 2005).

Part B provides *supplemental medical insurance (SMI)* that covers the cost of physician and other services, and is funded in part by premiums paid by beneficiaries (US\$78.20 per beneficiary per month in 2005) and contributions from the general fund of the U.S. Treasury. A third part of Medicare, sometimes known as *Part C*, is the *Medicare Advantage Program*, which was established as the *Medicare+Choice* program by the *Balanced Budget Act (BBA)* of 1997 and subsequently renamed and modified by the *Medicare Prescription Drug, Improvement, and Modernization Act (MMA)* of 2003. The Medicare Advantage program expands beneficiaries' options for participation in private-sector health care plans. The MMA also established a fourth part of Medicare: a new prescription drug benefit, also known as *Part D*, beginning in 2004. Part D activities are handled within the SMI Trust Fund, but in an account separate from Part B. The purpose of the two separate accounts is to ensure that funds from one part are not used to finance the other.⁴

The cash surpluses of the HI system are also credited to a Trust Fund, and are invested in interest-bearing securities of the U.S. Government or in other securities guaranteed for both principal and interest by the government.

³ They are 100% excluded below a certain income threshold, with the exclusion rate falling to a minimum 15% at higher incomes (IMF, 2004).

⁴ Source: <http://www.cms.hhs.gov/publications/overview-medicare-medicaid/default3.asp> .

Supplemental Security Income (SSI)

The SSI program is a first-tier redistributive scheme, serving as a safety net. Under the SSI program, the federal government provides means-tested monthly cash payments to low-income people who are 65 or older, or disabled. Most states supplement SSI benefits. People who receive Social Security benefits and who have assets below the specified level (US\$2,000 for an individual and US\$3,000 for a couple) can also receive SSI benefits (OECD, 2005b).⁵ SSI benefits are indexed to the Consumer Price Index (CPI). At the end of 2004, 7 million individuals were receiving SSI benefits that averaged US\$428 per month (SSA, 2005).

Employer's Pension Plans

In addition to the Social Security program, it is important to note that the United States has a wide second-tier of private pension plans and plans sponsored by employers. In 2004, around 60% of all private-sector employees worked for an employer who sponsored a pension plan, although only half of all private-sector employees were actually participating in a plan. 75% of those without a pension plan work for employers who do not sponsor a plan.

Over the past 20 years, there has been a significant shift from *Defined Benefit (DB)* to *Defined Contribution (DC)* plans. Participation in DB plans declined from 35% in 1989-90 to 21% in 2004. Meanwhile, participation in DC schemes increased from 34% to 42% (OECD, 2005b). The most popular type of DC scheme is the *401(k)* plan. Participation is voluntary and both employees and employers can make contributions. Employees decide how much to contribute and how to invest the assets. Between 1984 and 1997, these plans grew from about 30% of all DC schemes to around 70%. *401(k)* plans may be used alone or in conjunction with an *Employee Stock Ownership Plan (ESOP)*, which buys and holds company stock. ESOPs are a tax-qualified DC plan.

There are many pension arrangements offered to public-sector employees as well, with most being DC plans. There are two pension systems at the federal level, the *Civil Service Retirement System (CSRS)*, which covers employees hired before 1 January 1984, and the more recent *Federal Employees Retirement System (FERS)*.

In 1974, the *Employment Retirement Income Security Act (ERISA)* implemented rules to regulate employer-sponsored plans. It also introduced *Individual Retirement Accounts (IRAs)*, created to give incentives to save (tax deferrals), to people without employer-sponsored coverage: the government does not tax original contributions or returns on contributions until funds are drawn. In 1981, the IRAs were expanded to allow workers covered by employer-sponsored plans to also establish accounts. Since 1986, however, full tax deferrals only apply to individuals who are not active participants in employer-sponsored schemes or who are below a certain income threshold.

⁵ Any unearned income of more than US\$20 a month (including Social Security) reduces SSI benefits by an equal amount.

Part II: Fairness, Efficiency, and Sustainability of the Social Security System

The Social Security program accomplished a significant reduction in the poverty gap for senior citizens, but it is now at a critical juncture. The combined forces of the retirement of the baby boom generation, rising life expectancies, and falling birth rates will stretch the system over the next 30 years. As a consequence, future generations could face a significantly higher level of taxation to support the current level of benefits. The current Administration wants to avoid placing such a burden in future generations, and it is proposing changes to the system. There is currently an ongoing discussion among policymakers on how to reform the Social Security program to make it more sustainable. In this section, we evaluate if and how the current Social Security program has achieved fairness and efficiency in the past 60 years, as well as if it will be sustainable in the long-term under the current parameters.

Equity

According to the American Academy of Actuaries (AAA, 2004), Social Security in the United States was designed to contain elements of both *individual equity* and *social adequacy*. Social Security retirement benefits are proportional to individual contributions (individual equity) thus benefits are higher for workers who contributed more into the system, and who have a history of higher pre-retirement salaries. However, the system provides a proportionately greater benefit for lower-income workers to help alleviate poverty among the elderly (social adequacy). The balance between these two elements has been maintained to varying degrees over the past 60 years. The new proposals to change the current system, should also take into consideration the right balance between individual and social fairness.

The current system serves the demands for individual equality in two ways:

- i. The age of the worker and his/her employment history, as well as the occurrence of events such as death, disability and retirement, are taken into consideration for the entitlement to benefits, which are paid without regard to need.
- ii. Worker with higher earnings or longer working careers receive higher benefits, even though these workers are more likely to have pension and insurance coverage from their employers, as well as to save for retirement on their own.

With regards to social adequacy, the demands for social fairness are served in the following ways:

- i. The benefit formula is progressive, and the amount of the basic pension (the PIA) favors lower-income employees. Replacement percentages (of a worker's pre-retirement earnings) tend to be higher for lower-paid workers (Table 1).
- ii. The system also favors less healthy workers and workers with dependent spouses and children.

