



Cato Institute Social Security Choice Paper No. 2: Retiring with Dignity: Social Security vs. Private Markets

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Executive Summary

Retiring with financial dignity is in jeopardy. That is the direct result of Social Security's ever-expanding role in the economics of both retirees and workers. Compassionate in intent, but flawed in design, Social Security will prevent many from enjoying financial security in their later years.

Unlike personal savings, pensions, and independent retirement accounts, all of which are stores of wealth, Social Security is a misguided political construct, wherein one's retirement benefits are dependent on the willingness of future workers to be taxed.

Benefits paid to present recipients are low. Benefits to be paid to future recipients will be even lower. Worse, the legal requirement to pay Social Security taxes prevents workers from investing the money lost to those taxes in higher earning assets.

Beyond that, the unsound financial foundation of the system virtually ensures that the promised benefits, low as they are, will be reduced even further. In the past, when Social Security's financial precariousness was addressed, the legislative response was to increase taxes and reduce benefits. Such responses not only failed to solve the problem, they exacerbated it.

There is a better solution. Allow people the freedom to invest their Federal Insurance Contributions Act (FICA) taxes in financial assets such as stocks and bonds. History shows that the financial return on those instruments meets retirement needs at a fraction of Social Security's cost.

For example, assuming historical rates of return, if individuals born in 1970 were allowed to invest in stocks the amount they currently pay in Social Security taxes, those individuals could receive nearly six times the benefits that they are scheduled to receive under Social Security, as much as \$11,729 per month. Even a low-wage earner would receive nearly three times the return on Social Security.

The idea of privatizing a public pension system is neither new nor untried. Where it has been properly implemented, it has been remarkably successful. For governments, privatization is the only viable answer to Social Security's inherent problems; for individuals, it is a profitable one.

Introduction

Social Security was born of the Great Depression. It was a political response to a severe economic trauma. During the first years of the 1930s real gross national product contracted by more than 25 percent. Unemployment rose to almost 22 percent. The stock market virtually imploded, dropping by 70 percent from 1929 to 1934.^[1] Americans were financially insecure and frightened.

President Franklin D. Roosevelt, witnessing the country in despair, addressed Congress on June 8, 1934. He promised legislation that he said would restore security. Some of his comments are telling.

Among our objectives I place the security of the men, women, and children of the nation first.

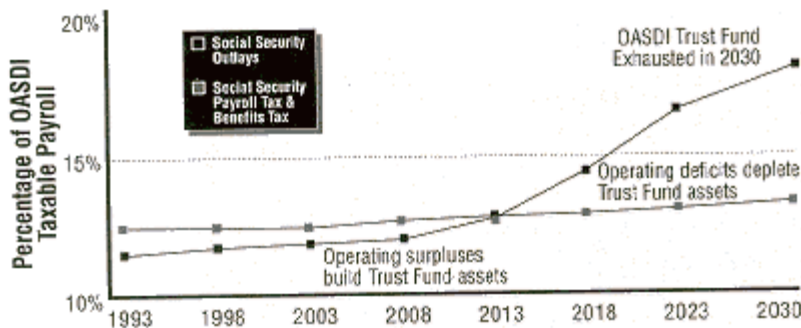
Next winter we may well undertake the great task of furthering the security of the citizen and his family through social insurance.

Hence I am looking for a sound means which I can recommend to provide at once security against several of the great disturbing factors in life.^[2]

The Great Depression set the stage and President Roosevelt deftly took his cue. Just one year later, on August 14, 1935, the Social Security Act was passed.

From its early, compassionate beginnings Social Security developed into a massive yet highly regarded program. Even though it is expensive--76 percent of today's wage earners pay more Social Security taxes than federal income taxes--the system's supporters are numerous, heterogeneous, vocal, and politically powerful.^[3] By and large, they do not want politicians to meddle with the system. However, Social Security is dangerously flawed and unsustainable in its current form.

Figure 1
Social Security Revenues versus Outlays



Source: Bipartisan Commission on Entitlement and Tax Reform, Final Report to the President (Washington: Government Printing Office, 1995), p. 22.

