

## 401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2007

### KEY FINDINGS

- **The bulk of 401(k) assets continued to be invested in stocks.** On average, at year-end 2007, about two-thirds of 401(k) participants' assets were invested in equity securities through equity funds, the equity portion of balanced funds, and company stock. About one-third was in fixed-income securities such as stable value investments and bond and money market funds. Although these relative shares have changed little over the past 12 years, the underlying fund composition has changed over time.
- **About two-thirds of 401(k) plans included lifecycle funds in their investment lineup at year-end 2007.** New analysis shows that at year-end 2007, more than 7 percent of the assets in the EBRI/ICI database were invested in lifecycle funds and one-quarter of 401(k) participants held lifecycle funds. Also known as "target date" funds, they are designed to simplify investing and automate account rebalancing.
- **New employees continued to utilize balanced funds, including lifecycle funds.** Across all age groups, more new or recent hires invested their 401(k) assets in balanced funds, including lifecycle funds. At year-end 2007, 28 percent of the account balances of recently hired participants in their twenties were invested in balanced funds, compared with 24 percent in 2006, 19 percent in 2005, and about 7 percent in 1998. At year-end 2007, almost 19 percent of the account balances of recently hired participants in their twenties were invested in lifecycle funds compared with 16 percent at year-end 2006.
- **401(k) participants continued to seek diversification of their investments.** The share of 401(k) accounts invested in company stock continued to shrink, falling by 0.5 percentage point (to 10.6 percent) in 2007. That continued a steady decline that started in 1999. Recently hired 401(k) participants contributed to this trend: they were less likely to hold employer stock.
- **Participants' 401(k) loan activity was stable.** In 2007, 18 percent of all 401(k) participants eligible for loans had a loan outstanding against their 401(k) account, the same percentage as at year-end 2006. Most loans tended to be small, amounting to 12 percent of the remaining account balance, on average, similar to year-end 2006.
- **At year-end 2007, the average account balance in the EBRI/ICI database was \$65,454, compared with \$61,346 at year-end 2006.** 401(k) account balances varied with participant age, tenure, and salary. Individuals with account balances of less than \$10,000 were primarily young workers or workers with short job tenures. In contrast, those with account balances in excess of \$100,000 were primarily older workers or workers with longer job tenure.
- **The year-end 2007 average account balance in the database was 6.7 percent higher than the year before, but does not accurately reflect the experience of typical 401(k) participants in 2007.** To examine the experience of 401(k) participants, one must control for the impact of 401(k) plans or participants joining and leaving the database year to year. As with previous EBRI/ICI updates, analysis of a consistent sample of 401(k) participants (those that have been in the same plan since 1999) is planned; this additional analysis is expected to be published in early 2009.

## INTRODUCTION

Over the past two decades, 401(k) plans have grown to be the most widespread private-sector employer-sponsored retirement plan in the United States,<sup>1</sup> and now serve as the most popular defined contribution (DC) plan, representing the largest number of participants and assets. In 2007, 48.5 million American workers were active 401(k) plan participants.<sup>2</sup> By year-end 2007, 401(k) plan assets had grown to represent 17 percent of all retirement assets, with \$3.0 trillion in assets.<sup>3</sup> In an ongoing collaborative effort, the Employee Benefit Research Institute (EBRI)<sup>4</sup> and the Investment Company Institute (ICI)<sup>5</sup> collect annual data on millions of 401(k) plan participants as a means to accurately portray how these participants manage their accounts.

This report is an update of EBRI and ICI's ongoing research into 401(k) plan participants' activity through year-end 2007.<sup>6</sup> The report is divided into four sections: The first describes the EBRI/ICI 401(k) database; the second presents a snapshot of participant account balances at year-end 2007; the third looks at participants' asset allocations, including a new analysis of 401(k) participants' use of lifecycle funds; and the fourth focuses on participants' 401(k) loan activity.

As with previous EBRI/ICI updates, analysis of a consistent sample of 401(k) participants (those that have been in the same plan since 1999) is planned; this additional analysis is expected to be published in early 2009. It should be noted that the year-end 2007 401(k) data reported in this analysis, by definition, do not reflect market losses or participant account activity in 2008. The impact of the 2008 financial market performance on average 401(k) balances is strongly affected by age and tenure of the individual participant, and it would be inaccurate to make a single estimate of an average 401(k) account outcome for 2008.

## About the EBRI/ICI Database

*The EBRI/ICI Participant-Directed Retirement Plan Data Collection Project is the largest, most representative repository of information about individual 401(k) plan participant accounts. As of December 31, 2007, the EBRI/ICI database included statistical information about:*

- 21.8 million 401(k) plan participants, in
- 56,232 employer-sponsored 401(k) plans, holding
- \$1.425 trillion in assets.

*The 2007 EBRI/ICI database covered 45 percent of the universe of 401(k) plan participants, 12 percent of plans, and 47 percent of 401(k) plan assets.*

*The EBRI/ICI project is unique because of its inclusion of data provided by a wide variety of plan recordkeepers and, therefore, portrays the activity of participants in 401(k) plans of varying sizes—from very large corporations to small businesses—with a variety of investment options.*

## EBRI/ICI 401(k) DATABASE

### *Sources and Type of Data*

Several organizations provided records on active participants in 401(k) plans for which they kept records at year-end 2007. These plan recordkeepers include mutual fund companies, insurance companies, and consulting firms. Although the EBRI/ICI project has collected data from 1996 through 2007, the universe of data providers varies from year to year. In addition, the sample of plans using a given provider can change. Thus, aggregate figures in this report generally should not be used to estimate time trends, unless otherwise indicated. Records were encrypted prior to delivery to EBRI to conceal the identity of employers and employees, but were coded so that both could be tracked by researchers over multiple years. Data provided for each participant include date of birth, from which an age group is assigned; date of hire, from which a tenure range is assigned; outstanding loan balance; funds in the participant's investment portfolios; and asset values attributed to those funds. An account balance for each participant is the sum of the participant's assets in all funds.<sup>7</sup> Plan balances are constructed as the sum of all participant balances in the plan. Plan size is estimated as the sum of active participants in the plan and, as such, does not necessarily represent the total number of employees at the sponsoring firm.

### *About Changes in Account Balances*

*When analyzing the change in account balances over time, it is important to have a consistent sample. Comparing average account balances across different year-end snapshots can lead to false conclusions. For example, the addition of a large number of new plans (arguably a good event) to the database would tend to pull down the average account balance, which could then be mistakenly described as hurting current participants, but actually would tell us nothing about consistently participating workers. Similarly, the aggregate average account balance would tend to be pulled down if a large number of older participants happened to retire and roll over their account balances. In addition, changes in the sample of recordkeepers and changes in the set of plans for which they keep records can also influence the change in aggregate average account balance. Thus, to ascertain what is happening to 401(k) participants' account balances, a set of consistent participants must be analyzed. Future research will examine linked data to analyze the consistent sample of participants in the EBRI/ICI data collection effort from 1999 through 2007.*

## Investment Options

Investment options are grouped into eight broad categories.<sup>8</sup> *Equity funds* consist of pooled investments primarily invested in stocks; these funds include equity mutual funds, bank collective trusts, life insurance separate accounts, and other pooled investments. Similarly, *bond funds* are any pooled account primarily invested in bonds. *Balanced funds* are pooled accounts invested in both stocks and bonds. They are classified into two subcategories in this year's update: lifecycle funds and non-lifecycle balanced funds. A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually in the fund's name, approaches. Non-lifecycle balanced funds include asset allocation or hybrid funds, in addition to lifestyle funds.<sup>9</sup> *Company*

*stock* is equity in the plan's sponsor (the employer). *Money funds* consist of those funds designed to maintain a stable share price. *Stable value* products, such as guaranteed investment contracts (GICs)<sup>10</sup> and other stable value funds,<sup>11</sup> are reported as one category. The "other" category is the residual for other investments, such as real estate funds. The final category, "unknown," consists of funds that could not be identified.<sup>12</sup>

## Distribution of Plans, Participants, and Assets by Plan Size

The 2007 EBRI/ICI database contains information on 56,232 401(k) plans with \$1.425 trillion in assets and 21.8 million participants (Figure 1). Most of the plans in the database are small: 44 percent of the plans in the database have 25 or fewer participants, and 31 percent have 26 to

FIGURE 1

### 401(k) PLAN CHARACTERISTICS BY NUMBER OF PLAN PARTICIPANTS, 2007

Number of plan participants	Total plans	Total participants	Total assets	Average account balance
1 to 10	11,687	65,833	\$3,722,980,332	\$56,552
11 to 25	12,903	221,374	11,633,251,756	52,550
26 to 50	9,817	356,502	18,104,579,032	50,784
51 to 100	7,677	544,808	27,311,612,372	50,131
101 to 250	6,485	1,027,877	51,626,730,209	50,227
251 to 500	2,995	1,053,255	51,763,123,352	49,146
501 to 1,000	1,851	1,311,306	68,437,552,757	52,190
1,001 to 2,500	1,433	2,243,984	125,321,204,456	55,848
2,501 to 5,000	685	2,389,409	138,569,623,021	57,993
5,001 to 10,000	333	2,298,588	159,421,876,799	69,356
>10,000	366	10,260,144	769,229,937,257	74,973
All	56,232	21,773,080	1,425,142,471,344	65,454

Note: The median account balance at year-end 2007 was \$18,942.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

100 participants. In contrast, only 5 percent of the plans have more than 1,000 participants. However, participants and assets are concentrated in large plans. For example, 79 percent of participants are in plans with more than 1,000 participants, and these same plans account for

84 percent of all plan assets. Because most of the plans have a small number of participants, the asset size for many plans is modest. About 18 percent of the plans have assets of \$250,000 or less, and another 31 percent have plan assets between \$250,001 and \$1,250,000 (Figure 2).

**FIGURE 2**

**401(k) PLAN CHARACTERISTICS BY PLAN ASSETS, 2007**

Total plan assets	Total plans	Total participants	Total assets	Average account balance
\$0 to \$250,000	10,356	110,228	\$1,011,144,491	\$9,173
>\$250,000 to \$625,000	8,560	165,543	3,647,145,469	22,031
>\$625,000 to \$1,250,000	8,690	264,362	7,889,030,112	29,842
>\$1,250,000 to \$2,500,000	8,496	427,119	15,182,796,960	35,547
>\$2,500,000 to \$6,250,000	8,568	870,658	33,975,265,229	39,023
>\$6,250,000 to \$12,500,000	4,232	880,036	37,227,110,442	42,302
>\$12,500,000 to \$25,000,000	2,843	1,153,906	49,664,974,228	43,041
>\$25,000,000 to \$62,500,000	2,110	1,870,386	82,590,853,141	44,157
>\$62,500,000 to \$125,000,000	960	1,732,917	83,542,126,851	48,209
>\$125,000,000 to \$250,000,000	602	1,894,565	106,633,087,818	56,284
>\$250,000,000	815	12,403,360	1,003,778,936,603	80,928
All	56,232	21,773,080	1,425,142,471,344	65,454

*Note: The median account balance at year-end 2007 was \$18,942.*

*Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project*

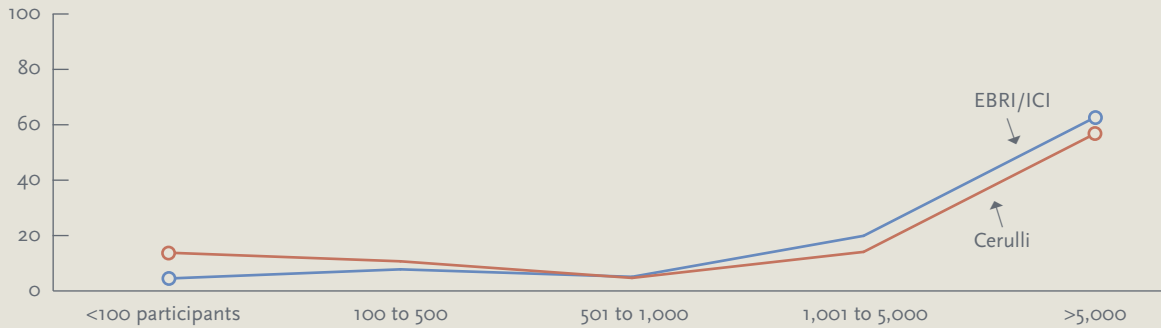
FIGURE 3

**EBRI/ICI DATABASE REPRESENTS WIDE CROSS-SECTION OF 401(k) UNIVERSE**

401(k) plan characteristics by number of participants: EBRI/ICI database vs. Cerulli estimates for all 401(k) plans, 2007

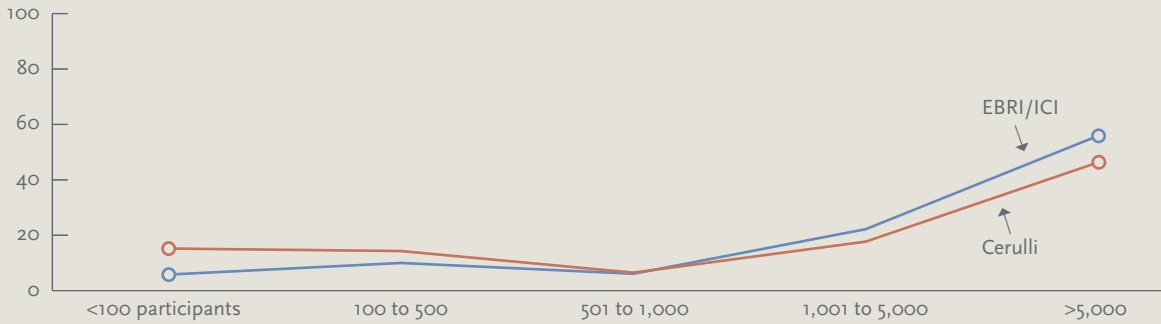
**Plan assets**

(percentage of plan assets)



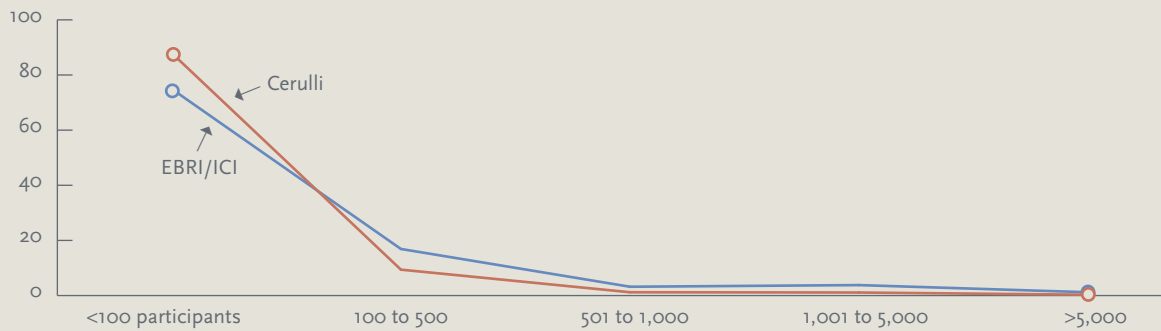
**Participants**

(percentage of participants)



**Plans**

(percentage of plans)



Sources: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project, Cerulli Associates

**Relationship of EBRI/ICI Database Plans to the Universe of All 401(k) Plans**

The 2007 EBRI/ICI database is a representative sample of the estimated universe of 401(k) plans. At year-end 2007, 401(k) plans held \$3.0 trillion in assets, and the EBRI/ICI database represents about 47 percent of that total.<sup>13</sup> The year-end 2007 EBRI/ICI database also covers 45 percent of the universe of active 401(k) plan participants and 12 percent of all 401(k) plans.<sup>14</sup> The distribution of assets, participants, and plans in the EBRI/ICI database for 2007 is similar to that reported for the universe of plans as estimated by Cerulli Associates (Figure 3).

**The Typical 401(k) Plan Participant**

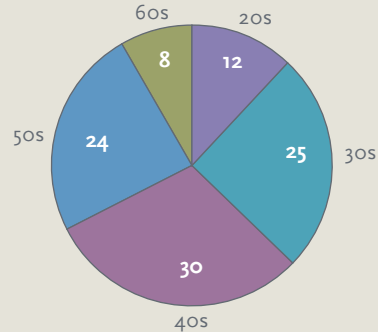
The EBRI/ICI database includes 401(k) participants of a wide range of age and tenure. Fifty-five percent of participants are in their thirties or forties, while 12 percent of participants are in their twenties and 8 percent are in their sixties (Figure 4). The median age of the participants in the 2007 EBRI/ICI database is 44 years, the same as in 2006. Although the age composition of 401(k) participants in the year-end 2007 EBRI/ICI database is the same as in the year-end 2006 database, the tenure composition of participants shifted to include many more low-tenure participants. In 2007, 38 percent of the participants had five or fewer years of tenure, compared with 33 percent of participants at year-end 2006. In 2007, 5 percent had more than 30 years of tenure, compared with 6 percent of participants in 2006. The median tenure at the current employer was six years in 2007, two years less than in 2006. Although, the database does not contain information on automatic enrollment, it is likely that automatic enrollment is playing a role in bringing in newly hired workers, which lowers the average tenure.<sup>15</sup>

**FIGURE 4**

**MORE THAN ONE-THIRD OF 401(k) PARTICIPANTS ARE IN THEIR 20S OR 30S OR HAVE SHORT JOB TENURE**

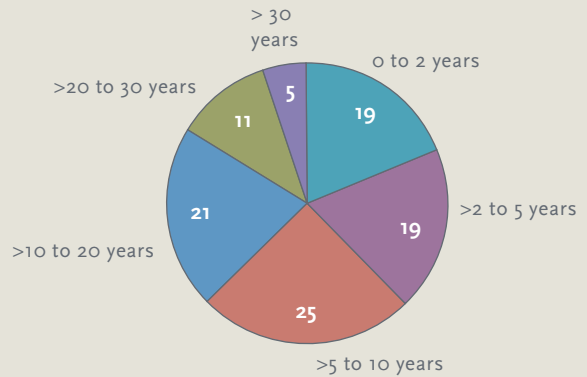
*Percentage of active 401(k) plan participants by age or tenure, 2007*

**By age**



**Median age: 44 years**

**By tenure**



**Median tenure: 6 years**

*Note: Components may not add to 100 percent because of rounding.  
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project*

## YEAR-END 2007 SNAPSHOT OF 401(k) PARTICIPANTS' ACCOUNT BALANCES

### *Definition of 401(k) Account*

In any given year, the EBRI/ICI database, which is constructed from the administrative records of 401(k) plans, provides a snapshot of the 401(k) account balances across all active participants' accounts. The database contains only the account balances held in the 401(k) plans at participants' current employers and reflects the entrance of new plans and new participants and the exit of participants who retire or change jobs. Retirement savings held in plans at previous employers or rolled over into individual retirement accounts (IRAs) are not included in the database. Furthermore, account balances are net of unpaid loan balances. Because of all of these factors, which change the composition of the universe over time, it is not correct to presume that the change in the average or median account balance for the database as a whole reflects the experience of "typical" 401(k) plan participants.<sup>16</sup>

The change in the average account balances in the database between years will reflect the change in the accounts of participants who are present in both years, which is the sum of three factors:

- new contributions by the participant, the employer, or both;
- total investment return on account balances, which depends on the performance of financial markets and on the allocation of assets in an individual's account; and
- withdrawals, borrowing, and loan repayments.

