

WHAT'S INSIDE

- 2 Introduction
- 3 EBRI/ICI 401(k) Database
- 8 Year-End 2010 Snapshot of 401(k) Participants' Account Balances
- 20 Year-End 2010 Snapshot of 401(k) Asset Allocation
- 48 Year-End 2010 Snapshot of 401(k) Plan Loan Activity
- 55 References
- 60 Notes

Sarah Holden, ICI Senior Director of Retirement and Investor Research; Jack VanDerhei, EBRI Director of Research; Luis Alonso, EBRI Director of Information Technology and Research Databases; and Steven Bass, ICI Assistant Economist, prepared this report.

Suggested citation: Holden, Sarah, Jack VanDerhei, Luis Alonso, and Steven Bass. 2011. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2010." *ICI Research Perspective* 17, no. 10 (December).

401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2010

KEY FINDINGS

- » **The bulk of 401(k) assets continued to be invested in stocks.** On average, at year-end 2010, 62 percent of 401(k) participants' assets was invested in equity securities through equity funds, the equity portion of balanced funds, and company stock. Thirty-three percent was in fixed-income securities such as stable value investments and bond and money funds.
- » **Seventy percent of 401(k) plans included target date funds in their investment lineup at year-end 2010.** At year-end 2010, 11 percent of the assets in the EBRI/ICI 401(k) database was invested in target date funds and 36 percent of 401(k) participants held target date funds. Also known as lifecycle funds, they are designed to offer a diversified portfolio that automatically rebalances to be more focused on income over time.
- » **More new or recent hires invested their 401(k) assets in balanced funds, including target date funds.** For example, at year-end 2010, 44 percent of the account balances of recently hired participants in their twenties was invested in balanced funds, compared with 42 percent in 2009, and about 7 percent in 1998. A significant subset of that balanced fund category is target date funds. At year-end 2010, 35 percent of the account balances of recently hired participants in their twenties was invested in target date funds, compared with 31 percent at year-end 2009.
- » **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 more than a percentage point (to 8 percent) in 2010, continuing a steady decline that started in 1999. Recently hired 401(k) participants contributed to this trend: they tended to be less likely to hold employer stock.

- » **Participants' 401(k) loan balances declined slightly in 2010.** In 2010, 21 percent of all 401(k) participants who were eligible for loans had loans outstanding against their 401(k) accounts, unchanged from year-end 2009, and up from 18 percent at year-end 2008. Loans outstanding amounted to 14 percent of the remaining account balance, on average, at year-end 2010, compared with 15 percent at year-end 2009. Loan amounts outstanding declined slightly from those in the past few years.
- » **The year-end 2010 average account balance in the database was 3.4 percent higher than the year before, but may not accurately reflect the experience of typical 401(k) participants in 2010.** To understand changes in 401(k) participants' average account balances, it is important to analyze a sample of consistent participants. As with previous EBRI/ICI updates, analysis of a sample of consistent 401(k) participants (those that have been in the same plan since 2003) is expected to be published in 2012.

Introduction

Over the past three decades, 401(k) plans have grown to be the most widespread private-sector employer-sponsored retirement plan in the United States.¹ In 2010, an estimated 51 million American workers were active 401(k) plan participants.² By year-end 2010, 401(k) plan assets had grown to represent 17 percent of all retirement assets, amounting to \$3.0 trillion.³ In an ongoing collaborative effort, the Employee Benefit Research Institute (EBRI)⁴ and the Investment Company Institute (ICI)⁵ collect annual data on millions of 401(k) plan participants as a means to accurately portray how these participants manage their 401(k) accounts.

This report is an update of EBRI and ICI's ongoing research into 401(k) plan participants' activity through year-end 2010.⁶ 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 2010; the third looks at participants' asset allocations, including analysis of 401(k) participants' use of target date, or lifecycle, funds; and the fourth focuses on participants' 401(k) loan activity.

As with previous EBRI/ICI updates, analysis of a sample of consistent 401(k) participants (for example, those that have been in the same plan since 2003) is planned. This additional analysis is expected to be published in 2012.

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, 2010, the EBRI/ICI database included statistical information about:

- » 23.4 million 401(k) plan participants, in
- » 64,455 employer-sponsored 401(k) plans, holding
- » \$1.414 trillion in assets.

The 2010 EBRI/ICI database covered 46 percent of the universe of 401(k) plan participants, more than 10 percent of plans, and 47 percent of 401(k) plan assets. The EBRI/ICI project is unique because it includes 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 recordkeeping organizations provided records on active participants in 401(k) plans at year-end 2010. These plan recordkeepers include mutual fund companies, insurance companies, and consulting firms. Although the EBRI/ICI project has collected data from 1996 through 2010, the universe of data providers varies from year to year. In addition, the sample of plans at any given provider can change. Thus, aggregate figures in this report generally should not be used to estimate time trends. Records were encrypted prior to inclusion in the database to conceal the identity of employers and employees, but were coded so that both could be tracked by researchers over multiple years.⁷ Data provided for each participant included 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.⁸ 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.

Within the year-end 2010 EBRI/ICI database it is possible to link individuals across plans across a majority of the recordkeepers. This improves the identification of active participants and resulted in the reclassification of nearly

1.2 million participant accounts that were multiple accounts owned by single individuals. This procedure allows EBRI and ICI to begin to consolidate account balances for individuals across data providers to provide a more accurate estimate of average account balances per individual.⁹

Investment Options

Investment options are grouped into eight broad categories.¹⁰ *Equity funds* consist of pooled investments primarily invested in stocks, including 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: target date funds and non-target date balanced funds. A target date fund pursues a long-term investment strategy, using a mix of asset classes, or asset allocation, that the fund provider adjusts to become less focused on growth and more focused on income over time.¹¹ Non-target date balanced funds include asset allocation or hybrid funds, in addition to lifestyle funds.¹² *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)*¹³ and *other stable value funds*,¹⁴ 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 assets that could not be identified.¹⁵

About Changes in Account Balances

When analyzing the change in participant 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 an indication that balances are declining, 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 retired and rolled 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 2003 through 2010.

Distribution of Plans, Participants, and Assets by Plan Size

The 2010 EBRI/ICI 401(k) database contains information on 64,455 401(k) plans with \$1.414 trillion in assets and 23.4 million participants (Figure 1). Most of the plans in the database are small: 45 percent of the plans have 25 or fewer participants, and 30 percent have 26 to 100 participants (Figure 2). In contrast, only 2 percent of the plans have more than 2,500 participants. However, participants and assets are concentrated in large plans. For example, 67 percent of participants are in plans with more than 2,500 participants, and these same plans account for 70 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 17 percent of the plans have assets of \$250,000 or less, and another 30 percent have plan assets between \$250,001 and \$1,250,000 (Figure 3).

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

The 2010 EBRI/ICI 401(k) database is a representative sample of the estimated universe of 401(k) plans. At year-end 2010, all 401(k) plans held a total of \$3.0 trillion in assets, and the database represents about 47 percent of that total.¹⁶ The database also covers 46 percent of the universe of active 401(k) plan participants and more than 10 percent of all 401(k) plans.¹⁷ The distribution of assets, participants, and plans in the database for 2010 is similar to the universe of plans as reported by the Department of Labor (Figure 4).¹⁸

FIGURE 1

401(k) Plan Characteristics by Number of Plan Participants, 2010

Number of plan participants	Total plans	Total participants	Total assets*	Average account balance
1 to 10	14,738	81,271	\$5,293,614,819	\$65,135
11 to 25	14,400	246,571	15,292,228,356	62,020
26 to 50	10,708	388,807	23,153,272,398	59,550
51 to 100	8,504	601,793	34,300,674,711	56,997
101 to 250	7,389	1,170,655	63,010,562,582	53,825
251 to 500	3,514	1,243,600	63,343,209,885	50,935
501 to 1,000	2,120	1,494,659	81,507,444,900	54,532
1,001 to 2,500	1,656	2,620,385	142,917,466,974	54,541
2,501 to 5,000	707	2,474,605	141,671,469,879	57,250
5,001 to 10,000	371	2,610,260	170,372,981,833	65,271
>10,000	348	10,508,579	673,316,270,459	64,073
All	64,455	23,441,185	1,414,179,196,794	60,329

*Assets do not add to the total because of rounding.

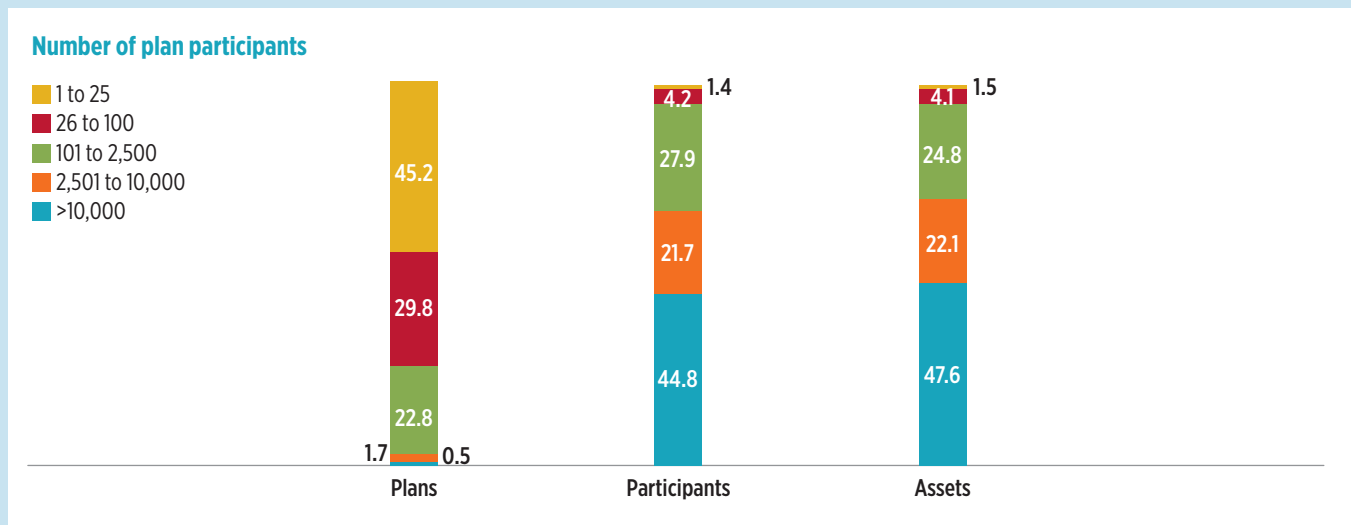
Note: The median account balance at year-end 2010 was \$17,686.

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

FIGURE 2

Distribution of 401(k) Plans, Participants, and Assets

Percentage of plans, participants, and assets by number of plan participants, 2010



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

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

FIGURE 3

401(k) Plan Characteristics by Plan Assets, 2010

Total plan assets	Total plans	Total participants	Total assets	Average account balance
\$0 to \$250,000	10,711	88,588	\$1,118,849,491	\$12,630
>\$250,000 to \$625,000	9,472	158,833	4,018,246,974	25,299
>\$625,000 to \$1,250,000	9,792	268,169	8,920,545,024	33,265
>\$1,250,000 to \$2,500,000	9,903	482,292	17,806,695,542	36,921
>\$2,500,000 to \$6,250,000	10,616	1,007,958	42,239,227,123	41,906
>\$6,250,000 to \$12,500,000	5,393	1,066,111	47,345,993,298	44,410
>\$12,500,000 to \$25,000,000	3,459	1,336,004	60,949,175,102	45,621
>\$25,000,000 to \$62,500,000	2,528	2,100,167	98,641,290,405	46,968
>\$62,500,000 to \$125,000,000	1,084	1,938,697	95,071,751,337	49,039
>\$125,000,000 to \$250,000,000	647	2,009,640	112,544,204,836	56,002
>\$250,000,000	850	12,984,726	925,523,217,662	71,278
All	64,455	23,441,185	1,414,179,196,794	60,329

Note: The median account balance at year-end 2010 was \$17,686.

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

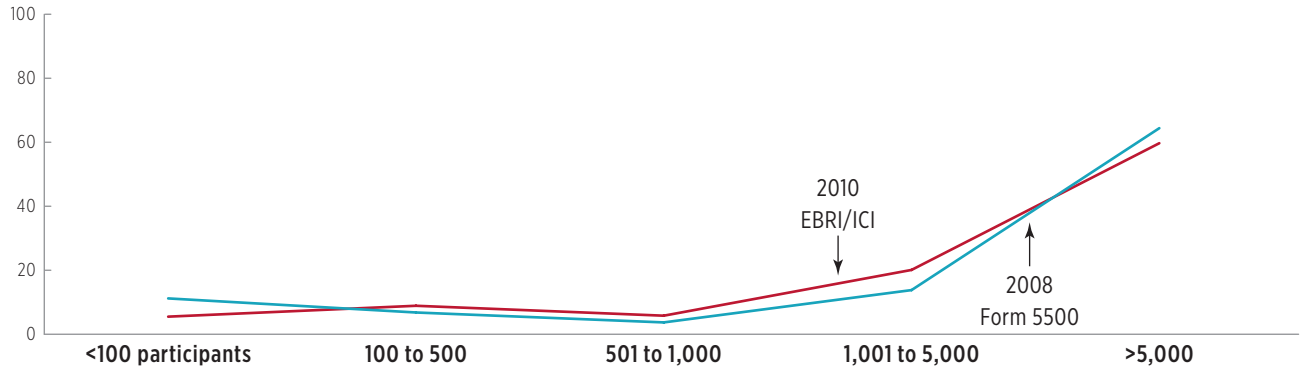
FIGURE 4

EBRI/ICI 401(k) Database Represents Wide Cross Section of 401(k) Universe

401(k) plan characteristics by number of participants: EBRI/ICI 401(k) database in 2010 vs. 2008 DOL Form 5500 for all 401(k) plans

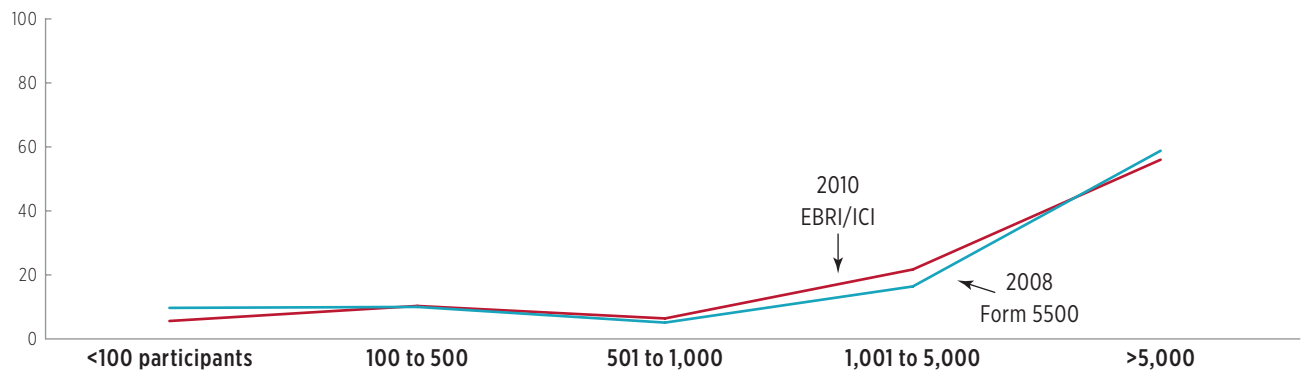
Plan assets

Percentage of plan assets



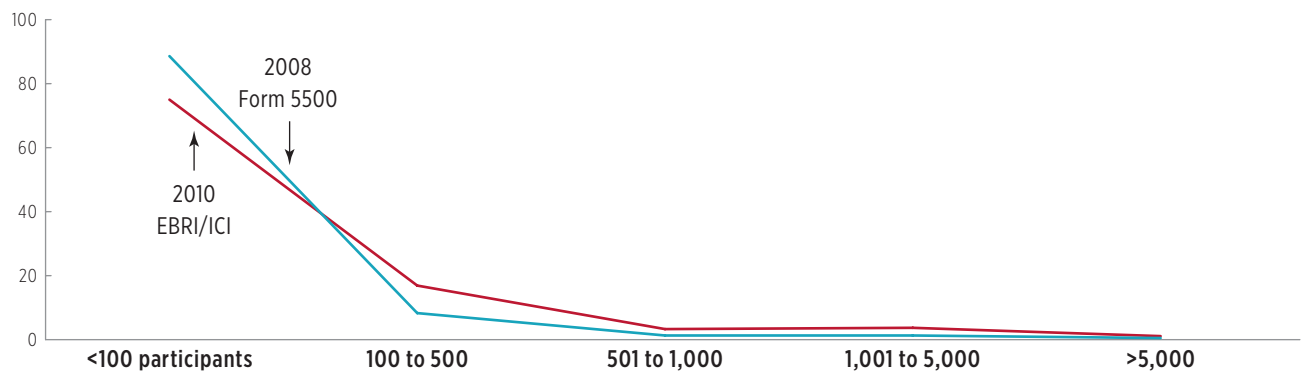
Participants

Percentage of participants



Plans

Percentage of plans



Sources: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project and U.S. Department of Labor

The Typical 401(k) Plan Participant

The database includes 401(k) participants across a wide range of age and tenure groups. At year-end 2010, 52 percent of participants were in their thirties or forties, while 12 percent of participants were in their twenties and 10 percent were in their sixties (Figure 5, upper panel). The median age of the participants in the 2010 database is 45

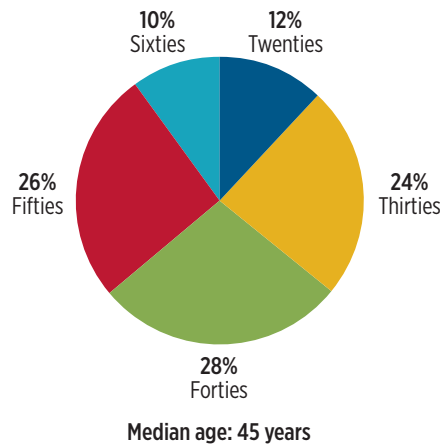
years, the same as in 2009. Because older participants tend to have larger account balances, assets in the database are more concentrated among the older 401(k) participant groups. At year-end 2010, 57 percent of 401(k) plan assets were held by participants in their fifties or sixties, while 14 percent were held by participants in their twenties or thirties (Figure 5, lower panel).

FIGURE 5

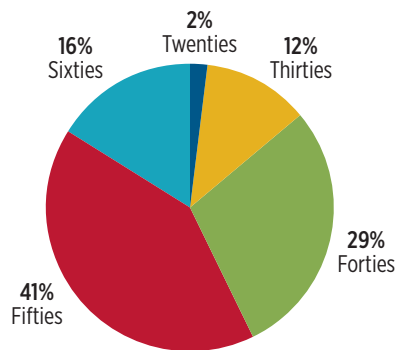
401(k) Participants Represent a Range of Ages

Percentage of active 401(k) plan participants and 401(k) plan assets by age, 2010

Active 401(k) plan participants



401(k) plan assets



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

Participants in 401(k) plans represent a wide range of job tenure experiences. In 2010, 39 percent of the participants had five or fewer years of tenure and 5 percent had more than 30 years of tenure (Figure 6). The median tenure at the current employer was eight years in 2010.

Year-End 2010 Snapshot of 401(k) Participants' Account Balances

Factors That Affect 401(k) Participants' Account Balances

In any given year, the change in a participant's account balance is the sum of three factors:

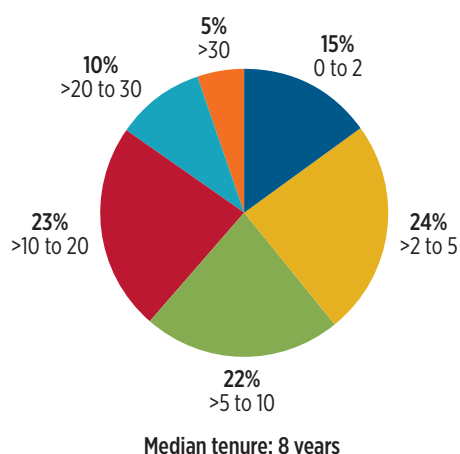
- » new contributions by the participant or employer or both;
- » total investment return on account balances, which depends on the performance of financial markets and on the allocation of assets in an individual's account; and
- » withdrawals, borrowing, and loan repayments.

The change in any individual participant's account balance is influenced by the magnitude of these three factors relative to the starting account balance. For example, a contribution of a given dollar amount produces a larger growth rate when added to a smaller account. On the other hand, investment returns of a given percentage produce larger dollar increases (or decreases) when compounded on a larger asset base. Asset allocation also influences investment returns and changes in assets. For example, stocks (as measured by the S&P 500 total return index) increased 15.1 percent during 2010, while bonds (as measured by the Barclays Capital U.S. Aggregate Bond Index) increased 6.5 percent (Figures 7 and 8).

