As a nation, Americans save a smaller portion of income than residents of most developed, free-market economies. For example, between 1960 and 1983, the savings rate in the United States averaged about 7.5 percent of disposable personal income. This is significantly less than the rates in West Germany (14.5 percent), in France (12.9 percent), and in Japan (18.9 percent).

Since American retirees are living longer, the low savings rate suggests that many of them may have difficulty maintaining their standard of living throughout their retirement years.

The condition of the Social Security System doesn't do much to change this assessment. The system's retirement fund became technically insolvent in 1982. Since the future health of the entire Social Security System depends on uncertain factors, such as demographics (population growth, etc.), future tax rates, and future benefit programs, it may not be prudent to count on Social Security to be as generous a source of retirement income in the future as it has been in the past.

In recent years, the welfare of older Americans has become increasingly dependent on income earned from private pensions. Between 1962 and 1982, the percentage of total financial assets in private pensions increased from about 3 percent to about 9 percent of seniors' incomes.

In spite of reforms undertaken over a decade ago, however, there are still questions about the safety of private pension funds. Will the money actually be there when it's time to retire? In this Economic Commentary, we examine private pension funds, and discuss their safety and the federal government's efforts to ensure that the funds will continue to provide retirement support in the next century.

### The Basics of Private Pensions

In general, there are two major types of private pensions. Funds in which contributions are determined by the benefits they will eventually yield are called defined benefit pensions. Funds in which contributions are predetermined, and in which benefits are determined by the accumulation and return on total fund assets, are called defined contribution pensions.

Defined contribution plans are easier for companies to manage, and account for about two-thirds of all private pensions. Defined-benefit pensions, while more cumbersome, offer some distinct advantages. They can serve as a lucrative tax shelter and can be used to stabilize a company's workforce because pension benefits are tied either to the highest level of salary attained or to salary at the time of retirement, thus giving workers an incentive to stay with the company.

Pension fund savings are typically generated through employer contributions, although this has not always been the case. In 1940, about 42 percent of the contributions to private pensions were made by employees and 58 percent by employers. But the post-WWII growth in private pensions has occurred primarily as a result of employer contributions. In 1980, employers were responsible for about 94 percent of the total contributions to private pension funds in that year, and only 6 percent came from direct contributions by employees.

Overall growth in private pensions as a percent of wages has been consistent with the growth of most non-wage employee benefits. Between 1955 and 1983, employer contributions for private pensions and profit sharing plans as a percentage of wages rose from 1.9 percent to 3.9 percent.

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The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.


2. Since pension benefits are tied to final labor income, increases in salary can increase total compensation (income plus pension benefits) by a proportionately larger amount. For a more thorough discussion of the financial advantages of the defined-benefit plan, see Bulow and Scholes (1983).
Preferential tax treatment notwithstanding, only about half of the civilian nonagricultural workforce is currently covered by private pensions (48.1 percent in 1988) and private pension coverage seems to be heavily concentrated among relatively high-income earners.

The Distribution of Outstanding Private Pension Assets

The distribution of outstanding private pension assets in 1984 is illustrated in chart 1. Unlike the life insurance companies (and insured plans), trusteed plans have placed a large portion of their assets in relatively unpredicatable investments. Because of heavy participation in the often-volatile corporate equity market, which in 1972 included a record high of about 75 percent of trusteed-fund portfolios, earnings by trusteed funds have been irregular over several decades (chart 2).

Between 1960 and 1980, earnings by private pension trust portfolios were about 5.2 percent per year, somewhat less than the 5.6 percent annual rate of return earned by life insurance companies. Despite a modest earnings rate over the 21 year period, the variation in private pension trust returns was enormous, particularly when compared against the investment performance of life insurance companies. The rate of return on pension funds over the 1970-1983 period was 6.1 percent, as opposed to the rate of return on life insurance company assets of 7.5 percent, which was larger than the spread during the 1960-1980 period. The rate of return on pension fund assets remained irregular in the early 1980s.

Why have pension fund administrators invested in volatile instruments? Some observers have noted that the choice of assets made by fiduciaries of trusteed plans are often made on institutional rather than economic grounds. Potentially serious conflicts of interest exist between some private pension plan fiduciaries and beneficiaries (pensioners or pension plan participants).

About 65 percent of all private pension assets are owned by life insurance companies. These trusteed pensions are typically allowed more flexible investment options as compared to insured plans, which is an important factor influencing the investments of private pension funds.

The value of pension assets will vary with changes in market returns. When pension fund assets exceed the amount owed to present and future pensioners, pension agreements typically allow such surpluses to be claimed by firm shareholders—not by firm pensioners.