In addition, changes in the average account balance between any two years of the EBRI/ICI cross-sectional data also reflect the addition of newly hired participant accounts, subtraction of the accounts of participants who change jobs or retire, changes in the composition of the plans using a given recordkeeper, changes in the sample of recordkeepers, and market returns. With respect to the latter, whether looking at the largest U.S. companies (S&P 500) or the smallest U.S. companies (Russell 2000), there was stock market volatility in 2007. Over the year as a whole, the S&P 500 total return index gained 5.5 percent, while the Russell 2000 total return index fell by 1.6 percent (Figure 5). Over 2007, the Lehman Brothers Aggregate Bond Index rose by 7.0 percent.

### *Size of 401(k) Account Balances*

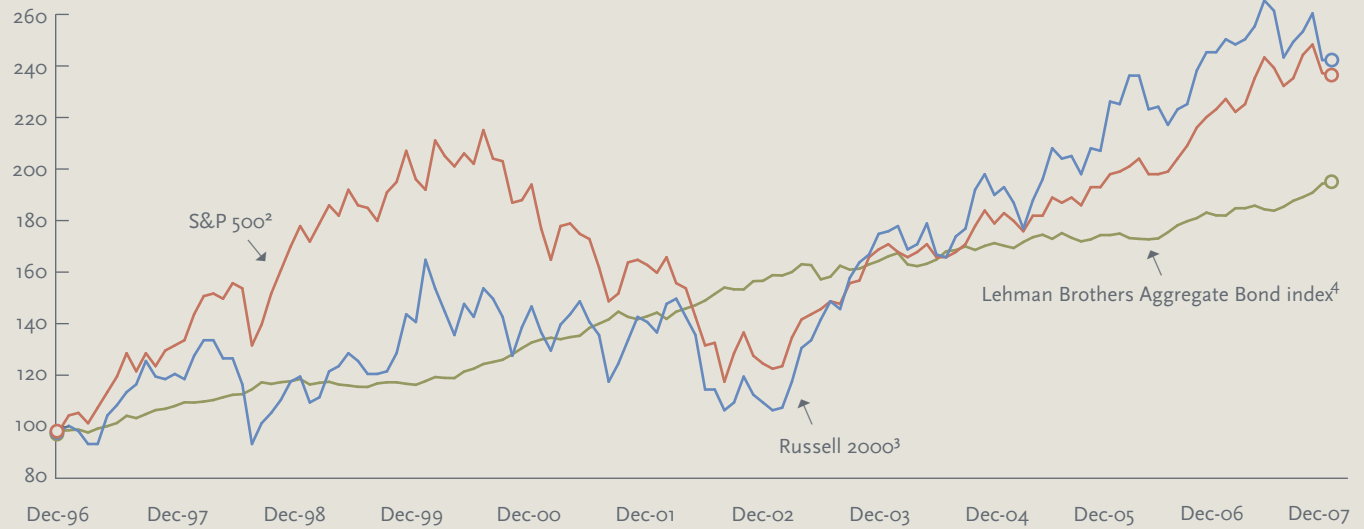
At year-end 2007, the average account balance was \$65,454 and the median account balance was \$18,942 (Figure 6). There is wide variation in 401(k) plan participants' account balances at year-end 2007. Nearly three-quarters of the participants in the 2007 EBRI/ICI database have account balances that are lower than \$65,454, the size of the average account balance. In fact, 39 percent of participants have account balances of less than \$10,000, while nearly 19 percent of participants have account balances greater than \$100,000 (Figure 7). The variation in account balances partly reflects the effects of participant age, tenure, salary, contribution behavior, rollovers from other plans, asset allocation, withdrawals, loan activity, and employer contribution rates. This research report examines the relationship between account balances and participants' age, tenure, and salary.



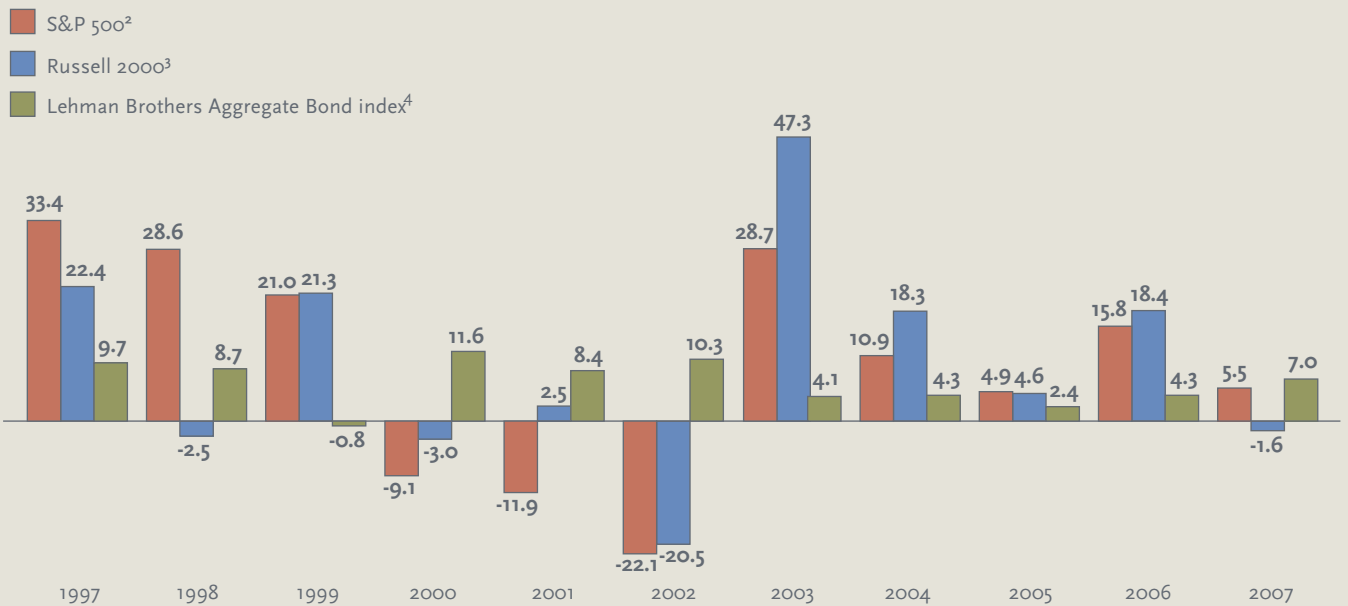
FIGURE 5

DOMESTIC STOCK AND BOND MARKET INDEXES

Month-end level,<sup>1</sup> December 1996 to December 2007



Annual percentage change in total return index, 1997–2007



<sup>1</sup>All indexes are set to 100 in December 1996.

<sup>2</sup>The S&P 500 index consists of 500 stocks chosen for market size, liquidity, and industry group representation.

<sup>3</sup>The Russell 2000 index measures the performance of the 2,000 smallest U.S. companies (based on total market capitalization) included in the Russell 3000 index (which tracks the 3,000 largest U.S. companies).

<sup>4</sup>The Lehman Brothers Aggregate Bond index is composed of securities from Lehman Brothers Government/Corporate Bond index, Mortgage-Backed Securities index, and the Asset-Backed Securities index (rebalanced monthly by market capitalization). The index's total return consists of price appreciation/depreciation plus income as a percentage of the original investment.

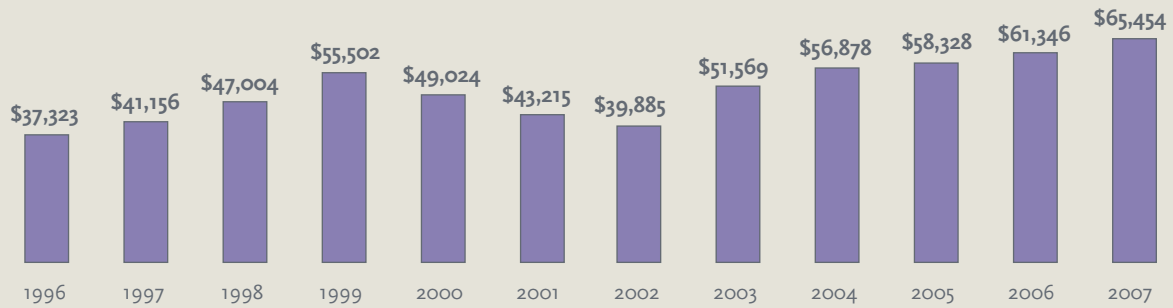
Sources: Bloomberg, Frank Russell Company, and Standard & Poor's

**FIGURE 6**

**SNAPSHOT OF AVERAGE YEAR-END ACCOUNT BALANCES**

401(k) plan participant account balances,<sup>1</sup> 1996–2007<sup>2</sup>

**Average**



**Median**



<sup>1</sup>Account balances are participant account balances held in 401(k) plans at the participants' current employers and are net of plan loans. Retirement savings held in plans at previous employers or rolled over into IRAs are not included.

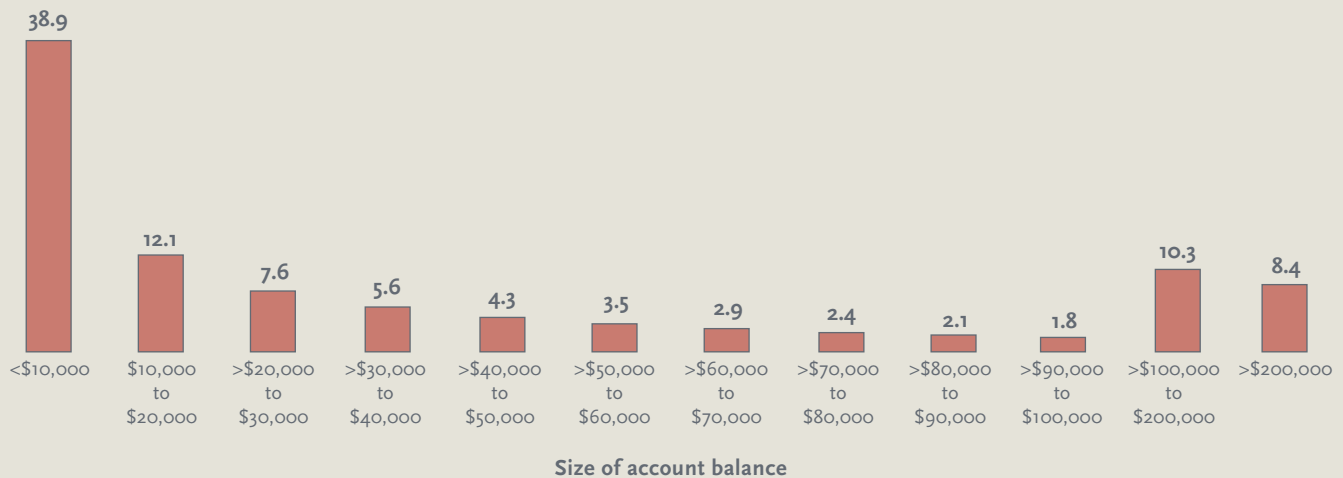
<sup>2</sup>The sample of participants changes over time.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 7**

**DISTRIBUTION OF 401(k) ACCOUNT BALANCES BY SIZE OF ACCOUNT BALANCE**

Percentage of participants with account balances in specified ranges, 2007



Note: At year-end 2007, the average account balance among all 21.8 million 401(k) plan participants was \$65,454; the median account balance was \$18,942.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

### Relationship of Age and Tenure to Account Balances

There is a positive correlation between age and account balance among participants covered by the 2007 EBRI/ICI database.<sup>17</sup> Examination of the age composition of account balances finds that 52 percent of participants with account balances of less than \$10,000 were in their twenties or thirties (Figure 8). Similarly, 53 percent of participants with account balances greater than \$100,000 were in their fifties or sixties. The positive correlation between age and account balance is expected because younger workers are likely to have lower incomes and to have had less time to accumulate a balance with their current employer. In

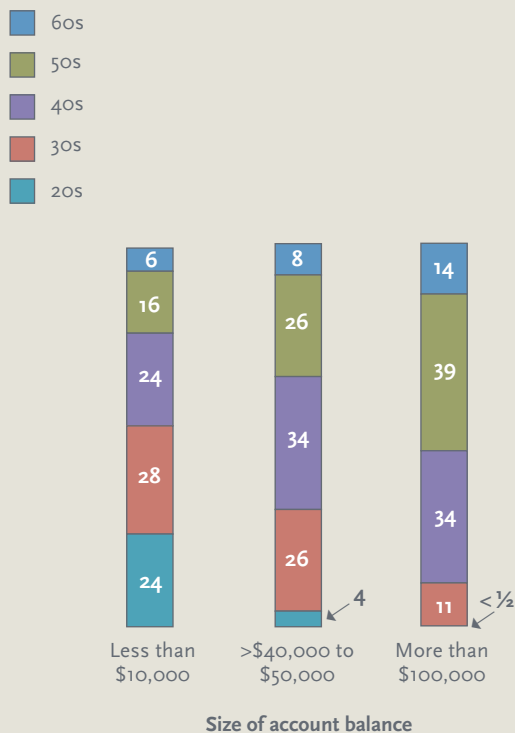
addition, they are less likely to have in their current plan accounts rollovers from a previous employer's plan.

There is also a positive correlation between account balance and tenure among participants represented by the 2007 EBRI/ICI database. A participant's tenure with an employer serves as a proxy for the length of time a worker has participated in the 401(k) plan.<sup>18</sup> Indeed, 64 percent of participants with account balances of less than \$10,000 had five or fewer years of tenure, while 74 percent of participants with account balances greater than \$100,000 had more than 10 years of tenure (Figure 9).<sup>19</sup>

**FIGURE 8**

#### AGE COMPOSITION OF SELECTED 401(k) ACCOUNT BALANCE CATEGORIES

Percentage of participants with account balances in specified ranges, 2007

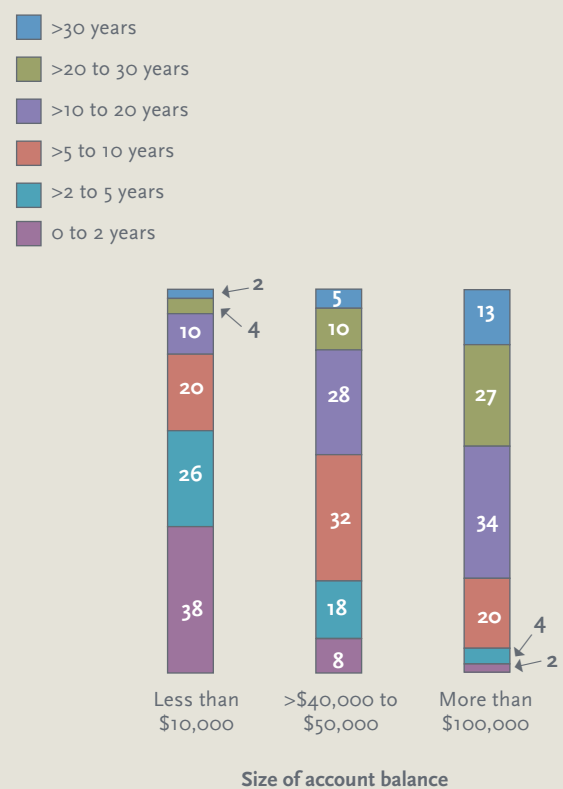


Note: Percentages may not add to 100 percent because of rounding.  
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 9**

#### TENURE COMPOSITION OF SELECTED 401(k) ACCOUNT BALANCE CATEGORIES

Percentage of participants with account balances in specified ranges, 2007



Note: Percentages may not add to 100 percent because of rounding. Job tenure is generally years working at current employer, and thus may overstate years of participation in the 401(k) plan.  
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Examining the interaction of both age and tenure with account balances reveals that, for a given age group, average account balances tend to increase with tenure. For example, the average account balance of participants in their sixties with up to two years of tenure was \$24,544, compared with \$210,457 for participants in their sixties with more than 30 years of tenure (Figure 10).<sup>20</sup> Similarly, the average account balance of participants in their forties with up to two years of tenure was \$16,672, compared with \$151,193 for participants in their forties with more than 20 years of tenure.

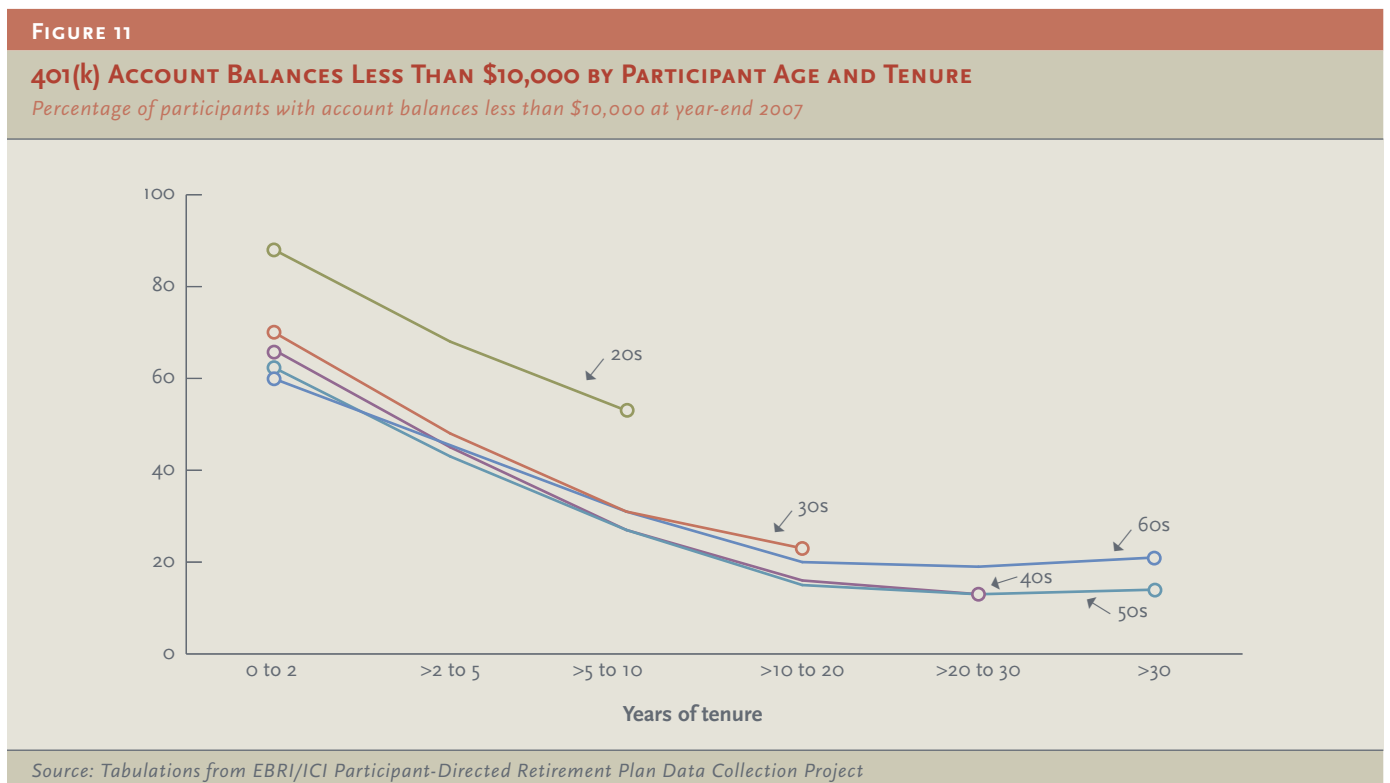
The distribution of account balances underscores the effects of age and tenure on account balances. In a given

age group, shorter tenure tends to mean that a higher percentage of participants will have account balances of less than \$10,000. For example, 88 percent of participants in their twenties with two or fewer years of tenure had account balances of less than \$10,000, compared with 51 percent of participants in their twenties with between five and 10 years of tenure (Figure 11). Older workers display a similar pattern. For example, 59 percent of participants in their sixties with two or fewer years of tenure had account balances of less than \$10,000. In contrast, only about 20 percent of those in their sixties with more than 20 years of tenure had account balances of less than \$10,000.<sup>21</sup>