FIGURE 6

401(k) Participants Represent a Range of Job Tenures

Percentage of active 401(k) plan participants by years of tenure, 2010



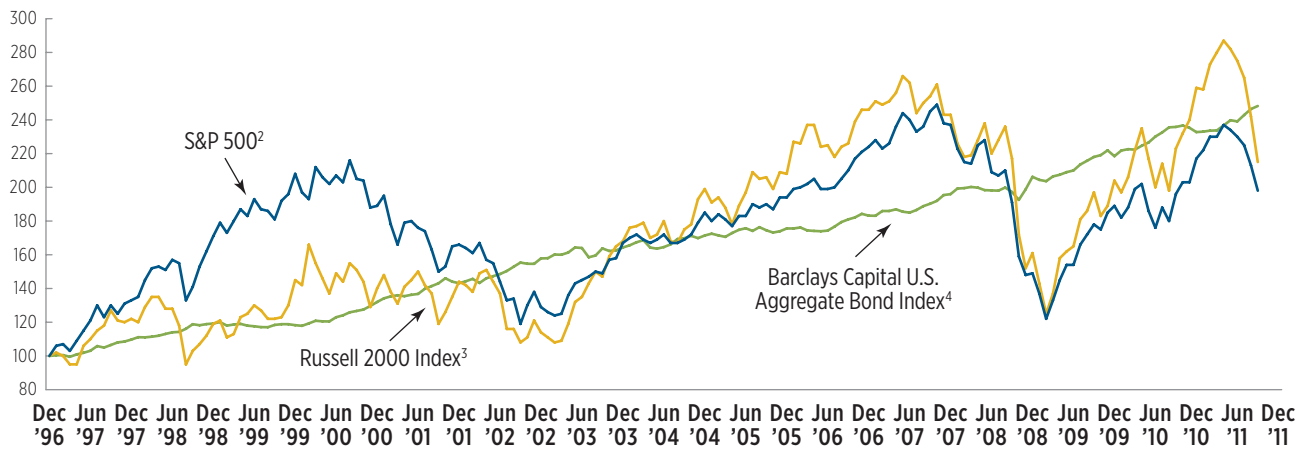
Note: Components do not add to 100 percent because of rounding. The tenure variable is generally years working at current employer, and thus may overstate years of participation in the 401(k) plan.

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

FIGURE 7

Domestic Stock and Bond Market Indexes

Month-end level,¹ December 1996 to September 2011



¹ All indexes are set to 100 in December 1996.

² The S&P 500 is an index of 500 stocks chosen for market size, liquidity, and industry group representation.

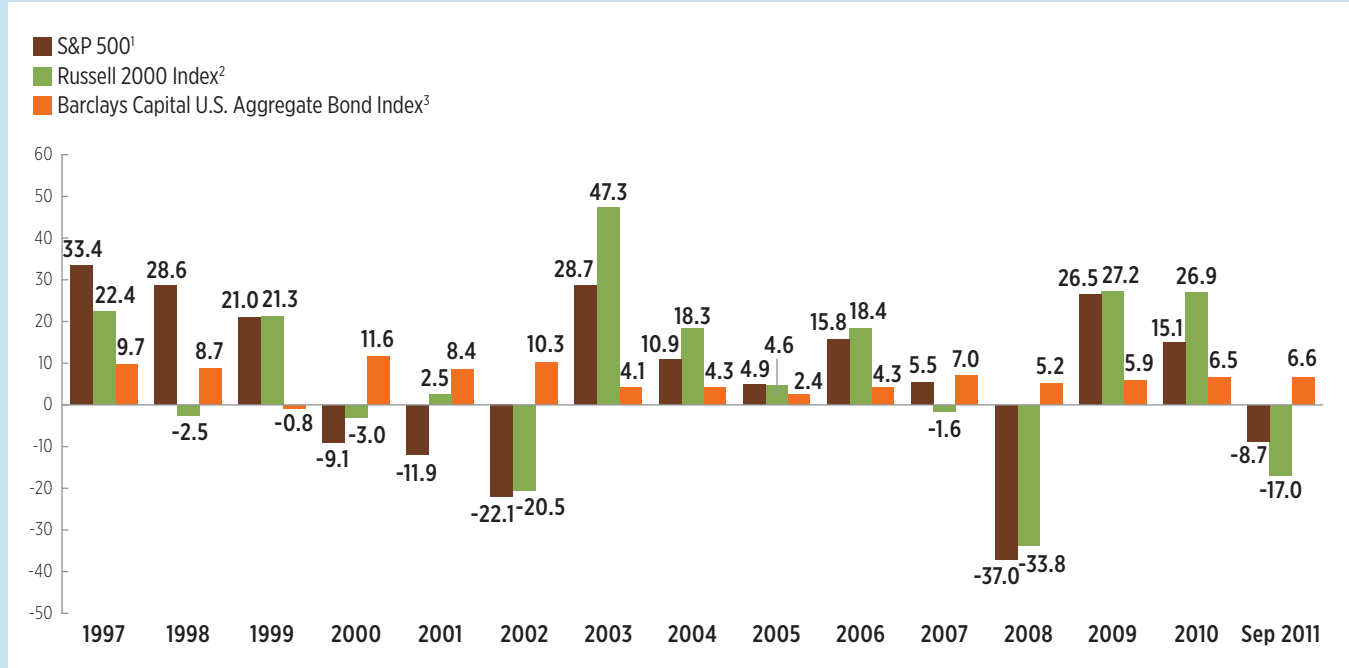
³ The Russell 2000 Index measures the performance of the 2,000 smallest U.S. companies (based on total market capitalization) included in the Russell 3000 Index (which tracks the 3,000 largest U.S. companies).

⁴ Formerly the Lehman Brothers U.S. Aggregate Bond Index, the Barclays Capital U.S. Aggregate Bond Index is composed of securities covering government and corporate bonds, mortgage-backed securities, and asset-backed securities (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, Barclays Global Investors, Frank Russell Company, and Standard & Poor's

FIGURE 8

Percent Change in Total Return Indexes



¹ The S&P 500 is an index of 500 stocks chosen for market size, liquidity, and industry group representation.

² 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).

³ Formerly the Lehman Brothers U.S. Aggregate Bond Index, the Barclays Capital U.S. Aggregate Bond Index is composed of securities covering government and corporate bonds, mortgage-backed securities, and asset-backed securities (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, Barclays Global Investors, Frank Russell Company, and Standard & Poor's

Definition of 401(k) Account Balance

As a cross section, or snapshot, of the entire population of 401(k) plan participants, the database includes 401(k) participants who are young and those who are new to their jobs, as well as older participants and those who have been with their current employers for many years. These annual updates of the database provide snapshots of 401(k) account balances, asset allocation, and loan activity across wide cross sections of participants. However, the cross-sectional analysis is not well suited to addressing the question of the impact of participation in 401(k) plans over time. Cross sections change in composition over time

because the selection of data providers and sample of plans using a given provider vary from year to year and because 401(k) participants join or leave plans.¹⁹ In addition, the database contains only the account balances held in the 401(k) plans at participants' current employers. Retirement savings held in plans at previous employers or rolled over into individual retirement accounts (IRAs) are not included in the analysis.^{20, 21} Furthermore, account balances are net of unpaid loan balances. Because of all these factors, 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.

Size of 401(k) Account Balances

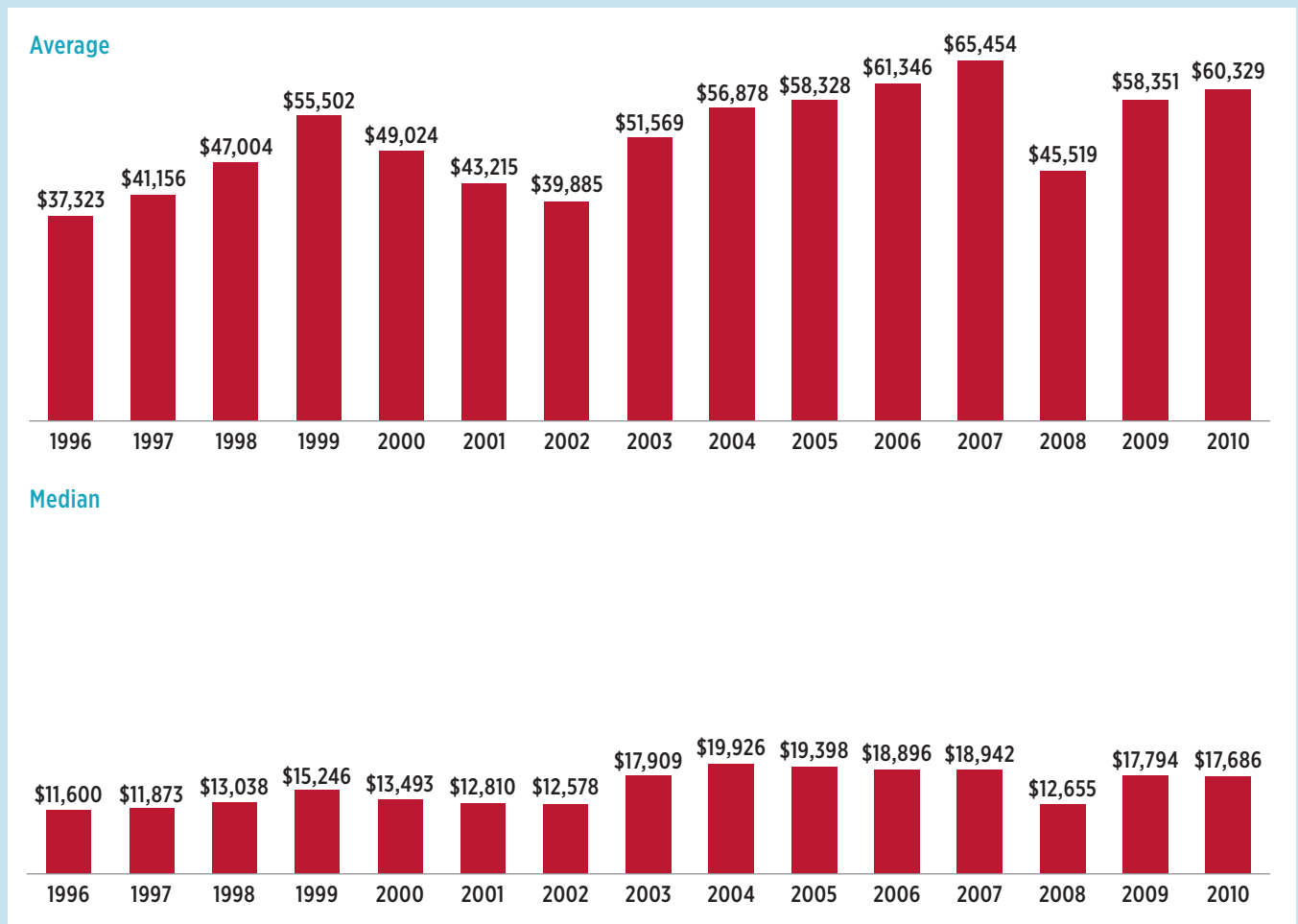
At year-end 2010, the average account balance was \$60,329 and the median account balance was \$17,686 (Figure 9). There is wide variation in 401(k) plan participants' account balances at year-end 2010. About three-quarters of the

participants in the 2010 EBRI/ICI 401(k) database had account balances that were lower than \$60,329, the size of the average account balance. In fact, 39.2 percent of participants had account balances of less than \$10,000, while 17.1 percent of participants had account balances

FIGURE 9

Snapshot of Year-End 401(k) Account Balances

401(k) plan participant account balances,¹ 1996–2010²



¹ 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.

² The sample of participants changes over time.

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

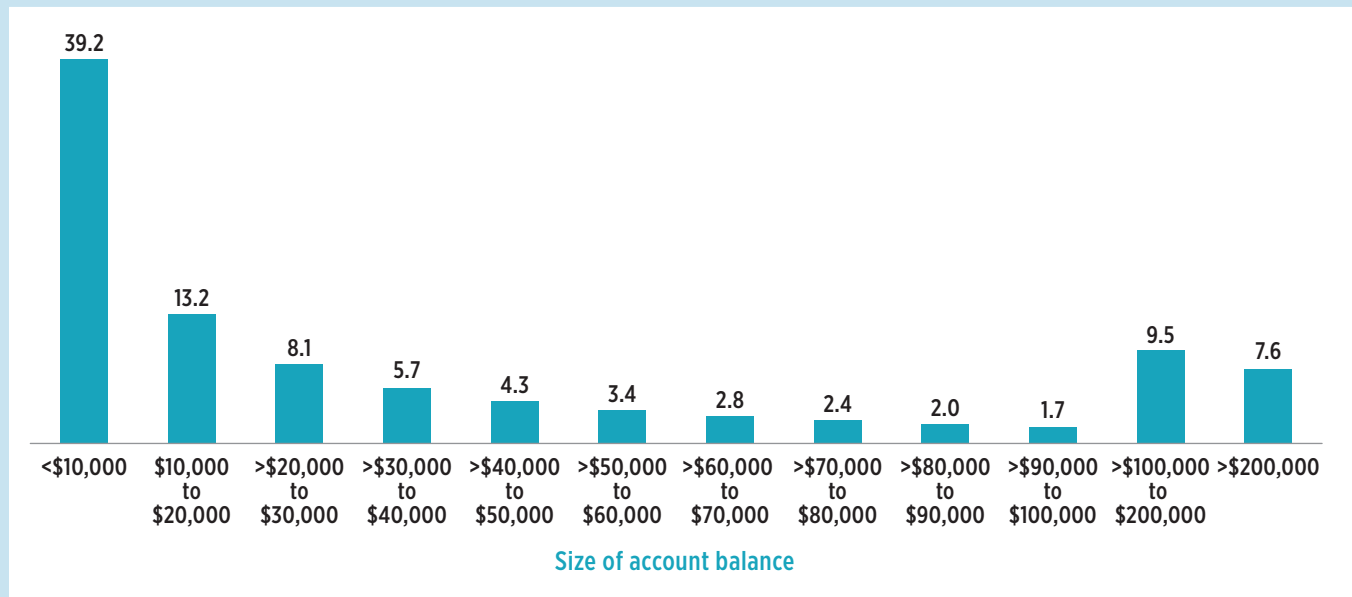
greater than \$100,000 (Figure 10). The variation in account balances partly reflects the effects of participant age, tenure, salary, contribution behavior, rollovers from other plans, asset allocation, withdrawals, loan activity, and

employer contribution rates. This research report examines the relationship between account balances and participants' age, tenure, and salary.

FIGURE 10

Distribution of 401(k) Account Balances by Size of Account Balance

Percentage of participants with account balances in specified ranges, 2010



Note: At year-end 2010, the average account balance among all 23.4 million 401(k) plan participants was \$60,329; the median account balance was \$17,686. Percentages do not add to 100 percent because of rounding.

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

Relationship of Age and Tenure to Account Balances

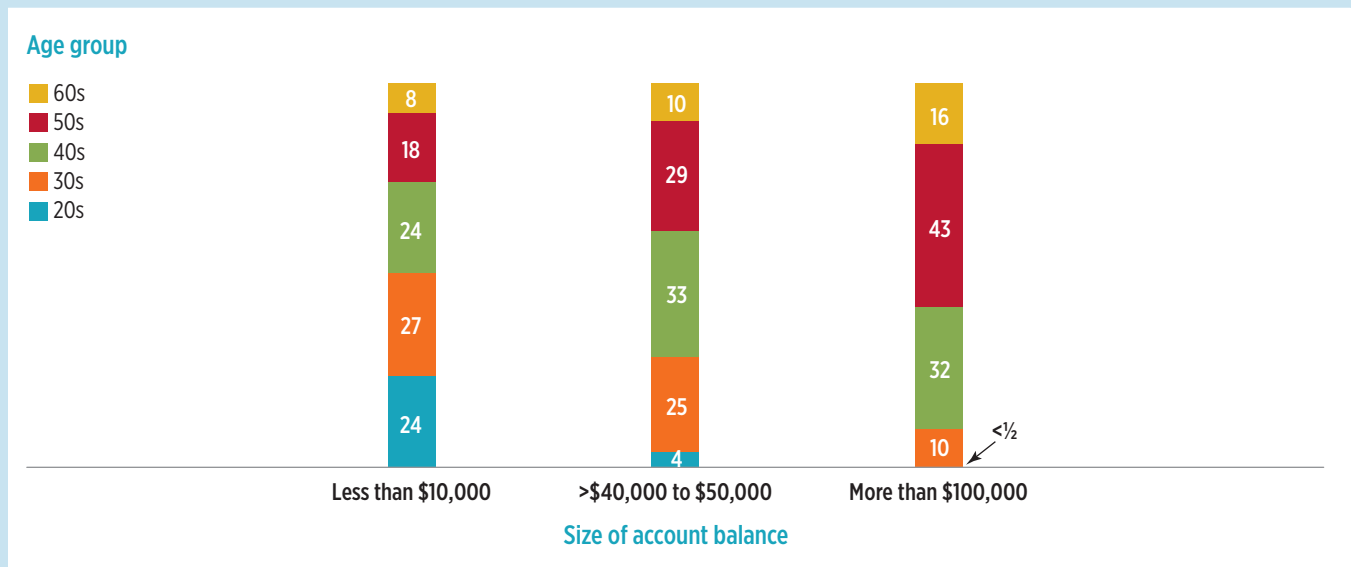
There is a positive correlation between age and account balance among participants covered by the 2010 database.²² Examination of the age composition of account balances finds that 51 percent of participants with account balances of less than \$10,000 were in their twenties or thirties (Figure 11). Similarly, 59 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 rollovers from a previous employer's plan in their current plan accounts.

FIGURE 11

Age Composition of Selected 401(k) Account Balance Categories

Percentage of participants with account balances in specified ranges, 2010



Note: Percentages do not add to 100 percent because of rounding.

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

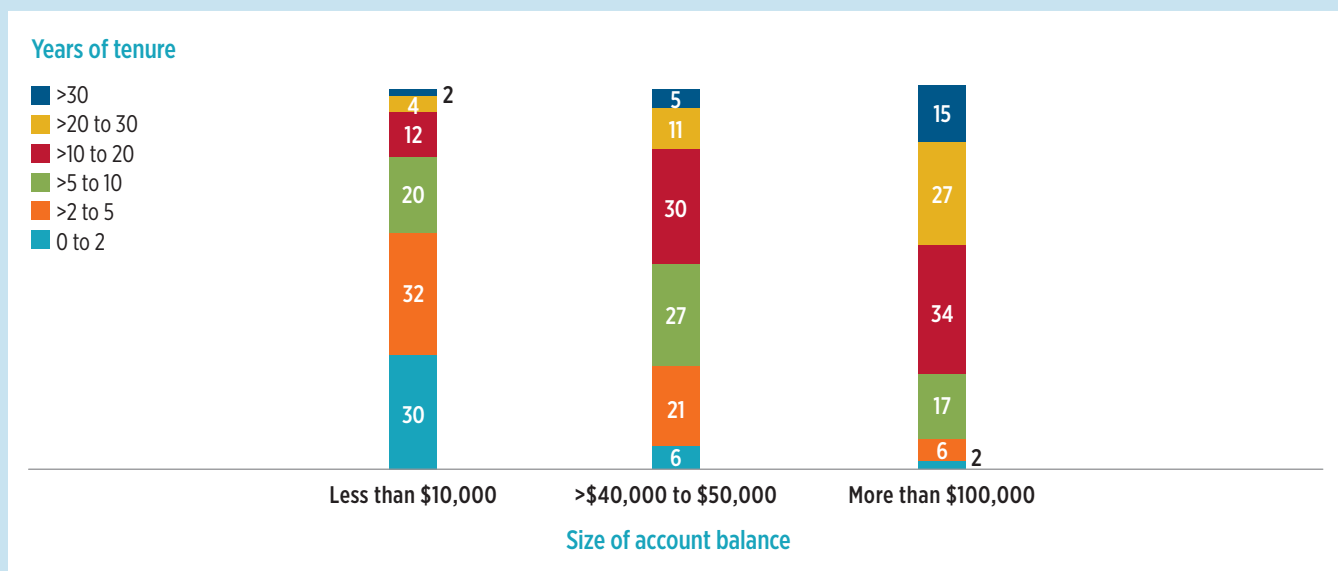
There is also a positive correlation between account balance and tenure among participants represented by the 2010 database. A participant's tenure with an employer serves as a proxy for the length of time a worker has participated in the 401(k) plan.²³ Indeed, 62 percent of participants with account balances of less than \$10,000 had five or fewer years of tenure, while 76 percent of participants with account balances greater than \$100,000 had more than

10 years of tenure (Figure 12).²⁴ 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 \$26,649, compared with \$202,329 for participants in their sixties with more than 30 years of tenure (Figure 13).²⁵ Similarly, the average account balance

FIGURE 12

Tenure Composition of Selected 401(k) Account Balance Categories

Percentage of participants with account balances in specified ranges, 2010



Note: Percentages may not add to 100 percent because of rounding. The tenure variable 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

FIGURE 13

401(k) Account Balances Increase with Participant Age and Tenure

Average 401(k) account balance by participant age and tenure, 2010

Age group	Years of tenure					
	0 to 2	>2 to 5	>5 to 10	>10 to 20	>20 to 30	>30
20s	\$4,250	\$10,793	\$16,132			
30s	10,369	21,812	37,915	\$55,087		
40s	16,337	30,158	52,148	87,914	\$132,209	
50s	22,024	36,030	56,899	98,289	179,587	\$194,399
60s	26,649	37,560	53,108	89,956	159,654	202,329

Note: The average account balance among all 23.4 million 401(k) plan participants was \$60,329; the median account balance was \$17,686. The tenure variable 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

of participants in their forties with up to two years of tenure was \$16,337, compared with \$132,209 for participants in their forties with more than 20 years of tenure.