Average Wage Level	Replacement Percentage
Low (about 45% of each year's national average wage*)	56%
Medium (about 100% of each year's national average wage*)	42%
High (about 160% of each year's national average wage*)	25%
Maximum (the maximum Social Security taxable wage)	30%
* The estimated national average-wage in 2004 (using intermediate assumptions) was about US\$35,000	

Source: American Academy of Actuaries, 2004.

Some forms of protection, such as an adequate retirement income for low-paid workers, cannot be achieved without some degree of subsidy from higher-wage workers. This type of arrangement, in which some classes of insured individuals subsidize the benefits of other classes, is sometimes called "social insurance". Although it has some of the parameters of commercial insurance, it also fulfills social goals that cannot be achieved without it. Under the current system, coverage is mandatory for most workers, and all covered workers contribute at the same rate (payroll tax of 6.2%). However, the benefit formula favors lower-income workers, with higher-income workers implicitly subsidizing lower-income workers (see Box 2). That's why Social Security is considered a social insurance program.

BOX 2 EQUITY AMONG MALE AND FEMALE SENIORS

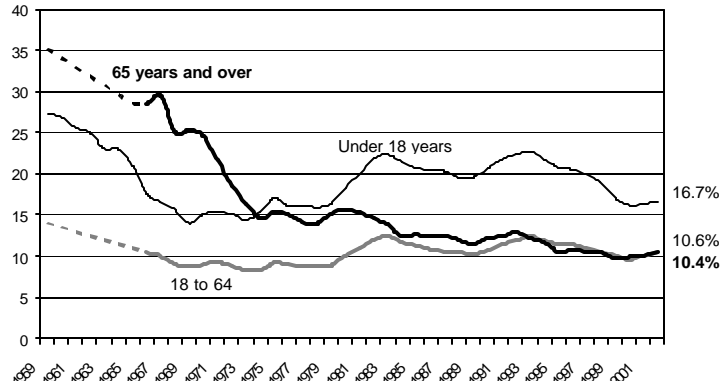
The U.S. Social Security program is considered to promote equity among male and female seniors. Because women have lower income than men on average, the redistribution scheme in the calculation of benefits provides them with a higher income than they would have otherwise.

Women are also more likely than men, by a ratio of almost 40 to 1, to receive spouse and survivor benefits. Moreover, because of women's longer life expectancy, the average woman will receive a higher total benefit than men (Favreault, 2002). There are critics who argue that precisely because women have a longer life expectancy, the system is inherently unfair to men. Women, they dispute, should receive a lower annuity than men, to compensate for their longer life expectancy.

The economic conditions for older Americans have improved over the past 25 years. Between 1976 and 2000, the real median incomes of the population aged 65 and over increased by around one-third, rising from about 50% of that of the working-age population, to just over 60% in 1984, fluctuating around this level in subsequent years (OCED, 2005b). The official poverty rate for persons aged 65 and over fell from around 15% in 1976 to 10.4% in 2002 (Chart

3).⁶ However, it is estimated that without Social Security, nearly half of older beneficiaries would be currently living in poverty instead of 8.7% (Table 2).

**Chart 3:
Poverty Rates by Age: 1959 to 2002**



Note: The data points represent the midpoints of the respective years.
Data for people 18 to 64 and 65 and older are not available from 1960 to 1965.
Source: U.S. Census Bureau, Current Population Survey, 1960-2003 Annual Social and Economic Supplements.

Table 2:

Poverty Status of Aged Persons Based on Family Income	
<i>Percentage below poverty line</i>	
<i>All Persons</i>	
55-61	9
62-64	10.4
65 or older	10.4
<i>Beneficiary</i>	
55-61	18.7
62-64	9.5
65 or older	8.7
<i>Non-beneficiary</i>	
55-61	8.1
62-64	11.2
65 or older	24.1

Source: Social Security Administration (2002)

In 2002, almost 90% of the population aged 65 and over received income from Social Security, and on average it provided almost 40% of aggregate income for older people. 66% of aged beneficiaries (65 or older) received at least half of their income from these benefits, and for 22% these benefits were the only source of income (SSA, 2002 and 2004). Initial benefits have increased in real terms over time, since they are based on career earnings indexed according to wages, and are projected to rise even further. For example, according to the Congressional Budget Office (CBO)'s projections, for an average earner retiring at age 65 in 2035, benefits will be about 25% greater than at present (CBO, 2003a). Assuming no reductions in benefits, projections

⁶ In 2002, 10.6% of the working-age population was in poverty, thus older Americans do not face a higher risk of poverty than younger individuals, what is an accomplishment of the Social Security program.

of future poverty rates suggest that poverty among senior citizens could fall to 7.2% in 2020 and 4.1% by 2047 (Wentworth and Pattison, 2002).

However, the United States is in a relative unfavorable position when international comparisons of relative poverty among the older population are drawn. Smeeding (2002), using a poverty line set at 50% of the median adjusted disposable income, found the elderly poverty rate to be 18.9% in the United States, compared to a 14-country average of 11.1%. Poverty rates, measured in this fashion, were particularly high for single older women. Similar results were found in an OECD study (Yamada, 2002), which compared nine OECD countries. While the proportion of older people below a relative poverty line was found to have fallen between the 1970s and the 1990s, low income rates for the elderly were higher in the United States than in any other OECD country apart from Japan (Table 3).

Table 3:

Old-Age Income and Labor Market Participation		
	Low-income rate of elderly*	Participation rate, 2001 >65 (%)
Australia	16.1	6.0
Canada	2.5	6.0
France	10.7	1.2
Germany	10.4	3.0
Italy	15.3	3.4
Japan	..	21.8
Netherlands	1.9	3.1
Spain	11.3	1.6
Sweden	3.0	9.4
United Kingdom	11.6	4.8
United States	20.3	13.1

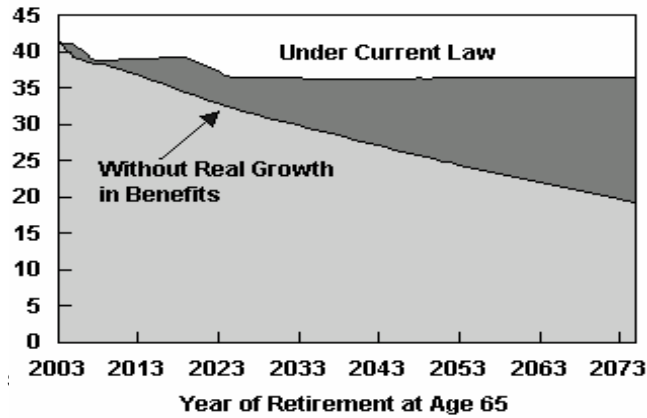
Source: OECD (2003). * Percentage of the elderly with income less than 50% of median disposable income.