**FIGURE 10**  
**ACCOUNT BALANCES INCREASE WITH AGE AND TENURE**  
*Average 401(k) account balance by age and tenure, 2007*

Age group	Tenure (years)					
	0 to 2	>2 to 5	>5 to 10	>10 to 20	>20 to 30	>30
20s	\$4,491	\$10,748	\$18,564			
30s	11,502	23,024	42,861	\$62,207		
40s	16,672	31,055	58,262	100,856	\$151,193	
50s	20,603	34,882	63,783	111,840	194,385	\$191,225
60s	24,544	35,399	60,525	105,504	172,584	210,457

*Note: At year-end 2007, the average account balance among all 21.8 million 401(k) plan participants was \$65,454; the median account balance was \$18,942. Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project*



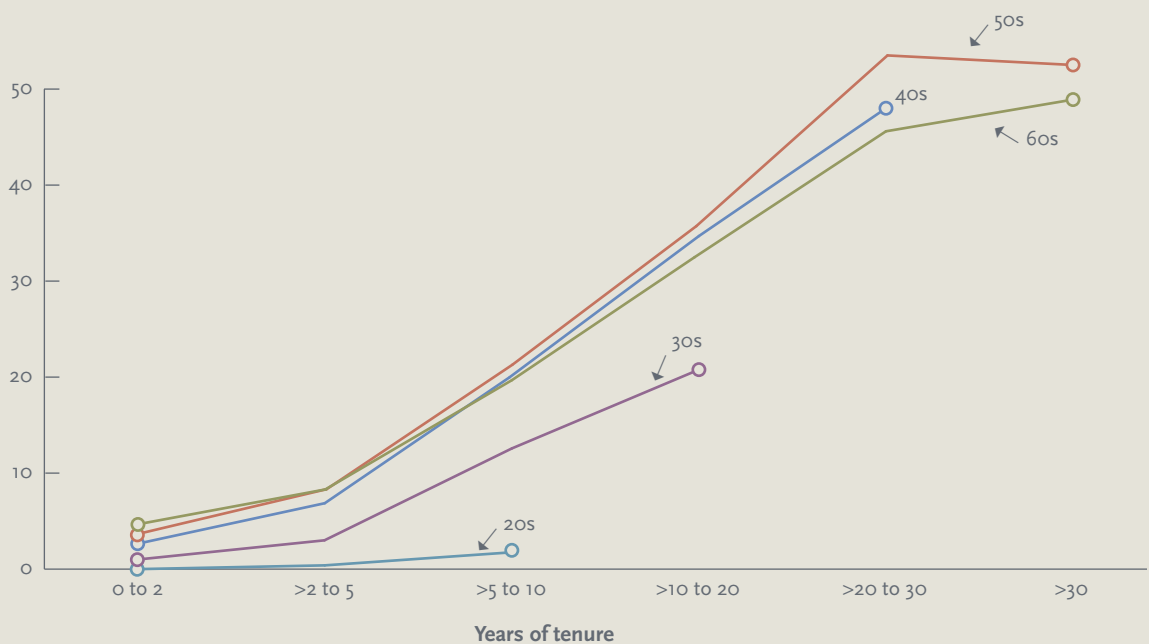
In a given age group, longer tenure tends to mean that a higher percentage of participants will have account balances greater than \$100,000. For example, about 13 percent of participants in their sixties with 10 or fewer years of tenure had account balances in excess of \$100,000 in 2007 (Figure 12). However, about 45 percent of participants in their sixties with between 20 and 30 years of tenure with their current employer had account balances greater than \$100,000. The percentage increases to 49 percent for participants in their sixties with more than 30 years of tenure.

**Relationship Between Account Balances and Salary**  
 Participants' account balances vary not only with age and tenure, but also with salary. Figure 13 reports the account balances of long-tenured participants at their current employers' 401(k) plans. Retirement savings held at previous employers or amounts rolled over to IRAs are not included in the analysis. To capture as long a savings history as possible, only long-tenured participants are included in this analysis. However, it is important to note that the tenure variable is the time that individuals have been at their current jobs and may not reflect the length of time they have participated in a 401(k) plan (particularly among older participants as 401(k) plans were introduced only about 27 years ago).<sup>22</sup>

**FIGURE 12**

**401(k) ACCOUNT BALANCES GREATER THAN \$100,000 BY PARTICIPANT AGE AND TENURE**

*Percentage of participants with account balances greater than \$100,000 at year-end 2007*



*Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project*

Older, longer-tenured, and higher-income participants tend to have larger account balances, which are important for meeting their income-replacement needs in retirement. For long-tenured participants in their twenties with salaries between \$20,000 to \$40,000, the median account balance was \$6,759 in 2007 (Figure 13). Long-tenured participants in their twenties earning more than \$100,000 had a median account balance of \$52,268. Among long-tenured participants in their sixties with \$20,000 to \$40,000 in

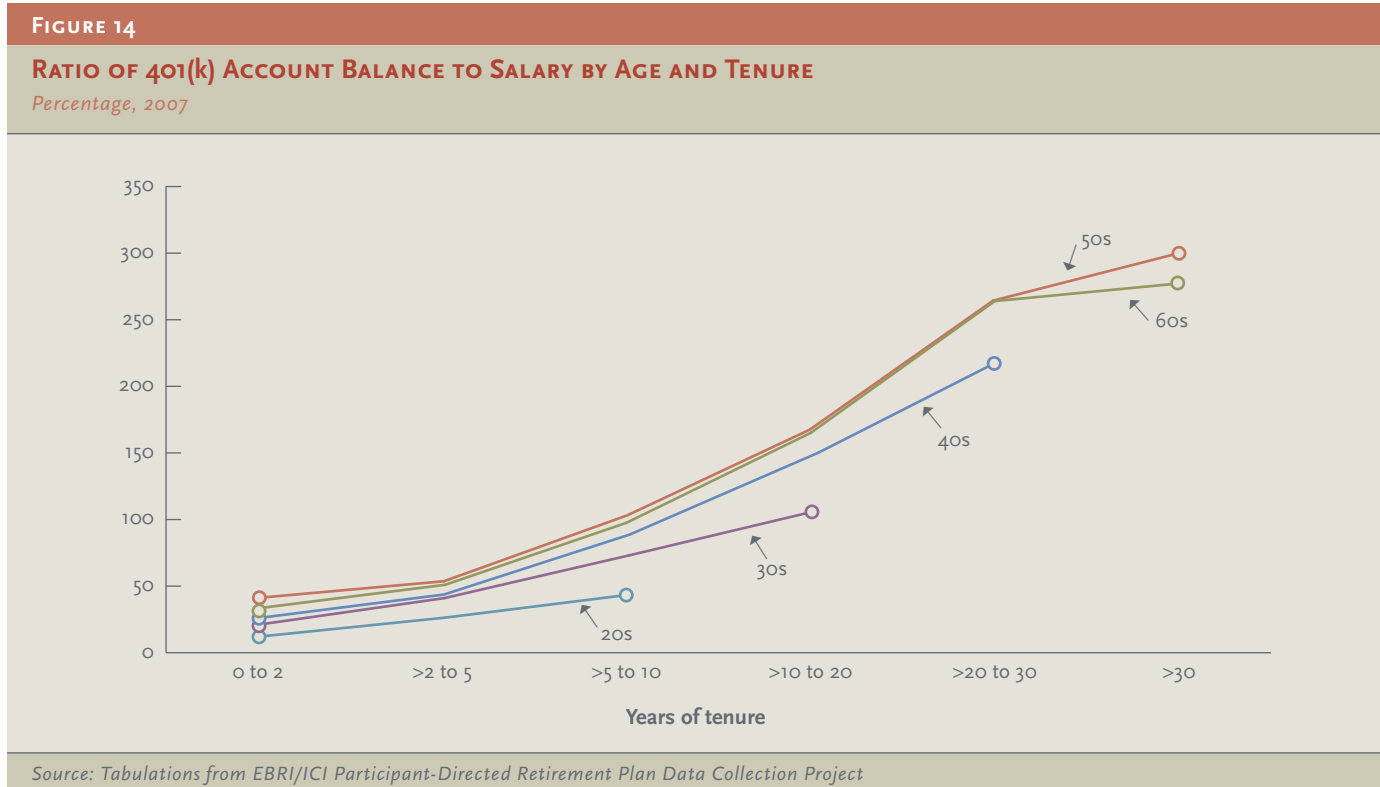
salary in 2007, the median account balance was \$58,028. For long-tenured participants in their sixties earning more than \$100,000, the median account balance was \$344,849.

The ratio of participant account balance to salary is positively correlated with age and tenure.<sup>23</sup> Participants in their sixties—having had more time to accumulate assets—tend to have higher ratios, while those in their twenties had the lowest ratios (Figure 14). In addition,

**FIGURE 13**  
**MEDIAN ACCOUNT BALANCE<sup>1</sup> AMONG LONG-TENURED<sup>2</sup> PARTICIPANTS BY AGE AND SALARY, 2007**

Salary range	Participant age group				
	20s	30s	40s	50s	60s
\$20,000 to \$40,000	\$6,759	\$21,187	\$51,130	\$66,378	\$58,028
>\$40,000 to \$60,000	\$15,510	\$37,578	\$82,667	\$102,410	\$97,413
>\$60,000 to \$80,000	\$33,155	\$64,611	\$133,488	\$160,324	\$162,683
>\$80,000 to \$100,000	\$49,002	\$100,995	\$194,832	\$226,266	\$236,612
>\$100,000	\$52,268	\$150,678	\$280,624	\$344,526	\$344,849

<sup>1</sup>Account balances are based on administrative records and cover the account balance at the 401(k) plan participant's current employer. Retirement savings held in plans at previous employers or rolled over into IRAs are not included. Account balances are net of loan balances.  
<sup>2</sup>Long-tenure participants are used in this analysis to capture as long a work and savings history as possible (see footnote 1). The tenure variable tends to be years with the current employer rather than years of participation in the 401(k) plan. Particularly among older participants, job tenure may not reflect length of participation in the 401(k) plans; the regulations for 401(k) plans were introduced only about 27 years ago.  
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project



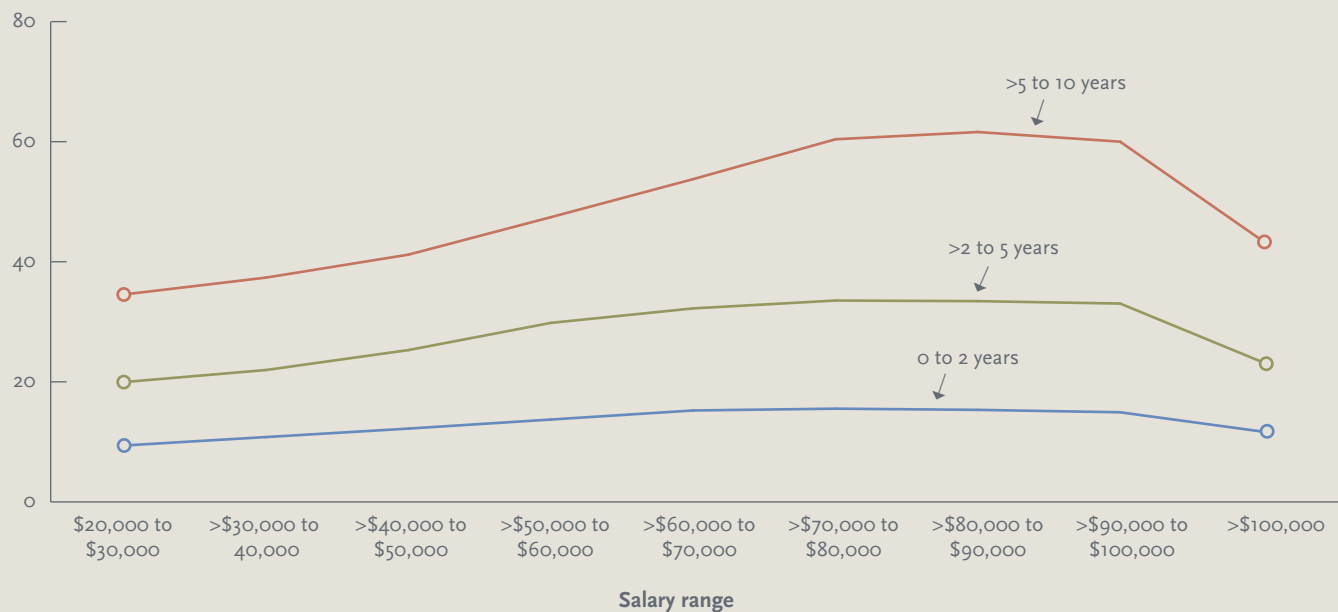
for any given age and tenure combination, the ratio of account balance to salary varies somewhat with salary. For example, among participants in their twenties, the ratio tends to increase slightly with salary for low-to-moderate

salary groups (Figure 15). However, at high salary levels the ratio tends to decline somewhat. A similar pattern occurs among participants in their sixties (Figure 16).<sup>24</sup>

**FIGURE 15**

**RATIO OF 401(k) ACCOUNT BALANCE TO SALARY FOR PARTICIPANTS IN THEIR TWENTIES BY TENURE**

Percentage, 2007

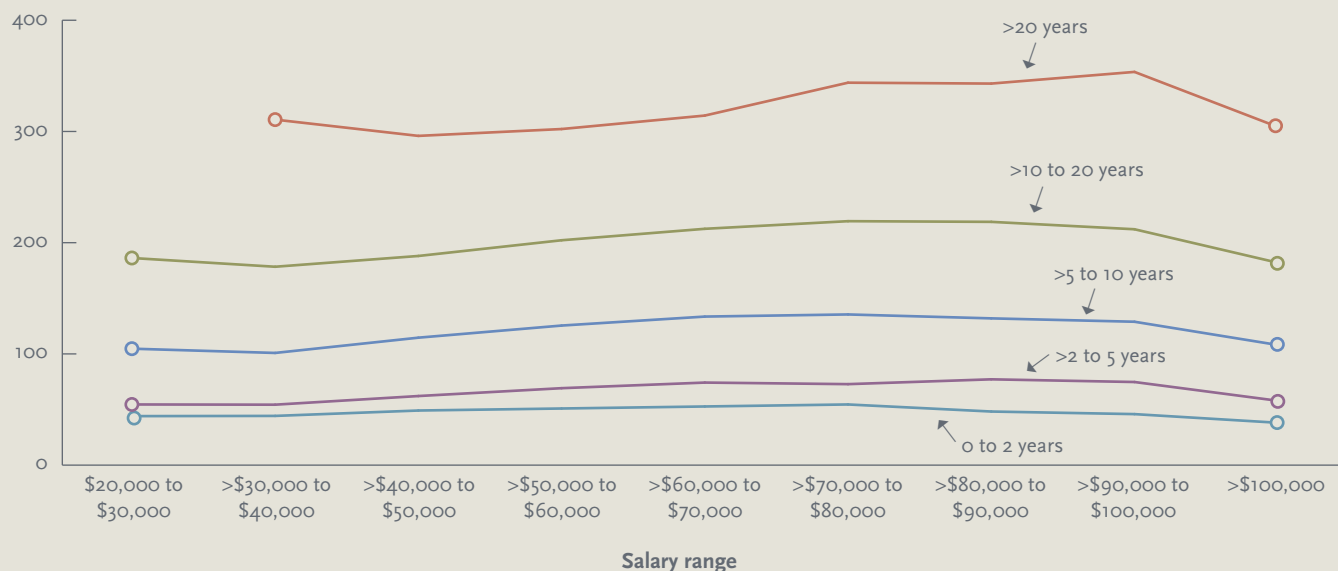


Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 16**

**RATIO OF 401(k) ACCOUNT BALANCE TO SALARY FOR PARTICIPANTS IN THEIR SIXTIES BY TENURE**

Percentage, 2007



Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

## YEAR-END 2007 SNAPSHOT OF 401(k) ASSET ALLOCATION

Consistent with traditional investment advice, 401(k) plan participants are heavily invested in equity securities. At year-end 2007, nearly half (48 percent) of 401(k) plan participants' account balances were invested in equity funds, on average (Figure 17). Altogether, equity securities—equity funds, the equity portion of balanced funds,<sup>25</sup> and company stock—represented about two-

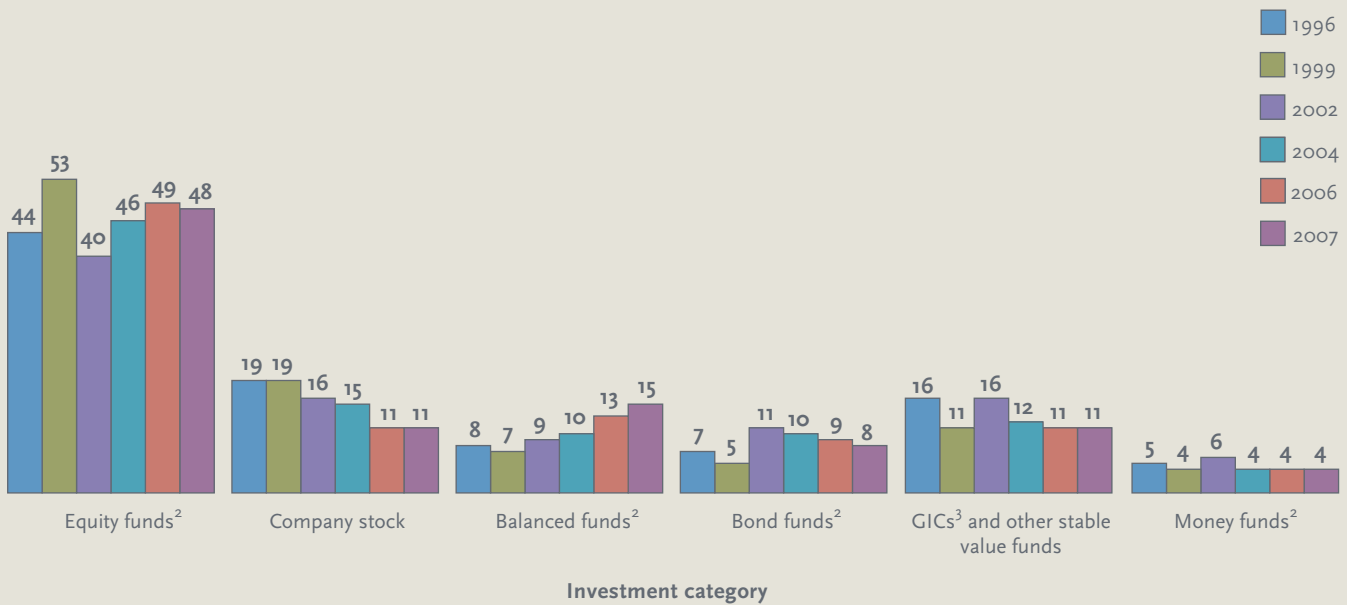
thirds of 401(k) plan participants' assets. The share of 401(k) assets invested in balanced funds, which include lifecycle funds, increased for the eighth consecutive year.