Social Security Is Fundamentally Flawed

In recent years many analysts have pointed out Social Security's fundamental structural flaws.^[4] Social Security is a pay-as-you-go system. Whereas contributions to a private pension plan are invested in earning assets, Social Security taxes are not. They are paid out immediately in benefits. Any surplus is not saved or invested for pensioners. Those funds are borrowed by the federal government to pay current operating expenses and replaced with government bonds.

In common usage a trust fund is an estate of money and securities held in trust for its beneficiaries. The Social Security Trust Fund is quite different.^[5] It is an accounting of the difference between tax and benefit flows. When taxes exceed benefits, the federal government lends itself the excess in return for an interest-paying bond, an IOU that it issues to itself. The government then spends its new funds on unrelated projects such as bridge repairs, defense, or food stamps. The funds are not invested for the benefit of present or future retirees.

When the time comes for Social Security to cash in its IOUs to pay benefits, the federal government, which holds no earmarked assets for that contingency, pays the bill by issuing additional debt or raising taxes. The trust fund is not a store of wealth. It is an accounting of how much the government owes itself and how much it will have to tax the economy in order to pay itself. It is a liability, not an asset.

The Social Security system's own actuaries estimate that Social Security's Old-Age and Survivors Insurance and Disability Insurance (OASDI) Trust Funds will be bankrupt in 2030 (see Figure 1).^[6] However, that estimate may not indicate how soon the financial crisis will really occur. The real crisis starts not when the trust fund runs out, but when it peaks and starts to decline. At that point the trust fund must start turning in bonds to the federal government to obtain the cash needed to finance benefits. But the federal government has no cash or other assets with which to pay off those bonds. It can obtain the cash only by borrowing and running a bigger deficit, increasing taxes, or cutting other government spending. But those problematic responses, even if implemented, will not appreciably lessen Social Security's financial peril, for the system's flaws are more fundamental.

Table 1

**Old-Age and Survivors Insurance (OASI)
Tax Rates and Taxable Income in Nominal Dollars**

Year	Tax Rate	x	Maximum Taxable Income	=	Maximum Tax
1937	2.00%		\$3,000		\$60.00
1951	3.00		3,600		108.00
1971	8.10		7,800		631.80
1991	11.20		53,400		5,980.80
1995	10.52		61,200		6,438.24

Source: 1993 Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds (Washington: Government Printing Office, 1993), Table 2(b)1.

The Declining Support/Benefit Ratio

In a pay-as-you-go system, today's benefits to the old are paid by today's taxes from the young. Tomorrow's benefits to today's young are to be paid by tomorrow's taxes from tomorrow's young. A pay-as-you-go structure, therefore, is an intergenerational transfer from younger workers to older retirees.

Given that payroll taxes alone pay benefits, holding all else constant, inflation-adjusted benefits can increase only as fast as the inflation-adjusted productivity of labor, or roughly 1 percent per year. With many workers per retiree, benefits can be high with low per capita taxes. Alternatively, with few workers per retiree, benefits can be low with high per capita taxes. The relationship between taxes and benefits, the support/benefit ratio, is, therefore, sensitive to the number of workers per retiree. Should the ratio fall, retirees are vulnerable.

To oversimplify slightly, changes in the support/benefit ratio are determined by changes in life expectancy and the birth rate. If people live longer, there are more retirees for each worker. If the birth rate falls, there are fewer workers for each retiree. Life expectancy has been increasing and the birth rate has been falling for decades.

In 1940 life expectancy at birth was 64 years; it is now estimated at 75.^[7] At the turn of the century the birth rate was 3.56; it is now 2.0.^[8] As one would expect, the result is a falling support/benefit ratio, as shown in Figure 2. In 1950 there were 16 workers for every Social Security beneficiary; at present there are 3.3, and it is projected that there will be fewer than 2.0 in 2030.^[9]

Taxes and Benefits: The Uneasy Relationship

As mentioned earlier, for any given level of support, and holding all other variables constant, payroll tax rates must rise as the support/benefit ratio falls. Therefore, at least theoretically, an increase in an individual's tax may not be related to an increase in that individual's benefits, but only be reflective of deteriorating demographics. Unfortunately, in this case, theory is fact.

Figure 2

Support/Benefit Ratio: Workers per Social Security Beneficiary



Source: 1995 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds (Washington: Government Printing Office, 1995), page 122.

At the onset of Social Security, the payroll tax was 2.00 percent of maximum taxable income, which was \$3,000. The total tax, on employee and employer combined, was just \$60. It has grown dramatically, as shown in Table 1.

