AN UPDATE ON PENSION DATA

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Introduction

This brief focuses on trends over the past two decades in employer-sponsored pension coverage. It explores who is covered by a pension plan and who is not, how much retirees receive in pension income, and how pension coverage and receipt have changed over time. This brief uses the newly-released 1999 Form 5500 data, as well as the Current Population Survey (CPS), to update our previous work on the topic. ¹

Trends in Pension Coverage

Workers can be associated with a plan in three distinct ways. They can work for an employer that sponsors a plan for any of its employees. They can be covered by a plan, but not be eligible for benefits. Or, they can actually participate in the plan. Coverage and participation are not the same, since, for example, one quarter of workers covered in 401(k) plans choose not to participate. ² Nevertheless, we use the terms “coverage” and “participation” interchangeably, except in the discussion of 401(k) plans. The data on coverage trends in this section are primarily from the Current Population Survey (CPS). ³

The share of workers covered by employer-sponsored pensions depends on the definition of coverage and the relevant population. Figure 1 shows how the percentage of the population with pensions declines as the definition narrows. For example, including government workers, restricting the relevant labor force substantially, and using employer sponsorship as the applicable criteria indicates that about 64 percent of the population had at least the potential for pension protection in 2002. At the other extreme, focusing only on participation for private sector workers and eliminating the age and full-time constraint

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¹ Munnell and Sundén (2001); and Munnell, et al. (2002).

² Munnell and Sundén (2004).

³ The CPS is administered jointly by the Bureau of Labor Statistics (BLS) and the Bureau of the Census. Another major source of pension data is the Employee Benefits Survey (EBS), which is conducted by the BLS. Although the EBS indicates more coverage than the CPS for comparable populations, the two series provide a relatively consistent picture of pensions in the United States. Among full-time workers, the gap between the two surveys is 10 percentage points (Herz et al. 2000). The difference can be attributed to sampling procedures and survey methods (Purcell 2000). This brief relies on the CPS because it provides better information for analyzing general trends. For additional details on data sources, see Munnell and Sundén (2001).
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shows that 39 percent of private sector workers participated in a pension.

While the level of pension participation depends on definitions, the trend over time does not. Regardless of how the relevant population is defined, pension participation in 2002 was lower than it was in 1979. In each case, participation dropped between 1979 and 1988, rebounded between 1988 and 1999, then dropped again between 1999 and 2002. In 1979, 51 percent of non-agricultural wage and salary workers in the private sector aged 25-64 participated in a pension plan; in 2002, that number was 46 percent.

Coverage by Sex, Earnings, and Race

The decline in pension coverage reflects a sharp drop in coverage for male workers at all earnings levels (Figure 2a). In contrast, participation for women increased across the board (Figure 2b). The drop in male participation rates was caused by declines in union membership and employment at large manufacturing firms, and by the rapid growth in 401(k) plans that made employee participation in pensions voluntary. Among women, the growth in pension participation was largely the result of improved earnings and an increase in full-time work and — to a lesser extent — increased union membership and employment at large firms.

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4 Even and Macpherson (1994) showed that the growth of 401(k) plans caused participation rates to drop most for young and less educated workers.
The remaining differential between coverage patterns for men and women can be explained by their different work patterns, since pension coverage among women who work full-time, full-year is virtually identical to the coverage rates for men (Figure 3).

Figures 2a and 2b also show that participation is closely correlated with earnings levels. In the top quintile, between 65 percent and 70 percent of workers — both male and female — participate in pensions; in the bottom quintile, that figure drops to about 15 percent for men and 10 percent for women.\(^5\)

The pension coverage data discussed above apply only to individual workers at any given point in time. Over a lifetime and on a household basis, the Health and Retirement Study (HRS) shows that coverage rates are somewhat higher.\(^6\) For households aged 59-69, approximately 61 percent had some sort of pension coverage in 2000. Again, however, pension coverage is much more extensive for high-income households — lifetime coverage drops from about 78 percent in the top two quintiles of the income distribution to 25 percent for the bottom quintile (Figure 4).