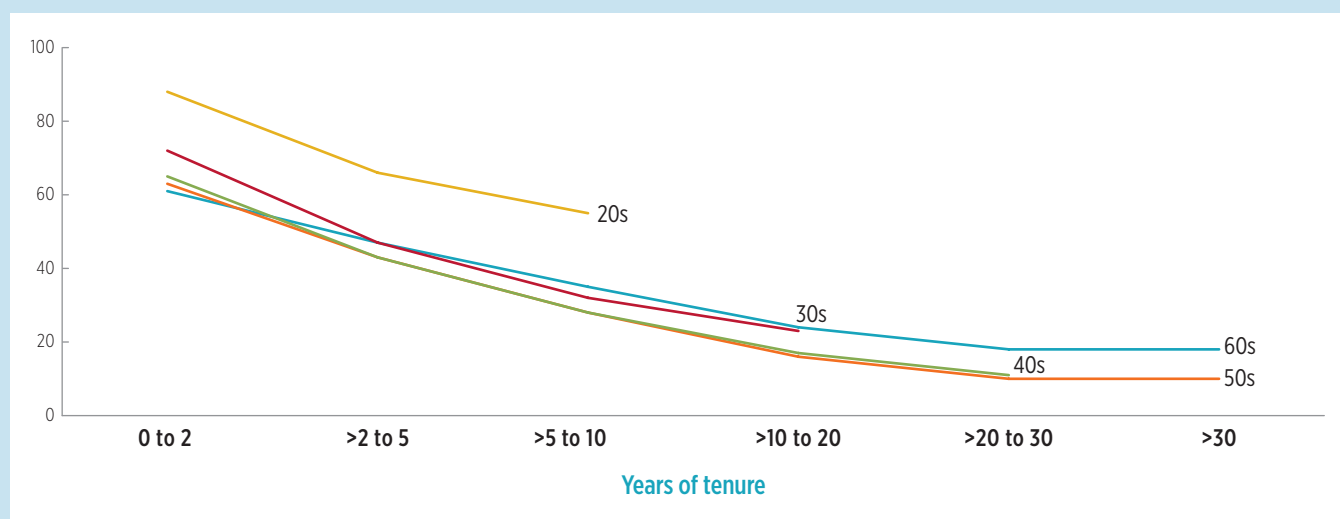
The distribution of account balances underscores the effects of age and tenure on account balances. In a given age group, shorter tenure tends to mean that a higher percentage of participants will have account balances of less than \$10,000. For example, 88 percent of participants in their twenties

with two or fewer years of tenure had account balances of less than \$10,000, compared with 55 percent of participants in their twenties with between five and 10 years of tenure (Figure 14). Older workers display a similar pattern. For example, 61 percent of participants in their sixties with two or fewer years of tenure had account balances of less than \$10,000. In contrast, only 18 percent of those in their sixties with more than 20 years of tenure had account balances of less than \$10,000.²⁶

FIGURE 14

401(k) Account Balances Less Than \$10,000 by Participant Age and Tenure

Percentage of participants with account balances less than \$10,000 at year-end 2010



Note: The tenure variable 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

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, 16 percent of participants in their sixties with five to 10 years of tenure had account balances in excess of \$100,000 in 2010 (Figure 15). However, 44 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.

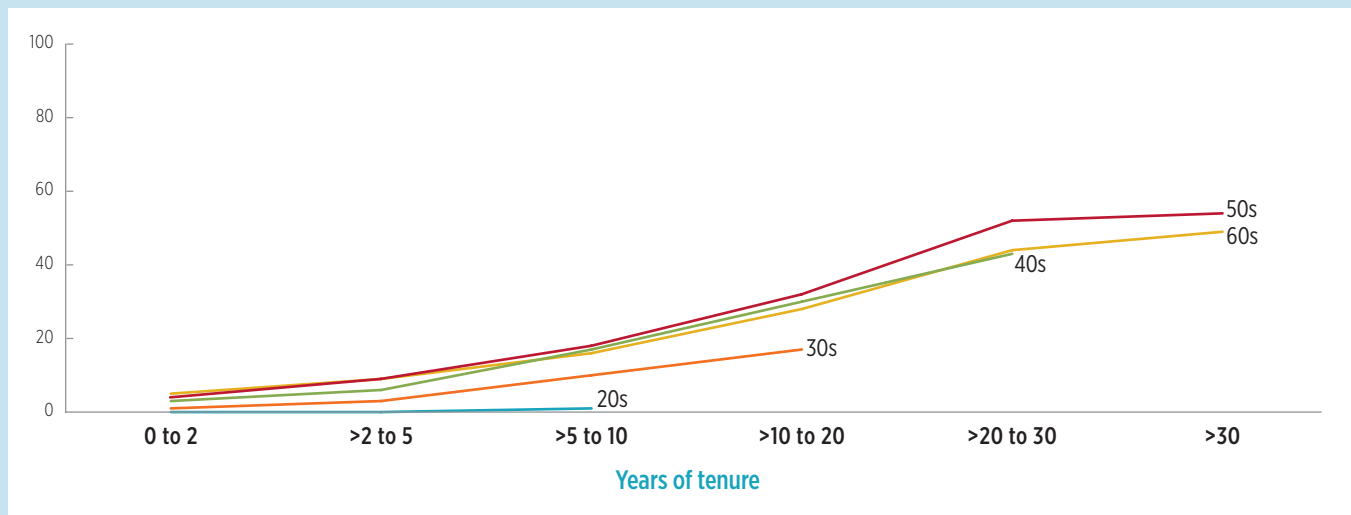
Relationship Between Account Balances and Salary

Participants' account balances vary not only with age and tenure, but also with salary. Figure 16 reports the account balances of longer-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 longer-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 since 401(k) plans were introduced only about 30 years ago).²⁷

FIGURE 15

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 2010



Note: The tenure variable 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

Older, longer-tenured, and higher-income participants tend to have larger account balances, which are important for meeting their income-replacement needs in retirement.²⁸ For longer-tenured participants in their twenties with salaries between \$20,000 and \$40,000, the median account balance was \$6,299 in 2010 (Figure 16). Longer-tenured participants in their twenties earning \$80,000 to

\$100,000 had a median account balance of \$46,872, while those earning more than \$100,000 had a median account balance of \$37,168. Among longer-tenured participants in their sixties with \$20,000 to \$40,000 in salary in 2010, the median account balance was \$53,250. For longer-tenured participants in their sixties earning more than \$100,000, the median account balance was \$299,460.

FIGURE 16

Median 401(k) Account Balance¹ Among Longer-Tenured² Participants by Age and Salary, 2010

Salary range	Participant age group				
	20s	30s	40s	50s	60s
\$20,000 to \$40,000	\$6,299	\$16,910	\$46,555	\$64,342	\$53,250
>\$40,000 to \$60,000	13,447	28,757	64,237	89,151	85,486
>\$60,000 to \$80,000	29,585	52,663	110,116	146,503	144,240
>\$80,000 to \$100,000	46,872	88,455	166,882	209,809	216,922
>\$100,000	37,168	117,035	251,001	306,840	299,460

¹ 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 individual retirement accounts (IRAs) are not included. Account balances are net of loan balances.

² Longer-tenured participants are used in this analysis to capture the longest possible work and savings history (see note 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 about 30 years ago.

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

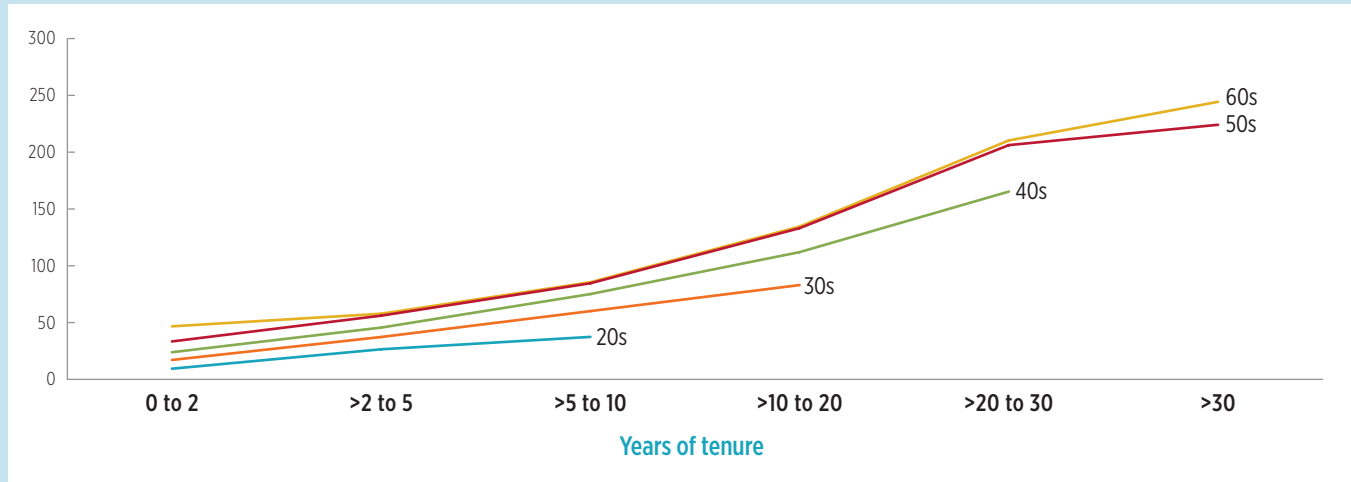
The ratio of participant account balance to salary is positively correlated with age and tenure.²⁹ Participants in their sixties—having had more time to accumulate assets—tended to have higher ratios, while those in their

twenties had the lowest ratios (Figure 17). In addition, 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

FIGURE 17

Ratio of 401(k) Account Balance to Salary by Participant Age and Tenure

Percent, 2010



Note: The tenure variable 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

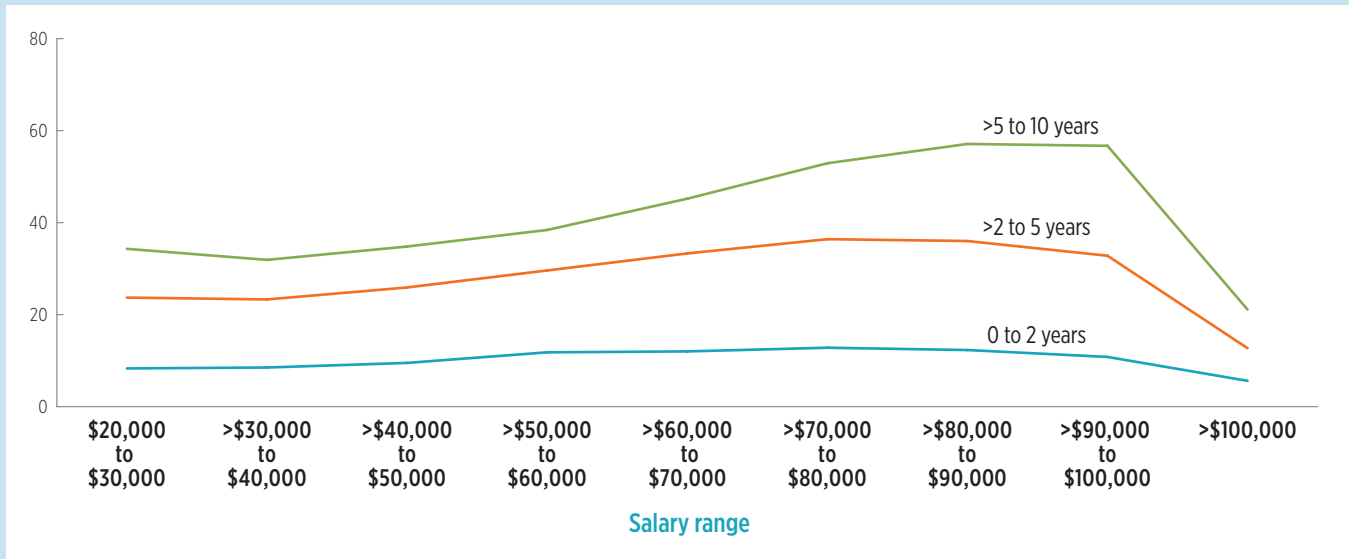
increase slightly with salary for low-to-moderate salary groups (Figure 18). However, at high salary levels the ratio

tends to decline somewhat. A similar pattern occurs among participants in their sixties (Figure 19).³⁰

FIGURE 18

Ratio of 401(k) Account Balance to Salary for Participants in Their Twenties by Tenure

Percent, 2010

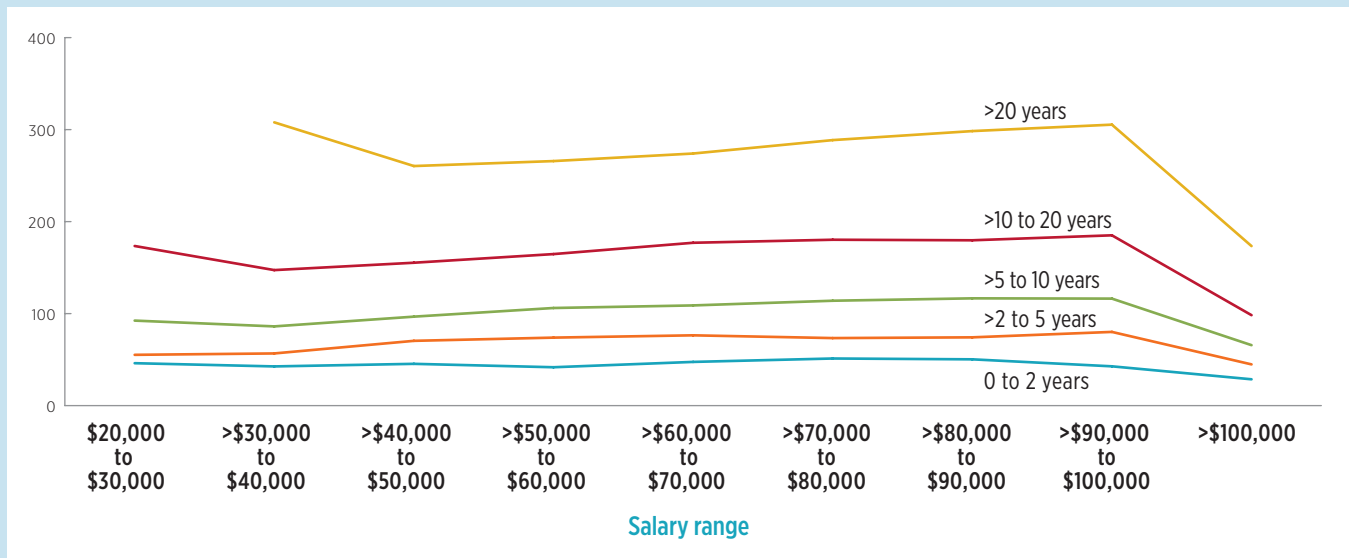


Note: The tenure variable is generally years working at current employer, and thus may overstate years of participation in the 401(k) plan.
 Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE 19

Ratio of 401(k) Account Balance to Salary for Participants in Their Sixties by Tenure

Percent, 2010



Note: The tenure variable 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

Year-End 2010 Snapshot of 401(k) Asset Allocation

When the stock market rises in value (Figures 7 and 8), the percentage of 401(k) assets invested in equities tends to rise; following this pattern, assets invested in equities increased as the stock market went up in 2010. At year-end 2010, 42 percent of 401(k) plan participants' account balances was invested in equity funds, on average, compared with 41 percent at year-end 2009, 37 percent at year-end 2008, 48 percent at year-end 2007, and 40 percent at year-end 2002 (Figure 20). Altogether, equity securities—equity funds, the equity portion of balanced funds,³¹ and company stock—represented about 62 percent of 401(k) plan participants' assets.

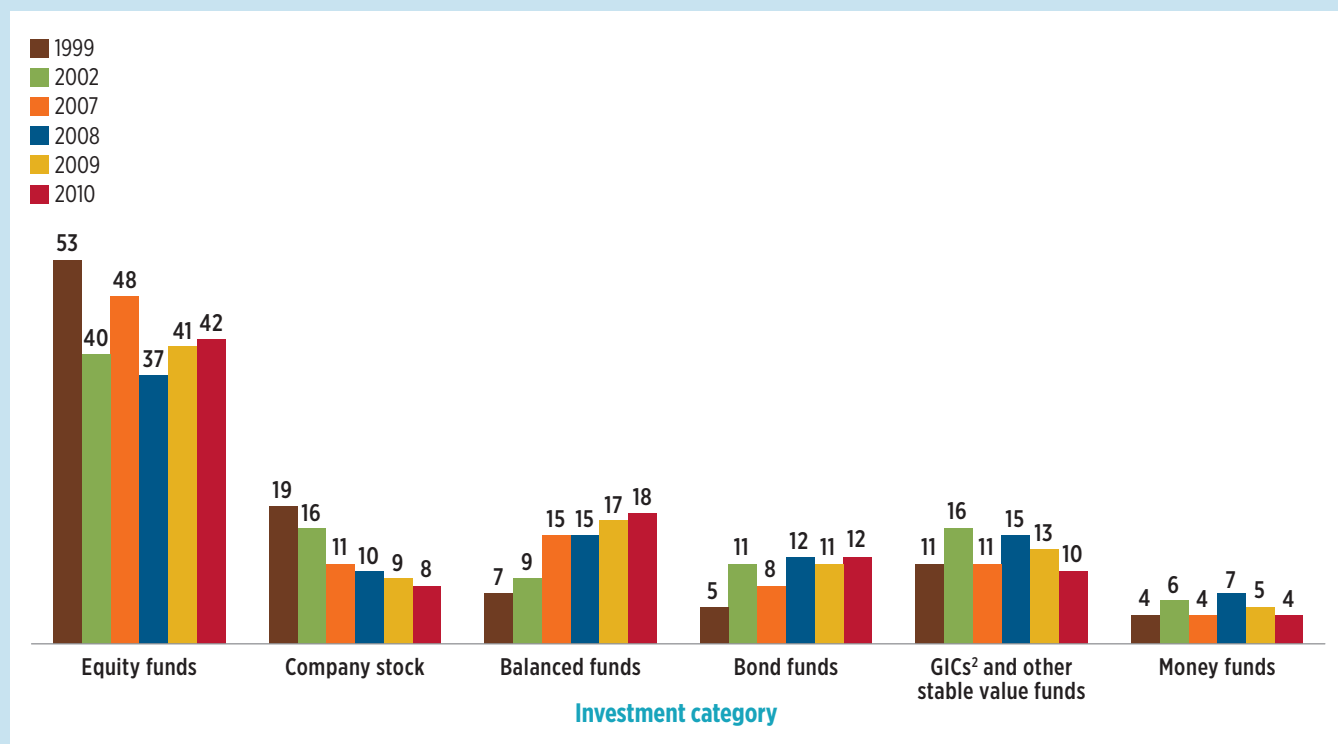
Changes in Asset Allocation Between Year-End 2009 and Year-End 2010

Investment performance likely explains much of the changes in 401(k) participants' asset allocations over time. Much of the movement in the largest component, equity funds, tends to reflect overall equity market prices, which generally rose from 1997 through 1999, before falling through 2002, rising again from 2003 through 2007, then dropping in 2008, and rising in 2009 and 2010 (Figures 8 and 20). At year-end 2010, equity funds were 42 percent of the assets in the EBRI/ICI 401(k) database, compared with a 41 percent share at year-end 2009. Balanced funds, which invest in equities and fixed-income securities, also increased in share, accounting for 18 percent of the assets in the database at

FIGURE 20

Average Asset Allocation of 401(k) Participants

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



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

² 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

year-end 2010. Despite the increases in shares of equity and balanced funds and the decreases in the shares of GICs and other stable value funds, money funds, and company stock, most 401(k) participants appeared not to have made dramatic shifts in their asset allocations in 2010.³²

Asset Allocation and Participant Age

As in previous years, the database for year-end 2010 shows that participants' asset allocation varied considerably with age.³³ Younger participants tended to favor equity funds and balanced funds, while older participants were more likely to invest in fixed-income securities such as bond funds, GICs and other stable value funds, or money funds (Figure 21). For example, among participants in their twenties, the average allocation to equity and balanced

funds was 74 percent of assets, compared with 50 percent of assets among participants in their sixties. Among participants in their twenties, the average allocation to equity funds was 37 percent of assets, compared with 34 percent of assets among participants in their sixties. Younger participants also had higher allocations to balanced funds, particularly to target date funds. A target date, or lifecycle, fund pursues a long-term investment strategy, using a mix of asset classes that follow a predetermined reallocation, typically rebalancing to shift its focus from growth to income over time.³⁴ At year-end 2010, 11 percent of 401(k) assets in the database was invested in target date funds. Among participants in their twenties, 27 percent of their 401(k) assets was invested in target date funds, while among participants in their sixties, 9 percent of their 401(k) assets was invested in target date funds.

