

# 401(k) PLANS ARE STILL COMING UP SHORT

BY ALICIA H. MUNNELL AND ANNIKA SUNDÉN\*

## Introduction

The release of the Federal Reserve's 2004 *Survey of Consumer Finances* (SCF) is a wonderful opportunity to reassess the role that 401(k) plans are playing in the provision of retirement income. The SCF is a triennial survey of a nationally representative sample of U.S. households, which collects detailed information on households' assets, liabilities, and demographic characteristics.<sup>1</sup> Because the SCF over-samples wealthy individuals, it provides the most comprehensive measure of wealth of any household survey. The 2001 survey showed that 401(k) accumulations were coming up short. The 2004 survey shows some progress but most of the problems persist.

## The Retirement Income System

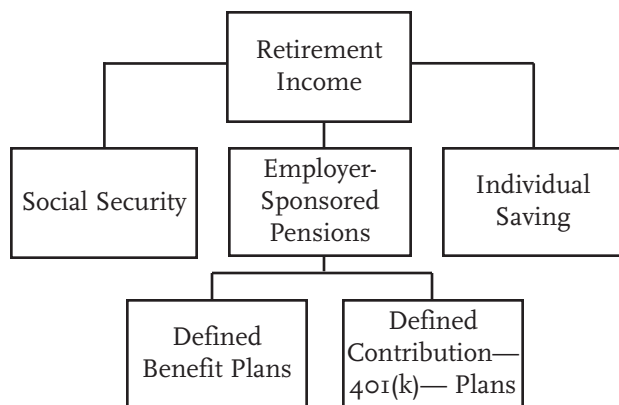
Before discussing 401(k) plans themselves, it is useful to have a sense of our retirement income "three-legged stool" (see Figure 1).

Social Security, the mainstay, provides 73 percent of the retirement income for the typical household (see Figure 2). The program is even more important for those with low earnings, who rely almost entirely on Social Security benefits in retirement, and it is relatively less important for high earners, who get more of their retirement income from pensions and earnings on assets.

But Social Security will provide less in the future than it does today for three reasons. The Normal Retirement Age — the age at which the worker is

entitled to full benefits — is moving from 65 to 67. As a result, those who continue to retire at say, 62 or 65, will see a cut in their monthly benefit relative to pre-retirement earnings. Second, Medicare Part B premiums are scheduled to increase from 9.4 percent of the average Social Security benefit today to 11.8 percent in 2030. These premiums are deducted before the check goes in the mail, so the net Social Security benefit will decline. Finally, more Social Security benefits will be taxed under the personal income tax since the thresholds above which benefits are taxable are not indexed to inflation or wage growth. In short, the first leg of the retirement income stool is getting relatively smaller.<sup>2</sup>

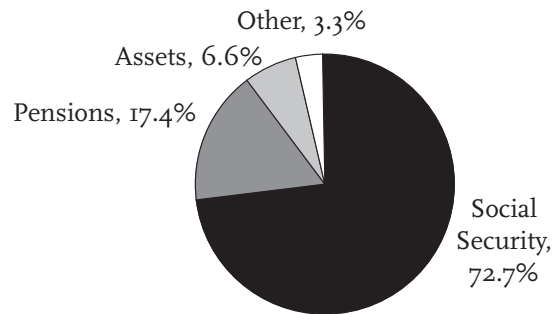
FIGURE 1. OVERVIEW OF THE U.S. RETIREMENT INCOME SYSTEM



Source: Authors' illustration.

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FIGURE 2. NON-EARNED RETIREMENT INCOME OF THOSE 65 AND OLDER BY SOURCE, MIDDLE INCOME QUINTILE, 2004



Source: Authors' calculations based on the *Current Population Survey*.

