United States General Accounting Office

GAO

Report to the Chairman, Subcommittee on Social Security, Committee on Ways and Means, House of Representatives

August 1996

401(k) PENSION PLANS

Many Take Advantage of Opportunity to Ensure Adequate Retirement Income

G A O
75 years
1921 - 1996

GAO/HEHS-96-176

GAO

United States
General Accounting Office
Washington, D.C. 20548

Health, Education, and Human Services Division

B-270758

August 2, 1996

The Honorable Jim Bunning
Chairman
Subcommittee on Social Security
Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

Traditionally, the three cornerstones of retirement income have been Social Security, private pensions, and savings. Families headed by people aged 65 or older receive, on average, about 60 percent of their income from Social Security, 15 percent from pensions and annuities, 11 percent from asset income, and the rest from earnings and public assistance. While Social Security coverage is mandatory and nearly universal, it is not designed to provide adequate retirement income by itself: Social Security replaces about 42 percent of the final-year earnings of a worker earning the Social Security average wage of $23,500. Pensions and savings are usually needed to fill the gap between Social Security payments and an adequate retirement income.

With the growth in 401(k) pension plans,[1] many workers have more opportunity to affect their retirement income because they can choose their contribution levels and how their pension assets are invested. Given this trend toward increased worker responsibility for retirement income, you requested that we provide you with answers to the following questions: (1) What proportion of workers are covered by pension plans and, in particular, 401(k) pension plans? (2) How much do workers covered by 401(k) plans contribute to their pension accounts? (3) How do workers covered by 401(k) plans allocate their pension account balances among various investment options? This report also examines how the answers to these questions differ by demographic group.

To answer these questions we analyzed two nationally representative databases containing detailed demographic and employment information about American workers in 1992, the latest year for which data were available. We also solicited comments from outside pension experts. We did our work between November 1995 and July 1996 in accordance with

[1] 401(k) pension plans are salary reduction plans that allow participants to contribute, before taxes, a portion of their salary to a retirement account. Many employers also match workers' contributions to these accounts.

generally accepted government auditing standards. (For further details on our scope and methodology, see app. I.)

Results in Brief

Many workers will be able to fill the gap between Social Security and an adequate retirement income with income from pensions. However, some groups of workers, primarily those with low income and less education, are at risk of receiving little or no pension income. Almost half of all workers and nearly two-thirds of workers nearing retirement age are covered by a pension plan. One in four workers who have pension coverage participates in a 401(k) pension plan. Male, white, highly educated, and higher-income workers are more likely to have pension coverage than are other workers. Moreover, most union members are covered by a pension plan as are most people working for large employing organizations, or firms (500 or more employees). In contrast, over half of the workers who never graduated from high school and are nearing retirement age have no pension coverage.

Workers with 401(k) pension plans determine the level of their retirement income, in part, by the amount they contribute to their pension account: the more they contribute, the more income they will have after retirement. On average, workers covered by a 401(k) plan contribute about 7 percent of their salary to their account; 80 percent also receive a matching contribution from their employer, averaging about 5 percent of their salary. Workers with higher income or those who attended college tend to contribute a higher proportion of their salary to their 401(k) pension account than lower-income or less educated workers. Furthermore, workers with 401(k) plans who are also covered by a defined benefit plan or who have a spouse who has pension coverage make larger contributions to their accounts than other workers.

Many workers are responsible for directing the investment of their 401(k) pension plan account balances. About 25 percent of 401(k) participants invest their 401(k) funds in conservative investments, such as bonds; another 25 percent invest primarily in stocks; and the rest split their investments between stocks and bonds. Women tend to invest their funds more conservatively than men do and are more likely to invest mostly in bonds. In addition, highly educated workers and higher-income workers are more likely to invest in stocks than other workers are. Over the long term, since stock market returns historically have been greater than the returns on bonds, workers investing their 401(k) pension plan account balances in stocks are likely to have greater retirement income than are more conservative investors, given equal contributions.

Background

Most financial planners report that retirement income that is 60 to 80 percent of final-year earnings is adequate to maintain a reasonable standard of living in the retirement years. Social Security benefits alone are not designed to maintain the standard of living enjoyed before retirement. For example, Social Security replaces from about 60 percent to less than 25 percent of final-year earnings for people who have worked 35 years. Low-income elderly Americans have very little income other than Social Security—almost 80 percent of their income is from Social Security—while the high-income elderly receive about 25 percent of their income from Social Security. Part of this difference is due to the fact that the low-income elderly receive less than 10 percent of their income from pensions and asset income, compared with 35 percent for the high-income elderly.

There are two basic types of pension plans: defined benefit and defined contribution plans. Pension benefits in defined benefit plans are generally based on a formula of years with the firm, age at retirement, and salary averaged over some number of years. In defined contribution plans, employers generally promise to make guaranteed periodic contributions to workers' accounts, but retirement benefits are not specified.

Pension coverage rates in this country increased after the turn of the century but have remained fairly stable since 1972, at about 49 percent of all workers and about 56 percent of all full-time workers. However, the number of defined contribution plans, as compared with defined benefit plans, has grown. Defined contribution plans as a percentage of all pension plans grew from 67 percent in 1975 to 87 percent in 1992. Similarly, the percentage of pension participants in defined contribution plans grew from 29 percent in 1975 to 60 percent in 1992.