Even adjusted for inflation, the maximum OASI tax increased almost 900 percent from 1951 to the present. During the same period Social Security benefits also increased, but substantially less than taxes. The maximum retirement benefit in 1951 for a 65-year-old worker was about \$5,000 per year in 1995 dollars. At present it is \$14,400, a rise of only 188 percent.^[10] For those retiring after 1951 the benefits received per tax dollar have deteriorated. From the perspective of return on investment, Social Security falls far short of available alternatives. The costs to society are enormous.

Workers Bear the Burden

Workers are required by law to pay Social Security taxes. That precludes their investing those lost wages in higher yielding assets such as those held in their personal savings and pension plans. They incur a huge burden from that loss

of freedom because Social Security is a tremendously bad investment.

How bad depends on several factors such as date of birth, age at retirement, investment alternatives, and lifetime income. The following analysis looks at pairs of workers born in 1930, 1950, and 1970. One of each pair's income is low--50 percent of the national average wage. The other's income is high--Social Security's maximum covered earnings. To put that in some perspective, in 1995 those wages are about \$12,600 and \$61,200, respectively. Each worker is assumed to start employment at age 21 and retire at either age 62 or the normal retirement age of 65, 66, or 67 depending on date of birth. Investment choices are restricted to U.S. stocks and bonds. Stocks are a 75/25 percent mix of large and small capitalization companies. Bonds are a 50/50 percent mix of long-term corporate and government bonds. Stock and bond returns are those actually earned from 1951 to 1993. Nominal returns thereafter are assumed to be 7 and 10 percent for bonds and stocks, respectively.^[11] (The reasonableness of those assumptions will be addressed later.) At retirement, portfolios are used to purchase annuities, increasing at 4 percent per annum and certain to age 80. Figure 3 compares Social Security's benefits to those earned from the capital markets for each of the cohorts.

The results are a striking indictment of Social Security. In every case but one, Social Security's benefits are below those earned in the capital markets. That phenomenon is not new.

Figure 3
Monthly Benefit Comparison of Social Security and the Capital Markets by Date of Birth, Income, and Age of Retirement (1995 Dollars)

[Bar graph omitted. Tabular presentation given.]

Year of Birth: 1930

	Retirement Age 62		Normal Retirement Age	
	Low Wage	High Wage	Low Wage	High Wage
Social Security	\$439	\$929	\$551	\$1,200
Bonds	\$380	\$1,341	\$574	\$2,072
Stocks	\$864	\$2,614	\$1,301	\$3,999

Year of Birth: 1950

	Retirement Age 62		Normal Retirement Age	
	Low Wage	High Wage	Low Wage	High Wage
Social Security	\$468	\$1,144	\$631	\$1,562

Bonds	\$749	\$3,194	\$1,069	\$4,585
Stocks	\$1,599	\$6,380	\$2,490	\$9,972

Year of Birth: 1970

	Retirement Age 62		Normal Retirement Age	
	Low Wage	High Wage	Low Wage	High Wage
Social Security	\$529	\$1,315	\$769	\$1,908
Bonds	\$676	\$3,268	\$1,085	\$5,243
Stocks	\$1,363	\$6,610	\$2,419	\$11,729

Source: Author's calculations based on figures in Social Security Administration, Social Security Bulletin, Annual Statistical Supplement, 1994 (Washington: Government Printing Office, 1994); Stocks, Bonds, Bills and Inflation (Chicago: Ibbotson Associates, 1995); and "IFC Investible Index," International Finance Corporation, Washington, 1995.

Both workers and retirees have been disadvantaged for decades. What the public has been encouraged to think is a secure, funded, government pension program that offers retirees reasonable benefits in return for taxes on their labor is, in fact, something else. It is a coercive, intergenerational transfer tax system that relies on unrealistic assumptions and pays unreasonably low benefits.

The performance calculations in Figure 3 assume no future change in the Social Security system: benefits will not be reduced and taxes will not be increased from present legislated levels. That assumption is probably naive. From 1951 until now the payroll tax has not been stable. It has increased 17 times. Not counting cost-of-living adjustments, the maximum covered earnings limit has risen five times. And most recently benefits have been cut by all sorts of tax code formulas as well as the raising of the retirement age. If that pattern is continued, Social Security's returns will be worse than indicated.