The third leg of the retirement income stool is individual saving. This is saving over and above that done through the workplace. But, in fact, virtually all the saving undertaken by the working-age population occurs in pension plans.<sup>3</sup> In recent years, saving outside of pensions has actually been negative. The lack of individual saving outside of pensions is confirmed by the 2004 *Survey of Consumer Finances*, which shows the typical household approaching retirement with less than \$30,000 of financial assets (see Table 1).

With a declining role for Social Security and no individual saving outside of pensions, the performance of employer-sponsored pension plans is very important. Before we look more closely at employer pensions, it is important to remember that 35 percent of households have no pension whatsoever in retirement and must rely almost entirely on Social Security.

TABLE 1. WEALTH OF HOUSEHOLD WITH HEAD AGE 55-64 IN THE MIDDLE QUINTILE, 2004

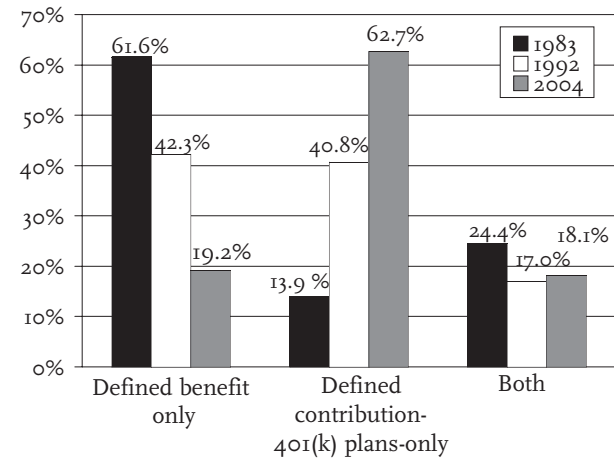
Source of wealth	Amount in dollars	Percent of total
Primary house	107,928	19.2
Business assets	11,837	2.1
Financial assets	27,581	4.9
Defined contribution	40,319	7.2
Defined benefit	94,845	16.9
Social Security	252,324	45.0
Other nonfinancial assets	26,273	4.7
Total	561,107	100

Source: Authors' calculations based on the 2004 *Survey of Consumer Finances*.

## The Shift from Defined Benefit to 401(k) Plans

Twenty five years ago, defined benefit plans (together with certain types of traditional defined contribution pension plans — such as employer-funded profit-sharing plans and money purchase plans) were workers' primary source of private pension coverage. These plans require workers to make almost no important financial choices before retirement. The firm enrolls all eligible workers, makes contributions, and makes investment decisions (or retains professional investment managers) and generally provides a lifetime benefit at retirement. The worker's only real choice is when to collect benefits.

FIGURE 3. PERCENT OF WORKERS WITH PENSION COVERAGE BY TYPE OF PLAN FROM SCF, 1983-2004



Source: Authors' calculations based on the *Surveys of Consumer Finances*.

When 401(k) plans began to spread rapidly in the early 1980s, they were viewed mainly as supplements to employer-funded pension and profit-sharing plans. Since 401(k) participants were presumed to have their basic retirement income security needs covered by an employer-funded plan and Social Security, they were given substantial discretion over 401(k) choices, including whether to participate, how much to contribute, how to invest, and when and in what form to withdraw the funds.

Over the past 25 years, however, the pension landscape has changed dramatically. Most workers covered by an employer plan now have a 401(k) as their primary or only plan (see Figure 3). Yet 401(k)s still operate under the old rules. Workers continue to have almost complete discretion over whether and how much to contribute, how to invest, and how and

when to withdraw the funds. In theory, workers should be able to accumulate substantial balances in 401(k) plans, but in practice most participants make mistakes at every step along the way.

## Participation and Contribution Decisions

One of the defining characteristics of 401(k) plans is that participation is voluntary and those employees who elect to participate choose how much to contribute.