As in previous years, the EBRI/ICI database for year-end 2007 finds that participants' asset allocation varies considerably with age.<sup>26</sup> Younger participants tended to favor equity funds, while older participants were more likely to invest in fixed-income securities such as bond

FIGURE 17

### 401(k) PLAN ASSETS CONCENTRATED IN EQUITY FUNDS

401(k) plan average asset allocation, percentage of total assets,<sup>1</sup> selected years



<sup>1</sup> Minor investment options are not shown; therefore, percentages do not add to 100 percent. Percentages are dollar-weighted averages.

<sup>2</sup> "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

<sup>3</sup> GICs are guaranteed investment contracts.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project



funds, GICs and other stable value funds, or money funds (Figure 18). For example, among participants in their twenties, the average allocation to equity funds was 48 percent of assets, compared with nearly 39 percent of assets among participants in their sixties. Younger participants also had higher allocations to balanced funds, particularly to lifecycle funds. Lifecycle, or target date funds, follow a predetermined reallocation of assets

over time to a specified target date, typically rebalancing to be more conservative and income-producing by the target date. At year-end 2007, 7 percent of 401(k) assets in the EBRI/ICI database were invested in lifecycle funds. Among participants in their twenties, 14 percent of their 401(k) assets were invested in lifecycle funds, while among participants in their sixties, almost 7 percent were invested in lifecycle funds.

**FIGURE 18**

**AVERAGE ASSET ALLOCATION OF 401(k) ACCOUNTS BY PARTICIPANT AGE**

*Percentage of account balances,<sup>1</sup> 2007*

Age group	Equity funds	Lifecycle funds <sup>2</sup>	Non-lifecycle balanced funds	Bond funds	Money funds	GICs <sup>3</sup> and other stable value funds	Company stock	Other	Unknown	Total <sup>1</sup>
20s	48.1	13.8	9.2	6.6	3.7	5.9	8.4	1.3	2.7	100
30s	56.8	9.3	7.4	6.9	3.0	4.9	8.9	1.7	1.0	100
40s	54.0	7.4	7.6	7.1	3.3	6.8	10.7	2.0	0.8	100
50s	45.9	7.1	8.4	8.6	4.3	11.3	11.5	2.2	0.6	100
60s	38.5	6.5	8.3	10.4	5.9	17.8	9.7	2.1	0.5	100
All	48.2	7.4	8.0	8.3	4.2	10.6	10.6	2.1	0.7	100

<sup>1</sup> Row percentages may not add to 100 percent because of rounding. Percentages are dollar-weighted averages.

<sup>2</sup> A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>3</sup> GICs are guaranteed investment contracts.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

## Asset Allocation and Investment Options

The investment options that a plan sponsor offers significantly affect how participants allocate their 401(k) assets. Figure 19 presents the distribution of plans, participants, and assets by four combinations of investment offerings. The first category is the base group, which consists of plans that do not offer company stock, GICs, or other stable value funds. Twenty-nine percent of participants in the 2007 EBRI/ICI database were in these plans, which generally offer equity funds, bond funds, money funds, and balanced funds as investment options. Another 27 percent of participants were in plans that offer GICs and/or other stable value funds as an investment option, in addition to the “base” options. Alternatively,

13 percent of participants were in plans that offer company stock, but no stable value products, while the remaining 32 percent of participants were offered both company stock and stable value products, in addition to the base options.

Lifecycle funds were available in two-thirds of 401(k) plans in the year-end 2007 EBRI/ICI database, up from 57 percent of plans in the year-end 2006 EBRI/ICI database (Figure 19).<sup>27</sup> These plans offered lifecycle funds to 14.7 million, or two-thirds, of the participants.<sup>28</sup> Among participants offered lifecycle funds, 37 percent held them at year-end 2007. Lifecycle fund assets represented 11 percent of the assets of plans offering such funds in their investment lineups.

FIGURE 19

### DISTRIBUTION OF 401(k) PLANS, PARTICIPANTS, AND ASSETS BY INVESTMENT OPTIONS, 2007

Investment options offered by plan	Plans	Participants	Assets
Equity, bond, money, and/or balanced funds	30,509	6,358,616	\$310,823,661,806
Of which: lifecycle funds <sup>1</sup> an option	19,615	4,987,945	243,414,909,917
Equity, bond, money, and/or balanced funds, and GICs <sup>2</sup> and/or other stable value funds	24,182	5,759,232	333,096,281,024
Of which: lifecycle funds <sup>1</sup> an option	17,058	3,925,885	231,250,935,755
Equity, bond, money, and/or balanced funds, and company stock	591	2,776,741	225,827,360,732
Of which: lifecycle funds <sup>1</sup> an option	470	1,971,881	155,719,177,317
Equity, bond, money, and/or balanced funds, and company stock, and GICs <sup>2</sup> and/or other stable value funds	950	6,878,491	555,395,167,782
Of which: lifecycle funds <sup>1</sup> an option	722	3,819,053	289,696,013,570
<b>All</b>	<b>56,232</b>	<b>21,773,080</b>	<b>1,425,142,471,345</b>
Of which: lifecycle funds <sup>1</sup> an option	37,865	14,704,764	\$920,081,036,558
		<b>Percentage of</b>	
Investment options offered by plan	Percentage of plans	participants	Percentage of assets
Equity, bond, money, and/or balanced funds	54.3%	29.2%	21.8%
Of which: lifecycle funds <sup>1</sup> an option	34.9	22.9	17.1
Equity, bond, money, and/or balanced funds, and GICs <sup>2</sup> and/or other stable value funds	43.0	26.5	23.4
Of which: lifecycle funds <sup>1</sup> an option	30.3	18.0	16.2
Equity, bond, money, and/or balanced funds, and company stock	1.1	12.8	15.8
Of which: lifecycle funds <sup>1</sup> an option	0.8	9.1	10.9
Equity, bond, money, and/or balanced funds, company stock, and GICs <sup>2</sup> and/or other stable value funds	1.7	31.6	39.0
Of which: lifecycle funds <sup>1</sup> an option	1.3	17.5	20.3
<b>All<sup>3</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>
Of which: lifecycle funds <sup>1</sup> an option	67.3	67.5	64.5

<sup>1</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>2</sup>GICs are guaranteed investment contracts.

<sup>3</sup>Column percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

### ***Asset Allocation by Investment Options and Age, Salary, and Plan Size***

As discussed above, asset allocation varies with participant age. Thus, Figure 20 presents the analysis of asset allocation by investment options and also by participants' age. Salary information is available for a subset of participants in the 2007 EBRI/ICI database. Because asset allocation is influenced by the investment options available to participants, Figure 21 presents asset allocation by salary range and by investment options. Participant asset allocation also varies with plan size (Figure 22, top panel), but much of the variation can be explained by differences in the investment options offered by plan sponsors. For example, the percentage of plan assets invested in company stock rises with plan size. A portion of this trend occurs because few small plans offered company stock as an investment option. For example, less than 1 percent of participants in small plans were offered company stock as an investment option, while 64 percent of participants in plans with more than 5,000 participants were offered company stock as an investment option in 2007. Thus, to analyze the potential effect of plan size, the remaining panels of Figure 22 group plans by investment options and plan size.

### ***Distribution of Equity Fund Allocations and Participant Exposure to Equities***

The year-end 2007 EBRI/ICI database finds that, on average, 48 percent of participant account balances were allocated to equity funds (Figure 18). However, individual asset allocations vary widely across participants. For example, nearly 38 percent of participants held no equity funds, while 21 percent of participants held more than 80 percent of their balances in equity funds (Figures 23 and 24). Furthermore, the percentage of participants holding no equity funds varies with age, with 50 percent of participants in their twenties, 33 percent of participants in their forties, and 43 percent of participants in their sixties holding no equity funds. The percentage of 401(k) participants holding no equity funds also varies with tenure, with the lowest and highest tenure groups being more likely not to be invested in equity funds. The percentage of participants holding no equity funds tends to fall as salary increases (Figure 24).

**FIGURE 20**

**AVERAGE ASSET ALLOCATION OF 401(k) ACCOUNTS BY PARTICIPANT AGE AND INVESTMENT OPTIONS**

*Percentage of account balances,<sup>1</sup> 2007*

	Equity funds	Lifecycle funds <sup>2</sup>	Non-lifecycle balanced funds	Bond funds	Money funds	GICs <sup>3</sup> and other stable value funds	Company stock
<b>ALL AGES COMBINED</b>							
<b>Investment options</b>							
Equity, bond, money, and/or balanced funds	56.8	12.1	7.8	13.6	6.9		
Equity, bond, money, and/or balanced funds, and GICs <sup>3</sup> and/or other stable value funds	51.6	8.3	11.3	5.6	2.9	17.4	
Equity, bond, money, and/or balanced funds, and company stock	44.9	5.9	5.7	12.8	7.5		20.5
Equity, bond, money, and/or balanced funds, company stock, and GICs <sup>2</sup> and/or other stable value funds	42.9	4.9	7.1	5.0	2.0	16.6	18.9
<b>PLANS WITHOUT COMPANY STOCK, GICs,<sup>3</sup> OR OTHER STABLE VALUE FUNDS</b>							
<b>Age group</b>							
20s	51.9	18.2	7.6	10.1	6.4		
30s	62.7	13.4	6.4	10.3	4.8		
40s	61.5	11.6	7.1	11.4	5.4		
50s	54.2	12.1	8.4	14.4	7.4		
60s	47.0	11.1	9.1	18.5	10.2		
<b>PLANS WITH GICs<sup>3</sup> AND/OR OTHER STABLE VALUE FUNDS</b>							
20s	49.3	15.7	12.7	4.7	2.5	10.6	
30s	59.3	10.2	10.1	5.1	2.3	9.2	
40s	57.5	8.2	10.7	5.2	2.5	12.2	
50s	49.5	8.1	11.6	6.0	2.9	18.5	
60s	41.9	7.0	11.9	6.2	3.6	26.7	
<b>PLANS WITH COMPANY STOCK</b>							
20s	50.5	10.7	6.0	8.5	4.7		16.3
30s	55.8	7.1	5.5	8.3	3.9		17.7
40s	50.7	6.1	5.6	9.4	5.0		20.9
50s	42.3	5.7	6.1	13.3	7.9		21.9
60s	34.4	5.1	5.1	19.9	12.7		19.3
<b>PLANS WITH COMPANY STOCK AND GICs<sup>3</sup> AND/OR OTHER STABLE VALUE FUNDS</b>							
20s	43.5	10.5	9.3	4.4	2.2	9.6	17.0
30s	51.1	6.5	7.2	4.8	1.6	7.9	17.5
40s	48.8	4.9	7.0	4.9	1.7	10.6	19.2
50s	41.1	4.6	7.5	5.3	2.2	17.1	19.5
60s	33.2	4.2	6.8	5.0	2.5	28.5	17.8

<sup>1</sup>Minor investment options are not shown; therefore, row percentages will not add to 100 percent. Percentages are dollar-weighted averages.

<sup>2</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>3</sup>GICs are guaranteed investment contracts.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 21**

**AVERAGE ASSET ALLOCATION OF 401(k) ACCOUNTS BY PARTICIPANT SALARY AND INVESTMENT OPTIONS**

*Percentage of account balances,<sup>1</sup> 2007*

Salary <sup>2</sup>	Equity funds	Lifecycle funds <sup>3</sup>	Non-lifecycle balanced funds	Bond funds	Money funds	GICs <sup>4</sup> and other stable value funds	Company stock
<b>PLANS WITHOUT COMPANY STOCK, GICs,<sup>4</sup> OR OTHER STABLE VALUE FUNDS</b>							
\$20,000 to \$40,000	50.3	18.4	8.2	13.4	8.1		
>\$40,000 to \$60,000	53.7	16.8	7.7	12.7	7.0		
>\$60,000 to \$80,000	56.9	14.9	7.1	12.1	6.7		
>\$80,000 to \$100,000	59.0	14.0	6.2	12.1	6.4		
>\$100,000	60.1	11.4	6.8	11.6	6.7		
All	56.8	12.1	7.8	13.6	6.9		
<b>PLANS WITH GICs<sup>4</sup> AND/OR OTHER STABLE VALUE FUNDS</b>							
\$20,000 to \$40,000	44.4	13.1	14.3	6.0	2.3	19.4	
>\$40,000 to \$60,000	48.0	10.8	15.2	5.4	2.4	16.8	
>\$60,000 to \$80,000	50.9	9.0	15.1	5.2	2.4	16.0	
>\$80,000 to \$100,000	54.4	8.5	11.5	5.4	2.2	15.5	
>\$100,000	54.6	8.3	11.7	5.8	3.0	13.8	
All	51.6	8.3	11.3	5.6	2.9	17.4	
<b>PLANS WITH COMPANY STOCK</b>							
\$20,000 to \$40,000	40.9	9.8	5.2	9.9	12.5		19.1
>\$40,000 to \$60,000	43.7	8.8	6.3	10.8	8.0		20.3
>\$60,000 to \$80,000	44.4	7.2	5.8	10.3	6.7		23.1
>\$80,000 to \$100,000	46.0	5.9	6.2	9.9	6.3		22.9
>\$100,000	48.0	5.6	7.6	9.5	5.5		19.6
All	44.9	5.9	5.7	12.8	7.5		20.5
<b>PLANS WITH COMPANY STOCK AND GICs<sup>4</sup> AND/OR OTHER STABLE VALUE FUNDS</b>							
\$20,000 to \$40,000	40.3	5.7	7.2	5.0	2.1	16.1	21.7
>\$40,000 to \$60,000	39.3	5.2	7.0	4.6	2.1	14.6	25.6
>\$60,000 to \$80,000	41.2	6.0	8.1	4.6	2.0	14.0	22.1
>\$80,000 to \$100,000	43.2	5.8	8.7	4.9	1.9	12.5	20.6
>\$100,000	44.7	5.9	7.9	5.2	1.9	12.0	19.4
All	42.9	4.9	7.1	5.0	2.0	16.6	18.9

<sup>1</sup>Minor investment options are not shown; therefore, row percentages will not add to 100 percent. Percentages are dollar-weighted averages.

<sup>2</sup>Salary information is available for a subset of participants in the EBRI/ICI database.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>4</sup>GICs are guaranteed investment contracts.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE 22

## AVERAGE ASSET ALLOCATION OF 401(k) ACCOUNTS BY PLAN SIZE AND INVESTMENT OPTIONS

Percentage of account balances,<sup>1</sup> 2007

Plan size by number of participants	Equity funds	Lifecycle funds <sup>2</sup>	Non-lifecycle balanced funds	Bond funds	Money funds	GICs <sup>3</sup> and other stable value funds	Company stock
<b>ALL PLANS</b>							
1 to 100	54.0	11.6	11.0	8.8	6.8	6.4	0.1
101 to 500	54.4	12.3	7.9	10.3	5.9	6.2	0.5
501 to 1,000	52.3	12.5	7.4	10.4	5.3	6.9	2.3
1,001 to 5,000	50.2	10.5	7.7	9.7	4.8	8.3	5.3
>5,000	46.2	5.3	7.9	7.4	3.5	12.2	14.5
All	48.2	7.4	8.0	8.3	4.2	10.5	10.6
<b>PLANS WITHOUT COMPANY STOCK, GICs,<sup>3</sup> OR OTHER STABLE VALUE FUNDS</b>							
1 to 100	56.5	13.0	9.0	10.9	8.6		
101 to 500	56.9	13.1	7.2	13.1	7.2		
501 to 1,000	55.7	12.5	7.6	14.5	7.0		
1,001 to 5,000	56.3	11.7	8.3	14.0	6.3		
>5,000	56.5	11.0	7.3	14.0	6.5		
All	56.8	12.1	7.8	13.6	6.9		
<b>PLANS WITH GICs<sup>3</sup> AND/OR OTHER STABLE VALUE FUNDS</b>							
1 to 100	51.2	9.8	13.6	6.0	4.4	14.6	
101 to 500	51.9	11.1	9.3	5.9	3.5	16.5	
501 to 1,000	51.8	12.9	7.9	5.5	2.5	16.9	
1,001 to 5,000	49.6	11.6	8.7	5.9	2.8	17.7	
>5,000	52.0	5.3	12.8	5.4	2.6	17.8	
All	51.6	8.3	11.3	5.6	2.9	17.4	
<b>PLANS WITH COMPANY STOCK</b>							
1 to 100 <sup>4</sup>	34.3	18.0	3.9	7.3	9.0		26.7
101 to 500	46.3	10.8	5.6	10.6	11.6		13.5
501 to 1,000	47.2	9.6	3.8	9.9	9.4		18.8
1,001 to 5,000	48.5	7.9	5.5	13.0	6.9		16.3
>5,000	43.9	5.2	5.8	12.8	7.6		21.8
All	44.9	5.9	5.7	12.8	7.5		20.5
<b>PLANS WITH COMPANY STOCK AND GICs<sup>3</sup> AND/OR OTHER STABLE VALUE FUNDS</b>							
1 to 100	38.6	11.1	7.3	8.6	5.7	16.6	5.4
101 to 500	43.6	11.4	8.3	6.5	3.0	15.2	6.3
501 to 1,000	39.2	12.8	7.8	4.3	2.4	16.1	11.3
1,001 to 5,000	41.6	9.1	7.4	4.4	3.1	16.9	12.7
>5,000	43.0	4.3	7.1	5.1	1.9	16.6	19.7
All	42.9	4.9	7.1	5.0	2.0	16.6	18.9

<sup>1</sup>Minor investment options are not shown; therefore, row percentages will not add to 100 percent. Percentages are dollar-weighted averages.

<sup>2</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>3</sup>GICs are guaranteed investment contracts.

<sup>4</sup>Because few plans fall into this category, these percentages may be heavily influenced by a few outliers.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 23**

**ASSET ALLOCATION DISTRIBUTION OF 401(k) PARTICIPANT ACCOUNT BALANCE TO EQUITY FUNDS BY AGE**

Percentage of participants,<sup>1, 2</sup> 2007

Age group	Percentage of account balance invested in equity funds										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	50.4	1.9	2.4	3.4	3.4	4.5	5.2	4.9	5.8	5.3	12.9
30s	35.4	2.5	2.9	4.1	4.4	5.8	6.8	6.7	7.8	6.9	16.7
40s	32.8	3.1	3.2	4.4	4.8	6.3	7.3	7.1	7.9	6.6	16.4
50s	35.1	4.0	3.8	5.0	5.3	6.7	7.5	6.8	7.0	5.1	13.7
60s	42.5	4.4	4.0	5.0	5.1	6.0	6.4	5.3	5.1	3.6	12.5
All	37.5	3.1	3.2	4.4	4.6	6.0	6.8	6.4	7.1	5.9	14.9

<sup>1</sup>The analysis includes the 21.8 million participants in the year-end 2007 EBRI/ICI database.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 24**

**ASSET ALLOCATION DISTRIBUTION OF 401(k) PARTICIPANT ACCOUNT BALANCES TO EQUITY FUNDS BY AGE, TENURE, OR SALARY**

Percentage of participants, 2007

	Percentage of account balance invested in equity funds			
	Zero	1 percent to 20 percent	>20 percent to 80 percent	>80 percent
<b>ALL</b>	37.5	6.4	35.3	20.8
<b>AGE GROUP</b>				
20s	50.4	4.2	27.1	18.2
30s	35.4	5.4	35.6	23.6
40s	32.8	6.3	37.8	23.1
50s	35.1	7.8	38.3	18.8
60s	42.5	8.4	32.9	16.1
<b>TENURE (YEARS)</b>				
0 to 2	48.4	3.5	28.0	20.1
>2 to 5	40.7	4.8	33.8	20.6
>5 to 10	31.9	6.7	38.6	22.8
>10 to 20	27.7	8.3	41.1	22.8
>20 to 30	31.3	10.0	40.5	18.1
>30	41.4	10.4	34.5	13.7
<b>SALARY</b>				
\$20,000 to \$40,000	43.4	7.5	32.6	16.5
>\$40,000 to \$60,000	32.6	9.3	40.0	18.2
>\$60,000 to \$80,000	26.4	9.2	43.9	20.5
>\$80,000 to \$100,000	22.0	9.0	46.8	22.2
>\$100,000	21.3	9.2	46.8	22.6

Note: Row percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Participants with no equity fund balances may still have exposure to the stock market through company stock or balanced funds, which include lifecycle funds. Indeed, 65 percent of participants with no equity funds had investments in either company stock or balanced funds (Figure 25). For example, 63 percent of participants in their twenties without equity funds held equities through company stock, balanced funds, or both. Indeed, 32 percent of participants in their twenties without equity funds held lifecycle funds, which will tend to be highly concentrated in equity securities for that age group,

as their only equity investment. Another 12 percent of participants in their twenties without equity funds had equity exposure through non-lifecycle balanced funds, and another 6 percent held company stock as their only equity investment. Twelve percent held some combination of lifecycle funds, non-lifecycle balanced funds, or company stock as their equity investment. As a result, many participants with no equity funds had exposure to equity-related investments through company stock and/or balanced funds (Figure 26).