\(^5\) Earnings also appear to be more important than race in explaining pension participation. When examining participation by earnings groups, the picture for whites and blacks looks very similar. Hispanics, on the other hand, have lower participation rates in all earnings groups. For additional evidence, see Chen (2003).

\(^6\) The HRS is a nationally representative data set with a core sample of about 12,600 individuals from about 7,600 families that provides detailed information on income and wealth holdings. Conducted by the University of Michigan’s Institute for Social Research, the HRS interviews individuals aged 51-61 in 1992 and their spouses, with the first interview taking place in 1992 and subsequent interviews taking place every other year.
The Uncovered — Firm Has a Plan

Of those not covered by a pension plan, roughly 20 percent work for an employer with a plan and four-fifths are employed in a firm without a plan. As shown in Figure 5, nearly half of those who are not part of their employer's pension plan report that they do not meet the age and service requirements or do not work enough to qualify for the plan, and another 5 percent were excluded because their job was not eligible for pension coverage. While roughly half of non-participating workers, therefore, are not eligible to participate in their employers’ plans, about one-fifth of workers say that they choose not to contribute to an available plan. This share rose slightly during the late 1990s, probably due to the growing prevalence of 401(k) plans.

The Uncovered — Firm Does Not Have a Plan

The majority of uncovered workers are employed in firms without a pension plan. The existence of a pension plan varies sharply by size of firm. The 2003 Employee Benefits Survey shows that 88 percent of establishments with more than 100 employees offer retirement benefits, while only 45 percent of those with less than 100 employees do so.

As reasons for not providing coverage, small employers frequently mention business concerns, such as uncertainty of revenue or newness of the business. They also cite employee reasons, such as high turnover or a preference for cash wages. Figure 6, taken from a survey of small employers by the Employee Benefits Research Institute (2003), documents the relative importance of these various factors. Business-related concerns dominate, and employee-related concerns are the next most frequently cited reason. The third most important factor, cited by about a quarter of small businesses, is high costs and administrative reasons. These results show that cost is important, but not the dominant consideration.

\[7\] Authors’ calculations from March CPS (2003).

\[8\] The Internal Revenue Code (IRC)’s minimum participation provisions allow firms to exclude employees under age 21 or with less than one year of employment with the firm. Since a year of service is defined as 1000 hours during a 12-month period, many part-time and seasonal workers never qualify to participate in the plan. In addition to the exclusion for age and service, the IRC’s minimum coverage rules permit a firm to exclude at least 30 percent of the remaining non-highly-compensated workers from the plan.

A Shift to Defined Contribution and Cash Balance Plans

This week, the Department of Labor released its official report on pension coverage for 1999, based on responses to Form 5500. The report shows the continued shift from defined benefit plans to defined contribution plans. The growth in defined contribution plans outpaced defined benefit plans on every major measure of comparison between 1975 and 1999: assets, benefits paid out, active participants, and contributions, as shown in Figure 7.

Figure 7. Defined Contribution Plans as a Percent of Total Plans, 1975 and 1999

Within the defined contribution world, the fastest growing type of plan is the 401(k). As shown in Figure 8, between 1984 (the first year separate data are available for 401(k) plans) and 1999, all dimensions of 401(k) plans — assets, benefits, participants, and contributions — have increased from between 25 and 35 percent of total defined contribution plans to between 75 and 80 percent.

Figure 8. 401(k) Plans as a Percent of Total Defined Contribution Plans, 1984 and 1999

Since overall pension coverage declined slightly, the enormous expansion of defined contribution plans, especially 401(k)-type plans, has produced a sharp drop in the percent of the workforce covered under traditional defined benefit plans. This is evident in the Form 5500 data, which show, for those with pension coverage, the proportion with a defined benefit only, defined contribution only, and both types of plans for 1980, 1990, and 1999 (see Figure 9).

Figure 9. Percent of Workers Covered by a Pension, by Pension Type, 1980, 1990, and 1999

Defined benefit plans generally provide retirement benefits based on a percentage of final salary for each year of service, and pay the benefits in the form of a lifetime annuity. For example, a worker with a final salary of $40,000 might receive 1.5 percent a year for 30 years of service, producing an annual pension of $18,000. The employer pre-funds these benefits by making pre-tax contributions into a pension fund; employees typically do not contribute. The employer holds the assets in trust, directs the investments, and bears the risk. In contrast to defined benefit plans, defined contribution plans are like savings accounts. Generally the employer, and often the employee, contributes a specified dollar amount or percentage of earnings into the account. These contributions are invested, usually at the direction of the employee, in mutual funds consisting of stocks and bonds or other investments. When the worker retires, the balance in the account determines the retirement benefit. The worker then can decide how and when to withdraw the accumulated money.
For the first time, the Form 5500 data document the growth of cash balance plans. As of 1999, there were about 1,300 cash balance plans, which accounted for 15 percent of all defined benefit plan participants and for 20 percent of all defined benefit assets (Figure 11).

Pensions as a Source of Retirement Income

Despite the decline in coverage, employer-sponsored pension benefits are an important source of retirement income. The 2001 SCF shows that pensions accounted for about 24 percent of the total wealth of households in the middle of the income distribution (see Table 1). This share makes pensions the second largest source of retirement income, behind only Social Security.

A Shift of Defined Benefit Plans to Cash Balance Plans

In addition to the shift in pension coverage from defined benefit to defined contribution plans, some employers have converted their pensions to hybrid plans that have both defined-benefit and defined-contribution characteristics. The most popular of the hybrids are the so-called cash balance plans. Legally, cash balance arrangements are defined benefit plans where the employers prefund contributions, own the assets, select the investments, and bear the risk. To the employee, however, cash balance plans look very much like a defined contribution plan.

11 The SCF is a triennial survey sponsored by the Federal Reserve Board in cooperation with the Department of the Treasury that collects data on households' assets, liabilities and other items, including pension coverage.
13 Contributions made for the employees are recorded in separate “notional” accounts for each worker. Notional accounts are used for recordkeeping purposes only; the
14 Department of Labor (2004).
What does the significant amount of pension benefits and pension wealth imply for the success of the employer-sponsored pension system and the welfare of retirees? First, pensions are much more important for high-income than for low-income workers. This pattern contrasts with that under Social Security where low-income workers receive a higher benefit relative to earnings. For those in the bottom quintile, pensions account for only 3 percent of non-earned income for those 65 and over according to the CPS. Data from two other sources — the SCF and the HRS — also show that pension wealth is only 3-6 percent of non-housing wealth for those aged 59-69 in 2000 (see Figure 12).

Second, the fact that pension and Social Security wealth are being evaluated in a low inflation environment makes them appear closer in value than they would with moderate or high inflation, since Social Security benefits increase in line with inflation whereas private employers rarely provide cost-of-living adjustments. Over the entire retirement span, the value of employer-sponsored pensions is less than that implied by the snapshot of pension wealth for people approaching retirement.

### Do Low-Income Workers Really Need Pension Income?

Ideally, retirement benefits should enable workers to maintain the same standard of well-being in retirement as they enjoyed while they were employed. The lack of pension income for low-wage workers would not be a source of concern if Social Security provided enough income for them to

### Table 1. Wealth Holdings of a Typical Household Prior to Retirement, SCF 2001

<table>
<thead>
<tr>
<th>Source of Wealth</th>
<th>Amount</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary house</td>
<td>$81,900</td>
<td>16.9%</td>
</tr>
<tr>
<td>Business assets</td>
<td>9,653</td>
<td>2.0%</td>
</tr>
<tr>
<td>Financial assets</td>
<td>36,806</td>
<td>7.6%</td>
</tr>
<tr>
<td>Defined contribution</td>
<td>28,516</td>
<td>5.9%</td>
</tr>
<tr>
<td>Defined benefit</td>
<td>86,792</td>
<td>17.9%</td>
</tr>
<tr>
<td>Social Security</td>
<td>220,791</td>
<td>45.4%</td>
</tr>
<tr>
<td>Other non-financial assets</td>
<td>21,335</td>
<td>4.4%</td>
</tr>
<tr>
<td>Total</td>
<td>485,793</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Authors' calculations from the 2001 Survey of Consumer Finances (SCF).

*a The “typical” household refers to the mean of the middle 20 percent of the sample.

### Table 2. Shares of Aggregate Income of Households Aged 65 and Older from Major Sources, 1958-2000

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Social Security</td>
<td>22%</td>
<td>26%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>36%</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>Asset Income</td>
<td>23%</td>
<td>25%</td>
<td>18%</td>
<td>22%</td>
<td>25%</td>
<td>25%</td>
<td>20%</td>
<td>18%</td>
</tr>
<tr>
<td>Earnings</td>
<td>37%</td>
<td>30%</td>
<td>23%</td>
<td>19%</td>
<td>17%</td>
<td>18%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>Private Pensions</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
<td>8%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Government Pensions</td>
<td>9%</td>
<td>9%</td>
<td>6%</td>
<td>7%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>5%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>2%</td>
<td>5%</td>
<td>5%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>101%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>99%</td>
<td>100%</td>
<td>101%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Conclusion

Employer-sponsored pensions can provide an important source of income for retirees. Currently, however, pensions cover less than half of the workforce at any given time. While the majority of those without pensions work for companies that do not sponsor plans, many workers could participate in their employer plan, but choose not to. This is largely due to the shift in pensions from traditional defined benefit plans to 401(k) plans, which place most of the responsibility on the employee and increase the possibility for making mistakes along the way.

Going forward, the amount of pre-retirement earnings replaced by Social Security will decline for a number of reasons, making other sources of retirement income even more crucial. In recent years, earnings have become an increasingly important part of older individuals' financial picture. With the Normal Retirement Age rising, and private pensions uncertain, work later in life or during retirement will continue to become more essential to providing a secure retirement.

Table 3. Estimated Social Security Replacement Rates for the Average Earner, 2003 and 2030

<table>
<thead>
<tr>
<th>Development Retire at Age 62</th>
<th>Retire at Age 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td></td>
</tr>
<tr>
<td>Reported replacement rate</td>
<td>33.0</td>
</tr>
<tr>
<td>After Medicare Part B deduction</td>
<td>30.2 *</td>
</tr>
<tr>
<td>Net replacement rate</td>
<td>30.2</td>
</tr>
<tr>
<td>2030</td>
<td></td>
</tr>
<tr>
<td>Replacement rate after extension of Normal Retirement Age</td>
<td>28.7</td>
</tr>
<tr>
<td>After deduction for Medicare Part B</td>
<td>25.0 *</td>
</tr>
<tr>
<td>After personal income taxation</td>
<td>22.8</td>
</tr>
<tr>
<td>After hypothetical 10% benefit cut</td>
<td>19.9</td>
</tr>
<tr>
<td>Net replacement rate</td>
<td>19.9</td>
</tr>
</tbody>
</table>

Source: Munnell (2003) and authors’ calculations.
* For the individual retiring at age 62, the Medicare Part B premium will not begin until age 65.
Policymakers should continue to search for effective ways to increase pension coverage, both by making it easier for employers without plans to adopt them and by encouraging employers with plans to allow more of their workers to participate. For workers who choose not to contribute to a pension plan, one possible policy approach may be to establish a system of defaults where, for example, the employee is automatically enrolled, his contribution is set to maximize the employer match, and his portfolio is automatically rebalanced. Successful efforts to expand participation in private pensions would make an important contribution to assuring that more workers could maintain their living standards in retirement.

References


Center for Retirement Research

About the Center
The Center for Retirement Research at Boston College, part of a consortium that includes parallel centers at the University of Michigan and the National Bureau of Economic Research, was established in 1998 through a grant from the Social Security Administration. The goals of the Center are to promote research on retirement issues, to transmit new findings to the policy community and the public, to help train new scholars, and to broaden access to valuable data sources. Through these initiatives, the Center hopes to forge a strong link between the academic and policy communities around an issue of critical importance to the nation’s future.

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