### *Less than Full Participation*

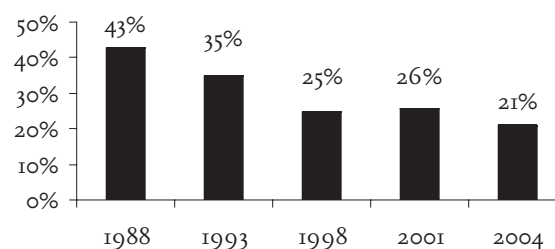
The percent of eligible workers who did not participate in their employer's 401(k) plan declined between 1988 and 2004. The 2004 *Survey of Consumer Finances* shows that 21 percent of eligible workers failed to participate, an apparent improvement over the 2001 Survey (see Figure 4). However, this improvement is illusory because it results from a decline in the share of workers who are eligible to participate (see Table 2).

Not surprisingly, younger workers are much less likely to participate than their older counterparts. Unfortunately, delay reduces the likelihood that these workers will be adequately prepared for retirement.<sup>4</sup>

### *Inadequate Contributions*

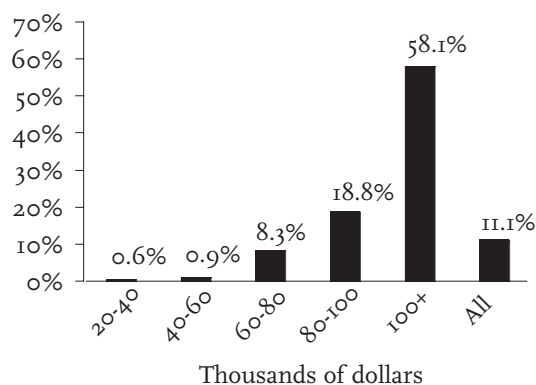
The 2004 SCF also shows that roughly 11 percent of all participants contribute the legal maximum to a 401(k) plan.<sup>5</sup> Not surprisingly, maximum contributions are closely related to income. Less than 1 percent of those earning \$40-\$60,000 contribute the maximum compared to 58 percent for those earning \$100,000 or more (see Figure 5). The typical contribution rate for a 401(k) participant is 6 percent of salary, with an employer match of 3 percent.

FIGURE 4. PERCENT OF ELIGIBLE WORKERS NOT PARTICIPATING IN 401(k) PLANS



Sources: Bureau of Labor Statistics (2003) and authors' calculations based on the *Surveys of Consumer Finances*.

FIGURE 5. PERCENT OF PARTICIPANTS MAKING MAXIMUM CONTRIBUTIONS, BY EARNINGS\*



Source: Authors' calculations based on the 2004 *Survey of Consumer Finances*.

\*Note: Since the legal maximum of \$15,000 is virtually out of reach for low-wage workers, this table assumes that the maximum is either \$15,000 or 25 percent of wages — whichever is lower.

TABLE 2. ELIGIBILITY AND PARTICIPATION IN 401(k) PLANS BY AGE, 2001 AND 2004

Age	Percent of workers eligible for 401(k) plan		Percent of eligible workers participating in 401(k) plan		Percent of all workers participating in 401(k) plan	
	2001	2004	2001	2004	2001	2004
20-29	43.7%	42.4%	66.7%	62.0%	29.1%	26.3%
30-39	54.5	48.0	75.6	77.7	41.2	37.3
40-49	56.2	51.3	76.7	83.4	43.1	42.8
50-59	51.2	51.6	73.5	83.3	37.6	43.0
60-64	36.8	49.2	80.2	87.6	29.5	43.1
All	51.7	48.9	74.4	79.1	38.5	38.7

Source: Authors' calculations based on the *Surveys of Consumer Finances*.

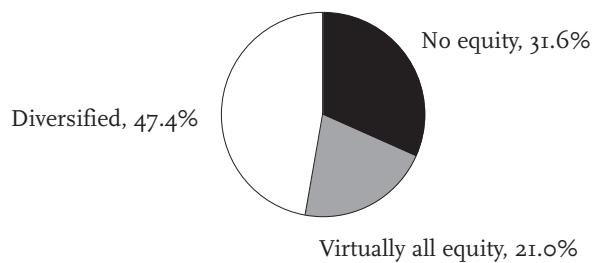
## Investment Decisions

In addition to not participating and not contributing as much as possible, people also make bad investment decisions.