For defined contribution pensions, the issue of asset ownership is not particularly interesting. Changes in the asset value of the fund are equally offset by changes in the liabilities of the fund; pension surpluses rarely exist. The value of defined-benefit pensions, however, has important implications for corporate balance sheets.

For defined-benefit pensions, the commitment to pay out benefits (the liability) need not change with asset market fluctuations. Consequently, market advances can improve the value of the corporation when it claims the overfunded portion of the pension.

Other conflicts of interest could arise when the assets of trusted plans are invested in the parent company of the pensioners. The conflict may occur if a company needs to alter the price of its stock for balance sheet considerations. For example, a firm may use pension fund assets to purchase its own stock in order to increase its value in anticipation of a stock-related trade. The rate of return on pension funds is important because if pension funds cannot meet their obligations to participants, these participants lose part or all of their contracted benefits. As a result of the 1974 Pension Reform Act, the federal government has a lien on part of the company's worth and will use this lien to augment pension funds so workers stand to lose the pension share of their compensation. Although this lien may not fully replace workers' pension benefits, it could have a significant effect on the firm's balance sheet.

Chart 1 Distribution of Pension Assets-1984

<table>
<thead>
<tr>
<th>Percent</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equities</td>
<td>47.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. U.S. Government Securities</td>
<td>27.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Corporate and Foreign Bonds</td>
<td>12.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Demand and Time Deposits</td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Mortgages and Open-Market Paper</td>
<td>5.4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCES: Board of Governors of the Federal Reserve System; U.S. Department of Commerce, Bureau of Economic Analysis; and American Life Insurance Corporation.

3. In the 1960s, the insurance industry was allowed to manage assets of pension funds (and some other assets) in separate accounts. These separate accounts are not governed by the same rules that restrict the investment options of life insurance companies. See Munnell (1982, pp. 19-108). In 1983, about 24 percent of private pension assets managed by life insurance companies were held in separate accounts. About 30 percent of the life insurance companies (and insured funds) are held in private stock. See American Council of Life Insurance, Pension Facts (1984).

4. Legislation has restricted an employer's ability to tender or give away its own stock. The Employee Retirement Income Security Act of 1974, P.L. 93-406, sect. 407(d), limits the holdings of a parent firm's stock by a pension fund to 30 percent of the fund's assets.

5. For example, Union Carbide has recently asked for approval to terminate its existing overfunded pension plan for fear of takeover. Indeed, the GAF corporation has already purchased a huge portion of Carbide stock. See Williams (1985).

Pensions and the Corporate Balance Sheet

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ERISA and PBGC: The Road to Reform?

U.S. legislators responded to many of the problems associated with the management of private pensions by enacting the Employee Retirement Income Security Act of 1974 (P.L. 93-406), also known as ERISA or the Pension Reform Act.

Among ERISA's major contributions were the regulation of funding, investment management, benefit coverage, and the creation of the Pension Benefit Guaranty Corporation (PBGC). The quasi-public PBGC acts as an insurance corporation to private pensions, much like the FDIC insures depositors in most commercial banks; PBGC guarantees a portion of the employee's pension if the pension plan fails.

The PBGC is funded from four major sources: 1) premium monies—every worker who participates in a plan must pay annual premiums, currently $2.60 per worker each year, 2) assets inherited from terminated plans (plans the PBGC has determined are inadequately funded, or that have been voluntarily submitted to the PBGC by the parent firm), 3) income from investments, and 4) amounts received from employers upon termination of a pension under the employer liability provisions of ERISA.

Although creation of the PBGC is an important step toward private pension management reform, the PBGC guarantee is not unqualified. For plans that have been in existence for five or more years, the guarantee covers vested pension benefits up to a maximum either of 100 percent of average gross monthly income during the highest-paid five consecutive years of plan participation or of $1789.77 per month (indexed in accordance with the Social Security wage base increase), whichever is smaller. 6

Administration of ERISA is jointly performed by the U.S. Department of Labor and the Internal Revenue Service. The Labor Department is charged with the responsibility of protecting the rights of individuals and with policing fiduciary performance, while the IRS is responsible for overseeing whether or not funding, vesting, and other plan-related requirements are being fulfilled.

Private pension funds are subjected to examination by a series of required disclosures. Under the provisions of ERISA, pension fund administrators must submit annual reports of pension fund activities to the Labor Department. In addition, reports of termination and vested pension obligations are now required before pensions can be terminated.