**FIGURE 25**

**PERCENTAGE OF 401(k) PLAN PARTICIPANTS WITHOUT EQUITY FUND BALANCES WHO HAVE EQUITY EXPOSURE BY PARTICIPANT AGE OR TENURE, 2007**

	Percentage of participants without equity funds				
	Company stock and/or balanced funds	Lifecycle funds <sup>1</sup> as only equity investment	Non-lifecycle balanced funds as only equity investment	Company stock as only equity investment	Combination of company stock and/or lifecycle funds <sup>1</sup> and/or non-lifecycle balanced funds
<b>AGE GROUP</b>					
20s	63.2	32.3	12.2	6.4	12.3
30s	69.9	34.1	11.3	9.1	15.4
40s	67.5	28.9	10.6	12.3	15.8
50s	65.5	24.1	10.0	16.0	15.4
60s	58.4	17.3	9.7	19.9	11.5
All	65.4	27.9	10.7	12.3	14.4
<b>TENURE (YEARS)</b>					
0 to 2	69.5	40.4	12.1	4.8	12.2
>2 to 5	66.4	29.2	12.6	8.7	15.8
>5 to 10	65.4	22.3	11.8	12.9	18.4
>10 to 20	62.8	17.4	10.6	17.6	17.1
>20 to 30	61.0	11.3	7.7	27.6	14.4
>30	56.6	7.0	5.8	32.7	11.0
All	65.4	27.9	10.7	12.3	14.4

<sup>1</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Note: Row components may not add to total in first column because of rounding. "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project



**FIGURE 26**

**AVERAGE ASSET ALLOCATION FOR 401(k) PLAN PARTICIPANTS WITHOUT EQUITY FUND BALANCES BY PARTICIPANT AGE OR TENURE**

Percentage of account balances, 2007

	Lifecycle funds <sup>1</sup>	Non-lifecycle balanced funds	Bond funds	Money funds	GICs <sup>2</sup> and other stable value funds	Company stock	Other	Unknown	Total <sup>3</sup>
<b>AGE GROUP</b>									
20s	37.8	17.7	5.2	8.9	12.3	9.9	1.3	7.0	100
30s	36.5	16.1	6.8	9.1	12.8	14.0	3.0	1.7	100
40s	27.3	14.6	7.9	9.5	17.2	18.3	3.8	1.4	100
50s	20.2	12.9	9.3	10.4	24.3	18.3	3.6	1.1	100
60s	13.5	10.3	12.0	12.0	33.8	14.4	3.2	0.8	100
All <sup>4</sup>	21.4	12.8	9.5	10.5	24.5	16.5	3.5	1.2	100
<b>TENURE (YEARS)</b>									
0 to 2	48.1	14.3	6.4	9.3	12.2	6.2	1.1	2.5	100
>2 to 5	37.3	16.4	8.6	10.6	14.3	9.2	1.9	1.6	100
>5 to 10	29.1	16.3	8.9	11.3	16.4	13.7	2.7	1.4	100
>10 to 20	22.7	13.6	9.0	10.6	21.4	17.3	4.3	1.3	100
>20 to 30	15.4	12.2	9.0	9.4	28.5	20.5	4.1	1.0	100
>30	9.7	9.4	9.6	12.3	35.8	18.9	3.6	0.8	100
All <sup>4</sup>	21.4	12.8	9.5	10.5	24.5	16.5	3.5	1.2	100

<sup>1</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>2</sup>GICs are guaranteed investment contracts.

<sup>3</sup>Row percentages may not add to 100 percent because of rounding.

<sup>4</sup>The analysis includes the 8.1 million participants with no equity funds at year-end 2007.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 27**

**ASSET ALLOCATION TO EQUITIES VARIES WIDELY AMONG PARTICIPANTS**

Asset allocation distribution of 401(k) participant account balance to equities<sup>1</sup> by age; percentage of participants,<sup>2, 3</sup> 2007

Age group	Percentage of account balance invested in equities <sup>1</sup>					
	Zero	1 to 20 percent	>20 to 40 percent	>40 to 60 percent	>60 to 80 percent	>80 percent
20s	19.2	2.4	3.8	7.1	19.4	48.3
30s	10.9	2.5	3.9	7.9	20.0	54.8
40s	10.8	3.4	4.7	9.1	28.4	43.6
50s	12.2	5.0	6.3	17.5	23.9	35.1
60s	17.7	7.1	9.7	17.2	18.2	30.1
All <sup>2</sup>	13.2	3.8	5.3	11.2	23.0	43.4

<sup>1</sup>Equities include equity funds, company stock, and the equity portion of balanced funds.

<sup>2</sup>The analysis includes the 21.8 million 401(k) plan participants in the year-end 2007 EBRI/ICI database.

<sup>3</sup>Row percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Among individual participants, the allocation of account balances to equities (equity funds, company stock, and the equity portion of balanced funds) varies widely around the average of 68 percent for all participants in the 2007 EBRI/ICI database. Forty-three percent of participants had more than 80 percent of their account balances invested in equities, while 13 percent held no equities at all in 2007 (Figure 27).

### **Distribution of Participants' Balanced Fund Allocations by Age**

Individual 401(k) participants' asset allocation to balanced funds varies widely around an average of 15 percent (Figure 18). For example, 53 percent of participants held no balanced funds, while 16 percent of participants held

more than 80 percent of their accounts in balanced funds in 2007 (Figure 28). At year-end 2007, 47 percent of 401(k) participants held balanced funds, compared with 41 percent of participants at year-end 2006.<sup>29</sup> At year-end 2007, balanced fund use by participants was about evenly split between lifecycle funds and non-lifecycle balanced funds: 25 percent of 401(k) participants held lifecycle funds, nearly 25 percent held non-lifecycle balanced funds, and 3 percent held both. Most of the increase in balanced fund use between year-end 2006 and year-end 2007 resulted from the increased use of lifecycle funds; at year-end 2006, 19 percent of 401(k) participants held lifecycle funds, 23 percent held non-lifecycle balanced funds, and 1 percent held both.<sup>30</sup>

**FIGURE 28**

### **ASSET ALLOCATION DISTRIBUTION OF 401(k) PARTICIPANT ACCOUNT BALANCE TO BALANCED FUNDS BY AGE**

*Percentage of participants,<sup>1, 2</sup> 2007*

Percentage of account balance invested in balanced funds											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	50.5	5.0	5.5	4.9	2.7	2.5	2.7	1.7	1.6	1.3	21.7
30s	50.6	7.2	6.9	6.0	3.4	2.8	2.5	1.5	1.4	1.1	16.6
40s	53.1	7.5	6.9	6.3	3.5	2.9	2.5	1.4	1.3	1.1	13.5
50s	54.5	7.3	6.6	6.1	3.7	3.1	2.7	1.5	1.3	1.1	12.3
60s	60.3	6.0	5.3	5.2	3.3	2.8	2.5	1.3	1.2	1.0	11.3
All	53.4	6.9	6.4	5.9	3.4	2.8	2.6	1.4	1.3	1.1	14.8
Percentage of account balance invested in lifecycle funds <sup>3</sup>											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	70.6	2.4	2.5	2.4	1.4	1.4	1.5	1.1	1.1	0.9	14.8
30s	71.8	3.7	3.2	2.8	1.6	1.4	1.3	0.8	0.8	0.8	11.8
40s	75.1	3.7	3.1	2.7	1.5	1.3	1.2	0.7	0.7	0.7	9.3
50s	76.8	3.7	2.9	2.4	1.4	1.2	1.1	0.7	0.7	0.6	8.4
60s	80.9	2.9	2.2	1.9	1.2	1.1	0.9	0.6	0.6	0.5	7.2
All	74.9	3.4	2.9	2.5	1.5	1.3	1.2	0.8	0.8	0.7	10.2
Percentage of account balance invested in non-lifecycle balanced funds											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	77.3	4.1	3.9	3.0	1.3	1.1	1.2	0.5	0.5	0.3	6.7
30s	75.3	5.7	5.0	3.8	1.8	1.3	1.2	0.5	0.5	0.3	4.6
40s	74.6	5.8	5.1	4.2	2.1	1.5	1.3	0.6	0.5	0.4	3.9
50s	74.2	5.6	5.0	4.3	2.3	1.7	1.5	0.7	0.6	0.4	3.7
60s	76.8	4.5	4.0	3.8	2.2	1.7	1.5	0.7	0.5	0.4	3.8
All	75.3	5.4	4.8	3.9	2.0	1.5	1.3	0.6	0.5	0.4	4.4

<sup>1</sup>The analysis includes the 21.8 million participants in the year-end 2007 EBRI/ICI database.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Lifecycle fund usage varies with participant age and tenure. Younger participants were more likely to hold lifecycle funds than older participants: 29 percent of participants in their twenties held lifecycle funds compared with 19 percent of participants in their sixties (Figure 28). More recently hired participants were more likely to hold

lifecycle funds than participants with more years on the job: 34 percent of participants with two or fewer years of tenure held lifecycle funds, compared with 23 percent of participants with five to 10 years of tenure, and 14 percent of participants with more than 30 years of tenure (Figure 29).<sup>31</sup>

**FIGURE 29**

**ASSET ALLOCATION DISTRIBUTION OF 401(k) PARTICIPANT ACCOUNT BALANCE TO BALANCED FUNDS BY TENURE**

Percentage of participants,<sup>1, 2</sup> 2007

Tenure (years)	Percentage of account balance invested in balanced funds										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
0 to 2	47.3	4.5	5.3	5.2	2.8	2.6	2.8	1.6	1.5	1.2	25.3
>2 to 5	50.7	6.1	6.4	6.0	3.4	2.9	2.8	1.6	1.5	1.4	17.3
>5 to 10	53.8	7.8	7.2	6.4	3.7	3.0	2.7	1.5	1.4	1.2	11.5
>10 to 20	55.2	8.8	7.5	6.7	4.0	3.2	2.6	1.4	1.2	1.0	8.2
>20 to 30	60.0	8.7	7.0	5.9	3.6	2.8	2.2	1.3	1.1	0.9	6.5
>30	66.8	7.2	5.5	4.7	3.1	2.4	1.9	1.1	0.9	0.8	5.5
All	53.4	6.9	6.4	5.9	3.4	2.8	2.6	1.4	1.3	1.1	14.8
Tenure (years)	Percentage of account balance invested in lifecycle funds <sup>3</sup>										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
0 to 2	66.2	2.3	2.6	2.7	1.5	1.5	1.7	1.1	1.0	0.9	18.4
>2 to 5	72.7	3.1	3.0	2.8	1.6	1.4	1.4	0.9	0.9	0.9	11.2
>5 to 10	77.0	3.9	3.1	2.7	1.6	1.3	1.1	0.8	0.8	0.7	7.0
>10 to 20	79.4	4.4	3.2	2.5	1.5	1.2	1.0	0.6	0.6	0.5	5.1
>20 to 30	82.7	4.0	2.8	2.1	1.2	1.0	0.8	0.5	0.5	0.4	3.9
>30	86.0	3.3	2.3	1.7	1.0	0.8	0.6	0.4	0.4	0.3	3.2
All	74.9	3.4	2.9	2.5	1.5	1.3	1.2	0.8	0.8	0.7	10.2
Tenure (years)	Percentage of account balance invested in non-lifecycle balanced funds										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
0 to 2	78.3	3.6	3.8	3.1	1.3	1.1	1.1	0.5	0.4	0.3	6.6
>2 to 5	74.5	4.9	4.8	3.9	1.8	1.4	1.3	0.6	0.6	0.4	5.7
>5 to 10	73.3	6.1	5.4	4.3	2.2	1.6	1.4	0.7	0.6	0.4	4.2
>10 to 20	72.2	6.8	5.6	4.7	2.5	1.9	1.5	0.7	0.6	0.4	3.0
>20 to 30	74.1	6.8	5.3	4.3	2.4	1.7	1.3	0.7	0.5	0.4	2.4
>30	78.1	5.6	4.2	3.5	2.1	1.5	1.2	0.6	0.5	0.4	2.2
All	75.3	5.4	4.8	3.9	2.0	1.5	1.3	0.6	0.5	0.4	4.4

<sup>1</sup>The analysis includes the 21.8 million participants in the year-end 2007 EBRI/ICI database.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

### ***Distribution of Participants' Company Stock Allocations by Age***

Participants' allocations to company stock remained in line with previous years. Forty-four percent (or 9.7 million) of the 401(k) participants in the 2007 EBRI/ICI database were in plans that offered company stock as an investment option (Figure 19). Among these participants, 69 percent held 20 percent or less of their account balances in company stock, including almost 46 percent who held none (Figure 30). On the other hand, nearly 8 percent had more than 80 percent of their account balances invested in company stock.

### ***Asset Allocation of Recently Hired Participants***

Comparing snapshots of newly hired 401(k) plan participants' asset allocations provides further insight into the recent investment allocation activity of plan participants. Balanced funds, which include lifestyle and lifecycle funds, have increased in popularity among 401(k) participants. More recently hired participants held balanced funds: 53 percent of recently hired participants in 2007, compared with 33 percent of recent hires in 2002 and 29 percent of recent hires in 1998 (Figure 31). At year-end 2007, more than one-third of recently hired 401(k) participants held lifecycle funds, while more than one-fifth held non-lifecycle funds, and 3 percent held both lifecycle and non-lifecycle balanced funds (Figure 32). All of the increase in balanced fund use among recently hired participants between year-end 2006 and year-end 2007 resulted from increased use of lifecycle funds: at year-end 2006, 28 percent of recently hired 401(k) participants held lifecycle funds, 22 percent held non-lifecycle balanced funds, and 3 percent held both.

**FIGURE 30**

**ASSET ALLOCATION DISTRIBUTION OF PARTICIPANT ACCOUNT BALANCE TO COMPANY STOCK IN 401(k) PLANS WITH COMPANY STOCK BY AGE**

Percentage of participants,<sup>1, 2</sup> 2007

Age group	Percentage of account balance invested in company stock										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	57.2	10.1	7.5	6.0	4.6	4.7	2.6	1.4	1.1	0.7	4.1
30s	46.9	13.5	9.4	7.3	5.4	4.8	3.1	2.0	1.5	1.1	5.1
40s	42.9	14.8	9.7	7.5	5.6	4.8	3.3	2.3	1.8	1.4	6.0
50s	41.6	16.0	9.3	7.0	5.3	4.5	3.2	2.3	1.9	1.5	7.4
60s	44.7	15.0	7.8	5.9	4.3	3.7	2.6	2.0	1.8	1.5	10.8
All	45.6	14.2	9.0	6.9	5.2	4.6	3.1	2.1	1.6	1.3	6.4

<sup>1</sup>The analysis includes the 9.7 million participants in plans with company stock at year-end 2007.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 31**

**MORE RECENTLY HIRED 401(k) PLAN PARTICIPANTS HOLD BALANCED FUNDS**

Percentage of recently hired participants holding balanced funds, 1998–2007

Age group	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
20s	27.0	28.3	27.1	27.3	32.7	35.1	38.9	43.5	48.5	51.1
30s	29.0	31.0	28.3	26.5	33.1	36.2	39.8	42.8	47.9	54.2
40s	30.5	33.6	30.8	27.9	33.7	35.7	39.8	42.1	46.6	52.8
50s	30.9	34.9	32.1	29.2	33.9	35.5	40.3	43.3	47.8	53.4
60s	28.4	34.9	33.2	29.1	30.2	30.7	36.3	41.6	45.5	50.1
All	28.9	31.3	29.1	27.4	33.0	35.4	39.3	42.8	47.6	52.7

Note: The analysis includes 401(k) plan participants with two or fewer years of tenure in the year indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 32**

**MORE RECENTLY HIRED 401(k) PLAN PARTICIPANTS HOLD LIFECYCLE FUNDS**

Percentage of recently hired participants, 2006 and 2007

Age group	Holding balanced funds		Holding lifecycle funds <sup>1</sup>		Holding non-lifecycle balanced funds	
	2006	2007	2006	2007	2006	2007
20s	48.5	51.1	29.4	31.7	22.5	21.8
30s	47.9	54.2	28.5	35.1	22.5	22.2
40s	46.6	52.8	27.4	34.2	21.3	21.4
50s	47.8	53.4	28.1	34.9	21.4	21.2
60s	45.5	50.1	26.1	32.1	19.8	20.3
All	47.6	52.7	28.3	33.8	21.9	21.7

<sup>1</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Note: The analysis includes the 3.8 million recently hired participants (those with two or fewer years of tenure) in 2007 and the 2.8 million recently hired participants in 2006.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Recently hired participants are more likely to hold a high concentration of their accounts in balanced funds. At year-end 2007, nearly half (48 percent) of recently hired participants holding balanced funds had more than 90 percent of their account balance invested in balanced funds, compared with 43 percent in 2006 and 7 percent in 1998 (Figure 33). Concentration is highest among recently

hired participants with lifecycle funds; at year-end 2007, nearly 55 percent of recently hired participants holding lifecycle funds held more than 90 percent of their account balance in lifecycle funds (Figure 34). Three out of 10 recently hired participants holding non-lifecycle balanced funds had more than 90 percent of their account balance invested in non-lifecycle balanced funds.