Social Security recipients currently receive, on average, benefits equal to only 43 percent of preretirement income.^[12] But only 70 percent of that amount is fully funded for future recipients. Thus, unless additional funding is found, the replacement rate will actually fall to below 30 percent.^[13] At the same time, most economists suggest that if one's preretirement standard of living is to be maintained, retirement benefits of between 60 and 85 percent of preretirement income are probably necessary.^[14]

As Figure 4 illustrates, Social Security currently accounts for nearly half of all retirement benefits. More than half of the elderly receive no private pension, and more than one-third have no income from assets.^[15] Moreover, lower income Americans are unlikely to have corporate pensions or private savings plans. In 1994 the median Social Security

payment to an elderly individual was \$9,972, which was approximately 80 percent higher than that person's median private pension payment and three times the median cash income from assets.^[16]

Clearly, millions of elderly people rely on Social Security to provide for their retirement. Therefore, the increasingly poor return on Social Security means that many elderly Americans will find their financial security at greater and greater risk. Their dream of retiring with financial dignity will have been stolen from them.

Future Market Return Assumptions

One might be tempted to assert that the apparent deterioration in relative benefits between the worker born in 1930 to the one born in 1970 is due not to problems with Social Security, but to unrealistically high return assumptions on stocks and bonds. It is undeniably true that market forecasts account for a large component of the benefit calculation for younger workers. Indeed, for the worker born in 1970 there are only 2 years of market knowledge and 44 years of assumptions. However, the data presented in Table 2 cast doubt on this criticism.

For all three cohorts of workers, projected returns are lower than the actual returns that were experienced, except in one case. The lone exception is the worker born in 1930 who invested in bonds.

Forecasting interest rates and the stock market can be treacherous, but investors do it every day. Their trades embody implicit assumptions about the future relative returns on the traded securities. Intermarket trades--say from Japanese equities to French equities, or from U.S. stocks to U.S. bonds--also incorporate assumptions. One of the common elements used in making those assumptions is historical returns.

In this paper, future nominal rates of return on stocks and bonds are 10 and 7 percent, respectively. For comparison, historical returns for various periods are given in Table 3.

For all periods, equity returns were greater than the 10 percent assumption. In the case of bonds, half of the returns were higher than 7

Figure 4

Retirement Benefit Payments, by Source, 1992

[Pie graph omitted. Data provided below]

Government pensions: 18.7%

Private pensions: 31.4%

Social Security: 49.9%

Source: Josh Weston et al., "Who Will Pay for Your Retirement?" Committee for Economic Development, Washington, 1995.

Table 2

Importance of Market Forecasts in Estimating Deteriorating Social Security Returns

Worker	Actual Returns			Projected Returns		
	Bonds	Stocks	Years Actual	Bonds	Stocks	Years Projected
1930	5.6%	12.5%	42	7%	10%	2
1950	9.6	12.6	22	7	10	23
1970	14.6	19.0	2	7	10	44

Values derived from Stocks, Bonds, Bills and Inflation (Chicago: Ibbotson Associates, 1995).

Table 3
Average Annual Nominal Returns from Stocks and Bonds during Several Periods from 1926 through 1993

Period	Stocks		Bonds	
	Large Capitalization	Small Capitalization	Corporate	Government
1926-93	10.3%	12.4%	5.6%	5.0%
1951-93	11.9	14.3	6.1	5.6
1961-93	10.6	14.8	7.4	7.0
1971-93	11.7	15.3	9.7	9.5

Values derived from Stocks, Bonds, Bills and Inflation (Chicago: Ibbotson Associates, 1995).

percent and half were not. If history is any guide, the assumptions used for the specific markets are not out of line. Yet another way of approaching the issue is to ask whether a 7 percent return is unreasonable, not for any particular asset, but for any combination of assets. In the light of history, again the answer is no.

But focusing on the American market actually understates opportunities, for the U.S. market is only one of many. As shown in Figure 5, U.S. equities account for less than 40 percent of the value of all equities in the world. Investments exist well beyond our shores. Portfolios can be structured to take advantage of those markets.

By comparing returns, standard deviation, and correlation of returns, portfolios can be designed to increase total return while reducing risk. The opportunity to do so should be available to investors in a privatized retirement savings system. If it is, returns of 7 to 10 percent are not only attainable but probably conservative.