Finally, given that the bulk of the Social Security program is supported by the working population, the intergenerational equity of the system should be considered. It is important to evaluate whether the youth, when retiring, will have the chance to receive the same benefits as currently perceived by seniors, and whether they have to bear an unfair financial burden to support the system.

The long-term evaluation of the system, to be reviewed in the section on sustainability, indicates that future generations may not receive the benefits that they are promised today. However, for the same amount invested in the system, younger generations are expected to receive higher benefits than older generations under the system's current parameters. The reason for that is the wage indexation mechanism, which provides higher benefits than an inflation indexation mechanism would. Under rules put into effect in 1979, benefits of newly eligible recipients are based on a formula and earning records that are adjusted for wage growth. Those adjustments are designed to keep the ratio of initial benefits to pre-retirement earnings –that is, replacement rates– approximately the same from one group of new recipients to the next. Without those adjustments, replacement rates would decline as more of the earnings of future recipients fell into the lower-yielding brackets of the benefit formula. With the adjustments, the replacement rates remain constant (Chart 4).⁷

⁷ However, since benefit reductions for early retirement are scheduled to gradually increase for cohorts born between 1938 and 1960, any increases in benefits over time due to wage growth will be offset for individuals who retire before their FRA (SSA, 2001; Butrica, Iams, and Smith 2003).

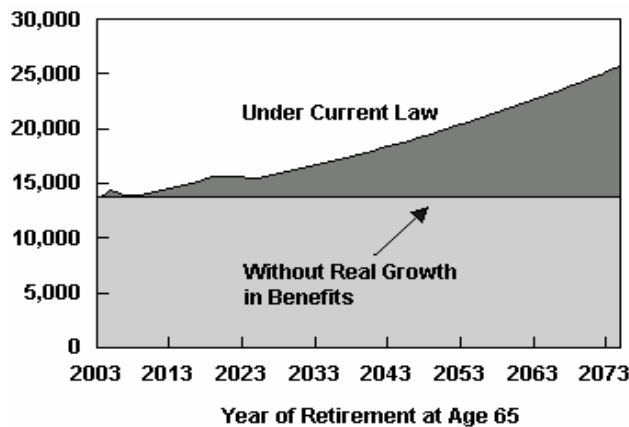
**Chart 4:
Projected Replacement Rates for Social Security
2003 to 2075**



Source: Congressional Budget Office.
Note: Replacement rates based on workers with average earnings patterns. Benefits under current law include adjustments for real wage growth

Wages tend to rise along with productivity in the economy, at a faster rate than prices. Thus, over the long-run, a system pegged to wage growth will gradually afford greater purchasing power. Under the CBO's assumptions, the purchasing power of the average earner's benefits at retirement is expected to nearly double between now and 2075. For example, for a worker retiring in 2003 at age 65 with average earnings over his/her career, annual benefits are estimated to be nearly US\$14,000. For a 65-year old retiring in 2005, those benefits will grow to US\$26,000 (Chart 5).

**Chart 5:
Projected "Real" Rise in Social Security Benefits
2003 to 2075**



Source: Congressional Budget Office.
Note: Benefits based on workers with average earnings patterns. Benefits under current law include adjustments for real wage growth.

The system is actually decried as unfair by many critics for this reason, although opponents defending the system argue that benefits should aim to preserve workers' living standards, and those tend to improve with time.⁸ Regardless of where one stands in this debate, intergenerational equity should be an important aspect when considering changes to the current system.

Efficiency

The system as it is now is considered administratively efficient. According to Baker and Rosnick (2004), "on average, less than 0.6 cents of every dollar paid out in Social Security benefits goes to pay administrative costs. By comparison, systems with individual accounts, like the ones in England or Chile, waste 15 cents of every dollar paid out in benefits on administrative fees." According to Genetski (1999), the present SSA does indeed a very efficient job in administering the retirement program, with overall administration costs close to US\$10 per worker, and amounting to 0.4% of contributions and 0.6% of benefits paid. As a percentage of assets, the administration costs are 0.4%.

The program's operations are considered effective because income is gathered through the annual income tax structure. The investment proves to be inexpensive because funds are only invested in government bonds, while the payout system also proves to be inexpensive because retirees get their benefits according to a formula that is applied nationwide.

However, in spite of its low administrative costs, there are a number of disincentives to work beyond the early retirement age, which are inherent to the system. If eliminated, the system's overall efficiency could be greatly improved. In the second half of the twentieth century, there was a striking decline in the labor force participation rate of older men. In 1950, for example, 81% of 62 year old men were in the labor force; by 1995, this number had fallen to 51%, though it has rebounded slightly in the past few years (Quinn, 1999). A large number of studies have documented pronounced "spikes" in retirement at ages 62 and 65, which correspond to the early and full retirement ages for Social Security. While there are some other explanations for a spike at age 65, such as entitlement for health insurance under the Medicare program, for example, there is little reason to see a spike at 62 other than the Social Security program (OECD, 2005b). According to Burtless and Moffitt (1984), this spike at age 62 only emerged after the early retirement eligibility for men was introduced in 1961.

Neumark and Powers (2005) found strong empirical evidence that the SSI program creates labor supply disincentives. In states that generously supplement the SSI benefits, labor supply among individuals relatively likely to participate in the SSI program falls off more than in less generous states, as workers approach the age of eligibility. Income and assets limits in the SSI program reduce the incentives for older individuals, who are likely candidates to go on the program, to accumulate additional resources.