**FIGURE 33**

**RECENTLY HIRED PARTICIPANTS NOW HOLD HIGHER CONCENTRATIONS IN BALANCED FUNDS**

*Percentage of recently hired participants holding balanced fund assets,<sup>1, 2</sup> 1998, 2006, and 2007*

Percentage of account balance invested in balanced funds			
1998			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	84.9	7.3	7.8
30s	86.0	7.6	6.4
40s	84.1	8.9	7.0
50s	81.1	10.7	8.2
60s	77.0	12.4	10.6
All	84.5	8.2	7.3
2006			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	40.1	13.7	46.2
30s	47.7	12.8	39.5
40s	46.0	13.1	40.9
50s	43.3	13.3	43.4
60s	39.5	12.6	47.9
All	43.9	13.3	42.8
2007			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	36.3	14.7	49.0
30s	40.9	12.6	46.5
40s	40.1	12.9	47.0
50s	38.1	13.0	48.8
60s	36.4	12.8	50.8
All	38.8	13.3	47.9

<sup>1</sup>The analysis includes the 0.4 million recently hired participants (those with two or fewer years of tenure) holding balanced funds in 1998; the 1.4 million recently hired participants holding balanced funds in 2006; and the 2.0 million recently hired participants holding balanced funds in 2007.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 34**

**MANY RECENTLY HIRED PARTICIPANTS NOW HOLD HIGHER CONCENTRATIONS IN LIFECYCLE FUNDS**

*Percentage of recently hired participants holding the type of fund indicated,<sup>1, 2</sup> 2007*

Percentage of account balance invested in balanced funds			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	36.3	14.7	49.0
30s	40.9	12.6	46.5
40s	40.1	12.9	47.0
50s	38.1	13.0	48.8
60s	36.4	12.8	50.8
All	38.8	13.3	47.9
Percentage of account balance invested in lifecycle funds <sup>3</sup>			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	29.9	16.0	54.0
30s	33.7	12.9	53.4
40s	32.6	13.1	54.3
50s	30.4	12.7	56.9
60s	28.6	12.1	59.3
All	31.6	13.8	54.6
Percentage of account balance invested in non-lifecycle balanced funds			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	54.2	10.4	35.4
30s	62.5	9.6	27.9
40s	62.2	10.0	27.8
50s	61.1	11.0	27.9
60s	58.0	11.6	30.4
All	59.5	10.2	30.3

<sup>1</sup>The analysis includes the 2.0 million recently hired participants (those with two or fewer years of tenure) holding balanced funds in 2007; the 1.3 million recently hired participants holding lifecycle funds in 2007; and the 0.8 million recently hired participants holding non-lifecycle balanced funds in 2007.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Balanced, lifecycle, and non-lifecycle fund use varied little by age group among recently hired participants. For example, 25 percent of recently hired participants in their twenties, thirties, or forties held more than 90 percent of their account balances in balanced funds, compared with 26 percent of recently hired participants in their fifties or sixties in 2007 (Figure 35).<sup>32</sup> Concentrated lifecycle fund use ranged from 17 percent of recent hires in their twenties holding more than 90 percent of their account balances in lifecycle funds to 20 percent of recently hired participants in their fifties with that concentration.

In addition, at year-end 2007, 28 percent of the account balances of recently hired participants in their twenties was invested in balanced funds, compared with 24 percent in 2006, 19 percent in 2005, and about 7 percent among that age group in 1998 (Figure 36). At year-end 2007, among recently hired participants in their twenties, lifecycle funds accounted for two-thirds of their balanced fund assets, or almost 19 percent of their account balances overall. Most of the increase in asset allocation to balanced funds occurred in the lifecycle fund category: lifecycle fund assets accounted for 16 percent of the account balance assets of recently hired participants in their twenties at year-end 2006.<sup>33</sup> A similar pattern occurs across all age groups.

**FIGURE 35**

**ASSET ALLOCATION DISTRIBUTION OF ACCOUNT BALANCE TO BALANCED FUNDS AMONG RECENTLY HIRED PARTICIPANTS BY AGE**

*Percentage of recently hired participants,<sup>1,2</sup> 2007*

Age group	Percentage of account balance invested in balanced funds										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	48.9	4.2	5.0	4.5	2.5	2.4	2.7	1.8	1.7	1.3	25.0
30s	45.8	5.0	5.9	5.6	3.0	2.7	2.7	1.5	1.4	1.2	25.2
40s	47.2	4.5	5.4	5.6	2.9	2.8	2.8	1.5	1.4	1.1	24.8
50s	46.6	4.2	5.0	5.4	2.9	2.8	2.9	1.5	1.5	1.1	26.1
60s	49.9	4.0	4.2	4.6	2.7	2.7	2.7	1.3	1.3	1.1	25.5
All	47.3	4.5	5.3	5.2	2.8	2.6	2.8	1.6	1.5	1.2	25.3
Age group	Percentage of account balance invested in lifecycle funds <sup>3</sup>										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	68.3	2.0	2.4	2.3	1.4	1.4	1.7	1.3	1.2	1.0	17.1
30s	64.9	2.6	3.0	3.0	1.6	1.6	1.6	1.0	1.0	0.9	18.7
40s	65.8	2.4	2.7	2.9	1.6	1.6	1.7	1.0	1.0	0.9	18.6
50s	65.1	2.3	2.5	2.7	1.5	1.6	1.7	0.9	1.0	0.8	19.9
60s	67.9	2.2	2.0	2.2	1.3	1.4	1.4	0.8	0.9	0.8	19.0
All	66.2	2.3	2.6	2.7	1.5	1.5	1.7	1.1	1.0	0.9	18.4
Age group	Percentage of account balance invested in non-lifecycle balanced funds										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	78.2	3.5	3.5	2.6	1.1	1.0	1.0	0.5	0.5	0.3	7.7
30s	77.8	4.1	4.2	3.2	1.3	1.1	1.0	0.4	0.4	0.3	6.2
40s	78.6	3.5	3.9	3.4	1.4	1.1	1.1	0.4	0.4	0.2	6.0
50s	78.8	3.2	3.6	3.4	1.5	1.2	1.2	0.5	0.4	0.3	5.9
60s	79.7	2.9	3.1	3.0	1.4	1.3	1.3	0.4	0.4	0.3	6.2
All	78.3	3.6	3.8	3.1	1.3	1.1	1.1	0.5	0.4	0.3	6.6

<sup>1</sup>The analysis includes the 3.8 million recently hired participants (those with two or fewer years of tenure) in 2007.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project



FIGURE 36

**AVERAGE ASSET ALLOCATION OF 401(k) ACCOUNTS BY PARTICIPANT AGE AND INVESTMENT OPTIONS AMONG PARTICIPANTS WITH TWO OR FEWER YEARS OF TENURE<sup>1</sup>**

Percentage of account balances,<sup>2</sup> 1998 and 2007

Age group	Balanced funds																	
	Equity funds		Total				Lifecyle funds <sup>3</sup>		Non-lifecyle funds		Bond funds		Money funds		GICs <sup>4</sup> and other stable value funds		Company stock	
	1998	2007	1998	2007	2007	2007	1998	2007	1998	2007	1998	2007	1998	2007	1998	2007		
<b>ALL</b>																		
20s	66.9	46.5	7.4	28.0	18.6	9.4	5.1	6.0	4.0	3.6	3.7	5.3	10.5	5.8				
30s	67.8	54.5	8.0	24.5	16.9	7.6	5.1	6.7	4.1	3.2	3.2	4.2	9.4	4.7				
40s	64.5	53.3	9.7	23.7	16.1	7.6	5.9	7.1	5.1	3.6	4.4	5.3	8.0	5.0				
50s	60.5	47.7	11.3	25.0	17.2	7.8	6.6	8.3	5.9	4.6	6.7	7.4	6.5	5.0				
60s	50.0	42.7	12.1	22.7	15.0	7.7	8.7	10.1	7.8	5.7	13.3	11.6	5.7	5.5				
All	64.8	50.9	9.1	24.5	16.7	7.8	5.7	7.4	4.9	3.9	4.6	6.0	8.6	5.1				
<b>PLANS WITHOUT COMPANY STOCK, GICs<sup>4</sup> OR OTHER STABLE VALUE FUNDS</b>																		
20s	77.8	50.7	7.8	27.4	21.3	6.1	7.7	9.1	4.9	5.6								
30s	77.9	58.9	8.4	25.4	20.1	5.3	7.2	9.4	4.8	4.8								
40s	74.0	58.0	9.9	25.1	18.9	6.2	8.3	10.1	6.0	5.4								
50s	70.3	52.8	11.3	26.9	19.9	7.0	10.0	12.1	6.5	6.6								
60s	59.4	49.2	11.8	26.0	18.1	7.9	13.5	15.1	12.2	7.4								
All	75.0	55.8	9.3	25.8	19.6	6.2	8.2	10.6	5.7	5.6								
<b>PLANS WITH GICs<sup>4</sup> AND/OR OTHER STABLE VALUE FUNDS</b>																		
20s	73.4	45.1	7.3	35.4	21.1	14.3	3.9	4.0	2.9	2.3	9.1	9.8						
30s	73.5	52.8	8.1	29.7	18.7	11.0	4.1	4.7	2.8	2.2	7.9	8.4						
40s	69.0	52.6	9.4	27.8	18.0	9.8	5.0	5.1	3.4	2.3	9.5	10.4						
50s	63.6	47.8	10.2	29.0	19.8	9.2	5.9	5.8	4.6	2.8	11.9	13.1						
60s	52.7	43.7	11.2	27.2	18.1	9.1	6.8	6.7	7.2	3.6	19.2	17.8						
All	69.7	50.0	7.9	29.2	18.9	10.3	5.0	5.2	3.5	2.5	10.1	11.2						
<b>PLANS WITH COMPANY STOCK</b>																		
20s	51.8	50.9	6.1	19.9	13.8	6.1	5.0	7.8	5.4	4.8			29.5	11.5				
30s	56.0	56.0	6.6	19.8	14.5	5.3	5.3	7.9	5.2	4.3			24.6	10.5				
40s	54.4	51.8	8.2	20.0	14.9	5.1	6.5	8.4	6.4	5.9			22.6	12.2				
50s	53.2	44.0	9.8	21.3	16.2	5.1	6.9	10.6	8.6	9.7			19.4	11.8				
60s	47.2	35.9	11.1	16.9	12.4	4.5	14.3	17.9	6.4	13.5			19.3	12.9				
All	54.2	50.4	7.2	20.0	14.8	5.2	6.3	9.3	6.1	6.5			24.1	11.6				
<b>PLANS WITH COMPANY STOCK AND GICs<sup>4</sup> AND/OR OTHER STABLE VALUE FUNDS</b>																		
20s	56.2	41.2	8.2	26.9	16.6	10.3	2.3	3.7	2.5	1.9	6.7	9.5	22.0	13.2				
30s	56.3	50.2	8.9	21.4	12.8	8.6	2.6	4.8	3.3	1.6	5.9	7.8	20.6	11.1				
40s	53.8	49.1	11.0	19.6	11.3	8.3	2.8	5.0	5.0	1.7	7.8	9.1	17.3	12.5				
50s	49.3	43.2	13.8	19.7	11.1	8.6	3.3	5.4	5.3	1.9	11.8	13.3	14.5	14.0				
60s	38.0	37.0	14.3	15.8	8.6	7.2	2.6	4.9	4.9	2.9	27.8	22.2	10.7	15.4				
All	54.1	46.4	10.1	20.7	12.1	8.6	2.4	4.8	2.4	1.8	10.1	10.7	18.6	12.7				

<sup>1</sup>The analysis is based on samples of 1.2 million participants with two or fewer years of tenure in 1998 and 3.8 million participants with two or fewer years of tenure in 2007.

<sup>2</sup>Minor investment options are not shown; therefore, row percentages will not add to 100 percent. Percentages are dollar-weighted averages.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>4</sup>GICs are guaranteed investment contracts.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Comparing recently hired participants in 2007 with their similar age groups in 1998 also illustrates that asset allocation to company stock and equity funds was lower in 2007 than in 1998, while asset allocation to fixed-income securities tended to increase (Figure 36). Recently hired

401(k) participants were less likely to hold company stock (Figure 37) and less likely to hold a high concentration of their account balance in company stock (Figures 38 and 39).<sup>34</sup>

**FIGURE 37**

**RECENTLY HIRED 401(k) PLAN PARTICIPANTS ARE LESS LIKELY TO HOLD COMPANY STOCK**

*Percentage of recently hired participants offered and holding company stock by age, 1998–2007*

Age group	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
20s	60.8	61.1	60.5	58.1	53.9	49.6	49.8	45.4	40.0	35.4
30s	61.9	62.3	61.6	60.0	57.2	53.3	52.3	47.6	43.6	40.4
40s	59.8	60.6	59.5	58.8	55.9	52.6	52.0	47.3	43.6	40.7
50s	57.6	58.8	57.4	57.9	53.9	51.2	49.5	45.2	42.3	39.6
60s	54.1	55.5	53.6	55.7	51.0	49.5	47.8	43.9	40.4	38.4
All	60.5	61.0	60.0	58.7	55.3	51.6	51.0	46.3	42.0	38.7

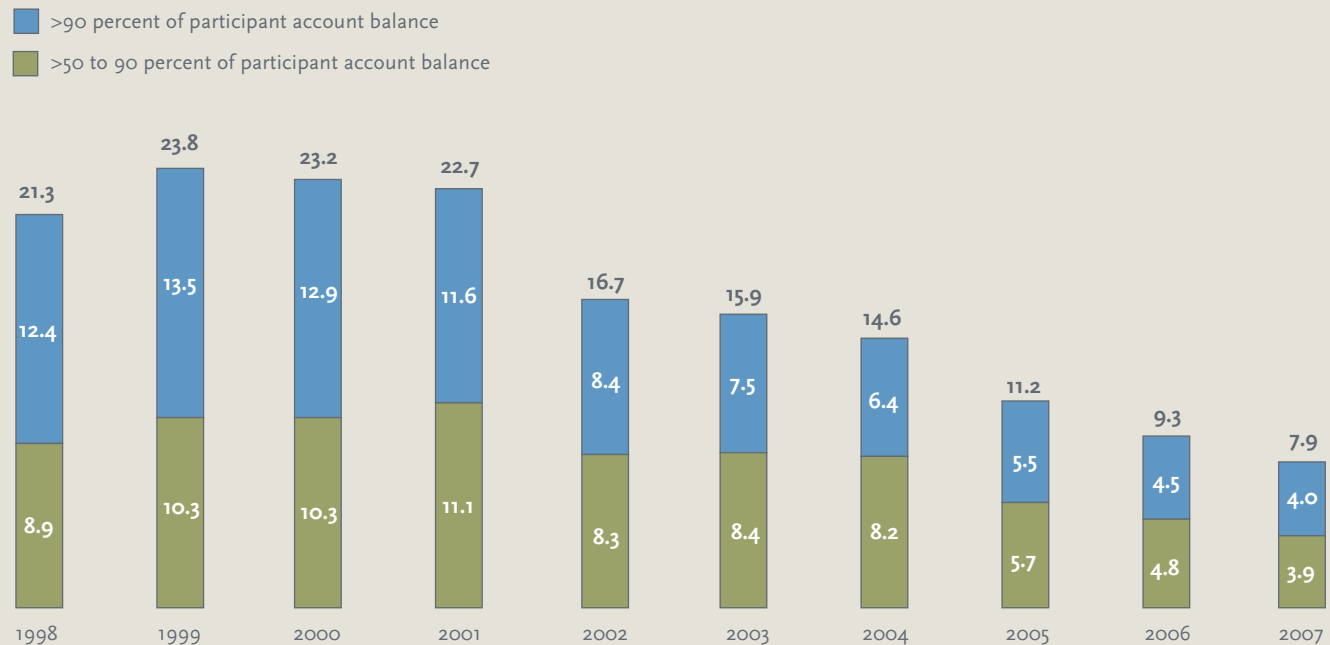
*Note: The analysis includes 401(k) plan participants with two or fewer years of tenure in the year indicated and in a plan offering company stock as an investment option.*

*Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project*

**FIGURE 38**

**FEWER NEW PARTICIPANTS HOLD HIGH CONCENTRATIONS IN COMPANY STOCK**

*Percentage of recently hired participants offered company stock holding the percentage of their account balance indicated in company stock, 1998–2007*



*Note: The analysis includes 401(k) plan participants with two or fewer years of tenure in the year indicated and in a plan offering company stock as an investment option.*

*Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project*

**FIGURE 39**

**ASSET ALLOCATION DISTRIBUTION OF RECENTLY HIRED PARTICIPANT ACCOUNT BALANCE TO COMPANY STOCK IN 401(k) PLANS WITH COMPANY STOCK BY AGE**

Percentage of recently hired participants in plans offering company stock as an investment option,<sup>1, 2</sup> 2007

Age group	Percentage of account balance invested in company stock										
	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	64.6	8.4	6.4	5.2	4.2	3.9	2.1	0.9	0.6	0.4	3.2
30s	59.6	10.2	7.6	5.9	4.3	3.9	2.2	1.1	0.7	0.5	4.0
40s	59.3	9.4	7.2	6.1	4.4	4.0	2.4	1.2	0.8	0.6	4.5
50s	60.4	9.1	6.8	6.0	4.2	4.1	2.2	1.2	0.8	0.5	4.7
60s	61.6	8.1	6.1	5.2	3.6	4.0	2.4	1.3	0.8	0.6	6.3
All	61.3	9.3	7.0	5.7	4.2	3.9	2.2	1.1	0.1	0.5	4.0

<sup>1</sup>The analysis includes the 1.5 million participants with two or fewer years of tenure in 2007 and in plans offering company stock as an investment option.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**YEAR-END 2007 SNAPSHOT OF 401(k) PLAN LOAN ACTIVITY**

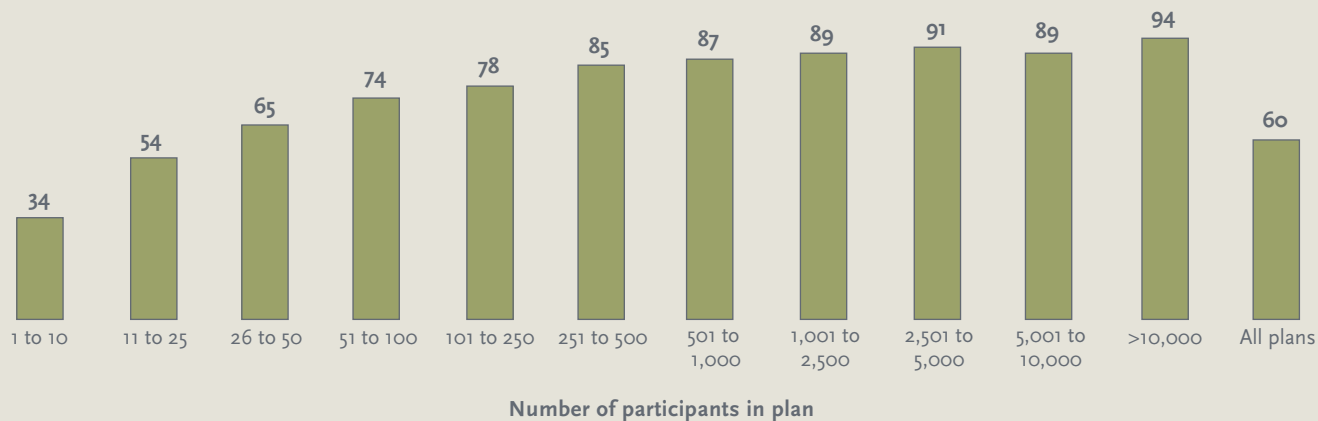
**Availability and Use of 401(k) Plan Loans by Plan Size**

Sixty percent of the 401(k) plans for which loan data were available in the 2007 EBRI/ICI database offered a plan loan provision to participants (Figure 40).<sup>35</sup> The loan feature was more commonly associated with large plans (as measured by the number of participants in the plan). Ninety-four percent of plans with more than 10,000 participants included a loan provision, compared with 34 percent of plans with 10 or fewer participants. There is little variation in participant loan activity by

plan size (Figure 41). Loan ratios vary only slightly when participants are grouped based on the size of their 401(k) plans (as measured by the number of plan participants; Figure 42). In the 12 years that the EBRI/ICI has been tracking loan activity among 401(k) plan participants, there has been little variation. On average, less than one-fifth of 401(k) participants with access to loans had a loan outstanding, and, on average, over the past 12 years, about 14 percent of the remaining account balance was taken out as a loan (Figure 43). U.S. Department of Labor data indicate that loan amounts tend to be a negligible portion of plan assets and that very little of loan amounts gets converted into distributions in any given year.<sup>36</sup>

**FIGURE 40**

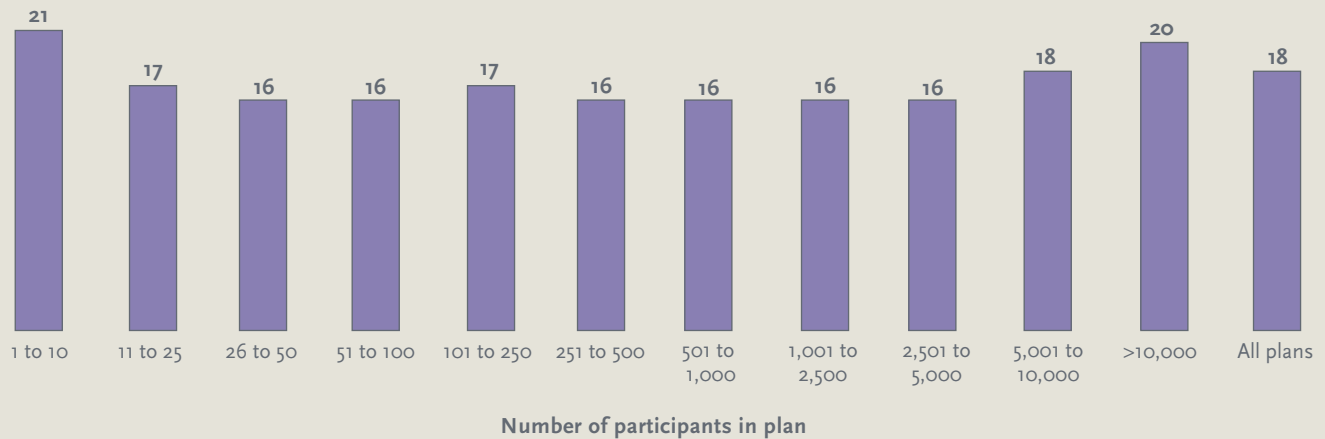
**PERCENTAGE OF 401(k) PLANS OFFERING LOANS BY PLAN SIZE, 2007**



Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE 41

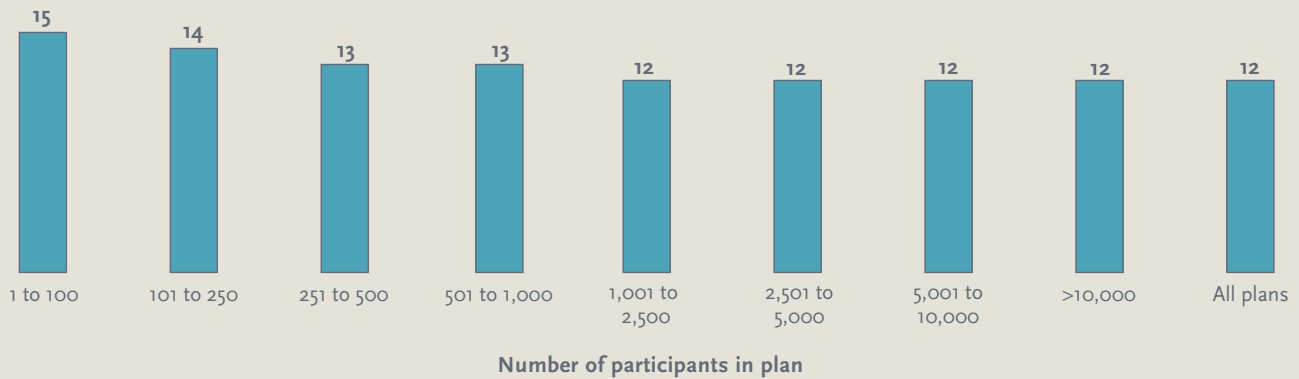
PERCENTAGE OF ELIGIBLE 401(k) PLAN PARTICIPANTS WITH 401(k) PLAN LOANS BY PLAN SIZE, 2007



Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE 42

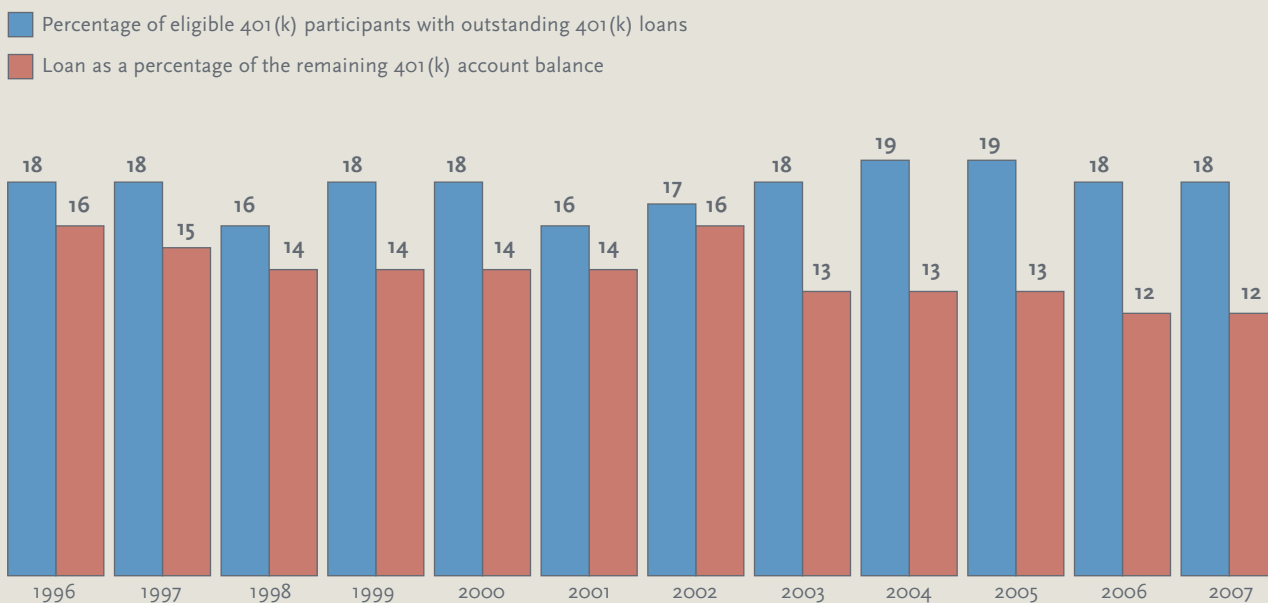
LOAN BALANCES AS A PERCENTAGE OF 401(k) ACCOUNT BALANCES FOR PARTICIPANTS WITH 401(k) PLAN LOANS BY PLAN SIZE, 2007



Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE 43

FEW 401(k) PARTICIPANTS HAVE OUTSTANDING 401(k) PLAN LOANS; LOANS TEND TO BE SMALL, 1996–2007



Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**Characteristics of Participants with Outstanding 401(k) Plan Loans**

In the 2007 EBRI/ICI database, 90 percent of participants were in plans offering loans. However, as has been the case for the 12 years that the EBRI/ICI databases have tracked 401(k) plan participants, relatively few participants made use of this borrowing privilege. At year-end 2007, only 18 percent of those eligible for loans had 401(k) plan loans outstanding (Figure 43). As in previous years, loan

activity varies with age, tenure, account balance, and salary. Of those participants in plans offering loans, the highest percentages of participants with outstanding loan balances were among participants in their thirties, forties, or fifties. In addition, participants with five or fewer years of tenure or with more than 30 years of tenure were less likely to use the loan provision than other participants. Only 11 percent of participants with account balances of less than \$10,000 had loans outstanding (Figure 44).

**FIGURE 44**

**PERCENTAGE OF ELIGIBLE PARTICIPANTS WITH 401(k) LOANS BY PARTICIPANT AGE, TENURE, ACCOUNT SIZE, OR SALARY, 1996, 2000, 2005, 2006, AND 2007**

	1996	2000	2005	2006	2007
<b>ALL</b>	18	18	19	18	18
<b>AGE GROUP</b>					
20s	12	11	11	11	10
30s	20	19	20	20	20
40s	22	21	22	22	22
50s	17	17	19	19	19
60s	9	9	10	11	10
<b>TENURE (YEARS)</b>					
0 to 2	6	5	5	6	7
>2 to 5	15	14	14	15	15
>5 to 10	24	23	22	23	23
>10 to 20	27	26	26	27	26
>20 to 30	25	26	24	24	24
>30	13	16	17	17	17
<b>ACCOUNT SIZE</b>					
<\$10,000	12	11	12	11	11
\$10,000 to \$20,000	26	23	26	26	25
>\$20,000 to \$30,000	26	25	27	27	26
>\$30,000 to \$40,000	25	25	26	27	26
>\$40,000 to \$50,000	24	25	25	26	26
>\$50,000 to \$60,000	24	24	24	25	25
>\$60,000 to \$70,000	23	24	23	24	24
>\$70,000 to \$80,000	26	23	22	23	23
>\$80,000 to \$90,000	23	23	21	23	23
>\$90,000 to \$100,000	22	22	20	21	22
>\$100,000 to \$200,000	22	20	18	19	19
>\$200,000	18	15	13	13	13
<b>SALARY RANGE</b>					
\$40,000 or less	18	17	19	20	20
>\$40,000 to \$60,000	20	23	26	27	28
>\$60,000 to \$80,000	18	23	24	22	24
>\$80,000 to \$100,000	17	21	22	17	21
>\$100,000	14	16	16	12	14

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE 45**

**LOAN BALANCES AS A PERCENTAGE OF 401(k) ACCOUNT BALANCES FOR PARTICIPANTS WITH LOANS BY PARTICIPANT AGE, TENURE, ACCOUNT SIZE, OR SALARY, 1996, 2000, 2005, 2006, AND 2007**

	1996	2000	2005	2006	2007
<b>ALL</b>	16	14	13	12	12
<b>AGE GROUP</b>					
20s	30	30	24	23	25
30s	22	20	19	19	19
40s	16	15	13	13	13
50s	12	11	10	10	10
60s	10	9	8	8	8
<b>TENURE (YEARS)</b>					
0 to 2	27	24	23	21	21
>2 to 5	24	25	21	20	22
>5 to 10	23	21	19	18	18
>10 to 20	15	14	13	13	13
>20 to 30	11	10	9	9	8
>30	7	8	8	7	7
<b>ACCOUNT SIZE</b>					
<\$10,000	39	39	35	35	36
\$10,000 to \$20,000	32	32	29	28	30
>\$20,000 to \$30,000	28	28	25	25	26
>\$30,000 to \$40,000	23	24	22	22	23
>\$40,000 to \$50,000	22	21	20	20	21
>\$50,000 to \$60,000	19	19	18	18	19
>\$60,000 to \$70,000	16	17	16	16	17
>\$70,000 to \$80,000	16	15	15	15	16
>\$80,000 to \$90,000	14	14	14	14	14
>\$90,000 to \$100,000	13	13	13	13	13
>\$100,000 to \$200,000	10	9	9	10	10
>\$200,000	5	5	4	5	5
<b>SALARY RANGE</b>					
\$40,000 or less	17	19	18	17	17
>\$40,000 to \$60,000	17	16	16	14	15
>\$60,000 to \$80,000	15	13	13	12	12
>\$80,000 to \$100,000	14	12	11	10	11
>\$100,000	14	10	9	8	9

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

### Average Loan Balances

Among participants with outstanding 401(k) loans at the end of 2007, the average unpaid balance was \$7,495.<sup>37</sup> Again, similar to other years of analysis, loan balances as a percentage of account balances (net of the unpaid loan balance) for participants with loans was 12 percent at year-end 2007 (Figure 45). In addition, as in previous years, there is variation around this average that corresponds

with age (lower the older the participant), tenure (lower the higher the tenure of the participant), account balance (lower the higher the account balance), and salary (lower the higher the participant's salary). Overall, loans from 401(k) plans tended to be small, with the vast majority of 401(k) participants in all age groups having no loan at all (Figure 46).

**FIGURE 46**

#### **LOANS FROM 401(k) PLANS TEND TO BE SMALL**

*Percentage of eligible participants by age, 2007*

Loan as a percentage of remaining account balance	Age group			
	20s	40s	60s	All
Zero (no loan)	90%	78%	90%	82%
1 to 10 percent	2	7	5	6
>10 to 20 percent	2	5	2	4
>20 to 30 percent	2	3	1	2
>30 to 80 percent	4	6	2	5
>80 percent	1	1	(*)	1

(\*) = less than ½ percent  
 Note: Column percentages may not add to 100 percent because of rounding.  
 Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project



## APPENDIX

This year's update of the EBRI/ICI database introduced a breakdown of the balanced fund category into lifecycle funds and non-lifecycle balanced funds. This Appendix, which presents Figures A1 through A5, updates figures published in the year-end 2006 report adding this new detail.

**FIGURE A1**

### DISTRIBUTION OF 401(k) PLANS, PARTICIPANTS, AND ASSETS BY INVESTMENT OPTIONS IN 2006

Investment options offered by plan	Plans	Participants	Assets
<b>Equity, bond, money, and/or balanced funds</b>	<b>25,716</b>	<b>5,417,288</b>	<b>\$257,314,641,063</b>
Of which: lifecycle funds <sup>1</sup> an option	15,200	4,028,199	187,778,431,327
<b>Equity, bond, money, and/or balanced funds, and GICs<sup>2</sup> and/or other stable value funds</b>	<b>26,632</b>	<b>5,253,422</b>	<b>266,723,774,069</b>
Of which: lifecycle funds <sup>1</sup> an option	14,280	3,017,262	150,158,822,816
<b>Equity, bond, money, and/or balanced funds, and company stock</b>	<b>584</b>	<b>2,587,751</b>	<b>199,572,151,262</b>
Of which: lifecycle funds <sup>1</sup> an option	441	1,808,716	132,196,695,657
<b>Equity, bond, money, and/or balanced funds, and company stock, and GICs<sup>2</sup> and/or other stable value funds</b>	<b>999</b>	<b>6,759,727</b>	<b>504,423,055,752</b>
Of which: lifecycle funds <sup>1</sup> an option	579	3,451,401	236,533,893,309
<b>All</b>	<b>53,931</b>	<b>20,018,188</b>	<b>1,228,033,622,146</b>
Of which: lifecycle funds <sup>1</sup> an option	30,500	12,305,578	706,667,843,108
		<b>Percentage of</b>	
<b>Investment options offered by plan</b>	<b>Percentage of plans</b>	<b>participants</b>	<b>Percentage of assets</b>
<b>Equity, bond, money, and/or balanced funds</b>	<b>47.7%</b>	<b>27.1%</b>	<b>21.0%</b>
Of which: lifecycle funds <sup>1</sup> an option	28.2	20.1	15.3
<b>Equity, bond, money, and/or balanced funds, and GICs<sup>2</sup> and/or other stable value funds</b>	<b>49.4</b>	<b>26.2</b>	<b>21.7</b>
Of which: lifecycle funds <sup>1</sup> an option	26.5	15.1	12.2
<b>Equity, bond, money, and/or balanced funds, and company stock</b>	<b>1.1</b>	<b>12.9</b>	<b>16.3</b>
Of which: lifecycle funds <sup>1</sup> an option	0.8	9.0	10.8
<b>Equity, bond, money, and/or balanced funds, and company stock, and GICs<sup>2</sup> and/or other stable value funds</b>	<b>1.9</b>	<b>33.8</b>	<b>41.1</b>
Of which: lifecycle funds <sup>1</sup> an option	1.1	17.2	19.3
<b>All<sup>3</sup></b>	<b>100</b>	<b>100</b>	<b>100</b>
Of which: lifecycle funds <sup>1</sup> an option	56.6	61.5	57.5

<sup>1</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>2</sup>GICs are guaranteed investment contracts.

<sup>3</sup>Column percentages may not add to 100 percent because of rounding.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE A2**

**ASSET ALLOCATION DISTRIBUTION OF 401(k) PARTICIPANT ACCOUNT BALANCE TO BALANCED FUNDS BY AGE IN 2006**

*Percentage of participants,<sup>1, 2</sup> 2006*

Percentage of account balance invested in balanced funds											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	53.8	5.5	5.5	4.7	2.5	2.3	2.1	1.6	1.4	1.2	19.4
30s	57.5	7.3	6.8	5.8	3.0	2.5	2.0	1.3	1.2	0.9	11.6
40s	59.1	7.3	6.8	6.0	3.3	2.7	2.2	1.2	1.1	0.9	9.4
50s	60.1	6.9	6.4	5.9	3.5	2.9	2.3	1.3	1.1	0.9	8.7
60s	65.3	5.6	5.1	5.0	3.1	2.7	2.2	1.1	1.0	0.8	8.1
All	59.1	6.8	6.3	5.6	3.1	2.6	2.1	1.3	1.1	0.9	10.9
Percentage of account balance invested in lifecycle funds <sup>3</sup>											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	73.2	2.1	2.1	2.0	1.2	1.2	1.2	1.1	1.0	0.9	14.1
30s	78.8	3.1	2.5	2.2	1.2	1.1	1.0	0.7	0.7	0.6	8.2
40s	81.7	3.0	2.2	2.0	1.1	1.0	0.9	0.6	0.6	0.5	6.4
50s	83.2	2.8	2.0	1.8	1.1	1.0	0.8	0.5	0.5	0.5	5.8
60s	86.2	2.2	1.6	1.4	0.9	0.9	0.7	0.4	0.4	0.4	5.0
All	80.8	2.8	2.1	1.9	1.1	1.0	0.9	0.7	0.6	0.6	7.5
Percentage of account balance invested in non-lifecycle balanced funds											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	78.3	4.3	4.1	3.0	1.4	1.1	0.9	0.5	0.4	0.3	5.6
30s	76.9	5.5	5.0	3.8	1.8	1.4	1.0	0.5	0.4	0.3	3.4
40s	76.2	5.4	5.0	4.2	2.1	1.6	1.2	0.6	0.5	0.3	0.0
50s	76.1	5.1	4.8	4.3	2.3	1.8	1.4	0.7	0.5	0.4	2.7
60s	79.1	4.0	3.7	3.6	2.1	1.7	1.4	0.6	0.5	0.4	2.8
All	76.9	5.1	4.7	3.9	1.9	1.5	1.2	0.6	0.5	0.3	3.3

<sup>1</sup>The analysis includes the 20.0 million participants in the year-end 2006 EBRI/ICI database.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE A3**