FIGURE 21

Average Asset Allocation of 401(k) Accounts by Participant Age

Percentage of account balances,¹ 2010

Age group	Equity funds	Target date funds ²	Non-target date balanced funds	Bond funds	Money funds	GICs ³ and other stable value funds	Company stock	Other	Unknown	Total ¹
20s	36.9	27.0	10.4	7.2	2.6	4.4	6.7	1.6	3.3	100
30s	47.5	15.8	7.5	8.8	3.1	4.9	7.0	2.3	3.2	100
40s	48.0	11.4	6.9	9.8	3.5	6.7	7.9	2.8	2.9	100
50s	40.3	10.0	7.1	12.2	4.6	11.2	8.7	3.2	2.7	100
60s	34.1	9.1	6.9	14.7	6.2	16.5	7.0	2.9	2.5	100
All	42.0	11.1	7.1	11.6	4.4	10.3	8.0	2.9	2.6	100

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

² A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

³ 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 22 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. Thirty-five percent of participants in the 2010 database were in these plans, which generally offer equity funds, bond funds, money funds, and balanced

FIGURE 22

Distribution of 401(k) Plans, Participants, and Assets by Investment Options, 2010

Investment options offered by plan	Plans	Participants	Assets ¹
Equity, bond, money, and/or balanced funds	40,638	8,177,054	\$405,510,024,541
Of which: target date funds ² an option	27,212	5,679,434	275,050,452,512
Equity, bond, money, and/or balanced funds; and GICs³ and/or other stable value funds	22,334	6,125,588	338,032,949,859
Of which: target date funds ² an option	16,919	4,466,445	235,136,454,086
Equity, bond, money, and/or balanced funds; and company stock	626	3,357,767	214,577,115,186
Of which: target date funds ² an option	430	2,471,571	136,656,195,629
Equity, bond, money, and/or balanced funds; company stock; and GICs³ and/or other stable value funds	857	5,780,776	456,059,107,209
Of which: target date funds ² an option	636	3,239,383	259,567,917,586
All	64,455	23,441,185	1,414,179,196,794
Of which: target date funds ² an option	45,197	15,856,833	906,411,019,813
Investment options offered by plan	Percentage of plans	Percentage of participants	Percentage of assets
Equity, bond, money, and/or balanced funds	63.0%	34.9%	28.7%
Of which: target date funds ² an option	42.2	24.2	19.4
Equity, bond, money, and/or balanced funds; and GICs³ and/or other stable value funds	34.7	26.1	23.9
Of which: target date funds ² an option	26.2	19.1	16.6
Equity, bond, money, and/or balanced funds; and company stock	1.0	14.3	15.2
Of which: target date funds ² an option	0.7	10.5	9.7
Equity, bond, money, and/or balanced funds; company stock; and GICs³ and/or other stable value funds	1.3	24.7	32.2
Of which: target date funds ² an option	1.0	13.8	18.4
All	100.0	100.0	100.0
Of which: target date funds ² an option	70.1	67.6	64.1

¹ Components do not add to the total because of rounding.

² A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

³ 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

funds as investment options. Another 26 percent of participants were in plans that offer GICs and other stable value funds as an investment option, in addition to the “base” options. Alternatively, 14 percent of participants were in plans that offer company stock but no stable value products, while the remaining 25 percent of participants were offered both company stock and stable value products, in addition to the base options.

Target date funds were available in 70 percent of 401(k) plans in the year-end 2010 database (Figure 22).³⁵ These plans offered target date funds to 68 percent of the participants in the database.³⁶ Among participants who were offered target date funds, 53 percent held them at year-end 2010. Target date fund assets represented 17 percent of the assets of plans offering such funds in their investment lineups.

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

As discussed above, asset allocation varies with participant age. Thus, Figure 23 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 2010 EBRI/ICI 401(k) database. Because asset allocation is influenced by the investment options available to participants, Figure 24 presents asset allocation by salary range and by investment options. Participant asset allocation also varies with plan size (Figure 25, 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. This trend emerges, in part, because few small plans offered company stock as an investment option. For example, fewer than 1 percent of participants in small plans (100 participants or fewer) were offered company stock as an investment option, while 60 percent of participants in plans with more than 5,000 participants were offered company stock as an investment option in 2010. Thus, to analyze the potential effect of plan size, the remaining panels of Figure 25 group plans by investment options and plan size.

FIGURE 23

Average Asset Allocation of 401(k) Accounts by Participant Age and Investment Options*Percentage of account balances,¹ 2010*

	Equity funds	Target date funds ²	Non-target date balanced funds	Bond funds	Money funds	GICs ³ and other stable value funds	Company stock
All ages combined							
Investment options							
Equity, bond, money, and/or balanced funds	48.6	14.2	6.3	17.8	6.5		
Equity, bond, money, and/or balanced funds; and GICs ³ and/or other stable value funds	43.0	13.4	9.2	8.2	2.5	18.2	
Equity, bond, money, and/or balanced funds; and company stock	37.0	11.4	4.8	13.9	8.9		18.8
Equity, bond, money, and/or balanced funds; company stock; and GICs ³ and/or other stable value funds	37.7	6.6	7.3	7.5	2.0	18.3	15.8
Plans without company stock, GICs,³ or other stable value funds							
Age group							
20s	42.7	29.6	7.1	10.7	4.1		
30s	52.5	18.3	5.9	12.6	4.5		
40s	53.9	13.9	6.1	14.4	5.1		
50s	47.4	13.4	6.5	18.6	6.8		
60s	40.8	12.2	6.3	23.8	9.1		
Plans with GICs³ and/or other stable value funds							
20s	37.0	29.1	14.6	5.2	1.5	7.8	
30s	47.8	19.2	9.7	6.4	1.9	9.4	
40s	49.3	13.9	8.8	7.2	2.2	12.5	
50s	42.2	12.2	9.3	8.9	2.6	19.3	
60s	34.7	10.7	8.9	9.8	3.3	27.9	
Plans with company stock							
20s	31.9	34.7	5.2	7.6	3.5		12.4
30s	44.8	15.9	4.7	9.9	4.6		15.2
40s	43.6	11.6	4.6	11.1	5.8		18.3
50s	34.4	10.1	5.1	15.0	9.2		20.3
60s	27.7	8.9	4.6	19.4	15.2		19.2

Continued on the next page

FIGURE 23 CONTINUED

Average Asset Allocation of 401(k) Accounts by Participant Age and Investment Options

Percentage of account balances,¹ 2010

	Equity funds	Target date funds ²	Non-target date balanced funds	Bond funds	Money funds	GICs ³ and other stable value funds	Company stock
Plans with company stock and GICs³ and/or other stable value funds							
Age group							
20s	33.4	18.3	13.1	4.8	1.5	8.3	16.4
30s	43.3	10.5	8.8	6.1	1.6	9.0	15.5
40s	43.8	7.1	7.4	6.7	1.8	12.0	16.1
50s	36.2	5.7	7.0	8.1	2.1	19.2	16.5
60s	29.8	5.0	6.7	8.3	2.3	29.4	14.1

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

² A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

³ 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 24

Average Asset Allocation of 401(k) Accounts by Participant Salary and Investment Options*Percentage of account balances,¹ 2010*

Salary ²	Equity funds	Target date funds ³	Non-target date balanced funds	Bond funds	Money funds	GICs ⁴ and other stable value funds	Company stock
Plans without company stock, GICs,⁴ or other stable value funds							
\$20,000 to \$40,000	42.7	21.9	6.8	17.2	6.1		
>\$40,000 to \$60,000	43.5	19.2	7.2	16.6	6.7		
>\$60,000 to \$80,000	45.7	17.8	6.4	15.9	6.1		
>\$80,000 to \$100,000	48.1	15.9	5.6	16.3	5.9		
>\$100,000	48.6	12.3	5.9	17.2	5.9		
All	48.6	14.2	6.3	17.8	6.5		
Plans with GICs⁴ and/or other stable value funds							
\$20,000 to \$40,000	39.1	17.4	11.1	7.5	2.4	18.0	
>\$40,000 to \$60,000	38.2	13.4	15.3	7.3	2.7	17.7	
>\$60,000 to \$80,000	41.8	10.5	15.1	7.7	2.5	17.0	
>\$80,000 to \$100,000	45.5	9.5	13.2	8.4	2.2	16.6	
>\$100,000	47.9	9.1	11.0	8.9	2.1	15.9	
All	43.0	13.4	9.2	8.2	2.5	18.2	
Plans with company stock							
\$20,000 to \$40,000	34.1	14.3	3.5	14.5	11.2		16.4
>\$40,000 to \$60,000	36.8	12.2	5.8	14.6	10.5		13.0
>\$60,000 to \$80,000	37.7	10.8	6.1	14.1	8.6		14.8
>\$80,000 to \$100,000	38.2	7.9	6.7	12.1	8.4		18.1
>\$100,000	38.0	7.6	5.8	14.5	6.1		20.1
All	37.0	11.4	4.8	13.9	8.9		18.8
Plans with company stock and GICs⁴ and/or other stable value funds							
\$20,000 to \$40,000	35.3	7.2	9.3	7.3	1.5	18.6	18.6
>\$40,000 to \$60,000	35.1	7.6	9.9	7.0	2.3	17.3	17.5
>\$60,000 to \$80,000	37.0	7.8	9.1	7.2	2.2	16.6	16.5
>\$80,000 to \$100,000	39.6	7.0	9.0	7.8	2.0	15.2	15.0
>\$100,000	41.1	6.7	6.6	7.5	1.4	15.5	13.0
All	37.7	6.6	7.3	7.5	2.0	18.3	15.8

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

² Salary information is available for a subset of participants in the EBRI/ICI 401(k) database.

³ A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

⁴ 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 25

Average Asset Allocation of 401(k) Accounts by Participant Plan Size and Investment Options*Percentage of account balances,¹ 2010*

Plan size by number of participants	Equity funds	Target date funds ²	Non-target date balanced funds	Bond funds	Money funds	GICs ³ and other stable value funds	Company stock
All plans							
1 to 100	45.1	16.6	6.1	13.8	6.8	5.3	0.1
101 to 500	45.4	16.8	5.6	14.2	6.0	5.9	0.5
501 to 1,000	44.9	15.3	5.9	13.7	5.4	6.9	2.2
1,001 to 5,000	44.4	13.6	6.2	12.9	4.6	8.2	4.4
>5,000	40.1	8.5	7.8	10.4	3.8	12.5	11.5
All	42.0	11.1	7.1	11.6	4.4	10.3	8.0
Plans without company stock, GICs,³ or other stable value funds							
1 to 100	45.0	18.0	4.1	17.0	7.6		
101 to 500	46.6	17.7	4.7	17.4	7.3		
501 to 1,000	46.9	15.3	5.5	18.1	7.2		
1,001 to 5,000	48.6	14.2	6.5	17.6	6.3		
>5,000	51.5	9.5	8.2	18.6	4.9		
All	48.6	14.2	6.3	17.8	6.5		
Plans with GICs³ and/or other stable value funds							
1 to 100	45.2	13.8	9.9	7.6	5.1	15.3	
101 to 500	44.3	14.8	6.9	8.0	3.1	17.2	
501 to 1,000	44.3	15.7	6.8	8.1	2.3	17.4	
1,001 to 5,000	42.6	15.6	6.5	8.4	1.9	18.3	
>5,000	42.0	11.0	11.5	8.2	2.4	19.0	
All	43.0	13.4	9.2	8.2	2.5	18.2	
Plans with company stock							
1 to 100 ⁴	34.2	14.7	4.3	13.0	9.4		15.6
101 to 500	35.4	14.3	5.3	13.2	9.9		14.7
501 to 1,000	38.8	11.1	3.1	13.2	8.7		18.1
1,001 to 5,000	41.6	8.1	4.8	14.8	7.4		16.8
>5,000	34.0	12.2	4.7	13.4	9.2		19.1
All	37.0	11.4	4.8	13.9	8.9		18.8

Continued on the next page

FIGURE 25 CONTINUED

Average Asset Allocation of 401(k) Accounts by Participant Plan Size and Investment Options

Percentage of account balances,¹ 2010

Plan size by number of participants	Equity funds	Target date funds ²	Non-target date balanced funds	Bond funds	Money funds	GICs ³ and other stable value funds	Company stock
Plans with company stock and GICs³ and/or other stable value funds							
1 to 100	35.4	14.1	6.5	8.3	5.4	14.5	7.6
101 to 500	33.9	15.4	8.6	7.7	3.3	16.8	6.9
501 to 1,000	35.1	15.0	6.2	6.9	3.1	13.9	14.2
1,001 to 5,000	37.2	12.7	6.0	7.2	2.8	15.8	12.0
>5,000	37.6	5.7	7.4	7.5	1.8	18.6	16.3
All	37.7	6.6	7.3	7.5	2.0	18.3	15.8

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

² A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

³ GICs are guaranteed investment contracts.

⁴ 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

Distribution of Equity Fund Allocations and Participant Exposure to Equities

Participants in 401(k) plans may hold equities through a variety of options including equity funds, company stock, and balanced funds. This section focuses first on the investing pattern of 401(k) plan participants with respect to equity funds. The asset allocation of participants without equity funds is explored next, because 401(k) participants holding no equity funds can hold equities in the form of company stock or through balanced funds. Finally, the overall investment in equities across all 401(k) plan participants is presented.

Asset Allocation to Equity Funds

The year-end 2010 EBRI/ICI 401(k) database shows that, on average, 42 percent of participant account balances were allocated to equity funds (Figure 21), which is one way to hold equities. However, individual asset allocations varied widely across participants. For example, about 47 percent of participants held no equity funds, while 16 percent of participants held more than 80 percent of their balances in equity funds (Figures 26 and 27). Furthermore, the percentage of participants holding no equity funds varied with age, with 63 percent of participants in their twenties, 42 percent of participants in their forties, and 49 percent

FIGURE 26

Asset Allocation Distribution of 401(k) Participant Account Balance to Equity Funds by Participant Age

Percentage of participants,^{1,2} 2010

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	63.0	2.5	2.0	2.7	2.7	3.1	4.0	3.7	3.9	3.5	8.8
30s	46.6	3.0	2.9	3.8	4.0	4.9	5.9	5.7	6.1	5.1	11.9
40s	41.8	3.5	3.2	4.2	4.4	5.5	6.5	6.2	6.5	5.2	13.1
50s	43.1	4.4	3.8	4.7	4.9	6.1	6.5	5.9	5.6	3.9	11.1
60s	49.2	4.7	4.0	4.7	4.8	5.4	5.6	4.5	4.0	2.7	10.4
All	47.0	3.6	3.2	4.1	4.2	5.2	5.9	5.5	5.6	4.3	11.5

¹ The analysis includes the 23.4 million participants in the year-end 2010 EBRI/ICI 401(k) database.

² Row percentages may not add to 100 percent because of rounding.

Note: "Equity funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in equities.

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

of participants in their sixties holding no equity funds. The percentage of 401(k) participants holding no equity funds also varied with tenure, with participants with five or fewer

years of tenure more likely not to be invested in equity funds. The percentage of participants holding no equity funds tends to fall as salary increases (Figure 27).

FIGURE 27

Asset Allocation Distribution of 401(k) Participant Account Balances to Equity Funds by Participant Age, Tenure, or Salary

Percentage of participants, 2010

	Percentage of account balance invested in equity funds			
	Zero	1 to 20 percent	>20 to 80 percent	>80 percent
All	47.0	6.8	30.4	15.8
Age group				
20s	63.0	4.5	20.2	12.3
30s	46.6	5.9	30.4	17.1
40s	41.8	6.7	33.2	18.3
50s	43.1	8.2	33.7	15.0
60s	49.2	8.7	29.1	13.0
Years of tenure				
0 to 2	62.1	4.0	21.0	12.9
>2 to 5	52.6	5.0	26.9	15.4
>5 to 10	44.3	6.6	33.0	16.1
>10 to 20	37.0	8.3	36.7	18.0
>20 to 30	35.8	10.8	37.3	16.1
>30	41.7	11.7	33.1	13.5
Salary				
\$20,000 to \$40,000	53.8	7.5	27.0	11.7
>\$40,000 to \$60,000	44.1	9.4	33.3	13.2
>\$60,000 to \$80,000	36.2	10.3	38.6	14.9
>\$80,000 to \$100,000	30.5	10.7	42.4	16.3
>\$100,000	26.5	10.8	44.9	17.9

Note: Row percentages may not add to 100 percent because of rounding. “Equity funds” include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in equities. The tenure variable 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

Asset Allocation of 401(k) Plan Participants Without Equity Funds

Participants with no equity fund balances may still have exposure to the stock market through company stock or balanced funds, which include target date funds. Indeed, 75 percent of participants with no equity fund allocation had investments in either company stock or balanced funds

at year-end 2010 (Figure 28). For example, 85 percent of participants in their twenties without equity funds held equities through company stock, balanced funds, or both. Indeed, 50 percent of participants in their twenties without equity funds held target date funds—which tend to be highly concentrated in equity securities for that age group—as their only equity investment. Another 11 percent of participants

FIGURE 28

Percentage of 401(k) Participants Without Equity Fund Balances Who Have Equity Exposure by Participant Age or Tenure, 2010

	Percentage of participants without equity funds				Combination of company stock and/or target date funds* and/or non-target date balanced funds
	Company stock and/or balanced funds	Target date funds* as only equity investment	Non-target date balanced funds as only equity investment	Company stock as only equity investment	
Age group					
20s	85.1	49.6	11.3	4.8	19.3
30s	79.4	45.4	9.6	8.1	16.3
40s	74.8	39.3	8.8	10.8	15.9
50s	70.3	33.4	8.2	13.2	15.4
60s	63.7	27.0	9.0	14.6	13.1
All	74.8	39.3	9.4	10.3	15.9
Years of tenure					
0 to 2	82.8	55.0	11.9	3.3	12.6
>2 to 5	79.5	41.9	11.0	4.2	22.3
>5 to 10	73.0	31.5	8.7	13.9	18.9
>10 to 20	68.7	24.4	8.1	21.2	15.1
>20 to 30	61.7	18.7	8.6	20.7	13.7
>30	57.8	16.7	8.8	20.4	11.9
All	74.8	39.3	9.4	10.3	15.9

*A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: Row components may not add to the total in the 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. The tenure variable 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

in their twenties without equity funds had equity exposure through non–target date balanced funds, and another 5 percent held company stock as their only equity investment. Nineteen percent held some combination of target date funds, non–target date 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 or balanced funds or both (Figure 29).