### *Failure to Diversify*

The most obvious is a failure to diversify. In 2004, 31.6 percent of participants held no equity and 21.0 percent had 80 percent or more in equity (see Figure 6). A non-diversified portfolio increases the risk that retirement income will be inadequate.

FIGURE 6. PARTICIPANTS BY EQUITY HOLDINGS, 2004

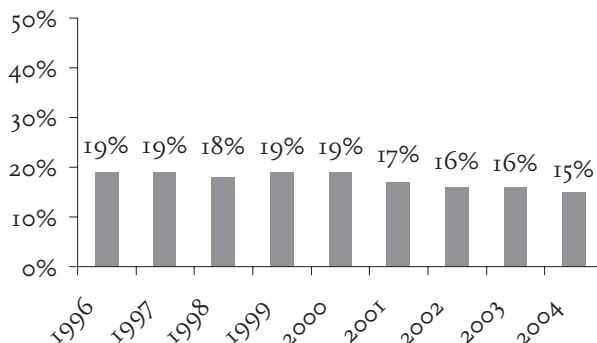


Source: Holden and VanDerhei (2005).

### *Over-Investment in Company Stock*

In addition, participants over-invest in company stock. In 2004, about 15 percent of all 401(k) assets were invested in company stock (see Figure 7). This share is down slightly from 19 percent in 2000, possibly reflecting a continuing weak stock market and a flurry of bankruptcies and revelations of corporate fraud.

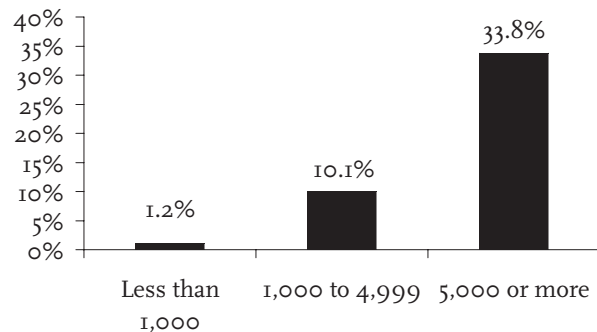
FIGURE 7. COMPANY STOCK AS A PERCENT OF 401(K) ASSETS, 1996-2004



Sources: Holden and VanDerhei (2004 and 2005).

An aggregate number does not tell the full story, however, since most 401(k) plans do not offer company stock as an investment option. As shown in Figure 8, the practice is concentrated among large plans — those with 5,000 or more participants — where company stock accounted for 34 percent of total assets. Concentrating 401(k) investments in company stock means that employees hold a large share of their portfolio in a single stock which is more risky than a diversified portfolio. Moreover they concentrate their financial bets on a security directly correlated with their own human capital and earnings. If the company does poorly, both current earnings and future retirement income will be affected negatively. In short, participants with large holdings of company stock expose themselves to unnecessary risk.

FIGURE 8. COMPANY STOCK AS A PERCENT OF TOTAL ASSETS BY SIZE OF PLAN, 2004

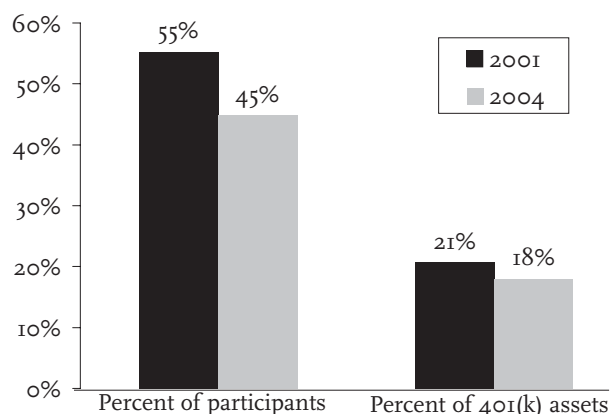


Source: Profit Sharing/401(k) Council of America (2005).