**ASSET ALLOCATION DISTRIBUTION OF 401(k) PARTICIPANT ACCOUNT BALANCE TO BALANCED FUNDS BY TENURE IN 2006**

*Percentage of participants,<sup>1, 2</sup> 2006*

Percentage of account balance invested in balanced funds											
Tenure (years)	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
0 to 2	52.4	5.1	5.6	5.2	2.6	2.5	2.2	1.5	1.5	1.2	20.4
>2 to 5	55.9	6.1	6.4	5.7	3.0	2.8	2.3	1.4	1.3	1.1	13.9
>5 to 10	59.6	7.5	6.9	6.1	3.3	2.7	2.2	1.2	1.1	0.9	8.4
>10 to 20	60.5	8.3	7.0	6.3	3.7	2.9	2.3	1.2	1.0	0.8	5.9
>20 to 30	65.1	8.0	6.5	5.5	3.3	2.5	2.0	1.1	0.9	0.7	4.4
>30	73.4	5.9	4.8	4.1	2.6	2.0	1.6	0.8	0.7	0.5	3.4
All	59.1	6.8	6.3	5.6	3.1	2.6	2.1	1.3	1.1	0.9	10.9
Percentage of account balance invested in lifecycle funds <sup>3</sup>											
Tenure (years)	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
0 to 2	71.7	2.0	2.2	2.3	1.2	1.3	1.3	1.0	1.1	0.9	15.0
>2 to 5	78.1	2.6	2.3	2.1	1.3	1.2	1.1	0.8	0.8	0.7	9.0
>5 to 10	82.6	3.1	2.3	2.0	1.2	1.0	0.9	0.6	0.6	0.5	5.2
>10 to 20	85.4	3.3	2.1	1.8	1.1	0.9	0.7	0.5	0.5	0.4	3.5
>20 to 30	87.7	3.0	1.8	1.4	0.9	0.8	0.6	0.4	0.4	0.3	2.6
>30	91.3	2.1	1.3	1.0	0.6	0.6	0.4	0.3	0.3	0.2	1.9
All	80.8	2.8	2.1	1.9	1.1	1.0	0.9	0.7	0.6	0.6	7.5
Percentage of account balance invested in non-lifecycle balanced funds											
Tenure (years)	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
0 to 2	77.8	3.9	4.2	3.3	1.3	1.2	0.9	0.5	0.4	0.3	6.0
>2 to 5	75.9	4.7	4.8	3.8	1.8	1.5	1.1	0.6	0.5	0.3	4.6
>5 to 10	75.4	5.5	5.0	4.2	2.1	1.6	1.3	0.6	0.5	0.4	3.1
>10 to 20	74.1	6.1	5.2	4.6	2.5	1.9	1.5	0.7	0.5	0.4	2.1
>20 to 30	76.4	5.9	4.9	4.0	2.3	1.7	1.3	0.7	0.5	0.4	1.6
>30	81.6	4.4	3.6	3.1	1.9	1.4	1.1	0.5	0.4	0.3	1.4
All	76.9	5.1	4.7	3.9	1.9	1.5	1.2	0.6	0.5	0.3	3.3

<sup>1</sup>The analysis includes the 20.0 million participants in the year-end 2006 EBRI/ICI database.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE A4**

**ASSET ALLOCATION DISTRIBUTION OF ACCOUNT BALANCE TO BALANCED FUNDS AMONG RECENTLY HIRED PARTICIPANTS BY AGE IN 2006**

*Percentage of recently hired participants,<sup>1, 2</sup> 2006*

Percentage of account balance invested in balanced funds											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	51.5	5.0	5.3	4.5	2.3	2.2	2.1	1.6	1.6	1.4	22.4
30s	52.1	5.7	6.3	5.6	2.8	2.5	2.1	1.4	1.4	1.1	18.9
40s	53.4	4.9	5.7	5.5	2.6	2.6	2.3	1.3	1.4	1.1	19.0
50s	52.2	4.5	5.2	5.5	2.7	2.8	2.4	1.4	1.5	1.1	20.7
60s	54.5	3.9	4.4	4.6	2.3	2.7	2.3	1.2	1.3	1.0	21.8
All	52.4	5.1	5.6	5.2	2.6	2.5	2.2	1.5	1.5	1.2	20.4
Percentage of account balance invested in lifecycle funds <sup>3</sup>											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	70.6	1.9	2.1	2.1	1.2	1.3	1.3	1.2	1.2	1.1	16.2
30s	71.5	2.4	2.6	2.6	1.4	1.3	1.3	1.0	1.0	0.8	14.1
40s	72.6	2.0	2.3	2.4	1.2	1.4	1.3	0.9	1.0	0.8	14.2
50s	71.9	1.8	2.0	2.2	1.2	1.4	1.2	0.9	1.0	0.8	15.5
60s	73.9	1.5	1.7	1.7	1.0	1.3	1.1	0.8	0.8	0.7	15.6
All	71.7	2.0	2.2	2.3	1.2	1.3	1.3	1.0	1.1	0.9	15.0
Percentage of account balance invested in non-lifecycle balanced funds											
Age group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100
20s	77.5	4.0	4.0	2.9	1.2	1.0	0.9	0.5	0.4	0.3	7.3
30s	77.5	4.4	4.6	3.4	1.4	1.1	0.9	0.4	0.4	0.3	5.5
40s	78.7	3.6	4.2	3.6	1.4	1.2	1.0	0.4	0.4	0.3	5.3
50s	78.6	3.2	3.9	3.7	1.5	1.4	1.1	0.5	0.4	0.3	5.4
60s	80.2	2.6	3.2	3.2	1.4	1.4	1.1	0.4	0.4	0.3	5.8
All	78.1	3.9	4.2	3.3	1.3	1.2	0.9	0.5	0.4	0.3	6.0

<sup>1</sup>The analysis includes the 2.8 million recently hired participants (those with two or fewer years of tenure) in 2006.

<sup>2</sup>Row percentages may not add to 100 percent because of rounding.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

Note: "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

**FIGURE A5**

**AVERAGE ASSET ALLOCATION OF 401(k) ACCOUNTS TO BALANCED, LIFECYCLE, AND NON-LIFECYCLE BALANCED FUNDS BY PARTICIPANT AGE AND INVESTMENT OPTIONS AMONG PARTICIPANTS WITH TWO OR FEWER YEARS OF TENURE<sup>1</sup>**

Percentage of account balances,<sup>2</sup> 2006 and 2007

Age group	Balanced funds					
	Total		Lifecycle funds <sup>3</sup>		Non-lifecycle funds	
	2006	2007	2006	2007	2006	2007
<b>ALL</b>						
20s	23.8	28.0	16.2	18.6	7.6	9.4
30s	20.1	24.5	13.5	16.9	6.6	7.6
40s	20.3	23.7	13.4	16.1	6.9	7.6
50s	21.8	25.0	14.4	17.2	7.4	7.8
60s	20.3	22.7	12.9	15.0	7.4	7.7
All	21.0	24.5	13.9	16.7	7.1	7.8
<b>PLANS WITHOUT COMPANY STOCK, GICs,<sup>4</sup> OR OTHER STABLE VALUE FUNDS</b>						
20s	26.9	27.4	21.0	21.3	5.9	6.1
30s	22.5	25.4	17.1	20.1	5.4	5.3
40s	23.3	25.1	16.9	18.9	6.4	6.2
50s	25.8	26.9	18.3	19.9	7.5	7.0
60s	25.7	26.0	17.2	18.1	8.5	7.9
All	24.0	25.8	17.7	19.6	6.3	6.2
<b>PLANS WITH GICs<sup>4</sup> AND/OR OTHER STABLE VALUE FUNDS</b>						
20s	26.1	35.4	15.4	21.1	10.7	14.3
30s	22.7	29.7	13.7	18.7	9.0	11.0
40s	22.8	27.8	14.2	18.0	8.6	9.8
50s	23.3	29.0	15.5	19.8	7.8	9.2
60s	20.9	27.2	13.7	18.1	7.2	9.1
All	23.2	29.2	14.5	18.9	8.7	10.3
<b>PLANS WITH COMPANY STOCK</b>						
20s	20.1	19.9	13.8	13.8	6.3	6.1
30s	18.2	19.8	12.4	14.5	5.8	5.3
40s	18.9	20.0	13.2	14.9	5.7	5.1
50s	20.8	21.3	14.7	16.2	6.1	5.1
60s	20.6	16.9	14.6	12.4	6.0	4.5
All	19.2	20.0	13.3	14.8	5.9	5.2
<b>PLANS WITH COMPANY STOCK AND GICs<sup>4</sup> AND/OR OTHER STABLE VALUE FUNDS</b>						
20s	21.2	26.9	12.6	16.6	8.6	10.3
30s	16.6	21.4	9.1	12.8	7.5	8.6
40s	16.3	19.6	9.1	11.3	7.2	8.3
50s	17.3	19.7	9.9	11.1	7.4	8.6
60s	15.1	15.8	9.3	8.6	5.8	7.2
All	17.1	20.7	9.7	12.1	7.4	8.6

<sup>1</sup>The analysis is based on samples of 2.8 million participants with two or fewer years of tenure in 2006 and 3.8 million participants with two or fewer years of tenure in 2007.

<sup>2</sup>Percentages are dollar-weighted averages.

<sup>3</sup>A lifecycle fund typically rebalances to an increasingly conservative portfolio as the target date of the fund, which is usually included in the fund's name, approaches.

<sup>4</sup>GICs are guaranteed investment contracts.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

## NOTES

- <sup>1</sup> For data on 401(k) plan assets, participants, and plans through 2005, see U.S. Department of Labor, Employee Benefits Security Administration 2008. For total retirement assets, including those in 401(k) plans, through the first quarter of 2008b, see Investment Company Institute 2008. For a discussion of trends between defined benefit and defined contribution (DC) plans, see Poterba, Venti, and Wise 2007 and Holden, Brady, and Hadley 2006.
- <sup>2</sup> The estimate of the number of active 401(k) plan participants is based on a combination of data from U.S. Bureau of Labor Statistics 2007 and U.S. Department of Labor 2008b.
- <sup>3</sup> See Investment Company Institute 2008.
- <sup>4</sup> The Employee Benefit Research Institute (EBRI) is a nonprofit, nonpartisan, public policy research organization, which does not lobby or take positions on legislative proposals.
- <sup>5</sup> The Investment Company Institute (ICI) is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of \$10.10 trillion and serve almost 90 million shareholders.
- <sup>6</sup> This update extends previous findings from the project for 1996 through 2006. For year-end 2006 results, see Holden, VanDerhei, Alonso, and Copeland 2007. Results for earlier years are available in earlier issues of *Investment Company Institute Perspective* ([www.ici.org/perspective/index.html](http://www.ici.org/perspective/index.html)) and *EBRI Issue Brief* ([www.ebri.org/publications/ib](http://www.ebri.org/publications/ib)).
- <sup>7</sup> Account balances are net of unpaid loan balances. Thus, unpaid loan balances are not included in any of the eight asset categories described.
- <sup>8</sup> This system of classification does not consider the number of distinct investment options presented to a given participant, but rather the types of options presented. Preliminary research analyzing 1.4 million participants drawn from the 2000 EBRI/ICI database suggests that the sheer number of investment options presented does not influence participants. On average, participants have 10.4 distinct options but, on average, choose only 2.5 (Holden and VanDerhei 2001b). In addition, the preliminary analysis found that 401(k) participants are not naive—that is, when given “n” options, they do not divide their assets among all “n.” Indeed, less than 1 percent of participants followed a “1/n” asset allocation strategy. Profit Sharing/401k Council of America 2008 indicates that in 2007, the average number of investment fund options available for participant contributions was 18; Hewitt Associates 2007 indicates an average number of investment options of 17 in 2007 (although, if premixed portfolios are excluded, the average number of investment options offered is 12). Deloitte Consulting, LLP, International Foundation, and the International Society of Certified Employee Benefit Specialists 2008 report that the average number of funds offered by the 436 401(k) plan sponsors in their survey was 17 in 2007.
- <sup>9</sup> Lifestyle funds maintain a predetermined risk level and generally use words such as “conservative,” “moderate,” or “aggressive” in their name to indicate the fund’s risk level. Lifestyle funds generally are included in the non-lifecycle balanced fund category.
- <sup>10</sup> GICs are insurance company products that guarantee a specific rate of return on the invested capital over the life of the contract.
- <sup>11</sup> Other stable value funds include synthetic GICs, which consist of a portfolio of fixed-income securities “wrapped” with a guarantee (typically by an insurance company or a bank) to provide benefit payments according to the plan at book value.
- <sup>12</sup> Some recordkeepers supplying data were unable to provide complete asset allocation detail on certain pooled asset classes for one or more of their clients. The final EBRI/ICI database includes only plans for which at least 90 percent of all plan assets could be identified.
- <sup>13</sup> For 401(k) asset figures, see Investment Company Institute 2008.
- <sup>14</sup> Estimates of the number of 401(k) plans and active participants are based on a combination of data from U.S. Bureau of Labor Statistics 2007 and U.S. Department of Labor 2008b.
- <sup>15</sup> Automatic enrollment tends to reduce the average tenure of participants in the 401(k) plan. Profit Sharing/401k Council of America 2008 reports that there is an upward trend in the number of plans that have automatic enrollment. Of their more than 1,000 member plans, 35.6 percent had automatic enrollment in 2007, compared with about 17 percent of plans in 2005, and 10.5 percent of plans in 2004. Nearly three-quarters of plans with automatic enrollment in 2007 applied automatic enrollment only to new hires, while 27 percent applied automatic enrollment to all non-participants.
- <sup>16</sup> For the analysis of the consistent sample of 401(k) participants with account balances in each and every year from 1999 through 2006, see Holden, VanDerhei, Alonso, and Copeland 2007.
- <sup>17</sup> Approximately 1.7 percent of the participants in the database were missing a birth date; were younger than 20 years old; or were older than 69 years old. They were not included in this analysis.
- <sup>18</sup> Approximately 7.1 percent of the participants in the database were missing a date of hire and were not included in this analysis.
- <sup>19</sup> The positive correlation between tenure and account balance is expected because long-term employees have had more time to accumulate an account balance. However, a rollover from a previous employer’s plan could interfere with this positive correlation because a rollover could give a short-tenured employee a high account balance. There is some discernible evidence of rollover assets among the participants with account balances greater than \$100,000 as 2 percent of them have two or fewer years of tenure and 4 percent of them have between two and five years of tenure (Figure 9).
- <sup>20</sup> Because 401(k) plans were introduced relatively recently (about 27 years ago), even older and longer-tenured employees could have participated in a 401(k) plan for, at most, about half of their careers. The Revenue Act of 1978 contained a provision that became Internal Revenue Code Sec. 401(k). The law went into effect on January 1, 1980, but it was not until November 1981 that proposed regulations were issued (see Holden, Brady, and Hadley 2006; Employee Benefit Research Institute 2005; and U.S. Internal Revenue Service 1981).
- <sup>21</sup> There are two possible explanations for the low account balances among this group: (1) their employer’s 401(k) plan has only recently been established (79 percent of all 401(k)-type plans in existence in 2005 were established after 1989 [tabulations of U.S. Department of Labor Form 5500 data for 2005]) or (2) the employee only recently joined the plan (whether on their own or through automatic enrollment). In either event, job tenure would not accurately reflect actual 401(k) plan participation.
- <sup>22</sup> It is possible that these older longer-tenured workers accumulated DC plan assets (e.g., possibly in a profit-sharing plan) prior to the introduction of 401(k) plan features. However, generally such DC plan arrangements did not permit employee contributions and often were designed to be supplemental to other employer plans. These participants’ account balances that pre-date the 401(k) plan are not included in this analysis, which focuses on 401(k) balance amounts.
- <sup>23</sup> The ratio of 401(k) account balance (at the current employer) to salary alone is not an indicator of preparedness for retirement. A complete analysis of preparedness for retirement would require estimating projected balances at retirement by also considering retirement income from Social Security, defined benefit plans, IRAs, and other DC plans, possibly from previous employment. For references to such research, see Holden and VanDerhei 2005. For an analysis of the possible impact of automatic increases in participants contribution rates in automatic enrollment plans, see VanDerhei and Copeland 2008. For a discussion of the variety of factors (e.g., taxes, savings, mortgages, children) that impact replacement rates, see Brady 2008. For an analysis of the impact of changes in Social Security between 1992 and 2004 on retirement patterns, see Gustman and Steinmeier 2008.
- <sup>24</sup> The tendency of the account balance-to-salary ratio to peak at higher salary levels and then fall off likely reflects the influence of two competing forces. First, empirical research suggests that higher earners tend to contribute higher percentages of salary; therefore, one would expect the ratio of account balance to salary to rise with salary. However, tax code contribution limits and nondiscrimination rules, which aim to ensure

that employees of all income ranges attain the benefits of the 401(k) plan, constrain these high-income individuals' ability to save in the plan. See Holden and VanDerhei 2001a for a complete discussion of EBRI/ICI findings and others' research on the relationship between contribution rates and salary. For an analysis of 401(k) participants' contribution activity during the bear market of 2000 to 2002, see Holden and VanDerhei 2004.

- 25 At year-end 2007, 61 percent of balanced mutual fund assets were invested in equities (see Investment Company Institute, *Quarterly Supplementary Data*).
- 26 Participants in their twenties hold approximately 2 percent of the total assets in the 2007 EBRI/ICI database; participants in their thirties hold 12 percent; participants in their forties hold 31 percent; participants in their fifties hold 40 percent; and participants in their sixties hold the remaining 15 percent of the total assets.
- 27 See Appendix Figure A1 for distribution in 2006 of 401(k) plans, participants, and assets by investment options including lifecycle funds.
- 28 Lifecycle funds have been increasingly used as the default investment in automatic enrollment plans and in plans' investment lineups (see Profit Sharing/401k Council of America 2008). At year-end 2007, 67 percent of lifecycle mutual fund assets were held in DC plans (see Investment Company Institute 2008).
- 29 See Holden, VanDerhei, Alonso, and Copeland 2007.
- 30 See Appendix Figure A2 for balanced, lifecycle, and non-lifecycle balanced fund use in 2006 by age of 401(k) participant.
- 31 See Appendix Figure A3 for balanced, lifecycle, and non-lifecycle balanced fund use in 2006 by tenure of 401(k) participant.
- 32 See Appendix Figure A4 for balanced, lifecycle, and non-lifecycle balanced fund use in 2006 among recently hired participants by age of 401(k) participant.
- 33 See Appendix Figure A5 for the asset allocation of account balances (including balanced, lifecycle, and non-lifecycle balanced fund asset share) in 2006 among recently hired participants by age of 401(k) participant.
- 34 There has been a downward trend in 401(k) plan participants' holdings of and concentration in company stock in the database. In the wake of the collapse of Enron in 2001, participants' awareness of the need to diversify may have increased and some plans sponsors changed plan design (see VanDerhei 2002). In addition, some of this movement may be the result of regulations put in place by the Pension Protection Act of 2006 (PPA), which resulted in regulations that limit the length of time participants could be required to hold company stock contributed to their accounts by their employer; specified rules regarding the notification of blackout periods; and required quarterly statements that must include notice highlighting the importance of diversification (see U.S. Joint Committee on Taxation 2006).
- 35 Plan-specific information on loan provisions is available for the majority of the plans in the sample (including virtually all of the small plans). Some plans without this information are classified as having a loan provision if any participant in the plan has an outstanding loan balance. This may understate the number of plans offering loans (or participants eligible for loans) because some plans may have offered, but no participant had taken out, a plan loan. It is likely that this omission is small as U.S. Government Accountability Office 1997 finds that more than 95 percent of 401(k) plans that offer loans had at least one plan participant with an outstanding loan.
- 36 In plan-year 2005 (the latest data available), only 1.7 percent of the \$2.4 trillion in 401(k) plan assets were participant loans. In addition, only \$445 million flowed out of 401(k) plans as the result of converting a loan into a withdrawal/distribution ("deemed distribution of participant loans"). See U.S. Department of Labor, Employee Benefits Security Administration 2008a.
- 37 The median loan balance outstanding was \$4,167 at year-end 2007.

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