Work disincentives could be removed through policy actions that would speed up the transition from 65 to 67 for the FRA, raise the early retirement age, ensure disability benefits do not become an alternative route to early retirement, and limit tax advantages in private pension schemes for taking early retirement (Martin, 2005).

⁸ Weisman, J. and Mike Allen (2005).

Sustainability

With life expectancy on the rise and the number of workers contributing to Social Security on a downward trend, uncertainty about the sustainability of the system has been an important issue in the reform debate. The notion is that the downward trend in the number of workers, combined with an increasing number of elderly citizens, may jeopardize the system's capacity to collect enough funds for the provision of future benefits (Table 4).

Table 4
The Looming Change in the Ratio of Workers to Retirees

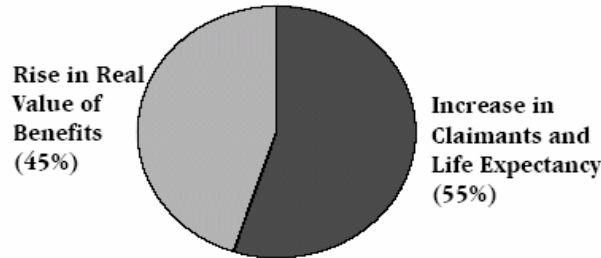
	Millions of People				
	Workers	Population Age 65+	Increase in Workers During Previous Decade	Increase in Population Age 65+ During Previous Decade	Ratio of Workers to Population Age 65+
1970	93.1	20.9	20.6	3.7	4.4
1980	113.6	26.1	20.6	5.2	4.3
1990	133.7	32.0	20.0	5.9	4.2
2000	153.7	35.5	20.0	3.5	4.3
2010	165.4	39.5	11.8	4.0	4.2
2020	172.8	53.2	7.4	13.7	3.3
2030	178.1	69.4	5.3	16.3	2.6
2050	189.8	78.3	5.4	3.1	2.4

Source: Social Security Administration, *The 2002 Annual Report of the Board of Trustees of the Old-Age and Survivors and Disability Insurance Trust Funds* (March 26, 2002).

The CBO projects that spending for Social Security, adjusted for inflation, will rise from US\$493 billion in 2004 to US\$2.5 trillion in 2075. Those estimates are based on CBO's 10-year baseline budget outlook and the "intermediate" long-range assumptions of the Trustees of the Social Security Trust Fund. About 55% of the higher spending is due to an expected increase in the number of beneficiaries, as the number of new claimants grows and as life expectancy increases. The Trustees estimate an increase in the population age 65 and older from 37 million in 2003 to 75 million in 2035 and 95 million in 2075. Life expectancy for people who were 65 in 2003 is estimated to be 83 years. In 2035, it is estimated to be 85 years, and in 2075, 87 years.

The remaining 45% of the rise in spending, however, is due to the projected increase in the real value of pension benefits. As mentioned earlier, under the CBO's assumptions, the purchasing power of the average earner's benefits at retirement is expected to nearly double between 2003 and 2075 (Chart 6).

**Chart 6:
Factors Contributing to the Rise in Social Security
Spending from 2003 to 2075**



Source: Congressional Budget Office.

Note: Spending is calculated in constant dollars.

The Social Security Trustees project that under current law outlays will first exceed revenues from payroll taxes and taxation of benefits in 2017 (2020, according to the CBO projections), at which time the annual gap will be covered with cash from redeeming special obligations of the Treasury. In the absence of other changes, the redemption of bonds can continue until the Trust Funds are depleted. The Trust Funds are projected to be exhausted in 2041 (or 2052 according to the CBO projections)⁹. After the Trust Funds are exhausted, spending cannot exceed annual revenues. The program will be unable to pay benefits under current law, and the CBO projects that dedicated revenues will equal 78% of scheduled outlays in 2053, thus paid benefits will be 22% lower than the scheduled benefits. After 2053, the imbalance is projected to widen.¹⁰

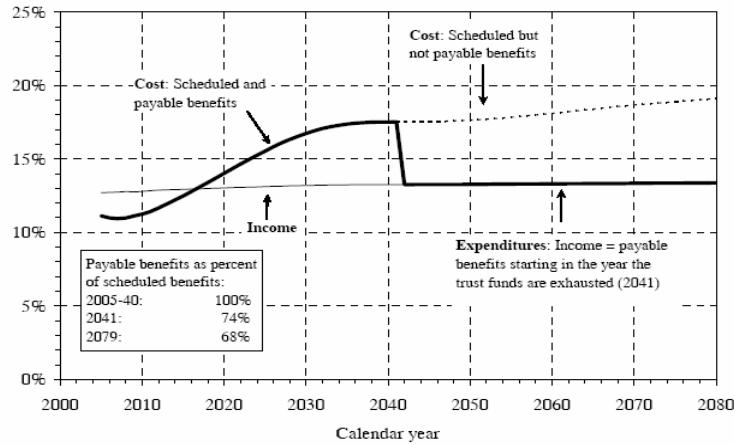
Social Security's cost rate is projected to continue to rise rapidly through about 2030 as the baby-boom generation reaches retirement age. Thereafter, the cost is estimated to rise at a slower rate for about 15 years as the baby-boom generation ages and begins to decline in size. By 2079, increasing life expectancy and low birth rates will cause a significant upward shift in the average age of the population, pushing the cost rate to 19.1% of taxable payroll, under intermediate assumptions (Chart 7). The program will then have to reduce payments to beneficiaries to match the amount of revenue coming into the system (by 12.8% according to the Trustees) or increase payroll taxes. For the 75-year projection period, the actuarial deficit, according to the trustees, is 1.92% of taxable payroll. The combined payroll tax rate could be increased during the period in a manner equivalent to an immediate and permanent increase of 1.92%.¹¹

⁹ In the CBO's projections the exhaustion of the Social Security Trust Funds occurs about a decade later largely because they assume higher real (inflation adjusted) interest rates and slightly lower benefits for men than the Trustees do.

¹⁰ According to the Trustees' estimates, the fund will only be able to pay 74% of promised benefits in 2042, and 68% in 2078.

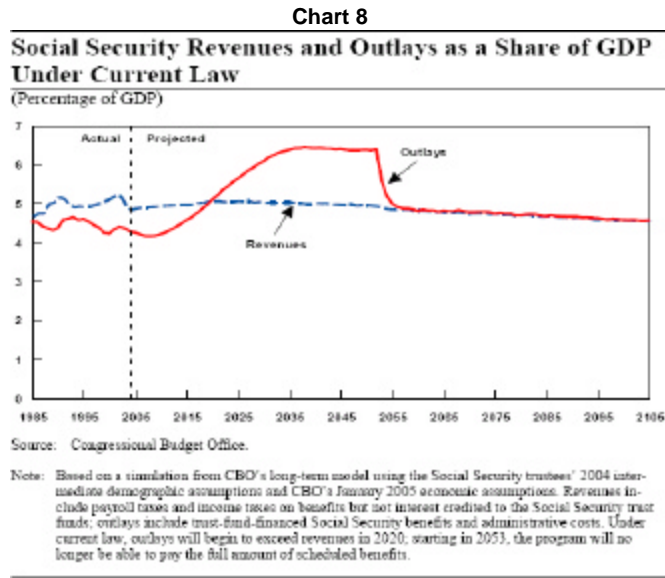
¹¹ According to CBO's projections, the 75-year actuarial imbalance in the Social Security system equals 1.04% of the present value of Social Security's taxable payroll over those years. That number suggests that

Chart 7
OASDI Income and Cost Rates Under Intermediate Assumptions
(as a percentage of taxable payroll)

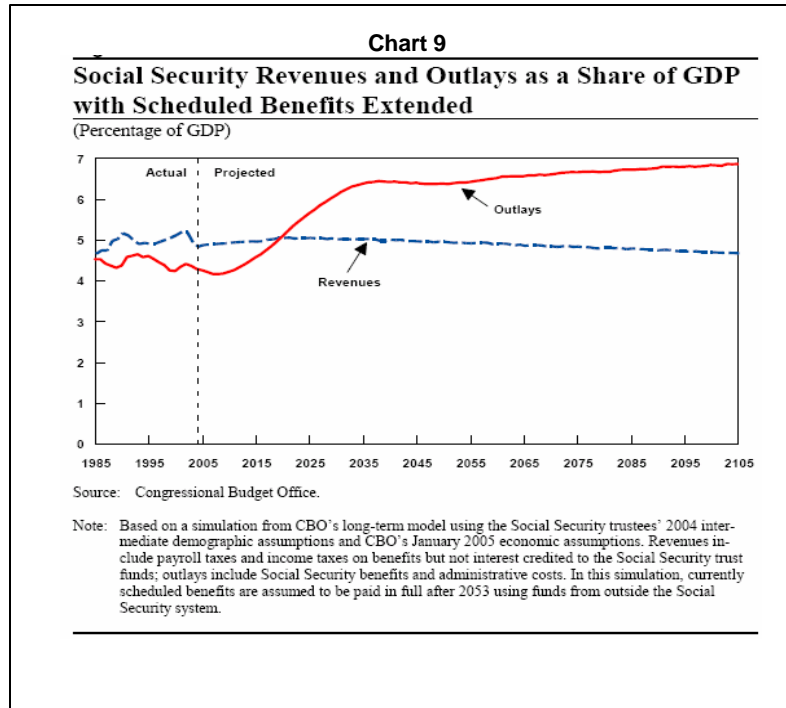


Source: The 2005 Annual Report of the Board of Trustees of the OASDI Trust Funds.

From the numbers above, one can conclude that, with benefits reduced annually to match available revenue (as they will be under current law when the Trust Funds run out), the program is sustainable in the long-run (Chart 8). Of course a sudden cut in benefits (estimated to be 20 to 30% by the CBO) may not be a desirable policy, but the program can be considered sustainable from a financing perspective. What cannot be sustained, given the current financing, is the payment of the present level of scheduled benefits, which are based on the current benefit formulas. Under the present formulas, outlays for scheduled benefits are projected (by the CBO) to exceed available revenues forever after about 2020 (2017, according to the Trustees), and this gap cannot be sustained without continual (and substantial) injections of funds from the rest of the budget (Chart 9).



raising the payroll tax by about 1% or reducing initial benefits for newly entitled beneficiaries by 9% would address the 75-year imbalance in the system (CBO Testimony, 2005b).



In summary, Social Security surpluses are currently growing and contributing increasing amounts to the rest of the budget, but will begin to shrink after 2008, when the baby boomers start to become eligible for early retirement benefits. By CBO's calculations, the surplus (excluding interest) will reach US\$100 billion in 2007, but by 2025 that surplus is projected to become a deficit of roughly US\$100 billion in 2005 dollars.

However, although Social Security will put pressure on the federal budget in the long-term, the demands from Medicare and Medicaid will be much greater. Whereas Social Security spending is projected to grow from 4% of GDP today to almost 6.5% by 2079, spending on Medicare and Medicaid is expected to grow substantially more. Trustees of the Medicare HI Trust Fund expect it to be exhausted in 2020, and while Medicare's annual costs are currently 2.6% of GDP (or about 60% of Social Security's), they are projected to surpass Social Security expenditures in 2024 and reach almost 14% of GDP in 2079. The projected 75-year actuarial deficit in the HI Trust Fund is now 3.09% of taxable payroll. HI could be brought into actuarial balance over the next 75 years by an immediate 107% increase in program income or an immediate 48% reduction in program outlays, or some combination of the two (CBO Testimony, 2005b).

The position of the Medicare SMI system is even worse. The SMI system is run on a PAYG basis, thus there are no trust fund assets, and premium payments cover only a part of its outlays. The administration's budget for the 2003 fiscal year estimated that the unfunded liability of the SMI system would be roughly an additional 80% of GDP, equivalent to a 3.37% increase in the payroll tax (IMF, 2004).