Social Security Cannot Be Fixed

Ultimately, even if Social Security's looming financial difficulties can be fixed, it remains a fundamentally flawed program, providing an increasingly bad deal for today's young workers. Indeed, the reforms suggested for restoring the trust fund's actuarial balance, such as increasing payroll taxes, raising the retirement age, and reducing COLAs, would actually reduce the relative rate of return.^[17]

Figure 5

World Investment Markets as of June 30, 1995

[Pie graph omitted. Data presented below.]

United States:	39.84%
Japan:	23.66%
Western Europe:	16.42%
United Kingdom:	9.70%
Canada:	2.32%
Scandinavia:	2.22%
Hong Kong:	1.84%
Australia &	
New Zealand:	1.74%
Malaysia:	1.41%
Singapore:	.70%
Ireland:	.17%

Source: Morgan Stanley Capital International On-Line Service.

It, therefore, becomes imperative to move quickly to a private pension system. Where privatization has been effectively implemented, it has been successful. The Chilean experience is instructive.

Chile: The Privatization Paradigm

Only a brief comment will be offered about the Chilean system, for a full and detailed explanation is beyond the scope of this paper. Also, the Chilean model may not be precisely applicable to the United States.^[18] That said, however, Chile confronted a substantially similar problem with its public pension system and privatized it. The new private system has been remarkably successful.

Chile's social security system predated ours, having started in 1926. In the late 1970s its benefit payments were greater than its taxes, and it had no funded reserves. The anticipated decline in its support/benefit ratio meant that the

problems were only going to get worse. Chile decided to fundamentally restructure its system, not merely reform the flawed pay-as-you-go scheme.

The new system is one of forced savings. Workers are required to contribute 10 percent of their wages to their own accounts at a pension fund company (Administradoras de Fondos de Pensiones, or AFP), which invests the wages in securities such as stocks and bonds. Contributions and investment returns are not taxed, but withdrawals are. At retirement, participants have the options of purchasing a life-long annuity, withdrawing a monthly benefit from their AFP account, or purchasing an annuity that is effective at a specified future date. Participants also have the right to contribute an additional 10 percent of after-tax wages to their accounts, which compound tax-free.

The AFPs are single-purpose companies that are licensed and regulated by the government. Among other obligations, they are required to invest the contributions, distribute the benefits, offer insurance, conduct participant record keeping, and keep a certain level of reserves. Much as they are in our mutual fund industry, the workers' assets are separate from the AFP's assets. If an AFP were to go out of business, participants' assets would be transferred to another AFP. Individuals have the right to choose and change their AFP.

The success of Chile's privatization of its public pension system can be measured in many ways. Whereas in the late 1970s there were virtually no savings, now the cumulative assets managed by AFPs are about \$23 billion, or roughly 41 percent of gross domestic product.^[19] During the past decade, growth of Chile's real GDP has averaged over 6 percent, more than double that of the United States.^[20] And for the five years ending in 1994, the annualized total return of the Chilean stock market was 48.6 percent versus 8.7 percent for the United States.^[21]

But most important, retirees are receiving much higher benefits. Since the privatized system became fully operational on May 1, 1981, the average rate of return on investment has been 14 percent per year.^[22] As a result, the typical retiree is receiving a benefit equal to nearly 80 percent of his average annual income over the last 10 years of his working life, almost double the U.S. replacement value.^[23]

Chile's reforms are seen as such a huge economic and political success that other Latin American countries, including Argentina, Peru, and Colombia, are beginning to implement similar changes. Mexico has implemented a new privatized social security system operating alongside its old state-run system. In Europe, Britain has allowed some people to opt out of its upper tier of benefits, and Italy has begun to privatize some aspects of its social security system. Several former Soviet bloc countries also are studying the issue, for their systems are in precarious financial condition.^[24]

Conclusion

The U.S. Social Security system is not as vulnerable today as some others were when they were privatized. That gives us a window of opportunity within which to move forward with a reasoned solution without being subject to imminent crisis during the planning. But move forward we must, for the future of our system, if not changed, is certain disaster. We can do better for our younger workers and older retirees than to wait for the inevitable.

Allowing individuals to invest their money directly in the capital markets, rather than in Social Security, will provide them with far higher returns and thereby greater financial security. Thus, privatization of Social Security can restore financial dignity to Americans' retirement years.

Notes

The author wishes to thank Bruce Schobel, vice president and actuary with New York Life Insurance Company for his assistance with the paper. Schobel is a former actuary of the Social Security Administration.

1. Lionel Robbins, *The Great Depression* (London: Macmillan, 1934), pp. 203, 213, 236.

3. Franklin D. Roosevelt, *The Public Papers and Addresses of Franklin D. Roosevelt*, comp. Samuel I. Rosenman (New York, Random House, 1938), vol. 3, pp. 287-93.
5. On FICA taxes, see U.S. House of Representatives, Committee on Ways and Means, "Background Materials on the Federal Budget and Tax Policy for the Fiscal Year 1991 and Beyond," February 6, 1990, p. 24.
7. See, for example, Peter Ferrara, *Social Security: The Inherent Contradiction* (Washington: Cato Institute, 1980); Carolyn Weaver, ed., *Social Security's Looming Surpluses: Prospects and Implications* (Washington: American Enterprise Institute, 1990); and C. Eugene Steurle and Jon Bakija, *Retooling Social Security for the 21st Century: Right and Wrong Approaches to Reform* (Washington: Urban Institute, 1994).
9. The payroll tax actually funds several different trust funds: 1) The Old-Age and Survivors Insurance (OASI) Trust Fund is used to pay monthly benefits to retired workers and their spouses and minor children and to survivors of deceased workers. Those are the benefits most commonly thought of as Social Security. 2) The Disability Insurance (DI) Trust Fund is used to pay benefits to disabled workers, their spouses, and minor children and to provide rehabilitation services for the disabled. The DI Trust Fund is often linked with the OASI Trust Fund as OASDI to distinguish them from the Hospital Insurance Trust Fund. 3) The Hospital Insurance (HI) Trust Fund is used to pay hospital costs under Medicare Part A. That trust fund was established in 1965.
11. 1995 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds (Washington: Government Printing Office, 1995), pp. 28-30.
13. *Ibid.*, Table II.D.2.
15. *Ibid.*
17. *Ibid.*, p. 122.
19. Derived from Social Security Administration, *Social Security Bulletin, Annual Statistical Supplement, 1994* (Washington: Government Printing Office, 1994), p. 63.
21. Nominal data are used throughout the analysis for returns, wages, and Social Security benefits. There is a final adjustment to 1995 dollars, using historical Consumer Price Index data and an assumed 4 percent inflation rate for future years.
23. Because of the redistributionist formula of Social Security benefits, the replacement value of benefits ranges from 58 percent for the lowest income workers to 24 percent or less for higher income workers. Josh Weston et al., "Who Will Pay for Your Retirement?" Committee for Economic Development, Washington, 1995.
25. Stephen Entin, "Social Security: Problems and Opportunity," Institute for Research on the Economics of Taxation, Washington, June 19, 1995.

27. A. Haeworth Robertson, *Social Security: What Every Taxpayer Should Know* (Washington: Retirement Policy Institute, 1992), p. 218.
29. Weston et al., Figure 16, p. 28.
31. *Ibid.*, p. 27.
33. See, for example, Bipartisan Commission on Entitlement and Tax Reform, *Final Report to the President* (Washington: Government Printing Office, 1995).
35. For a detailed discussion of the Chilean privatization experiment and its applicability to the United States, see Karl Borden, "Dismantling the Pyramid: The Why and How of Social Security Privatization," Cato Institute Project on Social Security Privatization, paper no. 1, August 14, 1995.
37. Luis Larrain, "Social Security Reform," in *The Chilean Experience: Private Solutions to Public Problems*, ed. Cristian Larroulet (Santiago: Center for International Private Enterprise, 1991), p. 45.
39. Richard Hart, "A Pension Lesson from Chile," *Christian Science Monitor*, March 7, 1995.
41. Jos' Piñera and Mark Klugmann, "The Chilean Private Pension System," *International Center for Pension Reform*, Santiago, 1995, p. 10.
43. *Ibid.*, p. 9.
45. *Ibid.*, p. 10.
47. See World Bank, *Averting the Old Age Crisis* (Oxford: Oxford University Press, 1995).