If the PBGC deems a plan insufficient to pay out the benefits it guarantees, it has the authority to force the termination of a plan (table one). In such cases, the PBGC (or a PBGC appointee) becomes the plan fiduciary. In addition, the PBGC has a high-priority claim on up to 30 percent of the employer’s net worth, which may be invoked to ensure that workers receive what the pension agreement prescribes. The priority of the PBGC claim is approximately equal to the priority of the federal government’s claim for unpaid taxes. This represents an important change from the pre-ERISA environment when pensioners had virtually no claim on corporate assets. If the employer’s liability still does not raise the benefit level up to the PBGC’s guaranteed amount, the PBGC will contribute to the terminated fund up to the limits set forth by ERISA.

ERISA reformed many other questionable practices of the private pension system by requiring stricter accountability of fiduciary investments, and by mandating that fiduciaries invest pension monies “prudently,” and that workers have access to vital pension investment information. Although there are no laws that require employers to offer a pension, ERISA loosened the requirements that had previously disqualified some employees from joining existing plans or from obtaining vesting. For example, existing pension plans must permit all employees who

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6. For plans that have not existed for five years, the PBGC-guaranteed pension is the larger of either 20 percent of the benefits contributed or of $20 times the number of years the plan has existed.
Vesting

Before 1974, private pensions were not legally bound to vest employer-contributed benefits prior to employee retirement. Vesting in a pension means that employees have retained a right to at least part of their accrued pension benefits. Without vesting, a plan participant has no guarantee of eventual vesting. Second, like other insurance systems created by the government, the PBGC faces a risk because by law it must insure all pensions, including the poorest funded. In some instances, the underfunding problems that plague some private pension funds have simply been shifted to the government insurance agency. As a result, the PBGC is currently under-funded itself. Its assets (in the form of premiums and assets of terminated plans) are falling behind its liabilities (the reserve to pay out benefits to plan participants).

The reserve of claims (benefits PBGC must pay out) incurred during the last five years greatly exceed those incurred during the first five years of the PBGC’s existence. For example, net claims on PBGC for fiscal years 1975 through 1979 averaged only $37.3 million per year, and for fiscal years 1980 through 1984, net claims averaged $126 million per annum. This increase in claims was undoubtedly due to the generally poor performance of the national economy over that period. On September 30, 1984 the PBGC had assets totaling $1.063 billion and liabilities of $1.525 billion, for a net worth of about $462 million.

Consequently, the PBGC’s ability to deal with a major increase of claims is in doubt. Indeed, a single claim from a major private pension fund could seriously jeopardize the financial underpinnings of the PBGC. For example, after the Wheeling-Pittsburgh Steel Company terminated its pension fund last November, claims against PBGC assets rose by $450-$475 million, which reduced PBGC reserves by almost one-third, and which reduced PBGC net worth to a level of about minus $1 billion. Two challenges face the PBGC. First, it faces a risk because by law it must insure all pensions, including the poorly managed. Second, like other insurance systems created by the government, the PBGC insures a potentially non-diversifiable risk. Unlike claims accruing on life or health insurance claims, claims against several pension insurance funds need not be independent of one another. A prolonged decline in economic activity can produce a large number of retirees and pension plan terminations. Moreover, since pension assets are strongly influenced by the performance of the stock market, the value of private pension assets could be simultaneously reduced.

Consequently, adverse national economic conditions can threaten pension insurance and, in turn, threaten the safety of private pension savings. Although the FSLIC and FDIC insurance systems for deposits may face a similar problem, these organizations have the full faith and credit of the federal government, something that the PBGC does not have.

To survive, the PBGC must seek additional funding. Even though it was created by the federal government, it has only a $100 million line of credit from the U.S. Treasury. Two more potential sources of additional funding that are currently being considered in Congress are: (1) increasing employee premiums from $2.60 per year to $8.10, and (2) increasing an employer’s liability upon termination of its pension fund.

Alternatively, the federal government could cut back PBGC responsibilities. The Reagan Administration recently proposed the privatization of the pension insurance business by drastically limiting the government’s ability to insure private pensions and by allowing private insurers to insure the bulk of the funds.

The PBGC has managed to meet its present responsibilities to plan participants of terminated pension plans, but its future ability to make payouts will be significantly hampered if it terminations more substantially underfunded large plans.

References


10. For companies planning to go bankrupt, the PBGC’s lien would continue to be 30 percent of the assets; for companies that plan to terminate a pension fund and remain operative, the lien would be 30 percent of net worth and 10 percent of 10 (or less) years’ profits, until the underfunded portion is made up. This change would increase the deterrent against companies dumping underfunded pensions on the PBGC.

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