Part III: Reform Proposals

When considering changes to the Social Security, two important aspects should be taken into consideration: insurance and financing. In terms of insurance, the major issue is to find the proper balance between social and individual responsibility. In terms of financing, the major challenge is to find the proper balance between pre-funding retirement (through an increase in savings) and employing a traditional PAYG method of financing. The challenge for policymakers is to confront the new demographic situation, and to adjust the system to reflect those new realities, at the same time as trying to better insulate the system from unexpected demographic or economic changes in the future.

There has been much debate in the United States on how to reform the Social Security system to make it sustainable in the face of demographic aging. Given the scope of this literature, we will not survey it in full, but will concentrate on the proposals made by the President's Reform Commission in 2001 and by the President in February 2005.

The President's Reform Commission's Proposals

In early 2001, the President established a 16-member Commission to examine options for reforming Social Security. The President directed the Commission to propose plans that would strengthen the system and improve fiscal sustainability, while adhering to several principles: (1) maintaining benefits for retirees or near-retirees; (2) maintaining the survivor and disability benefits; (3) avoiding an increase in payroll taxes; (4) dedicating the entire Social Security surplus to Social Security only; (5) avoiding investing Social Security Trust Funds in the stock market; (6) offering voluntary personal retirement accounts as supplement to Social Security.

The Commission reported its findings in December 2001 (Social Security Commission, 2001), which included three alternative models for reform featuring personal accounts as a central component. The main elements of these three models were the following:¹²

- i. Personal Retirement Accounts (PRAs).* Workers would be allowed to divert a portion – up to 4% – of their OASDI contributions to PRAs.¹³ In exchange, OASDI benefits

¹² See Appendix for a more detailed description of each of those models.

would be reduced by the amount of direct contributions to PRAs plus an implicit real return rate of up to 3.5% above inflation.¹⁴

- ii. *Indexation.* In Models 2 and 3, the Commission suggested moving to a system in which pensionable earnings would be indexed to prices rather than wages (Model 2), or adjusted for future changes in life expectancy (Model 3). In addition, in Model 3 the formula for calculating benefits would be adjusted to increase its progressiveness.
- iii. *Minimum benefit.* In Models 2 and 3, a worker with 30 years of employment would be provided a minimum benefit of up to 120% of the poverty line in Model 2 and 100% in Model 3.

The report indicated that PRAs would present important advantages, including an increase in the rate of return on worker's contributions, and possibly increasing national savings. It also indicated, however, that the PRAs would exacerbate the system's insolvency during a transitional period. For example, diverting a percentage of OASDI payroll taxes to PRAs would reduce the cash flow available to meet current obligations, thus "transition payments" from general revenues to the Trust Fund would be needed over an extended period until benefit payments were reduced to their new steady-state level. The net present value of these payments over the 75-year period would be equivalent to 10% of GDP (IMF, 2004).

According to De Masi, Ivaschenko and Towe (IMF, 2004), before any of the models could be introduced significant technical and administrative issues would need to be resolved. For example:

- i. *Guarantees.* The Commission's proposals do not include a guaranteed minimum return on PRA investments. There may be pressure to attach some insurance to these accounts, given that they would be replacing at least part of the existing OASDI entitlements.
- ii. *Tax issues.* It is unclear how PRAs would be treated, but there is a strong argument for affording these contributions a tax treatment similar to that of other retirement savings instruments, such as IRAs and 401(k)s.
- iii. *Administrative issues.* A system with PRAs could be expensive to administer (Box 3) and would pose challenges for regulatory and tax policies.
- iv. *Benefits.* According to the authors, consideration should also be given to accelerating the pace at which the FRA is increased or to lengthening the computation period for the calculation of benefits.
- v. *SSI.* The Commission's acknowledges that reforms of the OASDI system should take into account the SSI system, and increases in the minimum OASDI benefits would likely need a corresponding increase in the SSI benefit.

¹³ The percentage to be diverted into PRAs was 2% in Model 1, 4% in Model 2 and 2.5% in Model 3.

¹⁴ The real rate of return was 3.5% in Model 1, 2% in Model 2 and 2.5% in Model 3.

BOX 3:

Estimated Administrative Costs of Pension Systems

The CBO (2004c) estimated the administrative costs of four systems for funding retirement in the United States: Social Security, the federal government's Thrift Savings Plan (TSP),* retail, mutual funds, and private Defined Contribution (DC) plans. It concluded that the costs of administering the system vary, in large part, because of differences in the level of services and range of asset choices, the degree to which a system is centralized (a centralized system such as the federal TSP may generate few or no costs for marketing and sales), and the size of the accounts (large accounts are unlikely to cost much more to manage than small accounts, thus administrative costs would affect their balances proportionately less because of economies of scale). The systems that CBO reviewed have administrative costs that, if charged to account holders, would reduce account balances at retirement by as little as 2% or as much as 30 %, depending largely on the level of service provided (Table 5).

Table 5

Estimated Administrative Costs of Pension Systems and Their Effect on Assets at retirement		
Pension System	Annual Administrative Costs	Percentage Reduction in Assets at Retirement
Social Security	\$11 per participant	2
Federal Thrift Savings Pla	\$25 per participant	5
Mutual Funds (Average)	1.09% of assets	23
Private Defined Contribution Funds, by Analyst		
Pension Dynamics Corporation (Large plan)	\$24 per account plus 0.8% of assets	21
Pension Dynamics Corporation (Small plan)	\$60 per account plus 1% of assets	30
IRS Form 5500 Tabulation	\$49 per account	9
General Accounting Office	\$103 per account	19

Source: CBO (2004c).

Note: Calculations are for retirees contributing 2% of earnings to a retirement account for 40 years.

The partial privatization schemes proposed in the three models have stimulated a heated debate among analysts, politicians and the public. President Bush and his Administration endorse the notion of an ownership society, but face many analysts who do not. For supporters of a privatized system, privatizing Social Security can contribute to make every worker more interested in a free economy and the stock market.