FIGURE 29

Average Asset Allocation for 401(k) Participants Without Equity Fund Balances by Participant Age or Tenure

Percentage of account balances, 2010

	Target date funds ¹	Non–target date balanced funds	Bond funds	Money funds	GICs ² and other stable value funds	Company stock	Other	Unknown	Total ³
Age group									
20s	56.7	17.4	4.4	3.9	6.1	7.0	1.5	2.5	100
30s	47.8	14.3	7.2	6.3	9.2	8.5	3.2	2.9	100
40s	36.7	12.1	9.8	7.7	13.7	11.2	5.1	3.2	100
50s	26.5	10.4	12.3	9.3	20.9	12.1	5.2	3.0	100
60s	19.7	8.5	15.5	11.8	28.3	9.3	4.0	2.8	100
All	29.9	10.9	11.9	9.3	19.8	10.7	4.5	3.1	100
Years of tenure									
0 to 2	54.3	10.5	10.8	5.1	9.0	4.6	3.5	2.2	100
>2 to 5	47.3	14.6	10.5	6.6	9.5	6.2	3.7	2.2	100
>5 to 10	37.9	13.0	10.7	8.9	13.8	8.1	3.5	3.7	100
>10 to 20	30.4	10.8	11.4	9.2	17.6	11.4	4.9	3.7	100
>20 to 30	20.6	10.2	11.9	9.3	24.2	14.0	6.1	3.3	100
>30	13.4	8.8	12.7	12.6	31.2	14.1	4.5	2.6	100
All	29.9	10.9	11.9	9.3	19.8	10.7	4.5	3.1	100

¹ A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund’s name.

² GICs are guaranteed investment contracts.

³ Row percentages may not add to 100 percent because of rounding. Percentages are dollar-weighted averages.

⁴ The analysis includes the 11.1 million participants with no equity funds at year-end 2010.

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

Asset Allocation to Equities

Among individual participants, the allocation of account balances to equities (equity funds, company stock, and the equity portion of balanced funds³⁷) varies widely around the average of 62 percent for all participants in the 2010 database. Forty percent of participants had more than 80 percent of their account balances invested in equities, while 12 percent held no equities at all at the end of 2010 (Figure 30).

Distribution of Participants' Balanced Fund Allocations by Age

Individual 401(k) participants' asset allocation to balanced funds varies widely around an average of 18 percent (Figure 20). For example, 47 percent of participants held no balanced funds, while 27 percent of participants held more than 80 percent of their accounts in balanced funds at the end of 2010 (Figure 31). At year-end 2010, 53 percent of 401(k) participants held balanced funds, up from the

50 percent of participants holding balanced funds at year-end 2009.³⁸ At year-end 2010, balanced fund use by participants occurred through target date funds and non-target date balanced funds: 36 percent of 401(k) participants held target date funds, 20 percent held non-target date balanced funds, and 2 percent held both.

Target date fund use varies with participant age and tenure. Younger participants were more likely to hold target date funds than older participants. At year-end 2010, 49 percent of participants in their twenties held target date funds, compared with 28 percent of participants in their sixties (Figure 31). Recently hired participants were more likely to hold target date funds than those with more years on the job: at year-end 2010, 48 percent of participants with two or fewer years of tenure held target date funds, compared with 34 percent of participants with more than five to 10 years of tenure, and 19 percent of participants with more than 30 years of tenure (Figure 32).

FIGURE 30

Asset Allocation to Equities Varied Widely Among 401(k) Plan Participants

Asset allocation distribution of 401(k) participant account balance to equities¹ by age; percentage of participants,^{2,3} 2010

Age group	Percentage of account balance invested in equities ¹					
	Zero	1 to 20 percent	>20 to 40 percent	>40 to 60 percent	>60 to 80 percent	>80 percent
20s	9.4	1.7	2.8	5.8	19.9	60.4
30s	9.6	2.9	4.1	8.4	20.9	54.2
40s	10.5	4.0	5.2	9.7	30.1	40.4
50s	12.8	6.1	7.3	19.1	29.1	25.5
60s	17.9	8.2	12.4	23.3	16.8	21.4
All ²	11.8	4.5	6.1	12.6	24.9	40.0

¹ Equities include equity funds, company stock, and the equity portion of balanced funds. "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

² Participants include the 23.4 million 401(k) plan participants in the year-end 2010 401(k) EBRI/ICI database.

³ 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

Asset Allocation Distribution of 401(k) Participant Account Balance to Balanced Funds by Age

Percentage of participants,^{1, 2} 2010

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	33.2	3.8	3.2	2.9	1.9	2.0	2.7	1.5	1.6	1.7	45.4
30s	43.1	6.0	5.1	4.4	2.7	2.4	2.5	1.7	1.9	1.9	28.2
40s	48.1	6.8	5.5	4.8	3.0	2.5	2.4	1.6	1.7	1.7	21.9
50s	50.7	6.9	5.3	4.9	3.1	2.6	2.4	1.5	1.7	1.6	19.3
60s	54.4	6.3	4.4	4.2	2.8	2.4	2.2	1.4	1.6	1.5	18.6
All	46.6	6.2	4.9	4.4	2.8	2.4	2.4	1.6	1.7	1.7	25.2

Percentage of account balance invested in target date funds ³											
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	51.0	1.8	1.6	1.6	1.1	1.1	2.0	1.1	1.2	1.4	36.1
30s	60.7	3.3	2.6	2.3	1.6	1.4	1.7	1.2	1.5	1.6	22.2
40s	66.1	3.8	2.6	2.3	1.6	1.4	1.5	1.1	1.3	1.3	17.1
50s	68.7	3.9	2.5	2.2	1.5	1.4	1.4	1.0	1.2	1.3	15.0
60s	71.6	3.4	2.0	1.9	1.3	1.2	1.2	0.9	1.2	1.2	14.1
All	64.4	3.4	2.4	2.1	1.5	1.3	1.5	1.0	1.3	1.4	19.7

Percentage of account balance invested in non-target date 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	80.2	3.2	2.1	1.6	0.8	1.0	0.8	0.5	0.4	0.4	9.0
30s	79.7	4.5	3.3	2.5	1.2	1.0	0.8	0.5	0.4	0.3	5.7
40s	79.5	4.7	3.6	2.9	1.5	1.1	0.9	0.5	0.4	0.3	4.5
50s	79.4	4.8	3.6	3.0	1.7	1.2	1.0	0.5	0.4	0.3	4.0
60s	80.7	4.2	3.0	2.7	1.6	1.2	1.0	0.5	0.4	0.3	4.3
All	79.8	4.4	3.3	2.6	1.4	1.1	0.9	0.5	0.4	0.3	5.2

¹ The analysis includes the 23.4 million 401(k) plan participants in the year-end 2010 EBRI/ICI 401(k) database.

² Row percentages may not add to 100 percent because of rounding.

³ A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

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 32

Asset Allocation Distribution of 401(k) Participant Account Balance to Balanced Funds by Tenure

Percentage of participants,^{1,2} 2010

Years of tenure	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	37.0	3.4	2.8	2.7	1.7	1.8	2.7	1.4	1.3	1.1	44.0
>2 to 5	42.2	4.7	4.0	3.8	2.4	2.4	2.3	1.7	1.7	1.6	33.2
>5 to 10	47.6	6.4	5.5	5.0	3.1	2.7	2.5	1.7	1.7	2.5	21.6
>10 to 20	52.1	8.1	6.2	5.4	3.4	2.7	2.6	1.8	2.6	2.2	12.8
>20 to 30	57.4	9.2	6.2	5.4	3.5	2.7	2.2	1.4	1.2	1.1	9.6
>30	61.8	8.6	5.4	4.5	3.0	2.2	1.9	1.2	1.0	1.0	9.4
All	46.6	6.2	4.9	4.4	2.8	2.4	2.4	1.6	1.7	1.7	25.2
Years of tenure	Percentage of account balance invested in target date funds ³										
	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	1.8	1.7	1.7	1.1	1.2	2.1	1.0	1.1	1.0	35.0
>2 to 5	59.8	2.6	2.1	2.1	1.4	1.3	1.5	1.1	1.2	1.2	25.6
>5 to 10	66.0	3.5	2.6	2.4	1.7	1.5	1.5	1.1	1.2	2.1	16.3
>10 to 20	71.4	4.5	2.9	2.4	1.6	1.5	1.5	1.2	2.1	1.8	9.2
>20 to 30	77.5	5.0	2.7	2.2	1.6	1.3	1.1	0.8	0.7	0.7	6.3
>30	80.8	4.6	2.2	1.7	1.2	1.0	0.9	0.6	0.6	0.6	5.9
All	64.4	3.4	2.4	2.1	1.5	1.3	1.5	1.0	1.3	1.4	19.7
Years of tenure	Percentage of account balance invested in non-target date 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	83.0	2.5	1.6	1.3	0.6	0.7	0.6	0.4	0.3	0.2	8.8
>2 to 5	80.2	3.5	2.6	2.0	1.1	1.1	0.8	0.6	0.5	0.4	7.2
>5 to 10	78.9	4.6	3.7	2.9	1.5	1.2	1.0	0.5	0.5	0.4	4.9
>10 to 20	78.0	5.5	4.2	3.4	1.8	1.3	1.1	0.5	0.4	0.4	3.4
>20 to 30	77.2	6.1	4.3	3.5	1.9	1.3	1.1	0.6	0.5	0.4	3.1
>30	78.4	5.9	3.9	3.1	1.8	1.2	1.0	0.5	0.4	0.4	3.3
All	79.8	4.4	3.3	2.6	1.4	1.1	0.9	0.5	0.4	0.3	5.2

¹ The analysis includes the 23.4 million 401(k) plan participants in the year-end 2010 EBRI/ICI 401(k) database.

² Row percentages may not add to 100 percent because of rounding.

³ A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

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

Distribution of Participants' Company Stock Allocations

Participants' allocations to company stock remained in line with previous years. Thirty-nine percent (or 9.1 million) of the 401(k) participants in the 2010 EBRI/ICI 401(k) database were in plans that offered company stock as an investment

option (Figure 22). Among these participants, 73 percent held 20 percent or less of their account balances in company stock, including 49 percent who held none (Figure 33). On the other hand, about 6 percent had more than 80 percent of their account balances invested in company stock.

FIGURE 33

Asset Allocation Distribution of 401(k) Participant Account Balance to Company Stock in 401(k) Plans with Company Stock by Participant Age

Percentage of participants,^{1,2} 2010

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	62.4	10.0	6.0	4.5	3.4	4.5	2.6	1.0	0.7	0.6	4.3
30s	50.5	13.8	9.5	6.9	4.8	4.1	2.7	1.5	1.1	0.8	4.3
40s	46.8	15.2	9.8	7.3	5.1	3.9	2.9	1.8	1.3	1.0	5.0
50s	44.6	16.6	10.0	7.3	4.8	3.7	2.9	1.9	1.4	1.1	5.7
60s	48.0	15.4	8.9	6.5	4.1	3.2	2.7	1.7	1.4	1.1	7.0
All	49.4	14.5	9.1	6.7	4.6	3.9	2.8	1.6	1.2	1.0	5.2

¹ The analysis includes the 9.1 million participants in plans with company stock at year-end 2010.

² Row percentages may not add to 100 percent because of rounding.

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

Asset Allocation of Recently Hired Participants

Comparing snapshots of newly hired 401(k) plan participants' asset allocations provides further insight into recent investment allocations. Balanced funds, which include lifestyle and target date funds, have increased in popularity among 401(k) participants. Recently hired participants in 2010 tended to be more likely to hold balanced funds compared with recent hires in the past. Sixty-three percent of recently hired participants in 2010 held balanced funds, compared with 61 percent of recently hired participants

in 2009, 60 percent of recent hires in 2008, 53 percent of recent hires in 2007, 33 percent of recent hires in 2002, and 29 percent of recent hires in 1998 (Figure 34). At year-end 2010, 48 percent of recently hired 401(k) participants held target date funds, while 17 percent held non-target date balanced funds, and 2 percent held both target date and non-target date balanced funds (Figure 35). At year-end 2009, 47 percent of recently hired 401(k) participants held target date funds, 17 percent held non-target date balanced funds, and 2 percent held both.

FIGURE 34

Many Recently Hired 401(k) Participants Hold Balanced Funds

Percentage of recently hired participants¹ holding balanced funds,² 1998–2010

Year	Age group					
	20s	30s	40s	50s	60s	All
1998	27.0	29.0	30.5	30.9	28.4	28.9
1999	28.3	31.0	33.6	34.9	34.9	31.3
2000	27.1	28.3	30.8	32.1	33.2	29.1
2001	27.3	26.5	27.9	29.2	29.1	27.4
2002	32.7	33.1	33.7	33.9	30.2	33.0
2003	35.1	36.2	35.7	35.5	30.7	35.4
2004	38.9	39.8	39.8	40.3	36.3	39.3
2005	43.5	42.8	42.1	43.3	41.6	42.8
2006	48.5	47.9	46.6	47.8	45.5	47.6
2007	51.1	54.2	52.8	53.4	50.1	52.7
2008	63.6	59.6	57.8	58.0	53.9	59.9
2009	64.1	61.2	59.3	58.7	53.6	60.9
2010	69.6	63.0	59.9	59.1	55.2	63.0

¹ The analysis includes 401(k) plan participants with two or fewer years of tenure in the year indicated.

² "Balanced funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in a mix of equities and fixed-income securities.

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

FIGURE 35

Many Recently Hired 401(k) Participants Hold Target Date Funds

Percentage of recently hired participants, 2006–2010

Holding balanced funds					
Age group	2006	2007	2008	2009	2010
20s	48.5	51.1	63.6	64.1	69.6
30s	47.9	54.2	59.6	61.2	63.0
40s	46.6	52.8	57.8	59.3	59.9
50s	47.8	53.4	58.0	58.7	59.1
60s	45.5	50.1	53.9	53.6	55.2
All	47.6	52.7	59.9	60.9	63.0
Holding target date funds*					
Age group	2006	2007	2008	2009	2010
20s	29.4	31.7	46.5	48.5	52.0
30s	28.5	35.1	43.5	47.3	47.8
40s	27.4	34.2	41.8	45.5	45.3
50s	28.1	34.9	42.2	45.2	45.0
60s	26.1	32.1	38.4	41.0	41.7
All	28.3	33.8	43.6	46.6	47.6
Holding non-target date balanced funds					
Age group	2006	2007	2008	2009	2010
20s	22.5	21.8	19.3	17.7	19.0
30s	22.5	22.2	18.8	16.4	16.9
40s	21.3	21.4	18.3	16.1	16.1
50s	21.4	21.2	18.1	15.5	15.5
60s	19.8	20.3	17.3	14.2	14.5
All	21.9	21.7	18.7	16.5	17.0

*A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: The analysis includes the 2.8 million recently hired participants (those with two or fewer years of tenure) in 2006, the 3.8 million recently hired participants in 2007, the 4.0 million recently hired participants in 2008, the 3.1 million recently hired participants in 2009, and the 3.2 million recently hired participants in 2010. "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

Among those who held balanced funds, recently hired participants in 2010 were more likely to hold a high concentration of their accounts in balanced funds compared with past years. At year-end 2010, 70 percent of recently hired participants holding balanced funds had more than 90 percent of their account balance invested in balanced funds, compared with 61 percent in 2009, 56 percent in 2008, 48 percent in 2007, 43 percent in 2006, and 7 percent in 1998 (Figure 36). Concentration is highest among recently hired participants with target date funds; at year-end 2010, 74 percent of recently hired participants holding target date funds held more than 90 percent of their account balance in target date funds (Figure 37). Fifty-two percent of recently hired participants holding non-target date balanced funds had more than 90 percent of their account balance invested in non-target date balanced funds at year-end 2010.

Balanced fund, target date fund, and non-target date balanced fund use varied somewhat by age group among recently hired participants, and recently hired participants in their twenties were more likely to be highly concentrated in such funds. For example, 52 percent of recently hired participants in their twenties held more than 90 percent of their account balances in balanced funds, compared with 40 percent of recent hires in their forties and 38 percent of recent hires in their sixties in 2010 (Figure 38). Concentrated target date fund use ranged from 41 percent of recent hires in their twenties holding more than 90 percent of their account balances in target date funds to 30 percent

of recently hired participants in their sixties with that concentration. In addition, at year-end 2010, 44 percent of the account balances of recently hired participants in their twenties was invested in balanced funds, compared with 42 percent in 2009, 36 percent in 2008, 28 percent in 2007, 24 percent in 2006, 19 percent in 2005, and about 7 percent among that age group in 1998 (Figure 39).³⁹ At year-end 2010, among recently hired participants in their twenties, target date funds accounted for 79 percent of their balanced fund assets, or 35 percent of their account balances overall. The increase in asset allocation to balanced funds occurred in the target date fund category: target date fund assets accounted for 31 percent of the account balance assets of recently hired participants in their twenties at year-end 2009 (non-target date balanced funds were 10 percent at year-end 2009 and 9 percent at year-end 2010).⁴⁰ The pattern of target date and non-target date balanced fund use varied with participant age and lineup of plan investment options.

Comparing recently hired participants in 2010 with similar age groups in 1998 also illustrates that asset allocation to company stock and equity funds tended to be lower in 2010 than in 1998, while asset allocation to fixed-income securities tended to increase (Figure 39). Recently hired 401(k) participants tended to be less likely to hold company stock (Figure 40) and tended not to hold a high concentration of their account balance in company stock (Figures 41 and 42).⁴¹

FIGURE 36

Recently Hired 401(k) Participants Now Hold Higher Concentrations in Balanced Funds

Percentage of recently hired participants holding balanced fund assets;^{1, 2} 1998, 2006, 2007, 2008, 2009, and 2010

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
2008			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	26.1	11.8	62.2
30s	33.5	13.3	53.2
40s	33.9	13.5	52.6
50s	32.8	13.5	53.6
60s	32.1	12.8	55.1
All	31.0	12.9	56.1

Continued on the next page

FIGURE 36 CONTINUED

Recently Hired 401(k) Participants Now Hold Higher Concentrations in Balanced Funds

Percentage of recently hired participants holding balanced fund assets;^{1,2} 1998, 2006, 2007, 2008, 2009, and 2010

Percentage of account balance invested in balanced funds			
2009			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	20.4	13.3	66.3
30s	27.8	13.9	58.3
40s	28.8	13.9	57.4
50s	28.7	13.7	57.6
60s	29.4	13.3	57.3
All	25.9	13.6	60.5
2010			
Age group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	14.8	10.0	75.2
30s	21.2	11.3	67.5
40s	22.7	10.7	66.6
50s	22.4	10.1	67.5
60s	22.3	9.2	68.5
All	19.7	10.5	69.8

¹ 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; the 2.0 million recently hired participants holding balanced funds in 2007; the 2.4 million recently hired participants holding balanced funds in 2008; the 1.9 million recently hired participants holding balanced funds in 2009, and the 2.0 million recently hired participants holding balanced funds in 2010.

² Row percentages may not add to 100 percent because of rounding.

Note: "Balanced funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in a mix of equities and fixed-income securities.

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

FIGURE 37

Many Recently Hired 401(k) Participants Hold High Concentrations in Target Date Funds

Percentage of recently hired participants holding the type of fund indicated,^{1,2} 2010

Age group	Percentage of account balance invested in balanced funds		
	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	14.8	10.0	75.2
30s	21.2	11.3	67.5
40s	22.7	10.7	66.6
50s	22.4	10.1	67.5
60s	22.3	9.2	68.5
All	19.7	10.5	69.8

Age group	Percentage of account balance invested in target date funds ³		
	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	11.2	10.6	78.3
30s	17.2	11.7	71.1
40s	18.1	10.8	71.0
50s	17.9	10.0	72.1
60s	18.1	9.0	72.9
All	15.6	10.8	73.6

Age group	Percentage of account balance invested in non-target date balanced funds		
	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	32.3	7.9	59.8
30s	42.1	9.0	48.9
40s	44.2	9.4	46.4
50s	44.1	9.1	46.8
60s	41.4	8.9	49.7
All	39.5	8.7	51.7

¹ The analysis includes the 2.0 million recently hired participants (those with two or fewer years of tenure) holding balanced funds in 2010; the 1.5 million recently hired participants holding target date funds in 2010; and the 0.5 million recently hired participants holding non-target date balanced funds in 2010.

² Row percentages may not add to 100 percent because of rounding.