### *Failure to Rebalance*

In most instances, it makes sense for individuals to reduce their equity holdings as they age. At first glance, the evidence suggests that individuals are following this advice since most data sets show lower equity holdings for older people than younger ones. But it appears that this pattern reflects the fact that people born more recently choose to hold more equity than those born in earlier years. Studies that follow people over time reveal very little portfolio adjustment either in response to increasing age or returns.<sup>6</sup>

FIGURE 9. PARTICIPANTS WHO "CASH OUT" AND PERCENT OF 401(k) ASSETS "CASHED OUT," 2001 AND 2004



Source: Authors' calculations based on the *Surveys of Consumer Finances*.

## Cashing Out

But the real culprit may not be the investment issue, but rather the fact that people cash out when they change jobs. That is, they take their money out of their 401(k) plan instead of rolling it over into an IRA or into their new employer's 401(k). As Figure 9 shows, the extent of cashing out in 2004 was less than in 2001, but still significant. About 45 percent of participants in 2004 cashed out when they changed jobs, even though they had to pay a 10-percent penalty under the personal income tax.<sup>7</sup> Since most of the people cashing out were younger workers with relatively small amounts, the dollar volume of the cash outs equaled only 18 percent of total assets.

Cashing out even small amounts can have a detrimental effect on ultimate accumulations. The only way to end up at retirement with significant accumulations is to put the money into the account and leave it there. The prevalence of cashing out suggests that people do not get serious about saving for retirement until later in life, at which point it is very difficult to accumulate adequate amounts. Fortunately, as discussed below, new rules may substantially reduce the magnitude of the cash out problem.

In summary, 401(k) plans require the employee to decide whether or not to join the plan, how much to contribute, how to invest the contributions and when to re-balance, what to do about company stock, whether to roll over accumulations when changing jobs, and how to use the money in retirement. Recent data continue to indicate that at every step along the way a significant fraction of participants

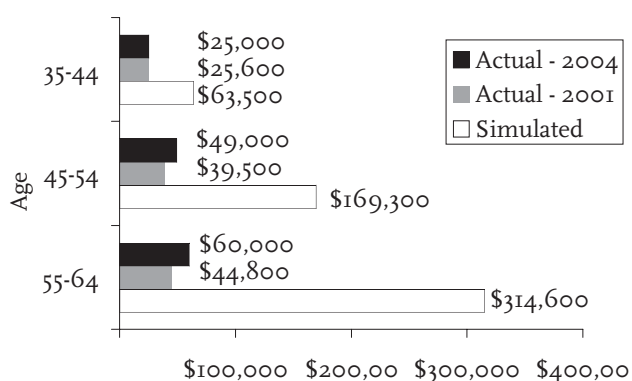
makes serious mistakes. A fifth of those eligible to participate in a plan choose not to do so. Only about 10 percent of those who do participate contribute the maximum. Over half fail to diversify their investments, many over-invest in company stock, and almost none re-balance their portfolios in response to age or market returns. Most importantly, many cash out when they change jobs.

## Accumulations in 401(k) Plans

The cumulative effect of these 401(k) missteps has a major impact on accumulations in 401(k) plans. In theory, a typical worker who ends up at retirement with earnings of \$58,000 and who contributed 6 percent steadily with an employer match of 3 percent should have about \$380,000. The bottom bar for each age group in Figure 10 shows the amounts that the typical household head with a 401(k) plan would have at each age along this path of accumulation.

The *Surveys of Consumer Finances* report the actual amount that the typical household head has in his account at each age. In 2004, the median balance for household heads aged 55-64 was \$60,000. (Note that the reported amounts include holdings in Individual Retirement Accounts (IRAs) because these balances consist mostly of rollovers from 401(k) plans). These balances had improved somewhat from \$44,800 in 2001, most likely because the new cohort of those 55-64 had spent more of their working life covered by a 401(k). But still, actual holdings of \$60,000 for those 55-64 are dramatically lower than those simulated for the hypothetical worker and would provide less than \$400 per month of annuity income.

FIGURE 10. 401(k)/IRA ACTUAL AND SIMULATED ACCUMULATIONS, BY AGE GROUP, 2001 AND 2004



Sources: Munnell and Sundén (2004) and authors' calculations from the *Surveys of Consumer Finances*.

One could argue that the relatively small balances for older workers reflects the fact that they may not have been covered by a 401(k) plan throughout their entire work lives, since 401(k)s only became available in 1981. But even workers aged 45-54, who are likely to have had substantial 401(k) coverage, are not on track for substantial accumulations at retirement.

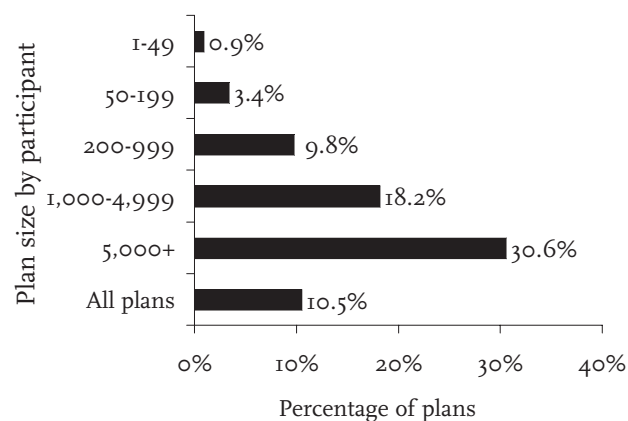
## Steps Underway to Improve 401(k) Plans

Policymakers and business leaders have recognized the challenges inherent in 401(k) plans and have taken some steps to make these plans easier and more automatic. Many of these efforts build on a series of studies by behavioral economists who demonstrated that inertia plays a major role in how workers participate and invest in 401(k) plans.<sup>8</sup>

### *Automatic Enrollment*

The major innovation to encourage participation has been automatic enrollment. The government changed the rules in 1998 to allow firms to require workers to "opt out" of a plan, instead of the traditional requirement to "opt in." Studies show that this simple change in the default increases participation by as much as 35 percentage points.<sup>9</sup> Even after three or four years, the vast majority of those automatically enrolled were still participating.<sup>10</sup> In 2004, about 30 percent of large plans had automatic enrollment provisions (see Figure 11).

FIGURE 11. PERCENTAGE OF PLANS WITH AUTOMATIC ENROLLMENT



Source: Profit Sharing/401(k) Council of America (2005).

### *Increasing Default Contribution Rates*

One problem with automatic enrollment is that the inertia that makes the approach effective for participation can lock people into low levels of contributions. That is, the typical default contribution rate is 3 percent,<sup>11</sup> and left on their own people would tend to stay at this level. Thus, to combat this problem 41 percent of plans with automatic enrollment automatically increase the default contribution rate over time.<sup>12</sup>

The remaining problem is that more than half of plans use stable value funds or money market funds as the default investment option for automatic deferrals. These funds are safe investments, but, as such, they produce low returns. Given the profound effects of inertia, most individuals remain in these conservative investments. As a result, they are likely to end up with inadequate accumulations at retirement. It would be much better if everyone were defaulted into a balanced fund of stocks and bonds where the investment mix changes as the individual ages.