However, there are critics of the Social Security privatization who emphasize its impact on old-age poverty level. The current system has maintained a balance between equity and income adequacy. As we have seen, there is an implicit redistributive mechanism to protect citizens from old-age poverty. With a privatized system, critics argue that there will be less scope for redistribution policies, given that there is no common fund. Moreover, there is a transfer of risk to the individual. Consequently, those who retire when the market reaches a peak collect large pensions, while those retiring when the market plunges may get little money to live on. Those who outlive their retirement savings, even after collecting a reasonable return on their investment, could be pushed back into poverty.¹⁵

Based on studies on the federal Thrift Saving Savings Plan (TSP) and on private 401(k) plans, critics also dispute that workers may not make sound investment decisions. The studies show that workers fail to diversify their assets enough, as well as to correctly balance the fund composition over time, and that they tend to overinvest in their own company's stock. They also

¹⁵ Weller, Christian E. (2004).

indicate that workers tend to overreact to market movements, rushing to buy stocks at the height of the bull markets, and often moving out of their stock funds and into bonds when stock prices collapse, potentially locking their losses.

The White House proposal

In February 2005, President Bush proposed a plan to reform Social Security (The White House, 2005c). The proposed plan allows workers to divert 4% of their payroll taxes into their PRA. Annual contributions to the PRA initially would be capped at US\$1,000 per year in 2009. The cap would rise gradually over time, growing US\$100 per year, plus growth in average wages. PRAs would be similar to the federal TSP. A centralized administrative structure would be created to collect retirement account contributions, manage investments, maintain records, and facilitate withdrawals at retirement. The money would be invested in a mix of conservative bonds and stock funds. To limit the risk of a massive drop in assets a few years before retirement, the account would be automatically invested in a “life cycle portfolio” when a worker reaches 47. The life cycle fund would automatically and gradually shift the allocation of investment funds as the individual neared retirement age, so that it was weighed more heavily toward secure bonds.

In the White House plan, much of the criticism to PRAs is addressed: Social Security will not disappear; only a fraction of payroll taxes will be diverted while most of it will still be directed toward Social Security, thus workers will still have a part of their pension benefits when they retire; workers have a choice between limited investment plans only, which will constitute a portfolio of stocks and bonds, thus decreasing the risk that participants would overinvest in one single stock; the system will be mostly centralized (with a TSP-style personal account structure) and fees are estimated to reach less than 1% of the money invested.¹⁶ However, there are other major contentious points that, according to critics, should be addressed, such as the costs of the transition to a new system with PRAs, and the expected real rate of return on workers’ contributions under the proposed plan.

When workers are allowed to divert part of their contributions into private accounts, the government will have to make transfers from general revenues to the Social Security Trust Fund to replace these missing contributions. Based on analysis by the SSA Actuary, the Office of Management and Budget estimates that the President’s PRA proposal will require transition financing of US\$664 billion of the next ten year (US\$754 billion including interest). This transition cost is seen by many, including supporters of the PRAs, as dangerous for the health of the economy, since the deficit will grow bigger during this period.

Supporters of the plan argue that economic and financial analysts should not worry about the short-term budget impact but rather should consider the plan as a solution to limit future long-term spending that are expected to boom in a few decades. Administration officials say that the new borrowing should have no impact on the market, because investors already know the government faces at least US\$3.7 trillion in unfunded Social Security obligations over the next 75 years, and US\$10.4 trillion over an infinite horizon. According to these officials, PRAs will not reduce the pool of savings available to the markets because every dollar borrowed by the Federal government to fund the transition is fully offset by an increase in savings represented by the accounts themselves.

¹⁶ The low costs are made possible by the economies of scale of a centralized administrative structure, as well as limiting investment options to a small number of cautious, broadly diversified funds.

Critics, however, emphasize that the system is not really in crisis, as it could be sustainable with a reduction in benefits, which have increased in real terms over time. For example, when analyzing the President's Reform Commission's Model 2 at the request of the U.S. Senate's Special Committee on Aging, the CBO indicated that total expected benefits under that plan, including OASDI benefits and individual accounts payouts, would be less than under current law, even though current-law benefits would fall below scheduled benefits with the exhaustion of the Trust Fund (CBO, 2004c). Workers would thus lose, despite the creation of PRAs.

Another issue subject to debate is the expected rate of return on workers' contributions under PRAs. The White House estimates that private retirement accounts will return an average of 4.6% in real terms. The CBO calculated a real return of 4.9%. They base their estimation on an independent review of historical data and economic analyses of future stock returns and in the past stocks have yielded a very good return, around 7% in real terms. Some analysts, however, believe that the expected investment returns under the White House plan may not be realized. They actually expect a fall in the real return of stock markets.

Krugman (2005), for example, expects a fall in the real return of stock markets based on the behavior of the price-earning ratio. The real rate of return tends to be equal to the inverse of the price-earnings ratio. Historically, he says, the price-earning ratio averaged 14 and is now about 20. If people are paying more for an asset, the rate of return is lower. If the ratio is now 20, then a good estimate of the real rate of return in the future is 5% and not 7%.

According to Diamond (2000), past and future long-run trends in the capital market may imply a decline in equity premium. For example, there has been a rising fraction of the American public investing in stocks either directly or indirectly through mutual funds and retirement accounts (such as 401(k) plans). Numerous studies have concluded that widening the pool of investors sharing in stock market risk should lower the equilibrium risk premium. Moreover, the projection of slower economic growth may suggest a lower long-run marginal product of capital, which is the source of returns to financial assets.

Critics of the White House proposal, in conclusion, defend changes that would preserve the basic structure of the system, instead of its partial privatization. They list a variety of reform options that could be considered, such as a reduction in benefits, changes in the benefits' indexation or formula (an increase in the earning's ceiling, for example), an increase in the early and full retirement ages, or an increase in the payroll tax.