³ A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

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 38

Asset Allocation Distribution of 401(k) Account Balance to Balanced Funds Among Recently Hired 401(k) Participants by Participant Age

Percentage of recently hired participants,^{1, 2} 2010

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	30.4	2.9	2.3	2.1	1.4	1.6	3.2	1.4	1.3	1.1	52.3
30s	37.0	3.5	3.1	2.9	1.9	1.9	2.8	1.6	1.5	1.3	42.5
40s	40.1	3.6	3.1	3.1	1.9	1.9	2.4	1.5	1.4	1.1	39.9
50s	40.9	3.8	2.8	2.9	1.8	1.8	2.3	1.3	1.2	1.1	39.9
60s	44.8	3.7	2.5	2.7	1.6	1.8	1.9	1.1	1.0	1.1	37.8
All	37.0	3.4	2.8	2.7	1.7	1.8	2.7	1.4	1.3	1.1	44.0

Percentage of account balance invested in target date funds ³											
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	48.0	1.2	1.3	1.3	0.9	1.0	2.6	1.0	1.0	0.9	40.7
30s	52.2	1.9	1.9	1.9	1.2	1.3	2.2	1.1	1.2	1.1	34.0
40s	54.7	2.0	1.8	1.9	1.2	1.3	1.9	1.0	1.1	0.9	32.2
50s	55.0	2.2	1.7	1.8	1.2	1.2	1.7	0.9	1.0	0.9	32.4
60s	58.3	2.2	1.5	1.7	1.0	1.1	1.4	0.7	0.8	0.9	30.4
All	52.4	1.8	1.7	1.7	1.1	1.2	2.1	1.0	1.1	1.0	35.0

Percentage of account balance invested in non-target date 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	81.0	2.6	1.4	1.0	0.5	0.7	0.7	0.4	0.3	0.2	11.4
30s	83.1	2.7	1.8	1.3	0.7	0.7	0.6	0.5	0.3	0.2	8.3
40s	83.9	2.5	1.7	1.5	0.7	0.7	0.6	0.5	0.3	0.2	7.5
50s	84.5	2.4	1.6	1.4	0.7	0.7	0.6	0.4	0.3	0.2	7.2
60s	85.5	2.1	1.3	1.3	0.7	0.7	0.5	0.4	0.2	0.2	7.2
All	83.0	2.5	1.6	1.3	0.6	0.7	0.6	0.4	0.3	0.2	8.8

¹ The analysis includes the 3.2 million recently hired participants (those with two or fewer years of tenure) in 2010.

² Row percentages may not add to 100 percent because of rounding.

³ A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

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 39

Average Asset Allocation of 401(k) Accounts by Participant Age and Investment Options Among 401(k) Plan Participants with Two or Fewer Years of Tenure¹

Percentage of account balances,² 1998 and 2010

Age group	Equity funds		Balanced funds				Bond funds		Money funds		GICs ⁴ and other stable value funds		Company stock	
	1998	2010	Total		Target date funds ³	Non-target date balanced funds	1998	2010	1998	2010	1998	2010	1998	2010
			1998	2010	2010	2010								
All														
20s	66.9	32.8	7.4	43.9	34.9	9.0	5.1	8.3	4.0	2.4	3.7	2.4	10.5	5.4
30s	67.8	39.7	8.0	35.0	28.2	6.8	5.1	10.2	4.1	2.8	3.2	3.1	9.4	4.1
40s	64.5	41.6	9.7	29.5	23.7	5.7	5.9	11.5	5.1	2.9	4.4	4.7	8.0	4.2
50s	60.5	37.0	11.3	27.3	22.0	5.3	6.6	14.5	5.9	3.4	6.7	7.8	6.5	4.0
60s	50.0	32.4	12.1	23.4	18.8	4.6	8.7	17.7	7.8	3.7	13.3	11.8	5.7	4.2
All	64.8	38.0	9.1	30.7	24.7	6.0	5.7	12.4	4.9	3.1	4.6	5.8	8.6	4.3
Plans without company stock, GICs,⁴ or other stable value funds														
20s	77.8	36.8	7.8	43.9	38.8	5.1	7.7	11.2	4.9	3.2				
30s	77.9	43.9	8.4	33.4	29.5	3.9	7.2	13.3	4.8	3.7				
40s	74.0	45.2	9.9	29.3	25.8	3.5	8.3	15.0	6.0	3.7				
50s	70.3	39.5	11.3	28.3	25.1	3.2	10.0	19.4	6.5	4.3				
60s	59.4	35.4	11.8	25.2	22.1	3.1	13.5	24.7	12.2	4.8				
All	75.0	41.4	9.3	30.6	27.0	3.6	8.2	16.6	5.7	4.0				
Plans with GICs⁴ and/or other stable value funds														
20s	73.4	32.4	7.3	49.2	34.0	15.2	3.9	6.4	2.9	1.1	9.1	5.8		
30s	73.5	36.1	8.1	42.2	31.4	10.7	4.1	7.1	2.8	1.6	7.9	7.8		
40s	69.0	38.8	9.4	33.4	25.3	8.1	5.0	7.7	3.4	1.5	9.5	13.0		
50s	63.6	36.0	10.2	28.9	21.2	7.7	5.9	9.3	4.6	1.8	11.9	19.0		
60s	52.7	32.8	11.2	26.4	19.1	7.3	6.8	11.8	7.2	2.4	19.2	22.3		
All	69.7	36.2	7.9	35.0	25.8	9.2	5.0	8.3	3.5	1.7	10.1	13.4		
Plans with company stock														
20s	51.8	29.5	6.1	41.8	36.8	5.0	5.0	9.1	5.4	2.9			29.5	11.5
30s	56.0	40.6	6.6	29.2	23.7	5.5	5.3	11.5	5.2	3.7			24.6	10.4
40s	54.4	42.5	8.2	24.8	20.1	4.7	6.5	12.8	6.4	4.0			22.6	12.0
50s	53.2	37.1	9.8	24.1	19.7	4.4	6.9	16.5	8.6	5.6			19.4	12.4
60s	47.2	31.0	11.1	21.4	17.4	3.9	14.3	23.0	6.4	6.7			19.3	13.1
All	54.2	38.5	7.2	27.4	22.6	4.8	6.3	13.6	6.1	4.4			24.1	11.7

Continued on the next page

FIGURE 39 CONTINUED

Average Asset Allocation of 401(k) Accounts by Participant Age and Investment Options Among 401(k) Plan Participants with Two or Fewer Years of Tenure¹

Percentage of account balances,² 1998 and 2010

Age group	Balanced funds													
	Equity funds		Total		Target date funds ³	Non-target date balanced funds	Bond funds		Money funds		GICs ⁴ and other stable value funds		Company stock	
	1998	2010	1998	2010	2010	2010	1998	2010	1998	2010	1998	2010	1998	2010
Plans with company stock and GICs⁴ and/or other stable value funds														
20s	56.2	28.7	8.2	41.1	28.2	12.9	2.3	5.0	2.5	1.8	6.7	5.1	22.0	14.6
30s	56.3	34.1	8.9	35.7	25.8	9.9	2.6	6.3	3.3	1.6	5.9	6.9	20.6	11.3
40s	53.8	36.2	11.0	29.2	20.6	8.7	2.8	7.0	5.0	2.0	7.8	10.1	17.3	11.5
50s	49.3	32.6	13.8	25.1	17.5	7.6	3.3	8.0	5.3	2.0	11.8	17.1	14.5	11.8
60s	38.0	27.0	14.3	18.5	12.7	5.8	2.6	7.1	4.9	1.7	27.8	30.4	10.7	12.2
All	54.1	32.8	10.1	29.3	20.6	8.7	2.4	6.8	2.4	1.8	10.1	13.3	18.6	11.9

¹ The analysis is based on samples of 1.2 million participants with two or fewer years of tenure in 1998 and 3.2 million participants with two or fewer years of tenure in 2010.

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

³ A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

⁴ 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 40

Recently Hired 401(k) Participants Tend to Be Less Likely to Hold Company Stock

Percentage of recently hired participants offered and holding company stock by participant age, 1998–2010

	Age group					
	20s	30s	40s	50s	60s	All
1998	60.8	61.9	59.8	57.6	54.1	60.5
1999	61.1	62.3	60.6	58.8	55.5	61.0
2000	60.5	61.6	59.5	57.4	53.6	60.0
2001	58.1	60.0	58.8	57.9	55.7	58.7
2002	53.9	57.2	55.9	53.9	51.0	55.3
2003	49.6	53.3	52.6	51.2	49.5	51.6
2004	49.8	52.3	52.0	49.5	47.8	51.0
2005	45.4	47.6	47.3	45.2	43.9	46.3
2006	40.0	43.6	43.6	42.3	40.4	42.0
2007	35.4	40.4	40.7	39.6	38.4	38.7
2008	32.9	37.4	37.9	37.8	38.7	36.2
2009	32.3	36.2	37.0	37.6	40.5	35.5
2010	30.3	33.6	34.4	34.4	36.8	33.0

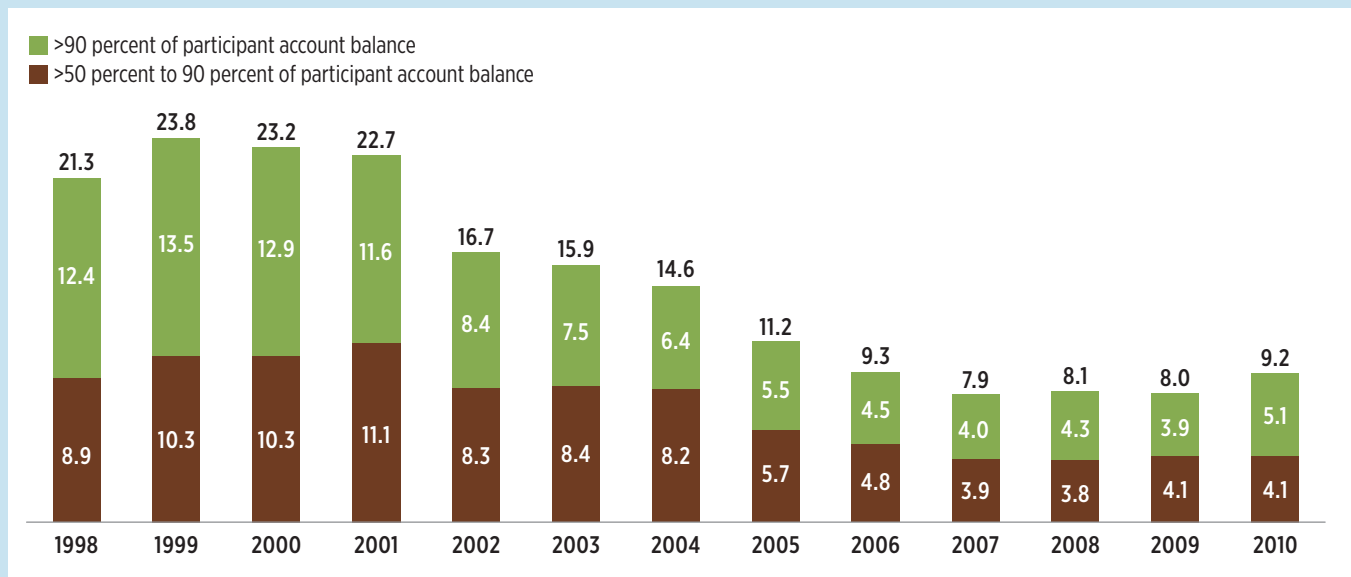
Note: The analysis includes 401(k) plan participants with two or fewer years of tenure in the year indicated and in a plan offering company stock as an investment option.

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

FIGURE 41

New 401(k) Participants Tend Not to 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, 1998–2010



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 42

Asset Allocation Distribution of Recently Hired 401(k) Participant Account Balance to Company Stock in 401(k) Plans with Company Stock by Participant Age

Percentage of recently hired participants in plans offering company stock as an investment option,^{1,2} 2010

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	69.7	5.0	4.1	3.6	3.0	5.8	2.2	0.7	0.5	0.5	4.7
30s	66.4	6.8	5.5	4.5	3.6	4.5	2.1	0.8	0.6	0.5	4.8
40s	65.6	7.0	5.7	4.8	3.7	3.6	2.1	0.9	0.7	0.5	5.4
50s	65.6	7.3	5.8	4.8	3.6	3.3	2.1	0.9	0.6	0.5	5.5
60s	63.2	8.2	6.0	4.4	3.6	3.1	2.2	1.1	0.9	0.9	6.5
All	67.0	6.4	5.2	4.3	3.4	4.4	2.1	0.8	0.6	0.5	5.1

¹ The analysis includes the 1.1 million participants with two or fewer years of tenure in 2010 and in plans offering company stock as an investment option.

² 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 2010 Snapshot of 401(k) Plan Loan Activity

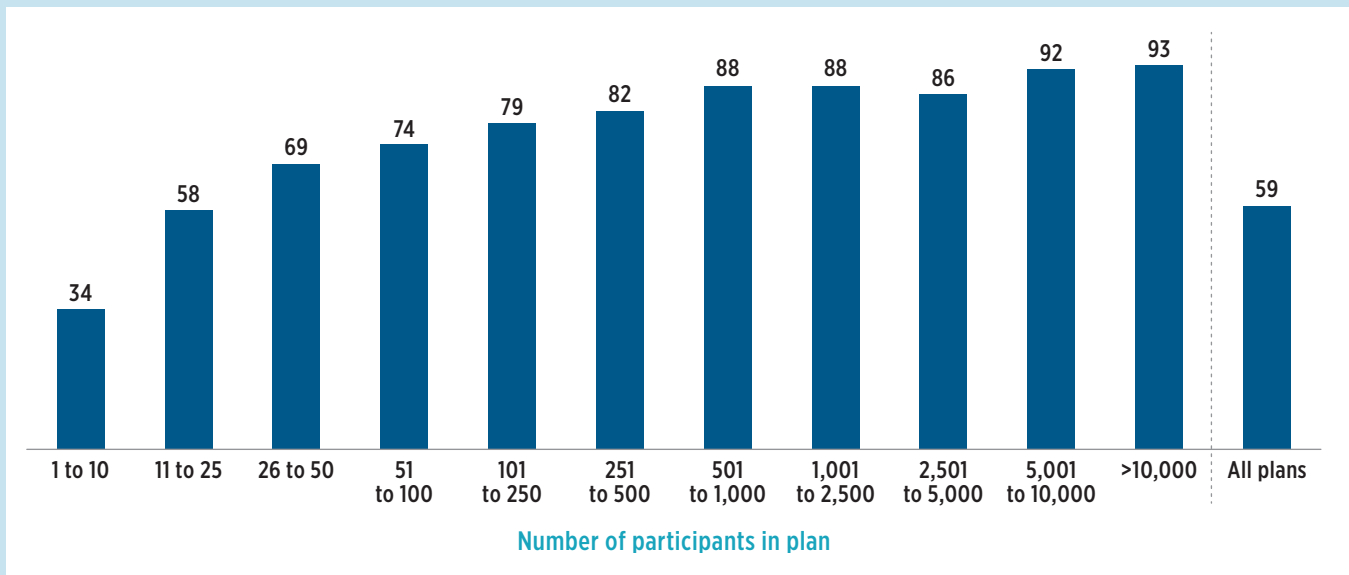
Availability and Use of 401(k) Plan Loans by Plan Size

Fifty-nine percent of the 401(k) plans for which loan data were available in the 2010 EBRI/ICI 401(k) database offered a plan loan provision to participants (Figure 43).⁴² The loan feature was more commonly associated with large

plans (as measured by the number of participants in the plan). Ninety-three 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 was modest variation in participant loan activity by plan size, ranging from 19 percent of participants with loans outstanding in 401(k) plans with 26 to 100 participants to 23 percent of participants in 401(k) plans with 10 or fewer

FIGURE 43

Percentage of 401(k) Plans Offering Loans by Plan Size, 2010



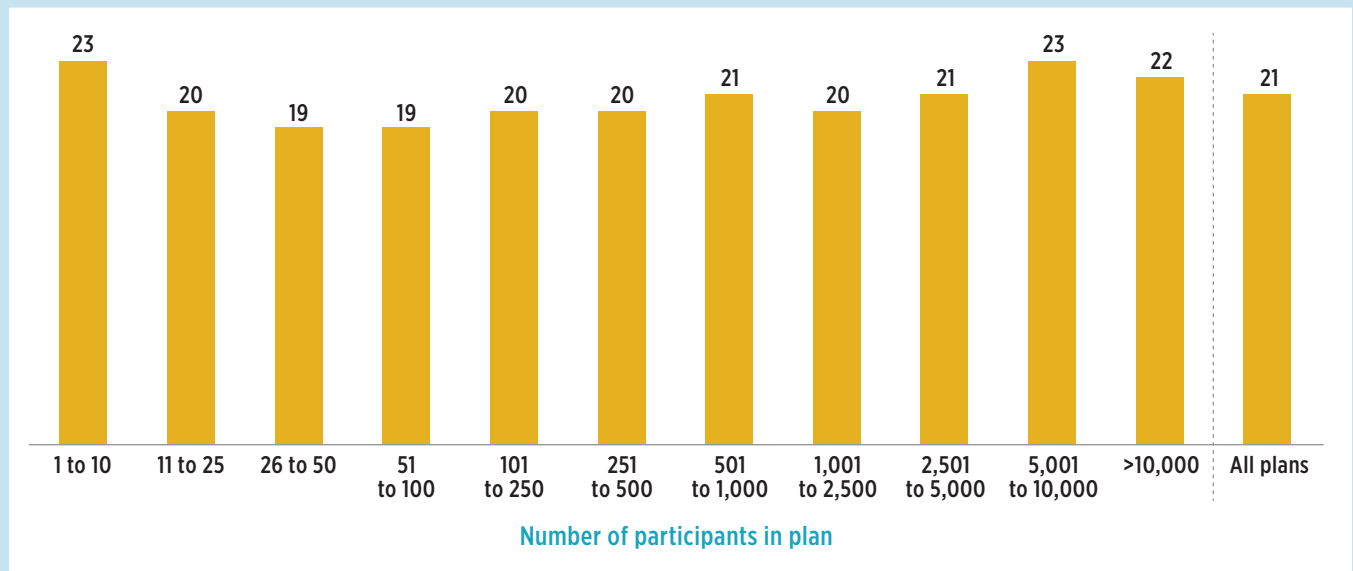
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

participants or 5,001 to 10,000 participants (Figure 44). Loan ratios—the amount of the loan outstanding divided by the remaining balance—vary only slightly when participants are grouped based on the size of their 401(k) plans (as measured by the number of plan participants). Among

participants in plans with 100 or fewer participants, the loan ratio was 16 percent of the remaining assets in 2010, while in plans with more than 10,000 participants, the loan ratio was 12 percent (Figure 45).