### *Managed Accounts*

While efforts to educate 401(k) participants through websites and informational materials have had limited success, more active and comprehensive approaches have generated a larger response. For example, some financial services firms have begun offering managed accounts as an option for the companies that hire them to provide investment advice to workers. Under this approach, professional financial advisors will, with an employee's permission, take charge of all the investment decisions. These services, of course, involve additional cost. About 10 percent of large plans offered a professionally managed alternative in 2004.<sup>13</sup>

### *Automatic Rollovers*

In 2005, a Department of Labor regulation changed the default for cashing out 401(k) balances when a worker leaves a company.<sup>14</sup> Under the old law, the employer was permitted to cash out any 401(k) account with a balance of \$5,000 or less, without the consent of the worker. Because of the costs of maintaining these small accounts, most employers chose this approach. Given inertia, 87 percent of all 401(k) balances under \$5,000 were cashed out.<sup>15</sup> Under the new law, the employer must roll over any 401(k) plan with a value between \$1,000 and \$5,000 into an IRA — unless the separating worker elects to have it cashed out or rolled over into a new 401(k) at his new company.



One problem is that the rollover amounts will be placed in money market funds or similar low risk/low return investments. Since most of those with low balances are probably young people, many, as a result of inertia, could pass up higher returns associated with riskier investments on these early accumulations for an extended period of time. Nevertheless, this change should substantially reduce the extent to which people cash out.

## Conclusion

Policymakers and the business community have come to recognize that 401(k) plans must be easier and more automatic if they are to serve as an effective vehicle for retirement saving. These plans have shifted all the risk and responsibilities for retirement saving from the employer to the employee and many employees make mistakes at every step along the way. A significant percent of eligible employees fail to join the plan, few contribute the maximum, most do not diversify their investments or re-balance their accounts over time, many over-invest in company stock, and roughly half of participants cash out when they change jobs. Automatic enrollment, automatic increases in the deferral rate and automatic rollovers will all help workers accumulate larger balances in their 401(k) plans. But the challenge is great, because the median 401(k)/IRA balance in 2004 for household heads with a plan was only \$40,000.<sup>16</sup>

Moreover, the focus to date has been on the accumulation phase of 401(k) plans — that is, the buildup of assets during the employee's working years. The real challenge will come as those dependent on 401(k) plans arrive at retirement and have to figure out how to allocate their 401(k) balances over their remaining lifetime.

## Endnotes

- 1 Kennickell, Starr-McCluer and Surette (2000). describe the *Survey of Consumer Finances* in detail.
- 2 Munnell (2003).
- 3 Munnell, Golub-Sass, and Varani (2005).
- 4 Some critics contend that the lack of participation is not a serious problem because many are covered by their employers' defined benefit plans. In fact, the 2004 *Survey of Consumer Finances* shows that only 24 percent of non-participants are covered by a defined benefit plan, and the majority of these workers are high earners. This means that most low-income and younger workers who choose not to participate are without pension coverage.
- 5 It would be ideal to have data on the percent of participants who contribute at least up to the employer match. Those who do not contribute at least up to this level are essentially leaving money on the table. However, the only information that can be gleaned from the 2004 *Survey of Consumer Finances* is the percent of participants who are contributing the maximum.
- 6 Agnew, Balduzzi and Sundén (2003).
- 7 This number is somewhat lower than that from a recent EBRI 2005 study in which *Survey of Income and Program Participation (SIPP)* data were used. This study showed that about 60 percent of those who took a lump-sum disbursement cashed out at least a portion of it.
- 8 Madrian and Shea (2001); and Choi, Laibson and Madrian (2004).
- 9 Madrian and Shea (2001).
- 10 Choi, Laibson, Madrian and Metrick (2001).
- 11 Choi, Laibson and Madrian (2004).
- 12 Profit Sharing /401(k) Council of America (2005).
- 13 Profit Sharing /401(k) Council of America (2005).
- 14 Klein (2005).
- 15 Munnell and Lee (2004).
- 16 This figure differs from the median balance of about \$35,000 reported in the *Survey of Consumer Finances* because it focuses on household heads and excludes spouses.

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