Conclusion

People are living longer, fertility has declined, and the number of elderly people will rise significantly relative to the number of working age people. In face of these trends and the rapid increase in health care costs, the U.S. Social Security and Medicare systems, which are the two principal federal programs providing support for the elderly, are likely to place significant longer-term pressures on the U.S. fiscal system. However, according to the OECD, the financial situation of these programs is less dire than in many other industrial countries. Because of its relatively high immigration and fertility rates, and relatively modest life expectancy when compared with other industrial countries, the United States is considered to be among the “slower-aging economies”. As a result, the projected increase in its age-related spending, including outlays for pensions and health care, is estimated to be at or somewhat less than average.

Public pension expenditure in the United States is projected to increase by 1.8% of GDP through 2050, a little less than the average increase compared to other OECD countries (Table 6). Public spending on income support for the aged was below the OECD average in 2001: 6.1% of GDP, compared to an OECD average of 8%. In view of the U.S. system’s relatively large Trust Fund assets and substantial contribution rate, its unfunded liability is also typically viewed as smaller than in other industrial countries.

Table 6

Change in public pension expenditure 2000-50 (% of GDP)	
Australia	1.6
Canada	2.0
France	3.9
Germany	5.0
Italy	-0.3
Japan	0.6
Netherlands	4.8
Sweden	1.6
United Kingdom	-0.7
United States	1.8

Source: OECD (2003).

Despite its better relative position, there has been much debate in the United States over the past few years about how to reform the Social Security system to improve its sustainability in the face of demographic aging. The main ideas being discussed can be grouped into two categories (OECD, 2005b): changes that preserve the basic structure of the current system with minor modifications; and more dramatic changes, such as shifting part of the system from a PAYG insurance plan to an arrangement including PRAs. Specific proposals for reforming Social Security have been put forward by the President's Reform Commission, and by the President himself, which feature PRAs as a central component. Whether these proposals will help trigger broad reforms remains to be seen, but it is important to explore options that would not only improve long-term sustainability, but also maintain or improve income adequacy in retirement. Most importantly, these reforms, to be successful, need to be considered in a broader perspective, also focusing on the financial situation of Medicare, given that little progress has been made toward addressing the longer-term solvency of the program, despite the very large deficits of the SMI and HI systems.

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Appendix I

Model 1 establishes a voluntary personal account option but does not specify other changes in Social Security's benefits and revenue structure to achieve full long-term sustainability.

- Workers can voluntarily invest 2 % of their taxable wages in a personal account.
- In exchange, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 3.5 % above inflation.
- No other changes are made to traditional Social Security.
- Expected benefits to retirees rise while the annual cash deficit of Social Security falls by the end of the valuation period.
- Workers, retirees, and taxpayers continue to face uncertainty because a large financing gap remains requiring future benefit changes or substantial new revenues.
- Additional revenues are needed to keep the trust fund solvent starting in 2030.

Model 2 enables future retirees to receive Social Security benefits that are at least as great as today's retirees, even after adjusting for inflation, and increases Social Security benefits paid to low-income workers. Model 2 establishes a voluntary personal account without raising taxes or requiring additional worker contributions. It achieves solvency and balances Social Security revenues and costs.

- Workers can voluntarily redirect 4 % of their payroll taxes up to US\$1000 annually to a personal account (the maximum contribution is indexed annually to wage growth). No additional contribution from the worker would be required.
- In exchange for the account, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 2 % above inflation.
- Workers opting for personal accounts can reasonably expect combined benefits greater than those paid to current retirees; greater than those paid to workers without accounts; and greater than the future benefits payable under the current system should it not be reformed.

- The plan makes Social Security more progressive by establishing a minimum benefit payable to 30-year minimum wage workers of 120 % of the poverty line. Additional protections against poverty are provided for survivors as well.
- Benefits under the traditional component of Social Security would be price indexed, beginning in 2009.
- Expected benefits payable to a medium earner choosing a personal account and retiring in 2052 would be 59 % above benefits currently paid to today's retirees. At the end of the 75-year valuation period, the personal account system would hold US\$12.3 trillion (in today's dollars; US\$1.3 trillion in present value), much of which would be new saving. This accomplishment would need neither increased taxes nor increased worker contributions over the long term.
- Temporary transfers from general revenue would be needed to keep the Trust Fund solvent between 2025 and 2054.
- This model achieves a positive system cash flow at the end of the 75-year valuation period under all participation rates.

Model 3 establishes a voluntary personal account option that generally enables workers to reach or exceed current-law scheduled benefits and wage replacement ratios. It achieves solvency by adding revenues and by slowing benefit growth less than price indexing.

- Personal accounts are created by a match of part of the payroll tax – 2.5 % up to US\$1000 annually (indexed annually for wage growth) – for any worker who contributes an additional 1 % of wages subject to Social Security payroll taxes.
- The add-on contribution is partially subsidized for workers in a progressive manner by a refundable tax credit.
- In exchange, traditional Social Security benefits are offset by the worker's personal account contributions compounded at an interest rate of 2.5 % above inflation.
- The plan makes the traditional Social Security system more progressive by establishing a minimum benefit payable to 30-year minimum wage workers of 100% of the poverty line (111% for a 40-year worker). This minimum benefit would be indexed to wage growth. Additional protections against poverty are provided for survivors as well.
- Benefits under the traditional component of Social Security would be modified by:
 - adjusting the growth rate in benefits for actual future changes in life expectancy,
 - increasing work incentives by decreasing the benefits for early retirement and increasing the benefits for late retirement, and
 - flattening out the benefit formula (reducing the third bend point factor from 15 to 10 %).
- Benefits payable to workers who opt for personal accounts would be expected to exceed scheduled benefit levels and current replacement rates.
- Benefits payable to workers who do not opt for personal accounts would be over 50% higher than those currently paid to today's retirees.
- New sources of dedicated revenue are added in the equivalent amount of 0.6% of payroll over the 75-year period, and continuing thereafter.

- Additional temporary transfers from general revenues would be needed to keep the Trust Fund solvent between 2034 and 2063.

Source: President Bush's Social Security Commission (2001), p.14, 15 and 16.