FIGURE 44

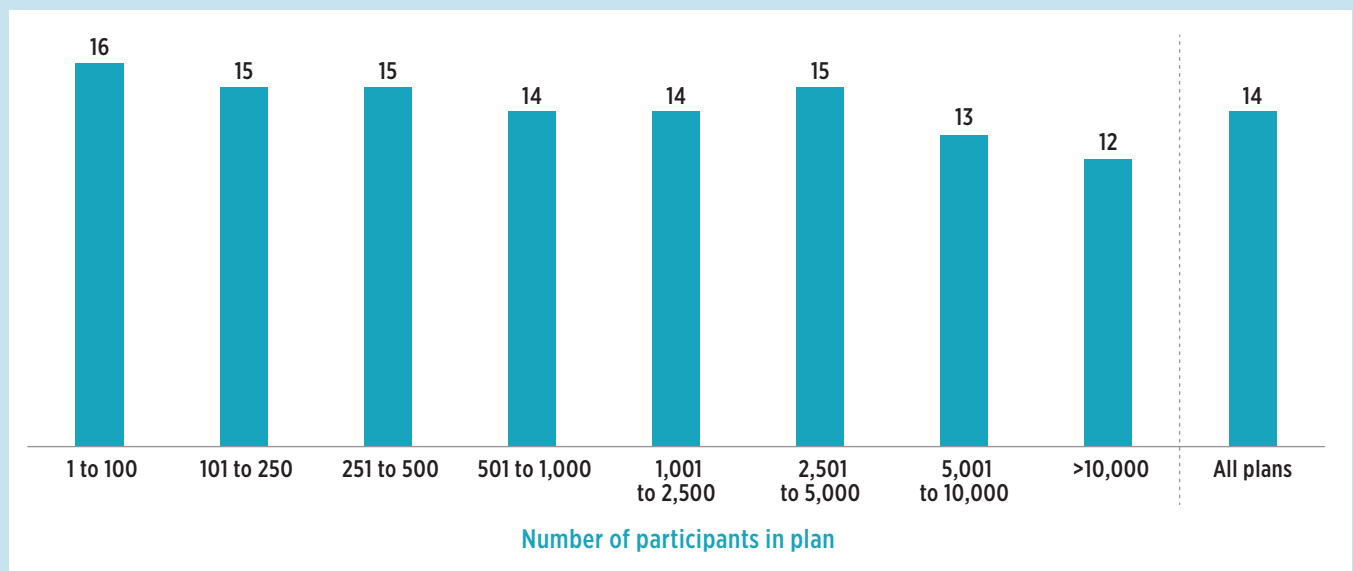
Percentage of Eligible 401(k) Plan Participants with 401(k) Loans by Plan Size, 2010



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

FIGURE 45

401(k) Loan Balances as a Percentage of 401(k) Account Balances for Participants with 401(k) Loans by Plan Size, 2010



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

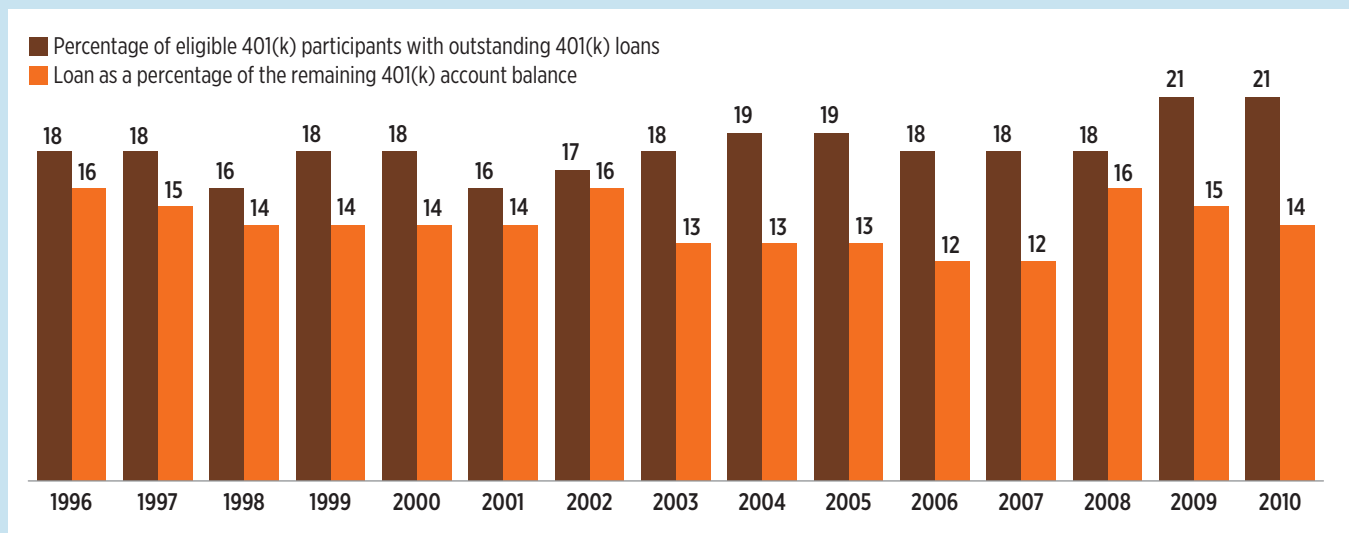
In the 15 years that the database has been tracking loan activity among 401(k) plan participants, there has been little variation. From 1996 through 2008, on average, less than one-fifth of 401(k) participants with access to loans had loans outstanding. At year-end 2009, the percentage of participants who were offered loans with loans outstanding ticked up to 21 percent and remained at that level at year-end 2010. However, not all participants have access to 401(k) plan loans—factoring in all 401(k) participants with and without loan access in the database, only 18 percent had a loan outstanding at year-end 2010.⁴³ On average, over the past 15 years, among participants with loans outstanding, about 14 percent of the remaining account balance was taken out as a loan (Figure 46). U.S. Department of Labor data indicate that loan amounts tend to be a negligible portion of plan assets and that very little gets converted into distributions in any given year (meaning that most loans are repaid).⁴⁴

401(k) Plan Loan Activity Varies with Participant Age, Tenure, Account Balance, and Salary

In the 2010 EBRI/ICI 401(k) database, 87 percent of participants were in plans offering loans. However, as has been the case for the 15 years that the database has tracked 401(k) plan participants, relatively few participants made use of this borrowing privilege. At year-end 2010, 21 percent of those eligible for loans had 401(k) plan loans outstanding (Figure 46). 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 (Figure 47). 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. Sixteen percent of participants with account balances of less than \$10,000 had loans outstanding.

FIGURE 46

Few 401(k) Participants Had Outstanding 401(k) Loans; Loans Tended to Be Small, 1996–2010



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

FIGURE 47

401(k) Loan Activity Varied Across 401(k) Plan Participants*Percentage of eligible 401(k) participants with 401(k) loans by participant age, tenure, account size, or salary; selected years*

	1996	2000	2002	2005	2007	2008	2009	2010
All	18	18	17	19	18	18	21	21
Age group								
20s	12	11	10	11	10	10	13	13
30s	20	19	18	20	20	20	23	23
40s	22	21	20	22	22	22	26	26
50s	17	17	17	19	19	19	22	22
60s	9	9	9	10	10	11	12	13
Years of tenure*								
0 to 2	6	5	4	5	7	6	9	7
>2 to 5	15	14	12	14	15	15	17	18
>5 to 10	24	23	21	22	23	23	25	27
>10 to 20	27	26	26	26	26	26	29	29
>20 to 30	25	26	25	24	24	25	27	26
>30	13	16	15	17	17	18	19	19
Size of account balance								
<\$10,000	12	11	11	12	11	12	16	16
\$10,000 to \$20,000	26	23	22	26	25	26	28	29
>\$20,000 to \$30,000	26	25	22	27	26	26	28	29
>\$30,000 to \$40,000	25	25	23	26	26	26	28	28
>\$40,000 to \$50,000	24	25	23	25	26	25	27	27
>\$50,000 to \$60,000	24	24	22	24	25	24	25	26
>\$60,000 to \$70,000	23	24	22	23	24	23	25	25
>\$70,000 to \$80,000	26	23	22	22	23	22	24	24
>\$80,000 to \$90,000	23	23	21	21	23	21	23	23
>\$90,000 to \$100,000	22	22	21	20	22	20	23	22
>\$100,000 to \$200,000	22	20	19	18	19	18	19	19
>\$200,000	18	15	13	13	13	12	13	12
Salary range								
\$40,000 or less	18	17	13	19	20	19	24	22
>\$40,000 to \$60,000	20	23	21	26	28	27	30	26
>\$60,000 to \$80,000	18	23	20	24	24	24	26	23
>\$80,000 to \$100,000	17	21	17	22	21	20	23	20
>\$100,000	14	16	13	16	14	14	16	14

*The tenure variable 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

Average Loan Balances

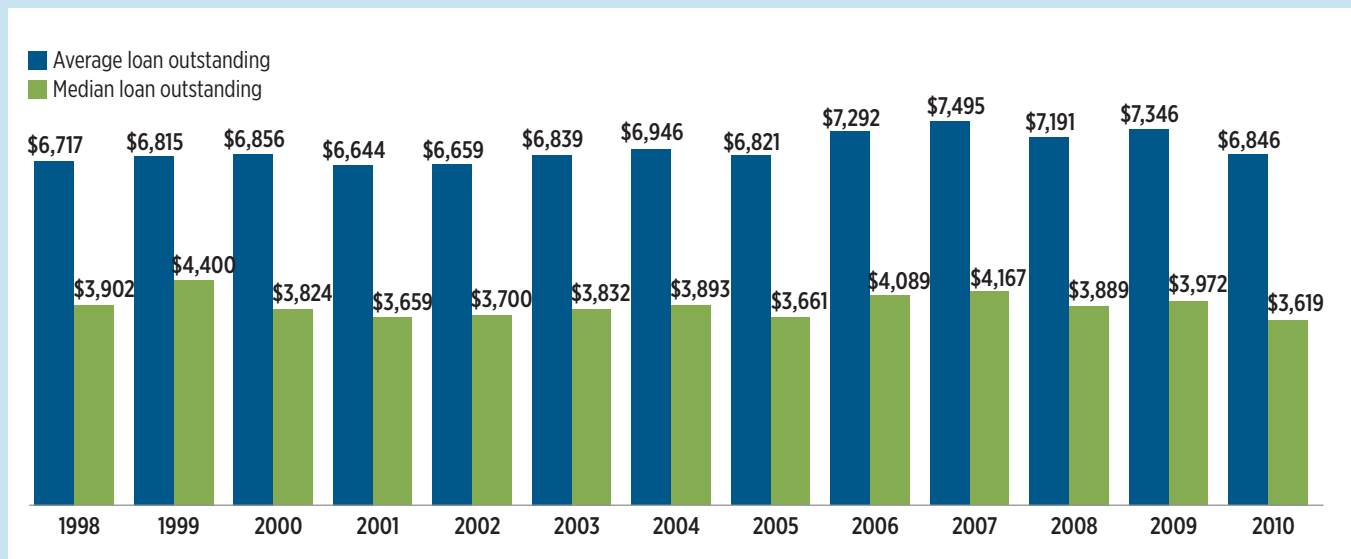
Among participants with outstanding 401(k) loans at the end of 2010, the average unpaid balance was \$6,846, compared with \$7,346 in the year-end 2009 database (Figure 48). The median loan balance outstanding was \$3,619 at year-end 2010, compared with \$3,972 in the year-end 2009 database. With account balances generally higher on average in 2010 compared with 2009, the ratio of the loan outstanding to the remaining account balance

edged down in 2010 (Figures 46 and 49). 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),⁴⁵ 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 outstanding at all (Figure 50).

FIGURE 48

401(k) Loan Balances

Average and median loan balances for 401(k) participants with 401(k) loans, 1998–2010



Note: Average and median 401(k) loan amounts are calculated among participants with 401(k) loans.

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

FIGURE 49

401(k) Loan Amounts Varied Across 401(k) Participants

401(k) loan balances as a percentage of 401(k) account balances for 401(k) participants with loans by participant age, tenure, account size, or salary; selected years

	1996	2000	2002	2005	2007	2008	2009	2010
All	16	14	16	13	12	16	15	14
Age group								
20s	30	30	28	24	25	29	26	24
30s	22	20	22	19	19	25	22	20
40s	16	15	16	13	13	18	16	15
50s	12	11	12	10	10	13	12	11
60s	10	9	10	8	8	11	10	9
Years of tenure*								
0 to 2	27	24	27	23	21	25	22	19
>2 to 5	24	25	25	21	22	26	23	20
>5 to 10	23	21	23	19	18	24	20	19
>10 to 20	15	14	16	13	13	17	16	14
>20 to 30	11	10	11	9	8	12	11	9
>30	7	8	10	8	7	9	9	7
Size of account balance								
<\$10,000	39	39	37	35	36	39	39	35
\$10,000 to \$20,000	32	32	31	29	30	33	31	28
>\$20,000 to \$30,000	28	28	28	25	26	29	27	25
>\$30,000 to \$40,000	23	24	25	22	23	26	25	23
>\$40,000 to \$50,000	22	21	22	20	21	24	22	20
>\$50,000 to \$60,000	19	19	20	18	19	21	21	19
>\$60,000 to \$70,000	16	17	18	16	17	19	19	17
>\$70,000 to \$80,000	16	15	16	15	16	18	17	16
>\$80,000 to \$90,000	14	14	15	14	14	16	16	15
>\$90,000 to \$100,000	13	13	13	13	13	15	15	14
>\$100,000 to \$200,000	10	9	10	9	10	11	11	10
>\$200,000	5	5	5	4	5	5	5	5
Salary range								
\$40,000 or less	17	19	18	18	17	21	19	17
>\$40,000 to \$60,000	17	16	16	16	15	19	17	15
>\$60,000 to \$80,000	15	13	14	13	12	17	14	13
>\$80,000 to \$100,000	14	12	12	11	11	14	12	11
>\$100,000	14	10	10	9	9	11	10	9

*The tenure variable 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

FIGURE 50

Loans from 401(k) Plans Tended to Be Small

Percentage of eligible participants by age, 2010

401(k) loan as a percentage of remaining 401(k) account balance	Age group			
	20s	40s	60s	All
Zero (no loan)	87	75	87	79
1 to 10 percent	3	8	6	6
>10 to 20 percent	3	6	3	5
>20 to 30 percent	2	4	2	3
>30 to 80 percent	5	7	3	6
>80 percent	1	1	(*)	1

(*) = less than 0.5 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

References

- Aon Hewitt. 2011. *Navigating the Path to Retirement: 2011 Universe Benchmarks*. Lincolnshire, IL: Aon Hewitt.
- Barclays Capital U.S. Aggregate Bond Index. San Francisco, CA: Barclays Global Investors.
- Bloomberg Data. New York, NY: Bloomberg L.P.
- Bogdan, Michael, Sarah Holden, and Daniel Schrass. 2011. "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2011." *ICI Research Perspective* 17, no. 5 (October). Available at www.ici.org/pdf/per17-05.pdf.
- Brady, Peter. 2008. "Measuring Retirement Resource Adequacy." *Journal of Pension Economics and Finance*. (Published online by Cambridge University Press on September 8, 2008.)
- Brady, Peter, Sarah Holden, and Erin Short. 2010. "The U.S. Retirement Market, 2009." *Investment Company Institute Fundamentals* 19, no. 3 (May). Available at www.ici.org/pdf/fm-v19n3.pdf.
- Choi, James J., David Laibson, Brigitte C. Madrian, and Andrew Metrick. 2001. "Defined Contribution Pensions: Plan Rules, Participant Decisions, and the Path of Least Resistance." *NBER Working Paper*, no. 8655 (December). Cambridge, MA: National Bureau of Economic Research.
- Congressional Budget Office. 2011. *CBO's 2010 Long-Term Projections for Social Security: Additional Information* (August). Washington, DC: Congressional Budget Office. Available at www.cbo.gov/ftpdocs/123xx/doc12375/08-05-Long-TermSocialSecurityProjections.pdf.
- Copeland, Craig. 2009. "Individual Account Retirement Plans: An Analysis of the 2007 Survey of Consumer Finances, With Market Adjustments to June 2009." *EBRI Issue Brief*, no. 333 (August). Available at www.ebri.org/pdf/briefspdf/EBRI_IB_08-2009_No333_SCF.pdf.
- Copeland, Craig. 2011. "Target-Date Fund Use in 401(k) Plans and the Persistence of Their Use, 2007–2009." *EBRI Issue Brief*, no. 361 (August). Available at www.ebri.org/pdf/briefspdf/EBRI_IB_08-2011_No361_TDFs.pdf.
- Deloitte Consulting LLP, International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists. 2010. *Annual 401(k) Benchmarking Survey 2010 Edition*. New York, NY: Deloitte Consulting LLP. Available at www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_consulting_2010annual401kbenchmarkingsurvey_121510.pdf.
- Deloitte Consulting and Investment Company Institute. 2011. *Inside the Structure of Defined Contribution/401(k) Plan Fees: A Study Assessing the Mechanics of the 'All-In' Fee*. Washington, DC: Investment Company Institute and New York, NY: Deloitte Consulting LLP. Available at www.ici.org/pdf/rpt_11_dc_401k_fee_study.pdf.
- Employee Benefit Research Institute. 2005. "History of 401(k) Plans: An Update." *FACTS from EBRI*. Washington, DC: Employee Benefit Research Institute (February). Available at www.ebri.org/pdf/publications/facts/0205fact.a.pdf.
- Fidelity Investments. 2008. "Impact of Market Volatility on Participant Exchange Behavior." *Building Futures: Impact of Market Volatility* (December). Boston, MA: Fidelity Investments.
- Fidelity Investments. 2009. "Participants Continue to Stay the Course Amidst Market Downturn; Improvements Seen in Worker Engagement, Account Diversification and Company Stock Usage." News release, January 28, 2009.
- Gustman, Alan L., and Thomas Steinmeier. 2008. "How Changes in Social Security Affect Recent Retirement Trends." *NBER Working Paper*, no. 14105 (June). Cambridge, MA: National Bureau of Economic Research.
- Hewitt Associates. 2009a. *How Well Are Employees Saving in 401(k) Plans: 2009 Hewitt Universe Benchmarks*. Lincolnshire, IL: Hewitt Associates LLC.
- Hewitt Associates. 2009b. *Trends and Experience in 401(k) Plans*. Lincolnshire, IL: Hewitt Associates LLC. Available at www.retirementmadesimpler.org/Library/Hewitt_Research_Trends_in_401k_Highlights.pdf.

Holden, Sarah, Steven Bass, and Brian Reid. 2011. *Commitment to Retirement Security: Investor Attitudes and Actions*. Washington, DC: Investment Company Institute (January). Available at www.ici.org/pdf/ppr_11_com_ret.pdf.

Holden, Sarah, Peter Brady, and Michael Hadley. 2006. "401(k) Plans: A 25-Year Retrospective." *Investment Company Institute Perspective* 12, no. 2 (November). Available at www.ici.org/pdf/per12-02.pdf.

Holden, Sarah, and Daniel Schrass. 2011. *Defined Contribution Plan Participants' Activities: First Half 2011. ICI Research Report* (October). Available at www.ici.org/pdf/ppr_11_rec_survey-q2.pdf.

Holden, Sarah, and Jack VanDerhei. 2001a. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 1999." *Investment Company Institute Perspective* 7, no. 1 (January), and *EBRI Issue Brief*, no. 230 (February). Available at www.ici.org/pdf/per07-01.pdf and www.ebri.org/pdf/briefspdf/0201ib.pdf.

Holden, Sarah, and Jack VanDerhei. 2001b. "The Impact of Employer-Selected Investment Options on 401(k) Plan Participants' Asset Allocations: Preliminary Findings." Working paper prepared for the Center for Pension and Retirement Research (CPRR) Current Pension Policy Issues Conference, at Miami University, Oxford, OH, June 8–9, 2001.

Holden, Sarah, and Jack VanDerhei. 2001c. "Contribution Behavior of 401(k) Plan Participants." *Investment Company Institute Perspective* 7, no. 4, and *EBRI Issue Brief*, no. 238 (October). Available at www.ici.org/pdf/per07-04.pdf and www.ebri.org/pdf/briefspdf/1001ib.pdf.

Holden, Sarah, and Jack VanDerhei. 2002. "Can 401(k) Accumulations Generate Significant Income for Future Retirees?" *Investment Company Institute Perspective* 8, no. 3, and *EBRI Issue Brief*, no. 251 (November). Available at www.ici.org/pdf/per08-03.pdf and www.ebri.org/pdf/briefspdf/1102ib.pdf.

Holden, Sarah, and Jack VanDerhei. 2003. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2002." *Investment Company Institute Perspective* 9, no. 5, and *EBRI Issue Brief*, no. 261 (September). Available at www.ici.org/pdf/per09-05.pdf and www.ebri.org/pdf/briefspdf/0903ib.pdf.

Holden, Sarah, and Jack VanDerhei. 2004a. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2003." *Investment Company Institute Perspective* 10, no. 2, and *EBRI Issue Brief*, no. 272 (August). Available at www.ici.org/pdf/per10-02.pdf and www.ebri.org/pdf/briefspdf/0804ib1.pdf.

Holden, Sarah, and Jack VanDerhei. 2004b. "Appendix: Additional Figures for the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project for Year-End 2003." *Investment Company Institute Perspective* 10, no. 2A (August). Available at www.ici.org/pdf/per10-02_appendix.pdf.

Holden, Sarah, and Jack VanDerhei. 2004c. "Contribution Behavior of 401(k) Plan Participants During Bull and Bear Markets." *National Tax Association Proceedings, Ninety-Sixth Annual Conference on Taxation*, November 13–15, 2003, Chicago, IL: 44–53. Washington, DC: National Tax Association.

Holden, Sarah, and Jack VanDerhei. 2005. "The Influence of Automatic Enrollment, Catch-Up, and IRA Contributions on 401(k) Accumulations at Retirement." *Investment Company Institute Perspective* 11, no. 2, and *EBRI Issue Brief*, no. 283 (July). Available at www.ici.org/pdf/per11-02.pdf and www.ebri.org/pdf/briefspdf/ebri_ib_07-20054.pdf.

Holden, Sarah, Jack VanDerhei, and Luis Alonso. 2009. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2008." *Investment Company Institute Perspective* 15, no. 2, and *EBRI Issue Brief*, no. 324 (October). Available at www.ici.org/pdf/per15-02.pdf and www.ebri.org/pdf/briefspdf/EBRI_IB_10-2009_No335_K-Update.pdf.