Much of the growth in defined contribution pension plans has been due to the increase in the number of 401(k) pension plans. In 1992, 401(k) plans accounted for 20 percent of all pension plans and 35 percent of all pension plan participants. Named after the section of the Internal Revenue Code that established them in 1978, 401(k) plans allow employees to contribute before-tax dollars to a qualified retirement account. Investment income earned on 401(k) account balances accumulates tax free until the individual withdraws the funds at retirement. Furthermore, many employers sponsoring 401(k) plans make matching contributions to these plans.

Half of All Workers Are Covered by Pension Plans, and Certain Groups Are More Likely to Be Covered Than Others

Although almost half of all American workers are covered by a pension plan, certain groups—such as unionized workers and those who work at large firms—are more likely to have this coverage. Workers with less education and lower income are less likely to be covered by pensions.

Many Workers Covered by Pension Plans

Almost half of all workers are covered by at least one pension plan. Almost two out of three workers nearing retirement age are covered by a pension plan. The majority of covered workers participate in a defined contribution plan, and nearly half of these workers are covered by a 401(k) plan. However, a third of workers eligible to participate in a 401(k) plan do not participate.

Unionized Workers and Workers at Large Firms More Likely to Have Pension Coverage

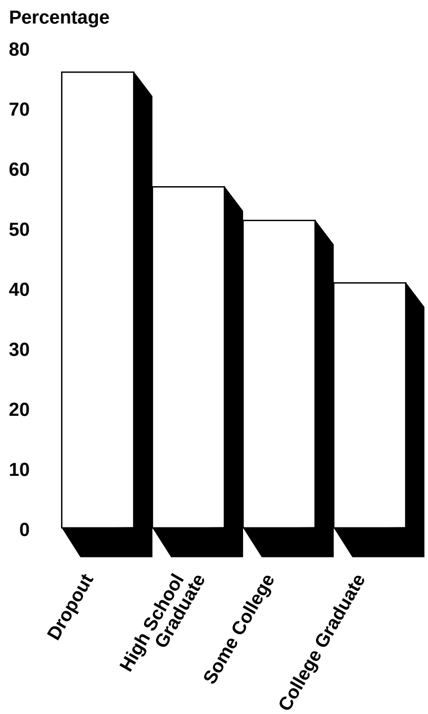
Union members are more likely to have pension coverage than nonunion workers. Almost 80 percent of all unionized workers and nearly 90 percent of unionized workers nearing retirement age are covered by a pension plan. On the other hand, almost 60 percent of nonunionized workers are not covered by a pension plan. Most unionized workers who are covered by a pension plan participate in a defined benefit plan, while only 15 percent participate in a 401(k) plan.

In addition, most workers at firms with 500 or more employees are covered by a pension plan. Over 70 percent of all workers and over 90 percent of older workers at large firms are covered by at least one pension plan. Workers at small firms (fewer than 25 employees) typically are not covered by a pension plan. In general, the larger the firm the more likely a worker is to be covered by a pension plan.

Many Workers With Less Education and Lower Income Are Without Pension Coverage

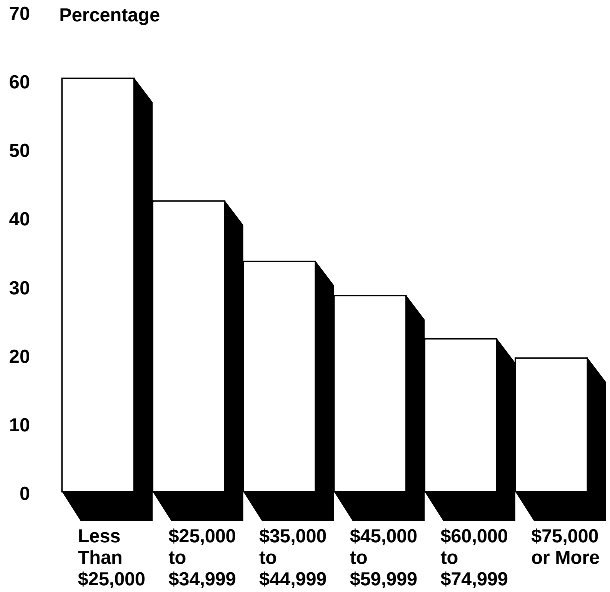
Workers who have not finished high school are unlikely to be covered by a pension plan (see fig. 1). More than three of every four workers who drop out of school have no pension coverage. Fewer than half of dropouts who are nearing retirement age have pension coverage. Almost 60 percent of college graduates, on the other hand, are covered by a pension plan, and over 75 percent of college graduates who are approaching retirement age are covered.

Figure 1: Percentage of Workers 18 to 64 Years of Age With No Pension Coverage by Educational Level, 1992



Lower-income workers typically have no pension coverage. For example, 60 percent of the workers with income less than $25,000 per year who are nearing retirement have no pension coverage and will have to rely on Social Security as their primary source of income after retirement (see fig. 2). Less than 20 percent of higher-income older workers are not covered by a pension plan. (For more information on pension coverage, see app. II.)

Figure 2: Percentage of Workers 51 to 61 Years of Age With No Pension Coverage by Income Level, 1992



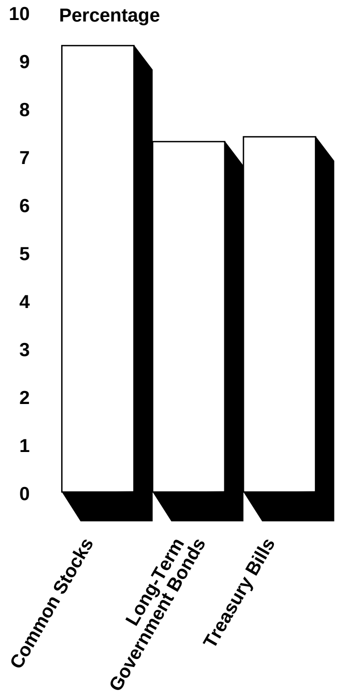
Workers With More Economic Security Contribute More to 401(k) Pension Plans

Retirement benefits for workers with 401(k) pension plans depend on how much the worker contributes to the plan, and higher-income workers tend to contribute more to their pension plan than lower-income workers. For example, workers with an annual income over $75,000 contribute, on average, over 8 percent of their salary, while workers with less than $25,000 in annual income contribute less than 5 percent. Moreover, less educated workers generally contribute less than more highly educated workers. Furthermore, workers who are also covered by a defined benefit plan or who have a spouse with pension coverage contribute a larger fraction of their salary to their 401(k) account than other workers. (For more information on contribution rates to 401(k) pension accounts, see app. II.)

Investment Choices for Pension Accounts Affect Retirement Income

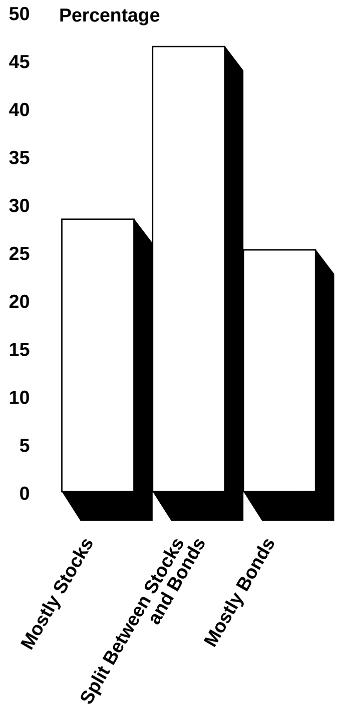
In addition to the amount contributed, retirement benefits depend on the return achieved by a worker's 401(k) fund investments. Historically, over the long term, common stocks have yielded the highest investment returns and government securities the lowest (see fig. 3).

Figure 3: Compound Annual Return on Various Investments, 1968-87



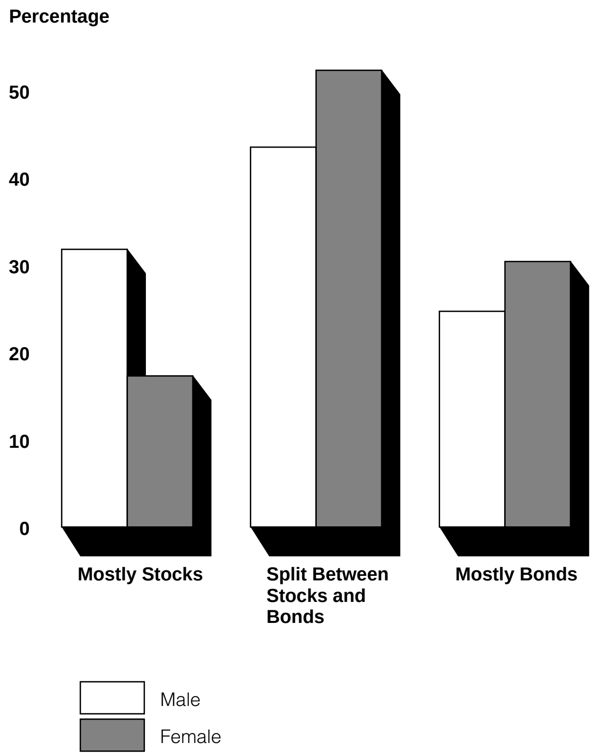
Almost half of all workers invest their 401(k) account funds in a diversified portfolio of stocks and bonds (see fig. 4).

Figure 4: Allocation of 401(k) Pension Balances Among Investment Options by All Workers 18 to 64 Years of Age, 1992



About a quarter of the workers are aggressive investors, investing mostly in stocks. The remaining 25 percent invest conservatively in bonds. However, different demographic groups exhibit distinct investment patterns. For example, female workers nearing retirement are more conservative investors than are older male workers (see fig. 5).

Figure 5: Allocation of 401(k) Account Balances Among Investment Options by Male and Female Workers 51 to 61 Years of Age, 1992



Workers with more education and higher-income workers are more aggressive investors and are more likely to invest mostly in stocks than are less educated workers and lower-income workers. (For more information on the allocation of 401(k) pension assets among various investment options, see app. II.)

Summary and Conclusions

At retirement, over 60 percent of workers have pension coverage and will receive some pension benefits during retirement, although some families do not receive much retirement income from pensions. Higher-income workers and better educated workers are more likely to be covered by a pension plan than are other workers. In addition, higher-income workers and better educated workers with 401(k) pension plans tend to contribute a larger proportion of their salary to their pension account and to invest their pension funds in higher yielding assets than do other 401(k) plan participants. Consequently, while many workers will have sufficient retirement income, some workers, especially those with less education and lower income, will be at risk of inadequate retirement income.

Comments

We asked two pension plan experts to comment on a draft of this report. They generally agreed with the study approach and results. They made a few technical suggestions, which we incorporated where appropriate.

We are sending copies of this report to the Secretary of Labor, relevant congressional committees, and other interested parties.

This report was prepared under my direction. Please contact Thomas L. Hungerford, Senior Economist, at (202) 512-7028 if you or your staff have any questions concerning this report.

Sincerely yours,

Jane L. Ross

Jane L. Ross
Director, Income Security Issues

Contents

Abbreviations

CODA	cash or deferred arrangement
EBRI	Employee Benefit Research Institute
HRS	Health and Retirement Survey
SCF	Survey of Consumer Finances

Scope and Methodology

We addressed the following three questions to determine how well-prepared workers are for retirement:

- What proportion of workers are covered by pension plans and, in particular, 401(k) pension plans?
- How much do workers covered by 401(k) plans contribute to their pension accounts?
- How do workers covered by 401(k) plans allocate their pension account balances among various investment options?

We also examined how the answers to these questions differ by demographic group. To do this work, we reviewed the relevant technical literature, talked to pension experts, and analyzed two data sources: the 1992 Survey of Consumer Finances (SCF), prepared by the Federal Reserve, and the first wave of the Health and Retirement Survey (HRS), prepared by the University of Michigan Survey Research Center. These databases provided nationally representative individual-level data rather than data from a limited number of specific pension plans or aggregated pension plan data, which have been used by other researchers in the past.

1992 Survey of Consumer Finances

SCF asked a random sample of respondents in 3,906 households questions regarding their own and their spouses' current and past employment, family asset holdings and debts, and demographic information. Included in the current employment questions were detailed questions about pension coverage. From SCF, we created a data set containing information on respondents and/or their spouses who were working at the time of the survey. The sample we used for our analysis contained information on 4,181 working individuals who were between the ages of 18 and 64 in 1992. Primary respondents composed about two-thirds of the sample, and respondents' spouses composed the other third. Sample weights were used throughout our analysis. The advantage of using SCF is that it contains very detailed information on earnings, assets, and pensions of households and is representative of all age groups. On the other hand, its sample size is relatively small.

Health and Retirement Survey

The first wave of HRS was conducted in 1992. The sample was composed of families with at least one family member between the ages of 51 and 61. The survey asked the primary respondent and his or her spouse questions regarding their current and past employment (including pension coverage), family asset holdings and debts, and demographic information.

The database contained one observation each for the primary respondent and spouse. The sample contained information on 5,403 working individuals, about two-thirds of whom were primary respondents and one-third of whom were spouses. Sample weights were used throughout our analysis. The primary advantage of using HRS is its relatively large sample of individuals nearing retirement age.

Construction of Variables

To answer the first research question, we constructed a categorical variable that first divided the samples into two parts: individuals with no current pension coverage and those with pension coverage. In the second step, we further divided those with current pension coverage into three categories. The first category includes all individuals with a defined benefit plan but no defined contribution plan. The second includes all individuals with a defined contribution plan (whether or not they were also covered by a defined benefit plan) but no 401(k) plan. The last category includes all individuals with a 401(k) plan (whether or not they were covered by another pension plan).

The variable created to examine the second research question is the percentage of salary that the worker contributes to his or her 401(k) plan account. The sample is restricted to only those workers who contribute to a 401(k) pension plan.

The third variable is a categorical variable indicating how the worker allocated his or her 401(k) pension balance among various general investments. Both surveys asked almost identical questions on asset allocation.[2] The sample was restricted only to those workers with 401(k) plans who knew how their pension account balances were invested.

As we addressed each successive question, the sample size of both data sets became smaller. We tried to create the same variables and variable categories for each data set. However, in some cases, categories for the same variable differed between our two samples because of slightly different classifications used in the two data sets.

[2]SCF asked, "How is the money in this account invested? Is it mostly in stocks, mostly in interest earning assets, is it split between these, or what?" HRS asked, "Is the money in this account invested mostly in stocks, mostly in interest earning assets, is it about evenly split between these, or what?" Interest earning assets include government and corporate bonds and guaranteed insurance contracts.

Supplementary Analysis

This appendix contains supplementary tables and more detailed information about pension coverage, contributions to 401(k) pension plans, and allocation of 401(k) plan account balances across the various investment choices. Cross-tabular results from the two databases, as well as a review of the relevant literature, are presented.

Purpose and Types of Pensions

Pensions are deferred compensation paid to the worker by the employer. Workers desire pensions because they are a tax-preferred and convenient means for saving for retirement. Employers also may benefit from offering pension coverage because pensions are a human resource tool. Pensions function as a device for attracting productive workers, reducing turnover, increasing work effort, and inducing older workers to retire when their productivity falls.

Employing organizations, or firms, offer two general types of pension plans: defined benefit plans and defined contribution plans. The differences between defined benefit and defined contribution pension plans are elucidated by the following formula, which shows the relationship between the present value of benefits and the present value of contributions:

BENEFITS = CONTRIBUTIONS + ASSET YIELD

Once any two of the three components are chosen, the third is automatically determined. The main difference between defined benefit and defined contribution plans is which two components are chosen.

In defined benefit plans, pension benefits are set when the worker is first employed at the firm (generally based on a formula of years with the firm, age at retirement, and salary averaged over some number of years). The firm makes contributions to the pension account; invests the assets to earn a return; and, when the worker retires, pays benefits. The firm's contributions depend on the asset yield. If the firm invests pension assets wisely and earns a high return, then its contributions to the pension account can be lower. However, if the investments do not do well, the firm must make up any shortfall with higher contributions. All responsibility for contributions and risks of investment are borne by the firm. The worker, however, bears the risks of uncertain future wages and job turnover.

In contrast, defined contribution plans shift some or all of the responsibility to the worker. In almost all defined contribution plans, the workers make the contribution to their pension account.[3] The amount of the worker's contribution depends on his or her desired level of retirement benefits and ability to contribute. In addition, many plans shift the investment risk to the worker by allowing the worker to direct the allocation of pension assets to various investments. In this arrangement, workers are completely responsible for the amount of their benefits at retirement. However, workers receive what is in their defined contribution accounts (contributions plus investment returns) if they leave the firm before retirement.

Salary reduction plans, also known as cash or deferred arrangements (CODA), are one type of defined contribution plan. These plans allow participants to contribute, before taxes, a portion of their salary to a retirement account. The various salary reduction plans are named after the section of the Internal Revenue Code that establishes rules for the plans. The 401(k) is a CODA plan for the private for-profit sector; the 403(b) is a CODA plan for the not-for-profit sector; and the 457 is a CODA plan for state and local governments.

Importance of Pension Income

The poorest 20 percent of elderly families are very dependent on Social Security—receiving over 75 percent of their income from Social Security, on average. These families receive less than 5 percent of their income from pensions. In contrast, elderly families in the top 20 percent of the income distribution receive about a quarter of their income from Social Security and 13 percent from pensions. Furthermore, over 25 percent of elderly families who receive Social Security and no pension income are poor. On the other hand, less than 2 percent of elderly families receiving both Social Security and pension income are poor.

Pension Coverage

Slightly less than half of all workers aged 18 to 64 are covered by a pension. About 27 percent are covered by a defined contribution plan, and the other 21 percent participate in a defined benefit plan.[4] Of those covered by a defined contribution plan, almost half participate in a 401(k) or other CODA plan. Pension coverage for those workers nearing retirement

[3]In profit-sharing plans, contributions are determined at the employer's discretion.

[4]Many workers are covered by more than one pension plan. We divided workers into pension coverage categories as follows: any worker who participates in a 401(k) or other CODA plan is identified as having a 401(k) plan regardless of other pension plan coverage. Workers who are covered by a defined contribution plan but not by a 401(k) or other CODA plan are classified in the defined contribution group whether or not they are covered by a defined benefit plan. Workers who are covered by a defined benefit plan but no defined contribution plan are placed in the defined benefit plan category.

age (51 to 61 years of age) is, however, much higher: Almost two-thirds are covered by a pension plan. Almost 30 percent are covered by a defined benefit plan, and 17 percent participate in a 401(k) plan. (See table II.1.) The Employee Benefit Research Institute (EBRI) reports that 57 percent of all civilian workers work for an employer that sponsors a pension plan. About three-quarters of these workers participate in their employer's plan.[5]

Table II.1: Comparison of Pension Coverage of All Workers Aged 18 to 64 With That of Workers Aged 51 to 61

Figures are percentages

	Workers 18 to 64 (SCF sample)	Workers 51 to 61 (HRS sample)
No pension coverage	52.0	34.4
Defined benefit pension plan	21.0	29.6
Defined contribution pension plan	14.0	19.0
401(k) or CODA pension plan	13.1	17.0

Note: Columns may not total 100 percent because of rounding.

Workers With Certain Demographic Characteristics Have Pension Coverage

Regardless of age, male workers are more likely to participate in a pension plan than are female workers. Half of all male workers have pension coverage, while 45 percent of female workers are covered. The gender disparity in pension coverage is more pronounced for workers nearing retirement age: Over 70 percent of male workers are covered, compared with 60 percent of female workers. (See table II.2.)

Table II.2: Type of Pension Coverage of Workers With Various Demographic Characteristics

Figures are percentages

	No pension coverage	Defined benefit pension plan	Defined contribution pension plan	401(k) pension plan
Workers 18 to 64 (SCF sample)				
Sex				
Male	49.4	22.0	15.5	13.2
Female	54.9	19.8	12.3	13.0
Race				
White	50.6	20.8	14.1	14.5
Black	46.4	27.7	18.4	7.5

(continued)

[5]EBRI, Employment-Based Retirement Income Benefits: Analysis of the April 1993 Current Population Survey, EBRI Special Report SR-25 (Washington, D.C.: EBRI, Sept. 1994).

Figures are percentages

	No pension coverage	Defined benefit pension plan	Defined contribution pension plan	401(k) pension plan
Education				
Dropout	75.9	12.5	7.7	3.9
High school diploma	56.8	19.9	13.2	10.1
Some college	51.2	21.1	13.9	13.9
College degree	40.8	24.4	16.7	18.1
Household income				
Less than $25,000	73.4	14.5	8.7	3.5
$25,000 to $34,999	52.4	23.1	10.5	14.0
$35,000 to $44,999	45.8	23.8	16.3	14.2
$45,000 to $59,999	41.9	26.4	15.8	15.8
$60,000 to $74,999	33.8	25.5	23.0	17.6
$75,000 or more	40.1	19.5	17.3	23.1
Workers 51 to 61 (HRS sample)				
Sex				
Male	28.7	31.2	20.7	19.4
Female	40.4	27.9	17.2	14.5
Race				
White	32.7	29.3	19.8	18.1
Black	38.2	37.1	14.0	10.7
Education				
Dropout	51.0	25.9	13.7	9.4
High school diploma	36.9	29.1	18.0	16.0
Some college	30.4	28.0	21.3	20.3
College degree	25.6	28.0	25.9	20.5
Graduate degree	12.0	44.6	19.6	23.9
Household income				
Less than $25,000	60.3	19.9	12.7	7.1
$25,000 to $34,999	42.4	27.9	16.5	13.3
$35,000 to $44,999	33.6	32.2	18.9	15.3
$45,000 to $59,999	28.6	34.5	19.0	17.9
$60,000 to $74,999	22.3	32.8	23.3	21.6
$75,000 or more	19.5	31.5	23.6	25.4

Note: Rows may not total 100 percent because of rounding.

There are also racial disparities in pension coverage. Table II.2 shows that black workers nearing retirement age are slightly more likely to be without pension coverage than white workers. Black workers are also more likely to be covered by a defined benefit plan, and white workers are more likely to participate in a 401(k) pension plan.

In addition, highly educated workers are more likely to be covered by a pension plan than less educated workers. For example, 60 percent of workers with a college degree have pension coverage, compared with only 25 percent of workers who never graduated from high school. This educational disparity in pension coverage also exists for workers aged 51 to 61: Less than half of dropouts are covered, while about 75 percent of college graduates are covered. A similar trend is seen for 401(k) pension plan coverage: More educated workers are more likely to participate in 401(k) pension plans than less educated workers.

Many of the same trends are apparent when examining pension coverage by level of household income. Workers living in families with higher income levels are generally more likely to be covered by a pension plan and are more likely to participate in a 401(k) pension plan than are lower income workers. The similarity in trends for educational level and income level is due to the high correlation between education and income: College graduates tend to earn more than high school dropouts and thus live in families with higher incomes.

Employment Characteristics Are an Important Determinant of Who Has Pension Coverage

Part-time workers are the least likely to be covered by a pension plan. Over all ages, about 10 percent of part-time workers have pension coverage, and less than a third of part-time workers nearing retirement are covered. Over half of all full-time workers participate in a pension plan, and over 70 percent of full-time workers nearing retirement age are covered. (See table II.3.)

Table II.3: Type of Pension Coverage of Workers Based on Employment Characteristics

Figures are percentages

	No pension coverage	Defined benefit pension plan	Defined contribution pension plan	401(k) pension plan
Workers 18 to 64 (SCF sample)				
Work status				
Part-time	87.3	6.9	2.9	2.9
Full-time	46.4	23.2	15.7	14.7
Union status				
Union member	21.9	46.1	20.5	11.5
Nonunion	59.8	14.4	12.3	13.5
Firm size (number of workers)				
Fewer than 20	87.0	6.5	4.9	1.7
20 to 99	61.7	16.0	12.5	9.8
100 to 499	46.8	25.5	13.8	13.9
500 or over	27.8	30.4	20.4	21.4
Workers 51 to 61 (HRS sample)				
Work status				
Part-time	68.3	17.2	8.6	5.8
Full-time	28.2	31.9	20.9	19.0
Union status				
Union member	12.0	54.5	18.5	15.1
Nonunion	42.7	20.3	19.2	17.7
Firm size (number of workers)				
Fewer than 25	59.1	16.4	14.2	10.4
25 to 99	28.7	35.0	19.6	16.7
100 to 499	20.6	34.9	21.1	23.4
500 or over	9.0	35.8	28.0	27.3

Note: Rows may not total 100 percent because of rounding.

Workers who are members of a union are more likely to have pension coverage than nonunion workers. Furthermore, most union members with pension coverage are covered by a defined benefit plan. Nonunion members with pension coverage are generally equally likely to participate in a defined benefit plan, a defined contribution plan, or a 401(k) pension plan.

Pension coverage is highly dependent on the size of the firm. Table II.3 shows that about 15 percent of workers in firms with fewer than 20 employees are covered by a pension plan. Over 70 percent of employees at large firms (500 or more employees) are covered. While older workers are more likely to have pension coverage, about 40 percent of workers nearing retirement age and working at a small firm (fewer than 25 employees) are covered by a pension plan. More than 9 out of 10 older workers at large firms are covered by a pension plan.

EBRI reports that about two-thirds of the workers who are eligible to participate in their employer's 401(k) plan actually do participate.[6] For example, three-quarters of eligible workers aged 61 to 64 participate in their employer-sponsored 401(k) plan, compared with about half of the 21- to 30-year-old age group. Furthermore, fewer than half of the eligible low-income (less than $15,000 per year) workers participate, in contrast to over 80 percent of workers earning $50,000 or more per year. Various researchers have examined other factors affecting participation in 401(k) plans, and several have found evidence that employer matching of employee contributions increases participation in 401(k) plans.[7] One team of researchers also found that employer-provided information on 401(k) plans has a positive effect on employee participation rates.[8]

Contribution Rates

As workers near retirement age, they tend to contribute a higher proportion of their income to their 401(k) pension accounts than younger workers. On average, workers with a 401(k) pension plan contribute 6.8 percent of their salary, while workers 51 to 61 years of age contribute 7.7 percent of their salary. Among older workers, women tend to contribute a higher proportion of their income to their 401(k) plan than do men. However, male and female workers aged 18 to 64 appear to contribute about the same percentage of their salary. (See table II.4.)

[6] EBRI, Employment-Based Retirement Income Benefits .

[7] See Robert L. Clark and Sylvester J. Schieber, Factors Affecting Participation Rates and Contribution Level in 401(k) Plans, (Washington, D.C.: Watson Wyatt Worldwide, May 1996); Leslie E. Papke, "Participation in and Contributions to 401(k) Pension Plans: Evidence from Plan Data," Journal of Human Resources, Vol. 30, No. 2 (spring 1995); and Paul Yakoboski and Jack VanDerhei, Contribution Rates and Plan Features: An Analysis of Large 401(k) Plan Data, EBRI Issue Brief No. 174 (Washington, D.C.: EBRI, June 1996).

[8] Clark and Schieber, Factors Affecting Participation Rates and Contribution Levels in 401(k) Plans.

Table II.4: Average Contribution Rates to 401(k) Pension Plans

Figures are percentages

	Average contribution rate	
	Workers 18 to 64 (SCF sample)	Workers 51 to 61 (HRS sample)
Total	**6.8**	**7.7**
Sex		
Male	6.9	7.4
Female	6.6	8.2
Education		
Dropout	6.1	6.6
High school diploma	5.8	7.7
Some college	7.4	7.9
College graduate	6.9	7.7
Graduate degree	[a]	8.4
Household income		
Less than $25,000	3.7	5.5
$25,000 to $34,999	5.7	7.5
$35,000 to $44,999	7.2	7.1
$45,000 to $59,999	7.0	8.1
$60,000 to $74,999	6.3	7.7
$75,000 or more	7.9	8.4
Defined benefit pension plan		
Yes	8.0	8.5
No	6.2	7.0
Spouse with pension plan		
Yes	7.7	8.3
No	6.3	7.5

[a]Not applicable.

Workers with more education and higher-income workers tend to contribute more to their 401(k) pension plans. On average, workers aged 18 to 64 whose income is greater than $75,000 tend to contribute more than double the proportion of their salary that workers with income below $25,000 do. Most likely, low-income workers use more of their income for meeting everyday living expenses than do higher-income workers. Workers who also participate in a defined benefit plan or who have a spouse covered by a pension plan contribute a higher proportion of their salary to their 401(k) plans than other workers. In addition, researchers have found that employer matching enhances worker contribution rates to some extent.[9] About 80 percent of all workers covered by a 401(k) plan receive an employer matching contribution. The average employer contribution is 4.8 percent of the worker's salary.

Asset Allocation

Both of our samples show that almost half of the workers invest their 401(k) pension account in a diversified portfolio. About a quarter are invested mostly in stocks, and the other quarter are invested mostly in bonds and other interest earning assets (see table II.5). It is impossible to judge whether a particular individual is investing too conservatively without knowing his or her investment horizon. Over periods of 20 to 30 years, stocks yield the greatest compound annual return and government bonds and bills the lowest. For example, from 1968 to 1987, the compound annual return on common stocks was 9.3 percent, compared with 7.4 percent for Treasury Bills and 7.3 percent for long-term government bonds. However, the year-to-year fluctuation in stock returns is much greater than the fluctuation in bond and bill returns. Nevertheless, investments in stocks have historically outperformed investments in bonds over the long term.

Table II.5: Allocation of 401(k) Pension Assets Among Investment Options

	Workers 18 to 64 (SCF sample)	Workers 51 to 61 (HRS sample)
Mostly stocks	28.4	26.4
Stocks and bonds	46.4	46.8
Mostly bonds	25.2	26.8

Workers With Different Demographic Characteristics Have Different Investment Patterns

Female workers appear to be more risk averse or conservative investors than male workers. While roughly the same proportion of male and female workers aged 18 to 64 years are invested mostly in stocks, a larger proportion of male workers than female workers have diversified portfolios and a smaller proportion are invested mostly in bonds. The gender disparity is much wider for workers aged 51 to 61. Male workers are almost twice as likely to invest mostly in stocks as female workers,

[9]See Clark and Schieber, Factors Affecting Participation Rates and Contribution Level in 401(k) Plans; Papke, "Participation in and Contributions to 401(k) Pension Plans: Evidence from Plan Data;" and Yakoboski and VanDerhei, Contribution Rates and Plan Features: An Analysis of Large 401(k) Plan Data.

and female workers are more likely to invest mostly in bonds than male workers. (See table II.6.) Other research confirms our finding that women tend to invest their pension funds in safer and lower yield assets than men.[10]

Table II.6: Allocation of 401(k) Account Balances Among Investment Options by Workers With Various Demographic Characteristics

Figures are percentages

	Mostly stocks	Stocks and bonds	Mostly bonds
Workers 18 to 64 (SCF sample)			
Sex			
Male	27.1	49.7	23.2
Female	29.8	42.8	27.4
Education			
Dropout	30.0	13.3	56.7
High school diploma	24.8	49.8	25.4
Some college	22.4	53.9	23.6
College graduate	33.2	42.6	24.2
Household income			
Less than $25,000	20.3	61.4	18.3
$25,000 to $34,999	31.1	46.3	22.6
$35,000 to $44,999	27.0	43.9	29.1
$45,000 to $59,999	26.8	39.6	33.6
$60,000 to $74,999	39.0	35.8	25.2
$75,000 or more	25.5	54.9	19.5
Spouse with pension			
Yes	31.1	44.8	24.1
No	26.8	47.3	25.9
Workers 51 to 61 (HRS sample)			
Sex			
Male	31.8	43.5	24.7
Female	17.3	52.3	30.4
Education			
Dropout	25.4	40.2	34.4
High school diploma	23.8	46.0	30.2
Some college	23.2	56.6	20.2
College graduate	25.9	44.8	29.3
Graduate degree	37.6	39.7	22.7

(continued)

[10]Richard P. Hinz, David D. McCarthy, and John A. Turner, "Are Women Conservative Investors? Gender Differences in Participant Directed Pension Investments," in Positioning Pensions for the Year 2000, Olivia Mitchell, ed. (Philadelphia: University of Pennsylvania Press, 1996).

Figures are percentages

	Mostly stocks	Stocks and bonds	Mostly bonds
Household income			
Less than $25,000	19.4	41.0	39.6
$25,000 to $34,999	21.1	44.7	34.3
$35,000 to $44,999	22.9	46.2	31.0
$45,000 to $59,999	20.2	52.1	27.6
$60,000 to $74,999	19.4	50.6	30.0
$75,000 or more	35.8	44.5	19.7
Spouse with pension			
Yes	29.1	47.9	23.0
No	24.8	46.2	29.0

Workers with higher educational levels are more likely to invest their pension assets primarily in stocks than are less educated workers. Table II.6 shows that over half of all workers aged 18 to 64 who never graduated from high school are heavily invested in bonds, while less than a quarter of college graduates invest mostly in bonds. Older workers nearing retirement age who have a graduate degree are the group most likely to invest mostly in stocks.

Workers with higher family income tend to invest more heavily in stocks than low-income workers, although there are exceptions. Older workers nearing retirement age with family income less than $25,000 are more than twice as likely to invest mostly in bonds than are workers with family income more than $75,000. Furthermore, over a third of the high-income older workers invest primarily in stocks, compared with less than 20 percent of the lowest-income workers. Other researchers have found similar results for defined contributions in specific firms.[11]

Workers with a spouse who has pension coverage are more likely to invest mostly in stocks and are less likely to invest mostly in bonds than workers with no spouse or a spouse with no pension coverage.

[11] Gordon P. Goodfellow and Sylvester J. Schieber, Investment of Assets in Self-Directed Retirement Plans, (Washington, D.C.: Watson Wyatt Worldwide, May 1995).

Bibliography

Clark, Robert L., and Sylvester J. Schieber. Factors Affecting Participation Rates and Contribution Levels in 401(k) Plans. Washington, D.C.: Watson Wyatt Worldwide, May 1996.

Culter, David M. “Reexamining the Three-Legged Stool,” in Social Security: What Role for the Future? Peter Diamond, David Lindeman, and Howard Young, eds. Washington, D.C.: National Academy of Social Insurance, 1996.

Employee Benefit Research Institute. Employment-Based Retirement Income Benefits: Analysis of the April 1993 Current Population Survey. EBRI Special Report SR-25. Washington, D.C.: EBRI, Sept. 1994.

Goodfellow, Gordon P., and Sylvester J. Schieber. Investment of Assets in Self-Directed Retirement Plans. Washington, D.C.: Watson Wyatt Worldwide, May 1995.

Grad, Susan. Income of the Population 55 or Older, 1994. SSA Publications No. 13-11871. Washington, D.C.: Social Security Administration, Jan. 1996.

Gustman, Alan L., Olivia S. Mitchell, and Thomas L. Steinmeier. “The Role of Pensions in the Labor Market: A Survey of the Literature.” Industrial and Labor Relations Review. Vol. 47, No. 3 (Apr. 1994).

Hinz, Richard P., David D. McCarthy, and John A. Turner. “Are Women Conservative Investors? Gender Differences in Participant Directed Pension Investments,” in Positioning Pensions for the Year 2000, Olivia Mitchell, ed. Philadelphia: University of Pennsylvania Press, 1996.

Papke, Leslie E. “Participation in and Contributions to 401(k) Pension Plans: Evidence from Plan Data.” Journal of Human Resources. Vol. 30, No. 2 (spring 1995).

Samwick, Andrew A., and Jonathan Skinner. How Will Defined Contribution Pension Plans Affect Retirement Income? Dartmouth, N.H.: Dartmouth College, June 1995.

U.S. Department of Labor, Pension and Welfare Benefits Administration. Private Pension Plan Bulletin: Abstract of 1992 Form 5500 Annual Reports. No. 5. Washington, D.C.: Department of Labor, winter 1996.

VanDerhei, Jack L. "New Evidence That Employees Choose Conservative Investments for their Retirement Funds." EBRI Employee Benefit Notes. Vol. 13, No. 2 (Feb. 1992).

Yakoboski, Paul, and Jack VanDerhei. Contribution Rates and Plan Features: An Analysis of Large 401(k) Plan Data. EBRI Issue Brief No. 174. Washington, D.C.: EBRI, June 1996.

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015

or visit:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000
or by using fax number (301) 258-4066, or TDD (301) 413-0006.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

http://www.gao.gov