- Holden, Sarah, Jack VanDerhei, and Luis Alonso. 2010. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2009." *Investment Company Institute Perspective* 16, no. 3, and *EBRI Issue Brief*, no. 350 (November). Available at www.ici.org/pdf/per16-03.pdf and www.ebri.org/pdf/briefspdf/EBRI_IB_011-2010_No350_401k_Update-09.pdf.
- Holden, Sarah, Jack VanDerhei, Luis Alonso, and Craig Copeland. 2008. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2007." *Investment Company Institute Perspective* 14, no. 3, and *EBRI Issue Brief*, no. 324 (December). Available at www.ici.org/pdf/per14-03.pdf and www.ebri.org/pdf/briefspdf/EBRI_IB_12a-2008.pdf.
- Holden, Sarah, Jack VanDerhei, and Carol Quick. 2000. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 1998." *Investment Company Institute Perspective* 9, no. 5 (January), and *EBRI Issue Brief*, no. 218 (February). Available at www.ici.org/pdf/per09-05.pdf and www.ebri.org/pdf/briefspdf/0200ib.pdf.
- Investment Company Institute. *Quarterly Supplementary Data*. Washington, DC: Investment Company Institute.
- Investment Company Institute. 2010. "Americans Committed to Saving for Retirement: ICI Year-End Data." News release (April 26). Available at www.ici.org/pressroom/news/10_news_trow_am_saves.
- Investment Company Institute. 2011. "The U.S. Retirement Market, Second Quarter 2011" (September). Available at www.ici.org/info/ret_11_q2_data.xls.
- MacDonald, Bonnie-Jeanne, and Kevin D. Moore. 2011. "Moving Beyond the Limitations of Traditional Replacement Rates." Society of Actuaries (September). Available at www.soa.org/research/research-projects/pension/default.aspx.
- Morningstar. 2011. *Ibbotson SBBI 2011 Classic Yearbook: Market Results for Stocks, Bonds, Bills, and Inflation 1926–2010*. Chicago, IL: Morningstar Inc.
- Plan Sponsor Council of America. 2011. *54th Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2010 Plan Experience*. Chicago, IL: Plan Sponsor Council of America.
- Poterba, James, Steven F. Venti, and David A. Wise. 2007. "Rise of 401(k) Plans, Lifetime Earnings, and Wealth at Retirement." *NBER Working Paper*, no. 13091 (May). Cambridge, MA: National Bureau of Economic Research.
- Russell 2000 Index. Tacoma, WA: Frank Russell Company.
- S&P 500. New York, NY: Standard & Poor's.
- U.S. Department of Labor, Bureau of Labor Statistics. 2007. *National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2007*. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. Available at www.bls.gov/ncs/ebs/sp/ebsm0006.pdf.
- U.S. Department of Labor, Bureau of Labor Statistics. 2008a. "Employee Benefits in the United States, March 2008." News release, August 7, 2008. Available at www.bls.gov/news.release/archives/ebs2_08072008.pdf.
- U.S. Department of Labor, Bureau of Labor Statistics. 2008b. *National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2008*. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. Available at www.bls.gov/ncs/ebs/benefits/2008/ownership/private/table02a.pdf.
- U.S. Department of Labor, Bureau of Labor Statistics. 2009. *National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2009*. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. Available at www.bls.gov/ncs/ebs/benefits/2009/ownership/private/table02a.pdf.
- U.S. Department of Labor, Bureau of Labor Statistics. 2010a. "Employee Benefits in the United States, March 2010." News release, July 27, 2010. Available at www.bls.gov/news.release/pdf/ebs2.pdf.

U.S. Department of Labor, Bureau of Labor Statistics. 2010b. *National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2010*. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. Available at www.bls.gov/ncs/eps/benefits/2010/ownership/private/table02a.pdf.

U.S. Department of Labor, Bureau of Labor Statistics. 2011a. *National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2011*. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. Available at www.bls.gov/ncs/eps/benefits/2011/ownership/private/table02a.pdf.

U.S. Department of Labor, Bureau of Labor Statistics. 2011b. "The Employment Situation, October 2011," Economic News Release, November 4, 2011. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. Available at www.bls.gov/news.release/empsit.t17.htm.

U.S. Department of Labor, Employee Benefits Security Administration. 2008a. *Private Pension Plan Bulletin, Abstract of 2005 Form 5500 Annual Reports*. Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (February). Available at www.dol.gov/ebsa/pdf/2005pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2008b. *Private Pension Plan Bulletin, Abstract of 2006 Form 5500 Annual Reports*. Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (December). Available at www.dol.gov/ebsa/pdf/2006pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2010a. *Private Pension Plan Bulletin, Abstract of 2007 Form 5500 Annual Reports (Version 1.4)*. Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (June). Available at www.dol.gov/ebsa/PDF/2007pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2010b. *Private Pension Plan Bulletin Historical Tables and Graphs (2008 Data Release Version 1.0)*. Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (December). Available at www.dol.gov/ebsa/pdf/historicaltables.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2010c. *Private Pension Plan Bulletin, Abstract of 2008 Form 5500 Annual Reports (Version 1.0)*. Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (December). Available at www.dol.gov/ebsa/PDF/2008pensionplanbulletin.pdf.

U.S. Government Accountability Office. 1997. "401(k) Pension Plans: Loan Provisions Enhance Participation but May Affect Income Security for Some." *Letter Report*, GAO-HEHS-98-5 (October). Washington, DC: U.S. Government Accountability Office. Available at www.gao.gov/archive/1998/he98005.pdf.

U.S. Internal Revenue Service. 1981. "Notice of Proposed Rule Making, Certain Cash or Deferred Arrangements Under Employee Plans." *Federal Register* 46, no. 217, November 10, 1981: 55544-55549.

U.S. Joint Committee on Taxation. 2006. *Technical Explanation of H.R. 4, the "Pension Protection Act of 2006" as Passed by the House on July 28, 2006, and as Considered by the Senate on August 3, 2006*. JCX-38-06 (August 3). Washington, DC: U.S. Joint Committee on Taxation. Available at www.jct.gov/x-38-06.pdf.

Utkus, Stephen P., and Jean A. Young. 2010. *Resilience in Volatile Markets: 401(k) Participant Behavior September 2007-December 2009*. Valley Forge, PA: The Vanguard Group, Vanguard Center for Retirement Research (March). Available at <https://institutional.vanguard.com/iam/pdf/CRRRES.pdf>.

VanDerhei, Jack L. 2002. *Company Stock in 401(k) Plans: Results of a Survey of ISCEBS Members*. Washington, DC: Employee Benefit Research Institute. Available at www.ebri.org/pdf/iscebs.pdf.

VanDerhei, Jack. 2010. "The Impact of Automatic Enrollment in 401(k) Plans on Future Retirement Accumulations: A Simulation Study Based on Plan Design Modifications of Large Plan Sponsors." *EBRI Issue Brief*, no. 341 (April). Available at www.ebri.org/pdf/briefspdf/EBRI_IB_04-2010_No341_Auto-Enrll.pdf.

VanDerhei, Jack, and Craig Copeland. 2008. "The Impact of PPA on Retirement Savings for 401(k) Participants." *EBRI Issue Brief*, no. 318 (June). Available at www.ebri.org/pdf/briefspdf/ebri_ib_06-20087.pdf.

VanDerhei, Jack, and Lori Lucas. 2010. "The Impact of Auto-Enrollment and Automatic Contribution Escalation on Retirement Income Adequacy." *EBRI Issue Brief*, no. 349 (November). Available at www.ebri.org/pdf/briefspdf/EBRI_IB_011-2010No349_EBRI_DCIIA.pdf.

The Vanguard Group. 2011. *How America Saves 2011: A Report on Vanguard 2010 Defined Contribution Plan Data*. Valley Forge, PA: The Vanguard Group, Vanguard Center for Retirement Research. Available at <https://institutional.vanguard.com/iam/pdf/HAS11.pdf>.

Notes

- ¹ For data on 401(k) plan assets, participants, and plans through 2008, see U.S. Department of Labor, Employee Benefits Security Administration 2010b. For total retirement assets, including those in 401(k) plans, through the second quarter of 2011, see Investment Company Institute 2011. For a discussion of trends between defined benefit (DB) and defined contribution (DC) plans, see Poterba, Venti, and Wise 2007 and Holden, Brady, and Hadley 2006.
- ² Prior to 2005, the U.S. Department of Labor private pension plan bulletin updates reported a count of active 401(k) plan participants that had been adjusted from the number of active participants that was actually reported in the Form 5500 filings to exclude: (1) individuals eligible to participate in a 401(k) plan who had not elected to have their employers make contributions; and (2) nonvested former employees who had not (at the time the Form 5500s were submitted) incurred the break in service period established by their plan (see U.S. Department of Labor, Employee Benefits Security Administration 2008a and 2008b for further detail). This change in methodology results in a dramatic increase in the number of individuals reported as active participants in 401(k) plans; in 2004, the number of active participants increased to 53.1 million (new method) from 44.4 million (old method; see U.S. Department of Labor, Employee Benefits Security Administration 2008b and 2010b). As the Department of Labor notes: “In a purely economic sense and for research purposes, individuals in these groups should not be included in the count of active participants.” However, the form schedule needed to make the adjustment is no longer required. Using National Compensation Survey data and historical relationships and trends evident in the Form 5500 data, EBRI and ICI estimate the number of active 401(k) participants to be about 51 million in 2010 and the number of 401(k) plans to be about 550,000. The estimate of the number of active 401(k) plan participants is based on a combination of data from U.S. Department of Labor, Bureau of Labor Statistics 2007, 2008a, 2008b, 2009, 2010a, 2010b, 2011a, and 2011b; and U.S. Department of Labor, Employee Benefits Security Administration 2008a, 2008b, 2010a, 2010b, and 2010c; and analysis of samples of consistent plans in the EBRI/ICI database.
- ³ See Investment Company Institute 2011.
- ⁴ The Employee Benefit Research Institute (EBRI) is a nonprofit, nonpartisan, public policy research organization that does not lobby or take positions on legislative proposals.
- ⁵ 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 \$12.5 trillion and serve more than 90 million shareholders (see Bogdan, Holden, and Schrass 2011).
- ⁶ This update extends previous findings from the project for 1996 through 2009. For year-end 2009 results, see Holden, VanDerhei, and Alonso 2010. Results for earlier years are available in earlier issues of *Investment Company Institute Perspective* (www.ici.org/research/perspective) and *EBRI Issue Brief* (www.ebri.org/publications/ib).
- ⁷ The EBRI/ICI 401(k) database environment is certified to be fully compliant with the ISO-27002 Information Security Audit standard. Moreover, EBRI has obtained a legal opinion that the methodology used meets the privacy standards of the Gramm-Leach-Bliley Act. At no time has any nonpublic personal information that is personally identifiable, such as a Social Security Number, been transferred to or shared with EBRI.
- ⁸ Account balances are net of unpaid loan balances. Thus, unpaid loan balances are not included in any of the eight asset categories described.
- ⁹ The cross-sectional analysis for this publication found that consolidating the multiple accounts across a majority of the providers to the single individual owning them resulted in an overall increase of 6.6 percent in the average 401(k) account balance. This statistic should be interpreted with caution, as it may not represent the total 401(k) assets owned by the individual. The impact of account consolidation varied with the participant’s age and tenure with the current employer. The largest increases in average account balance occurred among older participants with fewer years of tenure. For example, among participants in their sixties with two or fewer years of tenure, the average account balance increased 17 percent with the consolidation of their multiple accounts. Among participants in their fifties or sixties with more than 30 years of tenure, the average account balance increased 5 percent with the consolidation of their multiple accounts. Future joint research with this feature will explore the longitudinal aspects of this consolidation in more detail.
- ¹⁰ 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 401(k) 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 naïve—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. Deloitte/ICI Defined Contribution/401(k) Fee

Study 2011 data indicate that in 2010, the median number of investment options offered among the 525 plans in the survey was 14 (see Deloitte and Investment Company Institute 2011). Plan Sponsor Council of America 2011 indicates that in 2010, the average number of investment fund options available for participant contributions was 18 among the 820 plans surveyed; Hewitt Associates 2009b indicates an average number of 20 investment options in 2009. Deloitte Consulting LLP, International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists 2010 report that the average number of funds offered by the 534 401(k) plan sponsors responding to that question in their survey was 21 in 2010.

¹¹ The asset allocation path that the target date fund follows to shift its focus from growth to income over time is typically referred to as the “glide path.” Since discussions of asset allocation usually focus on the percentage of the portfolio invested in equities, the glide path generally reflects the declining percentage of equities in the portfolio as it approaches and passes the target date, which is usually indicated in the fund’s name. The target date generally is the date at which the typical investor for whom that fund is designed would reach retirement age and stop making new investments in the fund.

¹² 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-target date balanced fund category.

¹³ GICs are insurance company products that guarantee a specific rate of return on the invested capital over the life of the contract.

¹⁴ 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.

¹⁵ 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 401(k) database includes only plans for which at least 90 percent of all plan assets could be identified.

¹⁶ For 401(k) asset figures, see Investment Company Institute 2011.

¹⁷ Estimates of the number of 401(k) plans and active participants are based on a combination of data from U.S. Department of Labor, Bureau of Labor Statistics and U.S. Department of Labor, Employee Benefits Security Administration reports; and consistent plans in the EBRI/ICI database. See discussion in note 2.

¹⁸ The latest available data from the Department of Labor are for plan year 2008 (see U.S. Department of Labor, Employee Benefits Security Administration 2010c).

¹⁹ Because of these changes in the cross sections, comparing average account balances across different year-end cross-sectional snapshots can lead to false conclusions. For example, newly formed plans would tend to pull down the average account balance, but 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 participants retire and roll over their account balances.

²⁰ About half of traditional IRA assets resulted from rollovers from employer-sponsored retirement plans. See Brady, Holden, and Short 2010; and Copeland 2009.

²¹ Account balances are net of unpaid loan balances.

²² At year-end 2010, 2.0 percent of the participants in the database were missing a birth date entry, were younger than 20, or older than 69. They were not included in this analysis.

²³ At year-end 2010, 9.7 percent of the participants in the database were missing a date of hire entry and were not included in this analysis.

²⁴ 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 had two or fewer years of tenure, and 6 percent of them had between two and five years of tenure (see Figure 12).

²⁵ Because 401(k) plans were introduced about 30 years ago, older and longer-tenured employees would not have participated in 401(k) plans for their entire 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).

²⁶ 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 (83 percent of all 401(k)-type plans in existence in 2008 were established after 1989 [tabulations of U.S. Department of Labor Form 5500 data for 2008]), or (2) the employee only recently joined the plan (whether on his or her own or through automatic enrollment). In either event, job tenure would not accurately reflect actual 401(k) plan participation.

- ²⁷ 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, such DC plan arrangements generally did not permit employee contributions and often were designed to be supplemental to other employer plans. These participants' account balances that predate the 401(k) plan are not included in this analysis, which focuses on 401(k) balance amounts.
- ²⁸ Social Security replaces a much higher fraction of pre-retirement earnings for lower-income workers. For example, the first-year replacement rate (scheduled Social Security benefits as a percentage of average career earnings) for retired workers in the 1940–1949 birth cohort (individuals aged 61 to 70 in 2010) decreased as income increased. The median replacement rate for the lowest household lifetime earnings quintile was 71 percent; for the middle quintile, the median Social Security replacement rate was 43 percent; and for the highest quintile it was 30 percent. See Congressional Budget Office 2011.
- ²⁹ 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 MacDonald and Moore 2011 and Holden and VanDerhei 2005. For an analysis of the possible impact of automatic increases in participants' contribution rates in automatic enrollment plans, see VanDerhei 2010 and VanDerhei and Lucas 2010. 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.
- ³⁰ 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 2001c 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 2004c. For summary statistics on contribution activity in 2010, see The Vanguard Group 2011 and Aon Hewitt 2011.
- ³¹ At year-end 2010, 64 percent of balanced mutual fund assets were invested in equities (see Investment Company Institute, Quarterly Supplementary Data).
- ³² Other research suggests that most 401(k) participants do not make active changes to their asset allocations during any given year. For example, an ICI survey of recordkeepers covering nearly 24 million DC plan participant accounts found that 10.3 percent of DC plan participants changed the asset allocation of their account balances in 2010 and 8.0 percent changed the asset allocation of their contributions during 2010 (see Holden and Schrass 2011). Covering a year earlier, the ICI survey of recordkeepers covering nearly 24 million DC plan participant accounts found that 11.8 percent of DC plan participants changed the asset allocation of their account balances in 2009 and 10.5 percent changed the asset allocation of their contributions during 2009 (see Holden and Schrass 2011). Utkus and Young 2010 reported that 13 percent of DC plan participants traded in their retirement accounts in 2009, analyzing the plans administered by Vanguard. Analyzing 2010 data, The Vanguard Group 2011 reported that “despite the ongoing market volatility of 2010, only 12 [percent] of participants made one or more portfolio trades or exchanges during the year, down from 16 [percent] in 2008.” Aon Hewitt 2011 found that 14.2 percent of participants traded in their accounts in 2010, and 14.6 percent changed the asset allocation of their contributions. Hewitt Associates 2009a reported that 19.6 percent of participants made asset transfers in their account balances during 2008, which was “up only marginally” from 2007 (although, they tended to move larger portions of their account balances). Fidelity Investments 2008 reported that overall only 6.6 percent of participants in their recordkeeping system made exchanges during September, October, and November 2008, a time of stock market volatility. Furthermore, Choi et al. 2001 found that 401(k) participants rarely made changes after the initial point of enrollment. (For household survey results from late 2010 reflecting households' sentiment toward and confidence in 401(k) plans, see Holden, Bass, and Reid 2011.)
- ³³ For the age distribution of 401(k) plan participants and assets at year-end 2010, see Figure 5.
- ³⁴ See note 11 for additional detail on target date funds.
- ³⁵ This represents a decline from 77 percent of plans in the year-end 2009 EBRI/ICI 401(k) database (for year-end 2009 data, see Holden, VanDerhei, and Alonso 2010). The decline represents a change in sample of plans and providers due to the cross-sectional nature of the data collection, rather than the removal of target date funds from ongoing plans. For an analysis tracking target date fund use and the persistence of their use from 2007 through 2009, see Copeland 2011.

³⁶ Target date funds often are used as the default investment in automatic enrollment plans and in plans' investment lineups (see Plan Sponsor Council of America 2011). At year-end 2010, 72 percent of target date mutual fund assets were held in DC plans (see Investment Company Institute 2011). Plan Sponsor Council of America 2011 reported an increase in the incidence of automatic enrollment in 2010. Of more than 800 plans surveyed, 41.8 percent had automatic enrollment in 2010, compared with 38.4 percent of plans in 2009, 39.6 percent of plans in 2008, 35.6 percent of plans in 2007, about 17 percent of plans in 2005, and 10.5 percent of plans in 2004. Eighty-two percent of plans with automatic enrollment in 2010 applied automatic enrollment only to new hires, while 18 percent applied automatic enrollment to all nonparticipants.

³⁷ At year-end 2010, 64 percent of non-target date balanced fund assets were assumed to be invested in equities (see Investment Company Institute, *Quarterly Supplementary Data*). The allocation to equities in target date funds varies with the funds' target dates. For target date funds, investors were assumed to be in a fund whose target date was nearest to their 65th birthday. The equity portion was estimated using the industry average equity percentage for the assigned target date fund calculated using the Morningstar Lifecycle Allocation Index.

At year-end 2010, on average, participants in their twenties had 74 percent of their 401(k) plan assets invested in equities—through equity funds, company stock, and the equity portion of balanced funds; participants in their thirties, on average, had 73 percent invested in equities; participants in their forties had 69 percent invested in equities; participants in their fifties had 59 percent invested in equities; and participants in their sixties had 49 percent invested in equities.

³⁸ For year-end 2009 data, see Holden, VanDerhei, and Alonso 2010.

³⁹ See Holden et al. 2008; Holden, VanDerhei, and Alonso 2009; and Holden, VanDerhei, and Alonso 2010 for data for earlier years.

⁴⁰ For year-end 2009 data, see Holden, VanDerhei, and Alonso 2010.

⁴¹ In the database, there has been a downward trend in 401(k) plan participants' holdings of and concentration in company stock. In the wake of the collapse of Enron in 2001, participants' awareness of the need to diversify may have increased and some plan 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).

⁴² 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 a plan loan, but no participant had taken out a loan. It is likely that this omission is small, as U.S. Government Accountability Office 1997 found that more than 95 percent of 401(k) plans that offer loans had at least one plan participant with an outstanding loan.

⁴³ The percentage of 401(k) participants with 401(k) loans outstanding across all participants both with and without 401(k) plan loan access was similar in earlier years. For example, in 2009, this measure was 19 percent; in 2008, 16 percent; in 2007, 16 percent; and in 2006, 15 percent.

⁴⁴ In plan year 2008 (latest data available), only 2.2 percent of the \$2.2 trillion in 401(k) plan assets were participant loans. In addition, only \$663 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 2010c.

⁴⁵ This pattern is driven in part by restrictions placed on loan amounts.



1401 H Street, NW
Washington, DC 20005
202/326-5800
www.ici.org

Copyright © 2011 by the Investment Company Institute

The Investment Company Institute (ICI) is the national association of U.S. investment companies. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers.