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Research Perspective

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401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2009

Key Findings

Because 401(k) balances can fluctuate with market returns from year to year, meaningful analysis of 401(k) plans must examine how participants' accounts have performed over the long term. Looking at consistent participants in the EBRI/ICI 401(k) database over the six-year period from 2003 to 2009 (which included one of the worst bear markets for stocks since the Great Depression), the study found:

- **After rising in 2003 and for the next four consecutive years, the average 401(k) retirement account fell 27.8 percent in 2008, before rising 31.9 percent in 2009.**
- **The average 401(k) account balance moved up and down with stock market performance, but over the entire six-year time period increased at an average annual growth rate of 10.5 percent, attaining $109,723 at year-end 2009.**
- **The median 401(k) account balance increased at an average annual growth rate of 14.7 percent over the 2003–2009 period to $59,381 at year-end 2009.**

The bulk of 401(k) assets continued to be invested in stocks. On average, at year-end 2009, 60 percent of 401(k) participants' assets were invested in equity securities through equity funds, the equity portion of balanced funds, and company stock. Thirty-six percent were in fixed-income securities such as stable value investments and bond and money funds.

More than three-quarters of 401(k) plans included target date funds in their investment lineup at year-end 2009. At year-end 2009, nearly 10 percent of the assets in the EBRI/ICI 401(k) database was invested in target date funds and 33 percent of 401(k) participants held target date funds. Also known as *lifecycle* funds, they are designed to simplify investing and to automate account rebalancing.

New employees continued to use balanced funds, including target date funds. Across all but the oldest age group, more new or recent hires invested their 401(k) assets in balanced funds, including target date funds. At year-end 2009, about 42 percent of the account balances of recently hired participants in their twenties was invested in balanced funds, compared with 36 percent in 2008, and about 7 percent in 1998. At year-end 2009, 31 percent of the account balances of recently hired participants in their twenties was invested in target date funds, compared with almost 23 percent at year-end 2008.

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 half of a percentage point (to 9.2 percent) in 2009. That continued 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 activity rose in 2009. In 2009, 21 percent of all 401(k) participants eligible for loans had a loan outstanding against their 401(k) account, compared with 18 percent at year-end 2008 and year-end 2007. Loans outstanding amounted to 15 percent of the remaining account balance, on average, at year-end 2009, compared with 16 percent at year-end 2008. Loan amounts remained in line with the past few years in terms of typical dollar amounts.

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Introduction

Over the past two decades, 401(k) plans have grown to be the most widespread private-sector employer-sponsored retirement plan in the United States[1] and now serve as the most popular defined contribution (DC) plan, representing the largest number of participants and assets. In 2009, an estimated 49.0 million American workers were active 401(k) plan participants.[2] By year-end 2009, 401(k) plan assets had grown to represent 17 percent of all retirement assets, amounting to $2.8 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 accounts.

This report is an update of EBRI and ICI's ongoing research into 401(k) plan participants' activity through year-end 2009.[6] The report is divided into five sections: the first describes the EBRI/ICI 401(k) database; the second focuses on changes in participant account balances over time, analyzing a group of consistent 401(k) participants; the third presents a snapshot of participant account balances at year-end 2009; the fourth looks at participants' asset allocations, including analysis of 401(k) participants' use of target date, or lifecycle, funds; and the fifth focuses on participants' 401(k) loan activity.

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 2009. These plan recordkeepers include mutual fund companies, insurance companies, and consulting firms. Although the EBRI/ICI project has collected data from 1996 through 2009, 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, unless otherwise indicated. 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 include date of birth, from which an age group is assigned; date of hire, from which a tenure range is assigned; outstanding loan balance; funds in the participant's investment portfolios; and asset values attributed to those funds. An account balance for each participant is the sum of the participant's assets in all funds.[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.

A new feature in the year-end 2009 database is the ability to link individuals across plans and across recordkeepers. This improved the identification of active participants and resulted in the reclassification of nearly 1.5 million participant accounts that were multiple accounts owned by single individuals. This procedure also allowed 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; these funds include equity mutual funds, bank collective trusts, life insurance separate accounts, and other pooled investments. Similarly, *bond funds* are any pooled account primarily invested in bonds. *Balanced funds* are pooled accounts invested in both stocks and bonds. They are classified into two subcategories: 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 funds that could not be identified.[15]

About the EBRI/ICI 401(k) 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, 2009, the database included statistical information about:

- *20.7 million 401(k) plan participants, in*
- *51,852 employer-sponsored 401(k) plans, holding*
- *$1.210 trillion in assets.*

The 2009 database covered 42 percent of the universe of active 401(k) plan participants, 10 percent of plans, and 44 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.

Distribution of Plans, Participants, and Assets by Plan Size

The 2009 EBRI/ICI 401(k) database contains information on 51,852 401(k) plans with $1.210 trillion in assets and 20.7 million participants (Figure 1). Most of the plans in the database are small: 44 percent of the plans have 25 or fewer participants, and 30 percent have 26 to 100 participants. In contrast, only 5 percent of the plans have more than 1,000 participants. However, participants and assets are concentrated in large plans. For example, 79 percent of participants are in plans with more than 1,000 participants, and these same plans account for 83 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 19 percent of the plans have assets of $250,000 or less, and another 31 percent have plan assets between $250,001 and $1,250,000 (Figure 2).

Figure 1

401(k) Plan Characteristics by Number of Plan Participants, 2009

Number of plan participants	Total plans	Total participants	Total assets	Average account balance
1 to 10	11,410	63,199	$3,450,224,322	$54,593
11 to 25	11,518	197,472	10,195,105,081	51,628
26 to 50	8,717	316,512	15,894,079,012	50,216
51 to 100	6,840	485,134	24,151,482,187	49,783
101 to 250	6,004	955,964	45,979,081,708	48,097
251 to 500	2,832	998,267	47,263,774,919	47,346
501 to 1,000	1,839	1,303,936	63,301,430,136	48,546
1,001 to 2,500	1,394	2,182,496	112,210,922,205	51,414
2,501 to 5,000	640	2,234,030	122,068,002,953	54,640
5,001 to 10,000	327	2,268,966	150,408,723,529	66,290
>10,000	331	9,737,755	615,491,992,885	63,207
All	51,852	20,743,731	1,210,414,818,938	58,351

Note: The median account balance at year-end 2009 was $17,794.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure 2

401(k) Plan Characteristics by Plan Assets, 2009

Total plan assets	Total plans	Total participants	Total assets	Average account balance
$0 to $250,000	9,597	86,045	$1,019,080,598	$11,844
>$250,000 to $625,000	8,161	151,990	3,452,162,443	22,713
>$625,000 to $1,250,000	7,879	242,060	7,121,180,347	29,419
>$1,250,000 to $2,500,000	7,694	414,735	13,741,687,164	33,134
>$2,500,000 to $6,250,000	7,737	800,721	30,796,702,552	38,461
>$6,250,000 to $12,500,000	3,961	866,833	34,703,285,828	40,035
>$12,500,000 to $25,000,000	2,652	1,116,783	46,415,289,211	41,562
>$25,000,000 to $62,500,000	2,007	1,819,271	78,805,522,642	43,317
>$62,500,000 to $125,000,000	883	1,669,553	76,732,201,388	45,960
>$125,000,000 to $250,000,000	544	1,838,633	95,265,460,247	51,813
>$250,000,000	737	11,737,107	822,362,246,519	70,065
All	51,852	20,743,731	1,210,414,818,938	58,351

Note: The median account balance at year-end 2009 was $17,794.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

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

The 2009 EBRI/ICI 401(k) database is a representative sample of the estimated universe of 401(k) plans. At year-end 2009, all 401(k) plans held a total of $2.8 trillion in assets, and the database represents about 44 percent of that total.[16] The database also covers 42 percent of the universe of active 401(k) plan participants and 10 percent of all 401(k) plans.[17] The distribution of assets, participants, and plans in the database for 2009 is similar to that reported for the universe of plans as estimated by Cerulli Associates (Figure 3).

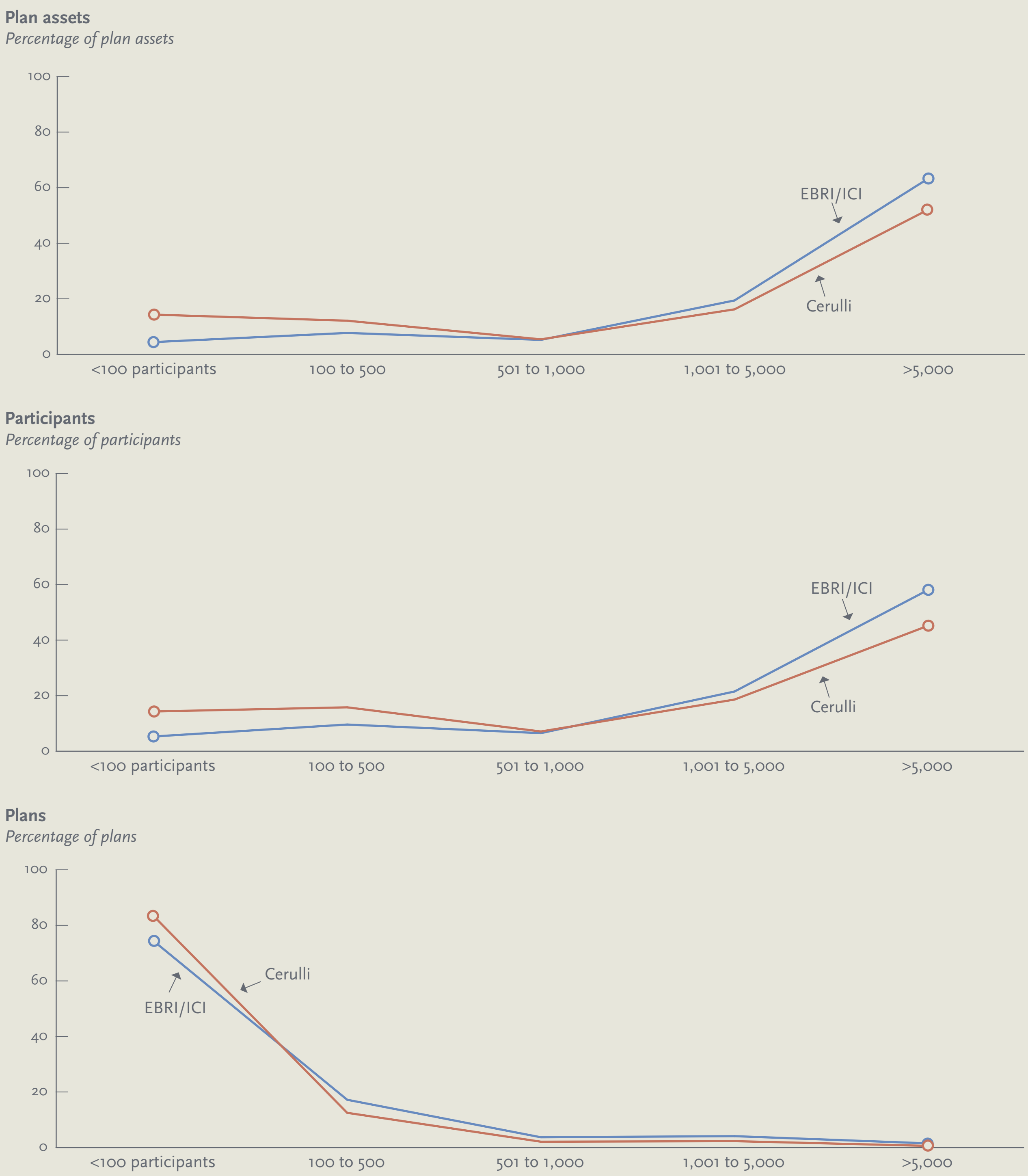
The Typical 401(k) Plan Participant

The database includes 401(k) participants across a wide range of age and tenure. Fifty-three percent of participants were in their thirties or forties, while 13 percent of participants were in their twenties and 9 percent were in their sixties (Figure 4). The median age of the participants in the 2009 database is 45 years, one year older than in 2008. In 2009, 38 percent of the participants had five or fewer years of tenure and 6 percent had more than 30 years of tenure. The median tenure at the current employer was six years in 2009, compared with seven years in 2008. The tenure composition in the year-end 2009 database is similar to the tenure composition of the year-end 2008 database, but the tenure distribution of 2007, 2008, and 2009 shows an increase in lower-tenured participants compared with 2006 and earlier. Although the database does not contain information on automatic enrollment, it is likely that automatic enrollment is playing a role in bringing in newly hired workers, which lowers the average tenure.[18]

Figure 3

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 vs. Cerulli estimates for all 401(k) plans, 2009



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

Changes in 401(k) Participants' Account Balances

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 individuals 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]

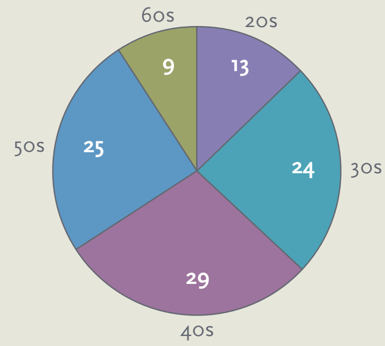
To explore the questions of the impact of ongoing participation in 401(k) plans and to understand how typical 401(k) plan participants have fared over a given time period, it is important to analyze a group of consistent participants (a longitudinal sample). This consistent group of participants is drawn from the annual cross-sections. This report analyzes two different consistent groups drawn from the database: (1) a group of 4.3 million participants with account balances at the end of each year at least from year-end 2003 through year-end 2009, and (2) a consistent group of 1.6 million participants with accounts at the end of each year at least from year-end 1999 through year-end 2009. The "2003–2009 consistent group" is introduced because the tenure of the "1999–2009 consistent group" has grown longer, and the age composition has gotten significantly older compared with the cross-sectional snapshots of participants.[22] The results from the 1999–2009 consistent group are presented in the appendix of this report.

Figure 4

401(k) Participants Represent a Range of Ages and Job Tenures

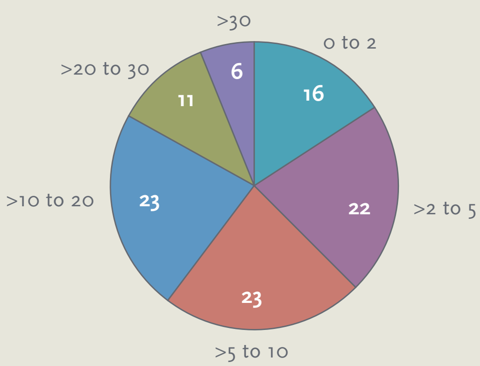
Percentage of active 401(k) plan participants by age or tenure, 2009

By age group



Median age: 45 years

By years of tenure



Median tenure: 6 years

Note: Components 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

Comparison of Consistent Group of 401(k) Participants to EBRI/ICI 401(k) Database

About three in 10, or 4.3 million, of the 401(k) participants with accounts at the end of 2003 in the EBRI/ICI 401(k) database had accounts at the end of each year from 2003 through 2009.[23] These 4.3 million 401(k) participants make up a group of consistent participants (or a longitudinal sample), which removes the effect of participants and plans entering and leaving the database. This group is similar with respect to age and tenure composition to the entire database at year-end 2003. By year-end 2009, these participants had a minimum tenure of six years and were slightly older in age composition when compared with the year-end 2009 cross-sectional database.[24] In addition, the 2003–2009 consistent group's account balances tended to be higher compared with account balances in the cross-sectional database at year-end 2009. Nevertheless, with respect to average asset allocation at year-end 2009, the 2003–2009 consistent group had similar asset allocation by participant age as participants in the entire year-end 2009 database.[25]

Reflecting their higher average age and tenure, the 2003–2009 consistent group also had median and average account balances that were much higher than the median and average account balances of the broader database (Figure 5). At year-end 2009, the average 401(k) account balance of the consistent group was $109,723, almost double the average account balance of $58,351 among participants in the entire database. The median 401(k) account balance among the consistent participants was $59,381 at year-end 2009, nearly three-and-one-half times the median account balance of $17,794 among participants in the entire database.[26]

Figure 5

401(k) Account Balances[1] Among 401(k) Participants Present from Year-End 2003 Through Year-End 2009[2]

[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 analysis is based on a sample of 4.3 million participants with account balances at the end of each year from 2003 through 2009.

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

401(k) account balances varied with both age and tenure among the consistent group of participants, as they do in the cross-sectional database. Younger participants or those with shorter job tenure tended to have smaller account balances, while those who were older or had longer job tenure tended to have higher account balances. For example, within the consistent group, participants in their twenties at year-end 2009 had an average account balance of $24,462, compared with an average of $144,004 for participants in their sixties (Figure 6).

Figure 6

Average Account Balances Among 401(k) Participants Present from Year-End 2003 Through Year-End 2009[1] by Participant Age and Tenure[2]

Age group[2]	Years of tenure[2]	2003	2004	2005	2006	2007	2008	2009
20s	All	$3,563	$6,864	$10,560	$15,367	$20,371	$15,598	$24,462
	>5 to 10	3,426	6,845	10,686	15,646	20,836	16,231	25,106
30s	All	17,662	24,712	31,789	41,791	51,619	36,842	54,167
	>5 to 10	12,292	19,146	26,262	35,771	45,274	32,772	49,458
	>10 to 20	24,369	31,749	38,859	49,558	59,904	42,388	60,422
40s	All	45,200	56,402	66,814	82,748	97,805	68,502	95,185
	>5 to 10	19,808	29,200	38,613	51,191	63,501	44,546	67,254
	>10 to 20	44,740	55,572	65,760	81,347	96,200	66,077	92,998
	>20 to 30	80,015	94,757	107,253	128,751	148,253	106,955	138,566
50s	All	77,059	92,137	105,335	126,711	146,877	106,850	139,932
	>5 to 10	23,033	33,161	43,255	56,672	70,032	49,179	74,908
	>10 to 20	52,192	64,371	75,666	92,748	108,990	74,249	106,334
	>20 to 30	113,980	133,432	149,906	178,125	204,604	150,642	190,348
	>30	115,624	133,968	148,592	174,777	198,844	152,786	184,329
60s	All	100,344	115,145	126,536	145,818	161,576	118,283	144,004
	>5 to 10	24,715	35,016	45,010	58,024	70,230	47,817	71,527
	>10 to 20	55,734	68,281	79,374	95,303	109,103	71,684	100,363
	>20 to 30	122,455	140,700	154,882	178,266	196,658	142,913	171,744
	>30	160,083	176,702	187,193	209,625	227,070	175,890	197,472
All[1]	All	60,144	72,173	82,768	99,644	115,257	83,161	109,723

[1]*The analysis is based on a group of 4.3 million participants with account balances at the end of each year from 2003 through 2009.*
[2]*Age and tenure groups are based on participant age and tenure at year-end 2009.*
Source: Tabulations from the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

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

The change in any individual participant's account balance is influenced by the magnitudes 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.

All told, from year-end 2003 through year-end 2009, the average account balance among the group of consistent participants grew 82.4 percent, rising from $60,144 at year-end 2003 to $109,723 at year-end 2009 (Figures 5 and 7). This translates into an annual average growth rate of 10.5 percent over the six-year period. The median account balance (or midpoint, with half above and half below) among this consistent group also grew, more than doubling from $26,098 in 2003 to $59,381 in 2009 (an annual average growth rate of 14.7 percent; Figure 5).

Among the consistent group, there was a wide range of individual participant experience, often influenced by the relationship among the three factors mentioned above: contributions, investment returns, and withdrawal and loan activity. Participants who were younger or had fewer years of tenure experienced the largest increases in average account balance between year-end 2003 and year-end 2009. For example, the average account balance of participants in their twenties rose 586.6 percent (a 37.9 percent annual average growth rate) between the end of 2003 and the end of 2009 (Figures 6 and 7). Because younger participants' account balances tended to be small (Figure 6), contributions produced significant account balance growth. In contrast, the average account balance of older participants or those with longer tenures showed more modest growth (Figure 7). For example, the average account balance of participants in their sixties increased 43.5 percent (a 6.2 percent annual average growth rate) between year-end 2003 and year-end 2009. Investment returns, rather than annual contributions, generally account for most of the change in accounts with larger balances. In addition, participants in their sixties tend to have a higher propensity to make withdrawals.[27]

These changes in participant account balances also reflect changes in asset values during the six-year time period (Figure 8). Although asset allocation varied with age and many participants held a range of investments, the impact of stock market performance showed through in 401(k) accounts because 401(k) plan participants tended to be heavily invested in equity securities. At year-end 2009, whether looking at the 2003–2009 consistent group or the entire EBRI/ICI 401(k) database, equity securities—equity funds, the equity portion of balanced funds,[28] and company stock—represented about 60 percent of 401(k) plan participants' assets.[29] The asset allocation of participants in the consistent group varied with participant age, a pattern that is also observed in the cross-sectional EBRI/ICI 401(k) database. Younger participants generally tended to favor equity 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 7

Percent Change in Average Account Balances Among 401(k) Participants Present from Year-End 2003 Through Year-End 2009[1] by Participant Age and Tenure[2]

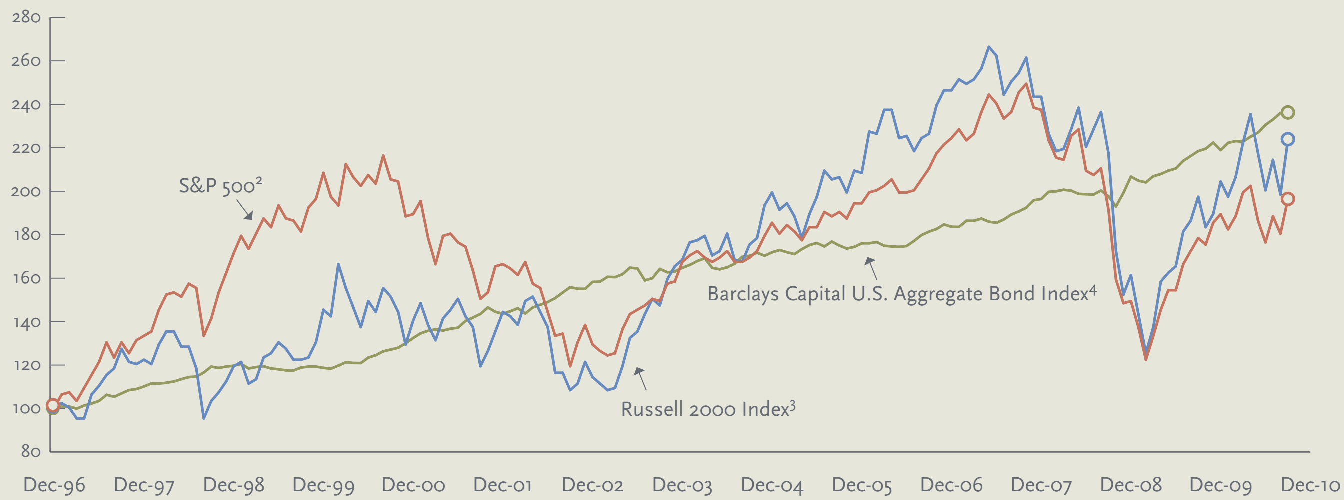
Age group[2]	Years of tenure[2]	2003–2004	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2003–2009
20s	All	92.6%	53.8%	45.5%	32.6%	-23.4%	56.8%	586.6%
	>5 to 10	99.8	56.1	46.4	33.2	-22.1	54.7	632.8
30s	All	39.9	28.6	31.5	23.5	-28.6	47.0	206.7
	>5 to 10	55.8	37.2	36.2	26.6	-27.6	50.9	302.4
	>10 to 20	30.3	22.4	27.5	20.9	-29.2	42.5	147.9
40s	All	24.8	18.5	23.8	18.2	-30.0	39.0	110.6
	>5 to 10	47.4	32.2	32.6	24.0	-29.8	51.0	239.5
	>10 to 20	24.2	18.3	23.7	18.3	-31.3	40.7	107.9
	>20 to 30	18.4	13.2	20.0	15.1	-27.9	29.6	73.2
50s	All	19.6	14.3	20.3	15.9	-27.3	31.0	81.6
	>5 to 10	44.0	30.4	31.0	23.6	-29.8	52.3	225.2
	>10 to 20	23.3	17.5	22.6	17.5	-31.9	43.2	103.7
	>20 to 30	17.1	12.3	18.8	14.9	-26.4	26.4	67.0
	>30	15.9	10.9	17.6	13.8	-23.2	20.6	59.4
60s	All	14.8	9.9	15.2	10.8	-26.8	21.7	43.5
	>5 to 10	41.7	28.5	28.9	21.0	-31.9	49.6	189.4
	>10 to 20	22.5	16.2	20.1	14.5	-34.3	40.0	80.1
	>20 to 30	14.9	10.1	15.1	10.3	-27.3	20.2	40.3
	>30	10.4	5.9	12.0	8.3	-22.5	12.3	23.4
All[1]	All	20.0	14.7	20.4	15.7	-27.8	31.9	82.4

[1]*The analysis is based on a group of 4.3 million participants with account balances at the end of each year from 2003 through 2009.*
[2]*Age and tenure groups are based on participant age and tenure at year-end 2009.*
Source: Tabulations from the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

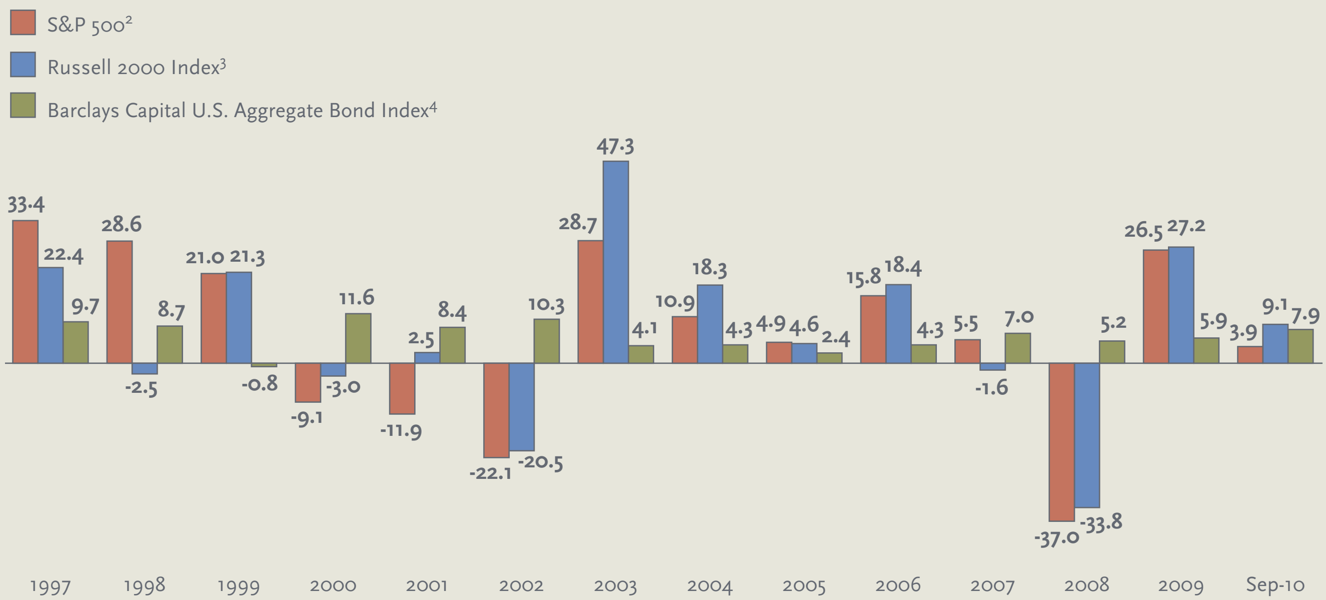
Figure 8

Domestic Stock and Bond Market Indexes

Month-end level,[1] December 1996 to September 2010



Annual percent change in total return index



[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 index (rebalanced monthly by market capitalization). The index's total return consists of price appreciation/depreciation plus income as a percentage of the original investment.*
Sources: Bloomberg, Barclays Global Investors, Frank Russell Company, and Standard & Poor's

Given these investment patterns, the growth pattern of 401(k) balances is influenced by stock market returns. As stock market values generally moved upward between 2003 and 2007, the average account balance of the 2003–2009 consistent group rose, on average, 17.7 percent per year over that four-year time period. In 2008, stock market performance turned sharply negative, with the S&P 500 total return index falling 37.0 percent (only in 1931, when the total return on large company stocks fell 43.3 percent, did that measure perform as poorly on an annual basis as the market did in 2008)[30] and the Russell 2000 Index falling 33.8 percent (Figure 8). In 2008, the average 401(k) account balance of the 2003–2009 consistent group fell by a smaller amount—27.8 percent—likely reflecting diversified portfolios and ongoing contributions.[31] In 2009, the stock market rose and the average 401(k) account balances of the 2003–2009 consistent group increased 31.9 percent.

Year-End 2009 Snapshot of 401(k) Participants' Account Balances

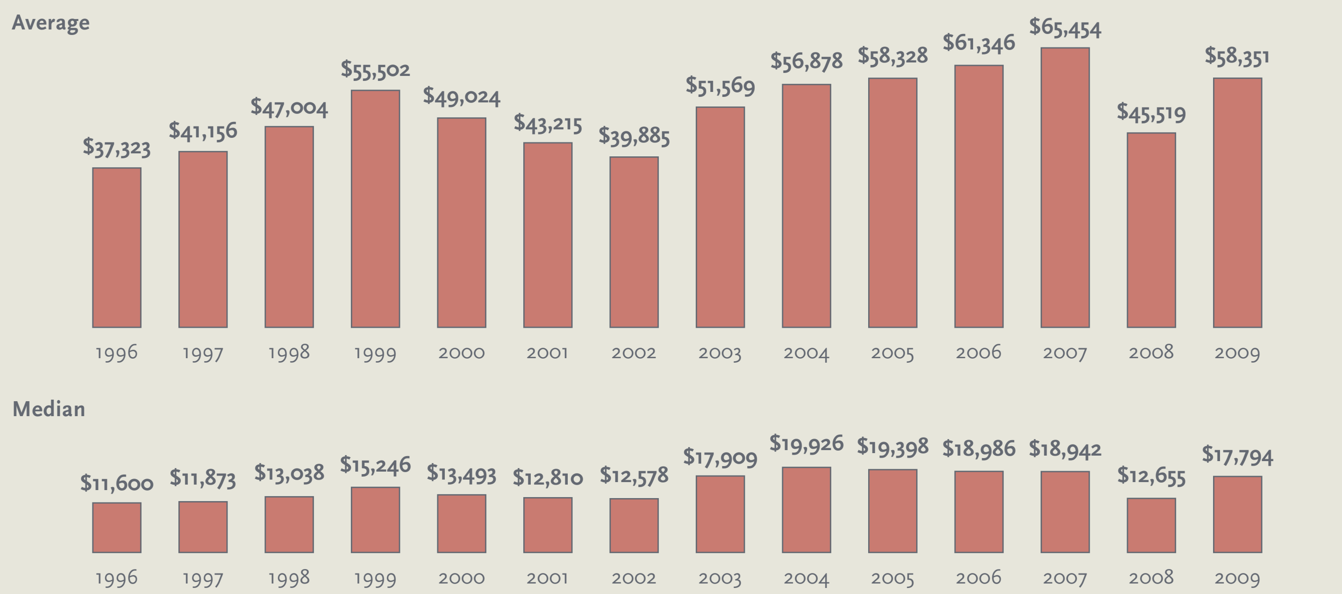
Definition of 401(k) Account Balance

In any given year, the EBRI/ICI 401(k) database provides a snapshot of the 401(k) account balances across all active participants' accounts. The database contains only the account balances held in the 401(k) plans at participants' current employers and reflects the entrance of new plans and new participants and the exit of participants who retire or change jobs. Retirement savings held in plans at previous employers or rolled over into IRAs are not included in the database. 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.

Figure 9

Snapshot of Average Year-End 401(k) Account Balances

401(k) plan participant account balances,[1] 1996–2009[2]



[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.

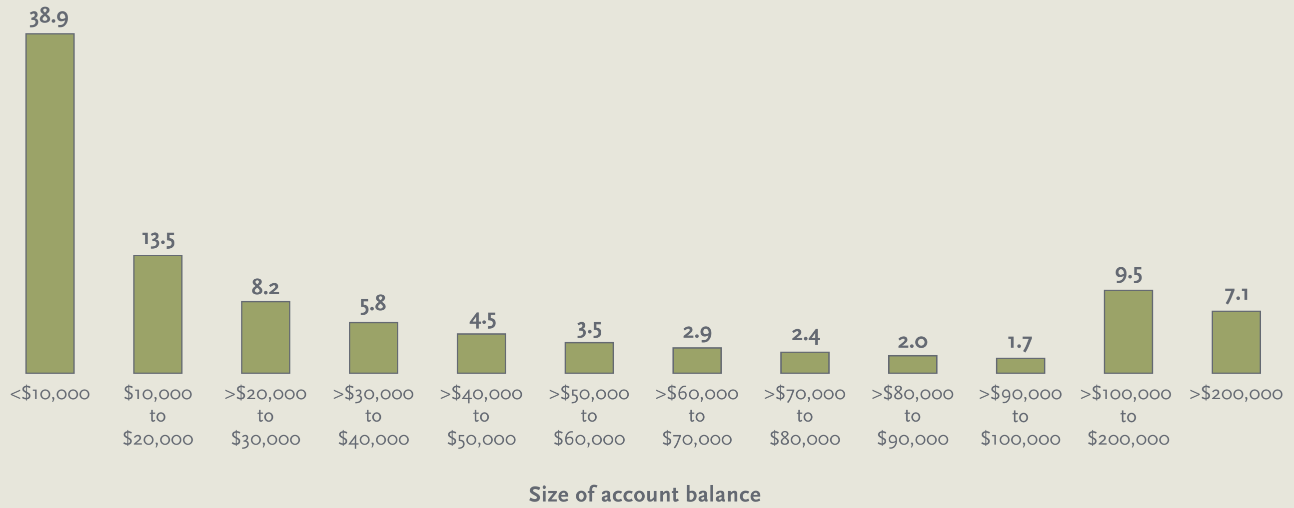
[2]The sample of participants changes over time.

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

FIGURE 10

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

Percentage of participants with account balances in specified ranges, 2009



Note: At year-end 2009, the average account balance among all 20.7 million 401(k) plan participants was $58,351; the median account balance was $17,794.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Size of 401(k) Account Balances

At year-end 2009, the average account balance was $58,351 and the median account balance was $17,794 (Figure 9). There is wide variation in 401(k) plan participants' account balances at year-end 2009. Almost three-quarters of the participants in the 2009 EBRI/ICI 401(k) database had account balances that were lower than $58,351, the size of the average account balance. In fact, 38.9 percent of participants had account balances of less than $10,000, while 16.6 percent of participants had account balances 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.

Relationship of Age and Tenure to Account Balances

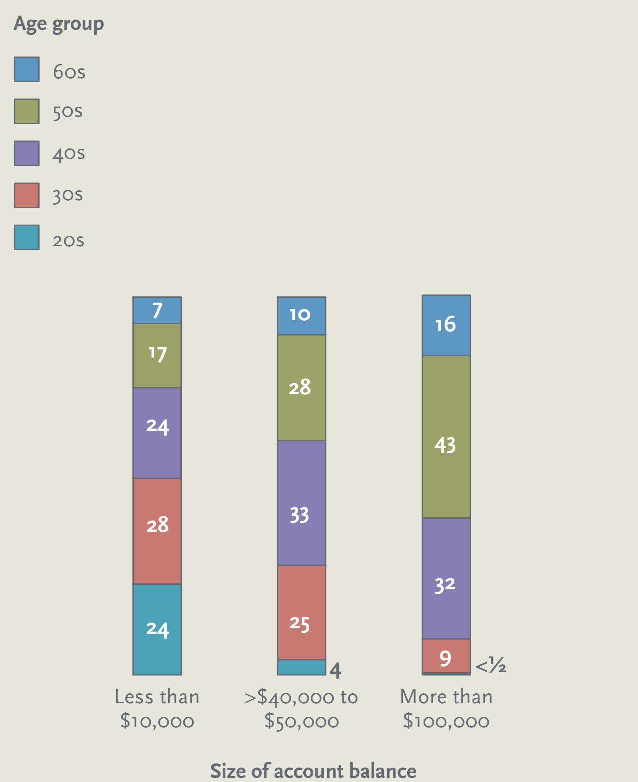
There is a positive correlation between age and account balance among participants covered by the 2009 database.[32] Examination of the age composition of account balances finds that 52 percent of participants with account balances of less than $10,000 were in their twenties or thirties (Figure 11). 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.

There is also a positive correlation between account balance and tenure among participants represented by the 2009 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.[33] Indeed, 61 percent of participants with account balances of less than $10,000 had five or fewer years of tenure, while 79 percent of participants with account balances greater than $100,000 had more than 10 years of tenure (Figure 12).[34] 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 $23,796, compared with $198,993 for participants in their sixties with more than 30 years of tenure (Figure 13).[35] Similarly, the average account balance of participants in their forties with up to two years of tenure was $16,146, compared with $125,257 for participants in their forties with more than 20 years of tenure.

Figure 11

Age Composition of Selected 401(k) Account Balance Categories

Percentage of participants with account balances in specified ranges, 2009

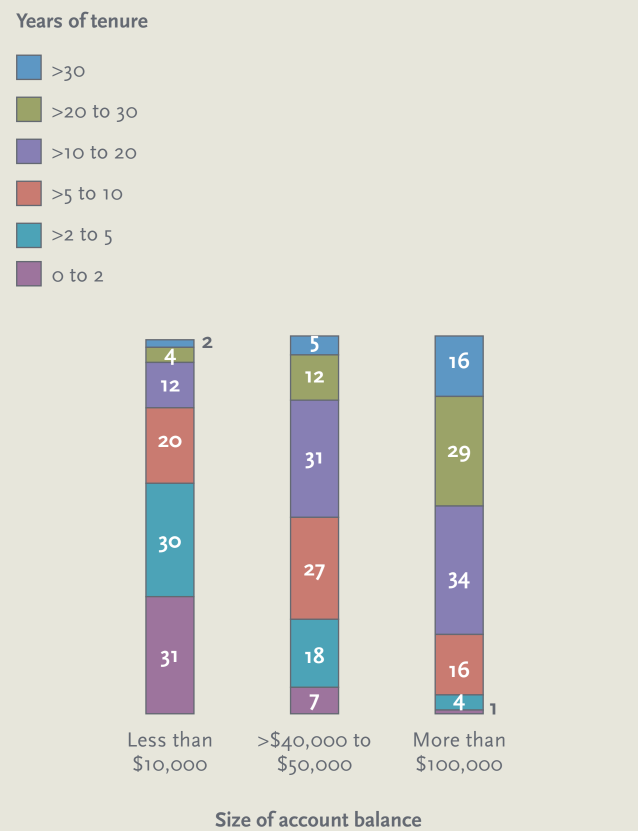


Note: Percentages may not add to 100 percent because of rounding.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure 12

Tenure Composition of Selected 401(k) Account Balance Categories

Percentage of participants with account balances in specified ranges, 2009



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

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, 85 percent of participants in their twenties with two or fewer years of tenure had account balances of less than $10,000 in 2009, compared with 57 percent of participants in their twenties with between five and 10 years of tenure (Figure 14). Older workers display a similar pattern. For example, 59 percent of participants in their sixties with two or fewer years of tenure had account balances of less than $10,000. In contrast, only 17 percent of those in their sixties with more than 20 years of tenure had account balances of less than $10,000.[36]

Figure 13

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

Average 401(k) account balance by participant age and tenure, 2009

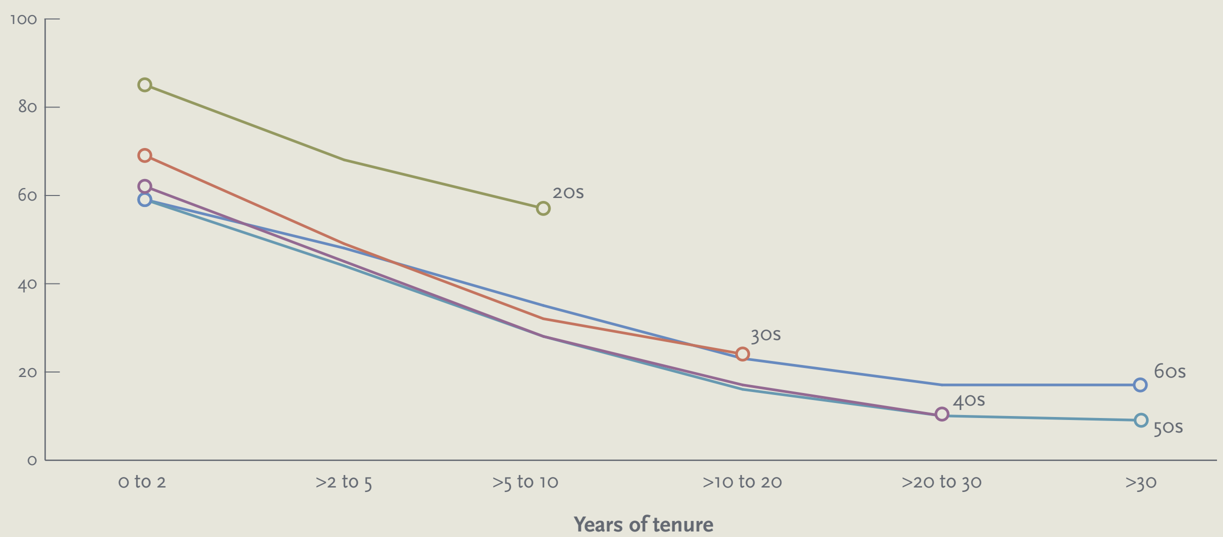
	Years of tenure					
Age group	0 to 2	>2 to 5	>5 to 10	>10 to 20	>20 to 30	>30
20s	$4,976	$10,064	$14,920			
30s	11,052	20,355	36,091	$50,696		
40s	16,146	26,975	49,222	82,127	$125,257	
50s	20,817	30,768	54,169	92,304	171,290	$179,150
60s	23,796	30,990	51,887	86,694	155,662	198,993

Note: The average account balance among all 20.7 million 401(k) plan participants was $58,351; the median account balance was $17,794. 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 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 2009



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 2009 (Figure 15). However, 43 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.

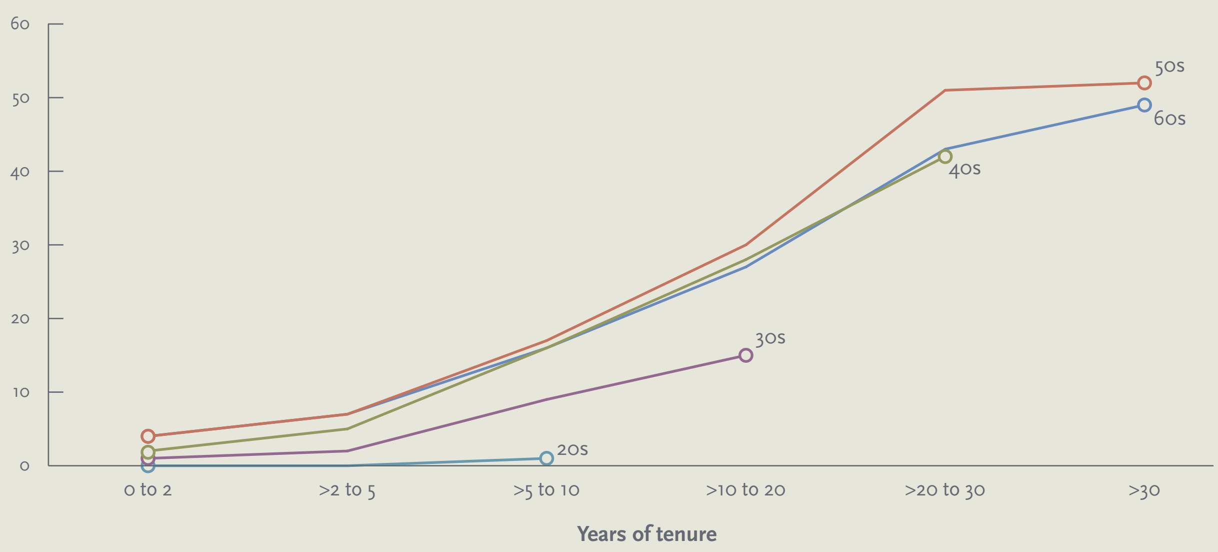
Relationship Between Account Balances and Salary

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 29 years ago).[37]

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 2009



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.[38] For longer-tenured participants in their twenties with salaries between $20,000 to $40,000, the median account balance was $5,778 in 2009 (Figure 16). Longer-tenured participants in their twenties earning more than $100,000 had a median account balance of $57,935. Among longer-tenured participants in their sixties with $20,000 to $40,000 in salary in 2009, the median account balance was $49,178. For longer-tenured participants in their sixties earning more than $100,000, the median account balance was $327,871.

The ratio of participant account balance to salary is positively correlated with age and tenure.[39] Participants in their sixties—having had more time to accumulate assets—tend to have higher ratios, while those in their twenties had the lowest ratios (Figure 17). In addition,

Figure 16

Median 401(k) Account Balance[1] Among Longer-Tenured[2] Participants by Age and Salary, 2009

	Participant age group				
Salary range	20s	30s	40s	50s	60s
$20,000 to $40,000	$5,778	$14,378	$38,847	$53,239	$49,178
>$40,000 to $60,000	12,673	26,824	60,760	81,450	81,700
>$60,000 to $80,000	29,612	50,318	107,614	135,800	139,928
>$80,000 to $100,000	44,780	84,982	164,466	196,485	212,205
>$100,000	57,935	130,689	251,767	318,340	327,871

[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 IRAs are not included. Account balances are net of loan balances.

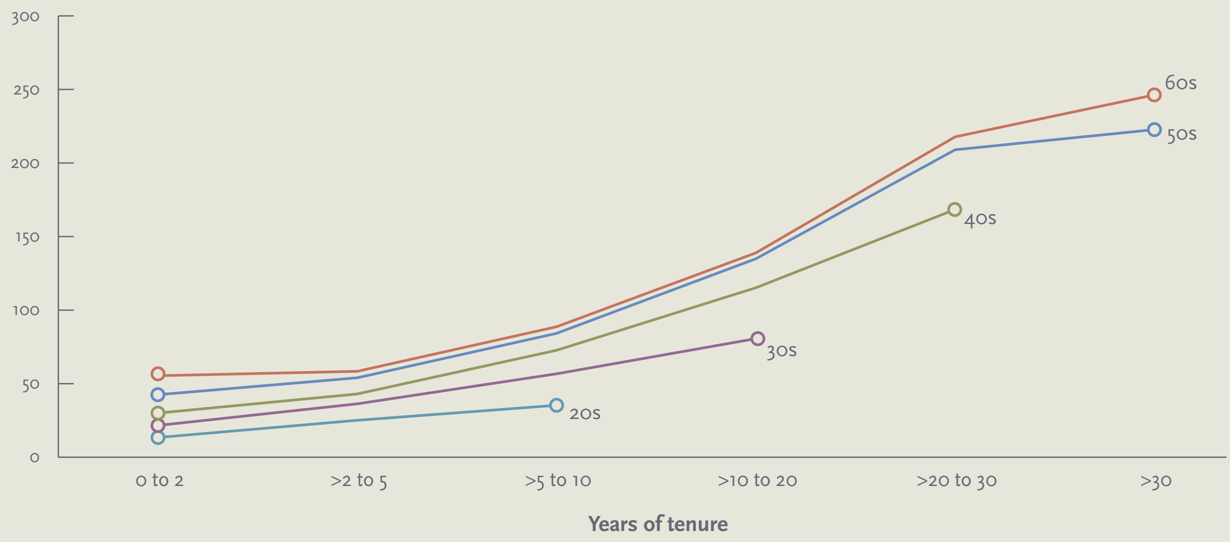
[2]Longer-tenure participants are used in this analysis to capture as long a work and savings history as possible (see note 1). The tenure variable tends to be years with the current employer rather than years of participation in the 401(k) plan. Particularly among older participants, job tenure may not reflect length of participation in the 401(k) plans; the regulations for 401(k) plans were introduced about 29 years ago.

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

Figure 17

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

Percent, 2009



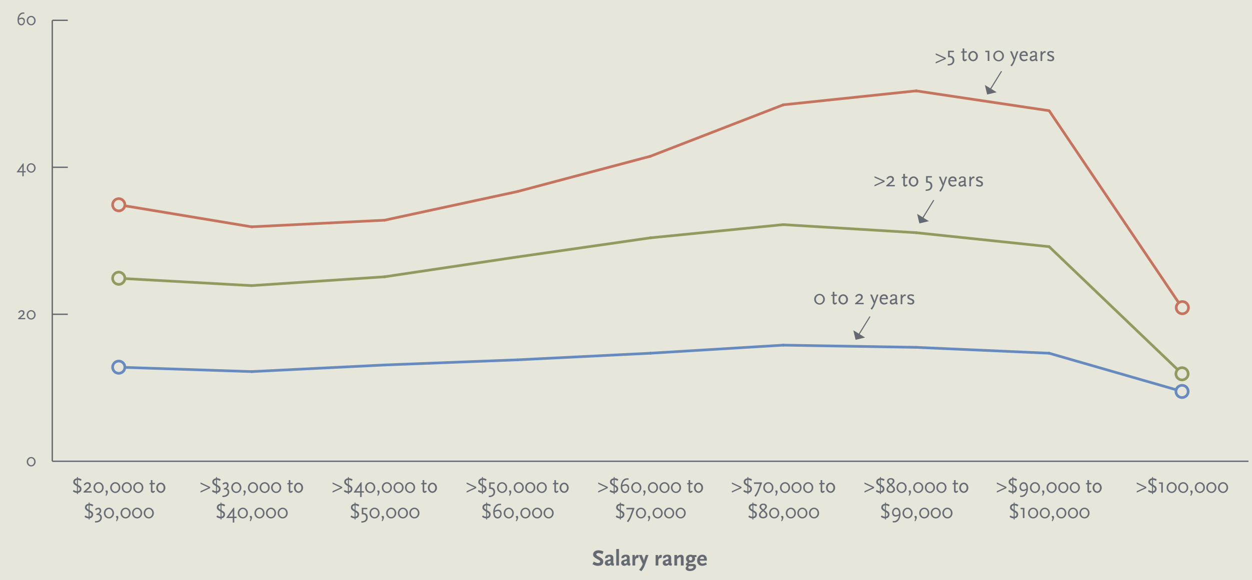
Note: The tenure variable is generally years working at current employer, and thus may overstate years of participation in the 401(k) plan.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

for any given age and tenure combination, the ratio of account balance to salary varies somewhat with salary. For example, among participants in their twenties, the ratio tends to increase slightly with salary for low-to-moderate salary groups (Figure 18). However, at high salary levels the ratio tends to decline somewhat. A similar pattern occurs among participants in their sixties (Figure 19).[40]

Figure 18

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

Percent, 2009

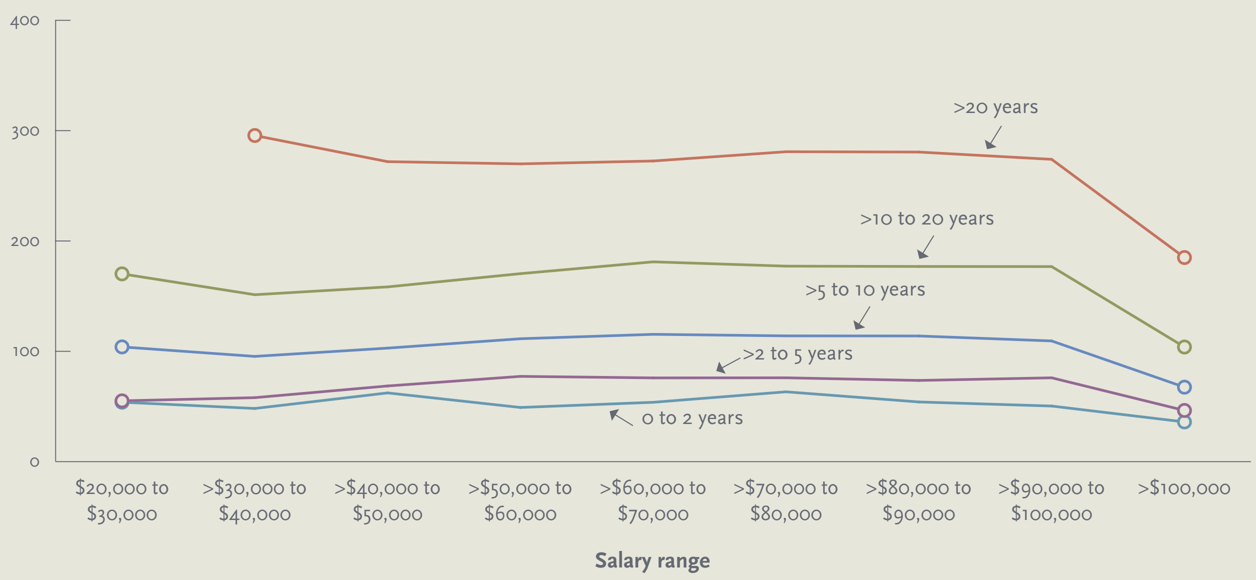


Note: The tenure variable is generally years working at current employer, and thus may overstate years of participation in the 401(k) plan.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure 19

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

Percent, 2009



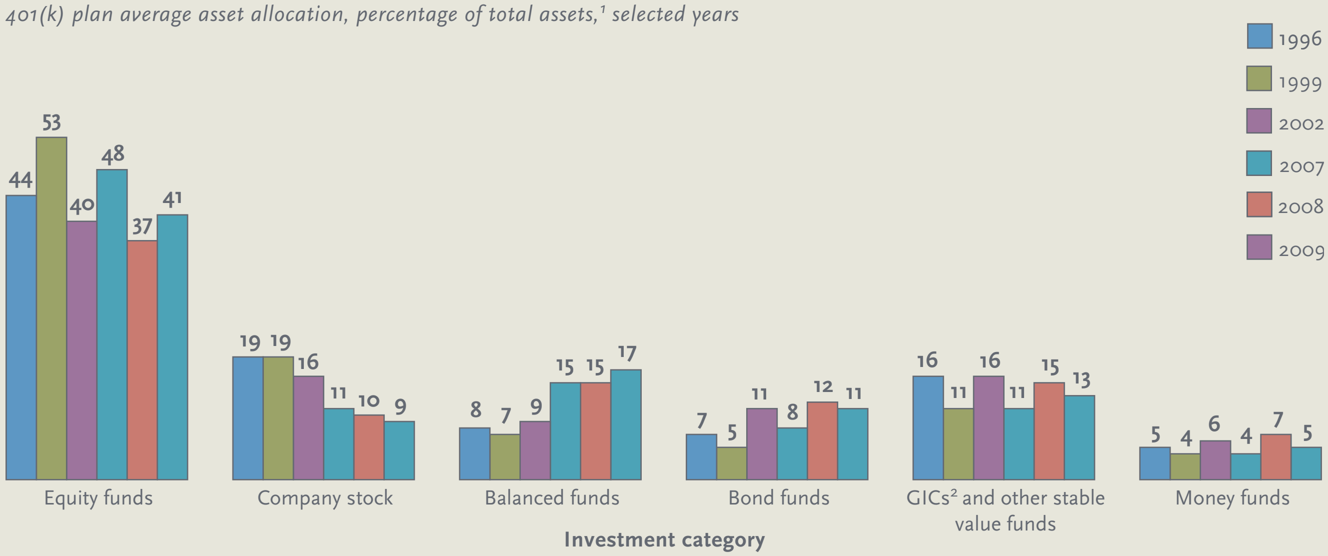
Note: The tenure variable is generally years working at current employer, and thus may overstate years of participation in the 401(k) plan.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure 20

Asset Allocation of 401(k) Participants

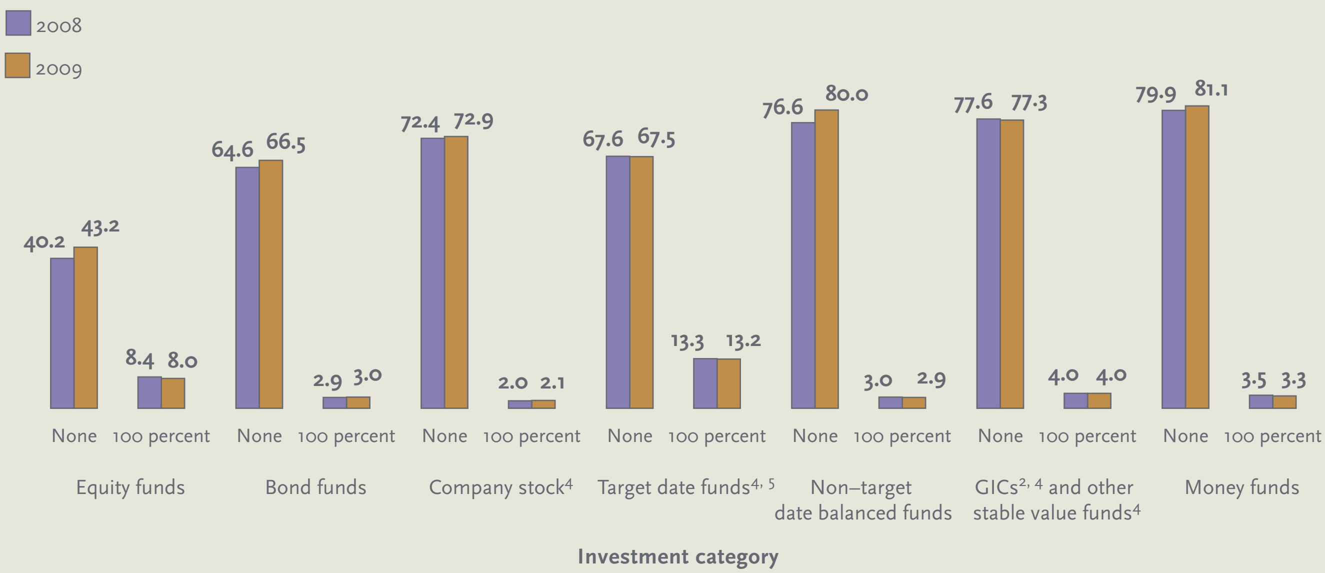
401(k) Plan Assets Are Concentrated in Equity Funds

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



Changes in All or Nothing 401(k) Plan Participant Asset Allocation by Investment Category, 2008–2009

Percentage of participants[3]



[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.*

[3] *Includes the 16.7 million participants with accounts at the end of each year from 2008 through 2009. A given participant may be counted in multiple investment categories. For example, a participant who is 100 percent invested in equities will be counted as "none" in each of the other investment categories.*

[4] *Not all participants are offered these investment options. See Figure 22.*

[5] *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

Year-End 2009 Snapshot of 401(k) Asset Allocation

As tends to occur when the stock market rises in value, the percentage of 401(k) assets invested in equities rose in 2009. At year-end 2009, 41 percent of 401(k) plan participants' account balances was invested in equity funds, on average, compared with 37 percent at year-end 2008, 48 percent at year-end 2007, and 40 percent at year-end 2002 (Figure 20, top panel). Altogether, equity securities—equity funds, the equity portion of balanced funds,[41] and company stock—represented about 60 percent of 401(k) plan participants' assets.

Changes in Asset Allocation Between Year-End 2008 and Year-End 2009

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 1996 through 1999, before falling through 2002, rising again from 2003 through 2007, then dropping in 2008, and rising in 2009 (Figures 8 and 20). At year-end 2009, equity funds were 41 percent of the assets in the EBRI/ICI 401(k) database, compared with a 37 percent share at year-end 2008. Balanced funds, which invest in equities and fixed-income securities, also increased in share, accounting for 17 percent of the assets in the database at year-end 2009. Despite the increases in shares of equity and balanced funds and the decreases in the shares of bond funds, GICs and other stable value funds, and money funds, most 401(k) participants appeared not to have made dramatic shifts in their asset allocations in 2009.[42]

Transaction activity is not tracked in the EBRI/ICI 401(k) database; nevertheless, some participant asset allocation activity can be inferred by analyzing the year-end snapshots of a consistent group of participants. For example, participant action can be discerned by studying the cases of a change from either a 0 percent (none) or a 100 percent allocation to any other allocation. Between year-end 2008 and year-end 2009, among the 16.7 million 401(k) participants with account balances in both years, the percentages of participants holding either all or none of their account balances in any particular investment option were little changed (Figure 20, lower panel).[43] For example, at year-end 2008, 40.2 percent of these participants held no equity funds. At year-end 2009, 38.5 percent continued to hold no equity funds, but 1.7 percent of participants were holding equity funds at year-end 2009 when they had held none at year-end 2008.[44] Conversely, the asset allocation to equity funds changed for 4.7 percent of 401(k) participants from holding equity funds at year-end 2008 to holding none at year-end 2009. On net, the percentage of participants holding no equity funds edged up only slightly from 40.2 percent to 43.2 percent between year-end 2008 and year-end 2009 (Figure 20, lower panel).

There was a small decline in the percentage of participants allocating 100 percent of their accounts to equity funds (Figure 20, lower panel). At year-end 2008, 8.4 percent of participants with accounts in both 2008 and 2009 were 100 percent invested in equity funds. At year-end 2009, 7.2 percent continued to hold 100 percent of their accounts in equity funds.[45] In addition, 0.9 percent of participants had increased their asset allocation to equity funds to 100 percent at year-end 2009 from lower allocations at year-end 2008. However, 1.1 percent of participants reduced their allocation to equity funds from 100 percent to less than all of their account. On net, the percentage of participants with their full account balance allocated to equity funds edged down slightly in 2009 to 8.0 percent of participants.

The net changes in percentages of participants 100 percent invested in the non-equity fund EBRI/ICI investment categories were generally small. The largest net change involved the share of participants completely eschewing non–target date balanced funds, which increased 3.4 percentage points between 2008 and 2009 (Figure 20, lower panel). At year-end 2008, 76.6 percent of participants held no non–target date balanced funds. At year-end 2009, 80.0 percent of participants held no non–target date balanced funds. The second largest net change in asset allocation to non-equity fund investments involved the share of participants completely eschewing bond funds, which increased 1.9 percentage points between 2008 and 2009 (Figure 20, lower panel). At year-end 2008, 64.6 percent of participants held no bond funds. At year-end 2009, 62.0 percent of participants continued to hold no bond funds, but 2.6 percent of participants held at least some of their accounts in bond funds at year-end 2009 when they had held no bond funds at year-end 2008.[46] Conversely, 4.5 percent of participants held no bond funds at year-end 2009 when they had held bond funds at year-end 2008. On net, the percentage of participants holding no bond funds increased to 66.5 percent at year-end 2009. Between year-end 2008 and year-end 2009, on net, the percentage of participants allocating 100 percent of their account balance to bond funds edged up from 2.9 percent to 3.0 percent of participants.

In sum, the EBRI/ICI 401(k) database does not contain information on participant transaction activity but can be used to analyze the year-end asset allocations of the consistent group of participants with accounts at year-end 2008 and year-end 2009. The analysis suggests that there is no evidence of a significant shift by a large percentage of participants away from their year-end 2008 asset allocations.

Asset Allocation and Participant Age

As in previous years, the database for year-end 2009 finds that participants' asset allocation varied considerably with age.[47] Younger participants tended to favor equity 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 73 percent of assets, compared with 47 percent of assets among participants in their sixties. Among participants in their twenties, the average allocation to equity funds was 38 percent of assets, compared with 32 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.[48] At year-end 2009, nearly 10 percent of 401(k) assets in the database was invested in target date funds. Among participants in their twenties, nearly 24 percent of their 401(k) assets was invested in target date funds, while among participants in their sixties, almost 8 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] 2009

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	38.3	23.5	11.2	7.7	3.5	5.5	7.3	1.2	2.1	100
30s	48.3	13.5	7.7	9.2	3.8	5.7	8.0	2.1	2.1	100
40s	47.3	9.9	7.1	9.9	4.2	8.3	9.4	2.6	1.6	100
50s	39.0	8.7	7.2	12.0	5.4	13.5	10.2	2.9	1.5	100
60s	32.2	7.6	6.9	13.9	7.3	19.9	8.3	2.9	1.2	100
All	40.6	9.5	7.2	11.4	5.3	12.6	9.2	2.7	1.6	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 percent of participants in the 2009 database were in these plans, which generally offer equity funds, bond funds, money funds, and balanced funds as investment options. Another 24 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, 16 percent of participants were in plans that offer company stock but no stable value products, while the remaining 30 percent of participants were offered both company stock and stable value products, in addition to the base options.

Figure 22

Distribution of 401(k) Plans, Participants, and Assets by Investment Options, 2009

Investment options offered by plan	Plans	Participants	Assets
Equity, bond, money, and/or balanced funds	**27,879**	**6,276,906**	**$298,127,169,373**
Of which: target date funds[1] an option	21,466	4,690,890	216,951,883,385
Equity, bond, money, and/or balanced funds; and GICs[2] and/or other stable value funds	**22,404**	**4,988,736**	**250,001,456,068**
Of which: target date funds[1] an option	17,197	3,945,915	192,078,616,530
Equity, bond, money, and/or balanced funds; and company stock	**644**	**3,223,670**	**192,188,040,515**
Of which: target date funds[1] an option	479	1,934,680	126,937,250,457
Equity, bond, money, and/or balanced funds; company stock; and GICs[2] and/or other stable value funds	**925**	**6,254,419**	**470,098,152,981**
Of which: target date funds[1] an option	731	4,213,175	325,628,206,556
All	**51,852**	**20,743,731**	**1,210,414,818,938**
Of which: target date funds[1] an option	39,873	14,784,660	861,595,956,927

Investment options offered by plan	Percentage of plans	Percentage of participants	Percentage of assets
Equity, bond, money, and/or balanced funds	**53.8%**	**30.3%**	**24.6%**
Of which: target date funds[1] an option	41.4	22.6	17.9
Equity, bond, money, and/or balanced funds; and GICs[2] and/or other stable value funds	**43.2**	**24.0**	**20.7**
Of which: target date funds[1] an option	33.2	19.0	15.9
Equity, bond, money, and/or balanced funds; and company stock	**1.2**	**15.5**	**15.9**
Of which: target date funds[1] an option	0.9	9.3	10.5
Equity, bond, money, and/or balanced funds, company stock; and GICs[2] and/or other stable value funds	**1.8**	**30.2**	**38.8**
Of which: target date funds[1] an option	1.4	20.3	26.9
All	**100.0**	**100.0**	**100.0**
Of which: target date funds[1] an option	76.9	71.3	71.2

[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]Column percentages may not add to 100 percent because of rounding.

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

Target date funds were available in 77 percent of 401(k) plans in the year-end 2009 database (Figure 22), up from 75 percent of plans in the year-end 2008 EBRI/ICI 401(k) database[49] and 67 percent of plans in the year-end 2007 EBRI/ICI 401(k) database.[50] These plans offered target date funds to 71 percent of the participants in 2009.[51] Among participants offered target date funds, 46 percent held them at year-end 2009. Target date fund assets represented 13 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 2009 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. A portion of this trend occurs because few small plans offered company stock as an investment option. For example, less than 1 percent of participants in small plans were offered company stock as an investment option, while 66 percent of participants in plans with more than 5,000 participants were offered company stock as an investment option in 2009. Thus, to analyze the potential effect of plan size, the remaining panels of Figure 25 group plans by investment options and plan size.

Distribution of Equity Fund Allocations and Participant Exposure to Equities

The year-end 2009 EBRI/ICI 401(k) database shows that, on average, 41 percent of participant account balances were allocated to equity funds (Figure 21). However, individual asset allocations varied widely across participants. For example, about 45 percent of participants held no equity funds, while 15 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 60 percent of participants in their twenties, 40 percent of participants in their forties, and 48 percent 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).

Participants with no equity fund balances may still have exposure to the stock market through company

Figure 23

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

Percentage of account balances,[1] 2009

	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	48.4	13.2	7.0	18.6	8.5		
Equity, bond, money, and/or balanced funds; and GICs[3] and/or other stable value funds	42.3	10.0	10.1	8.5	3.3	21.6	
Equity, bond, money, and/or balanced funds; and company stock	35.9	9.9	4.4	14.7	10.0		19.7
Equity, bond, money, and/or balanced funds; company stock; and GICs[3] and/or other stable value funds	36.6	6.8	6.9	7.1	2.3	20.7	15.7
PLANS WITHOUT COMPANY STOCK, GICs,[3] OR OTHER STABLE VALUE FUNDS							
Age group							
20s	44.3	27.5	7.3	11.4	6.0		
30s	53.9	16.6	6.1	13.4	5.9		
40s	53.7	12.9	6.7	15.1	6.8		
50s	46.6	12.7	7.3	19.4	9.1		
60s	40.3	11.3	7.1	24.5	11.8		
PLANS WITH GICs[3] AND/OR OTHER STABLE VALUE FUNDS							
20s	39.2	20.9	19.6	7.1	2.0	10.1	
30s	50.1	13.9	12.1	7.3	2.5	11.4	
40s	50.0	10.8	10.3	7.7	2.8	15.9	
50s	41.6	9.5	9.8	9.1	3.4	23.8	
60s	33.7	7.8	9.4	9.8	4.3	31.8	
PLANS WITH COMPANY STOCK							
20s	33.6	30.5	5.0	8.5	4.9		12.3
30s	44.0	14.9	4.3	10.2	5.5		16.4
40s	42.1	10.4	4.4	11.7	6.9		19.7
50s	33.8	8.4	4.8	16.1	10.4		21.2
60s	26.7	7.5	4.1	19.7	16.4		19.8
PLANS WITH COMPANY STOCK AND GICs[3] AND/OR OTHER STABLE VALUE FUNDS							
20s	35.8	18.7	11.8	5.1	2.0	9.5	15.2
30s	45.0	10.6	7.9	6.5	2.0	10.0	15.0
40s	43.7	7.3	6.9	6.8	2.0	13.6	16.4
50s	35.4	6.2	6.8	7.7	2.5	21.3	16.8
60s	28.3	5.2	6.5	7.4	2.9	32.6	14.2

[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] 2009

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	41.6	21.9	6.3	19.0	8.7		
>$40,000 to $60,000	45.0	19.4	6.6	18.2	8.3		
>$60,000 to $80,000	47.6	17.5	6.7	17.4	8.2		
>$80,000 to $100,000	49.6	16.8	5.4	17.7	8.0		
>$100,000	50.4	13.7	6.6	19.0	7.3		
All	48.4	13.2	7.0	18.6	8.5		
plans with GICs[4] and/or other stable value funds							
$20,000 to $40,000	35.4	16.4	9.5	9.2	3.3	23.2	
>$40,000 to $60,000	39.0	14.2	11.0	8.9	3.1	23.5	
>$60,000 to $80,000	43.8	11.8	10.2	8.9	3.1	22.3	
>$80,000 to $100,000	44.5	11.1	9.7	9.5	2.5	21.6	
>$100,000	45.8	9.9	9.2	9.9	2.9	21.3	
All	42.3	10.0	10.1	8.5	3.3	21.6	
plans with company stock							
$20,000 to $40,000	32.8	13.5	3.2	13.3	12.9		20.8
>$40,000 to $60,000	37.8	11.3	4.8	15.3	9.9		17.2
>$60,000 to $80,000	39.9	9.9	5.3	14.1	9.4		17.6
>$80,000 to $100,000	43.5	6.7	5.0	11.7	9.7		20.2
>$100,000	40.3	7.8	5.7	13.8	7.1		20.3
All	35.9	9.9	4.4	14.7	10.0		19.7
plans with company stock and GICs[4] and/or other stable value funds							
$20,000 to $40,000	30.9	8.2	7.1	5.5	1.8	24.0	20.0
>$40,000 to $60,000	33.4	7.1	7.9	6.1	2.6	21.1	19.6
>$60,000 to $80,000	36.4	7.7	7.9	6.7	2.6	18.3	18.8
>$80,000 to $100,000	39.0	7.1	7.8	7.2	2.5	16.7	18.3
>$100,000	42.0	6.8	5.5	7.3	2.4	17.2	18.1
All	36.6	6.8	6.9	7.1	2.3	20.7	15.7

[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 Plan Size and Investment Options

Percentage of account balances,[1] 2009

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	44.5	10.5	13.1	12.2	10.0	6.8	0.1
101 to 500	45.2	12.7	8.9	14.0	8.2	6.9	0.6
501 to 1,000	44.2	12.9	7.9	13.7	7.0	8.2	2.6
1,001 to 5,000	43.2	12.1	7.2	12.7	5.7	9.8	4.9
>5,000	39.0	8.1	6.6	10.5	4.3	15.0	12.9
All	40.6	9.5	7.2	11.4	5.3	12.6	9.2
PLANS WITHOUT COMPANY STOCK, GICs,[3] OR OTHER STABLE VALUE FUNDS							
1 to 100	45.2	16.3	7.2	15.4	11.7		
101 to 500	46.8	15.5	6.3	17.4	10.0		
501 to 1,000	47.2	14.5	6.6	18.5	9.3		
1,001 to 5,000	48.2	14.0	7.3	17.9	8.2		
>5,000	50.4	9.4	7.0	20.8	6.4		
All	48.4	13.2	7.0	18.6	8.5		
PLANS WITH GICs[3] AND/OR OTHER STABLE VALUE FUNDS							
1 to 100	43.7	1.6	22.4	7.5	7.4	16.9	
101 to 500	43.8	7.1	14.5	8.1	4.7	19.8	
501 to 1,000	43.8	10.9	10.5	7.7	3.7	20.6	
1,001 to 5,000	42.3	12.9	8.2	8.1	2.5	22.2	
>5,000	42.9	10.8	8.2	9.4	2.6	23.5	
All	42.3	10.0	10.1	8.5	3.3	21.6	
PLANS WITH COMPANY STOCK							
1 to 100[4]	38.2	8.9	4.3	12.4	13.9		15.9
101 to 500	39.4	11.4	5.0	13.9	12.4		12.5
501 to 1,000	37.5	11.4	3.8	14.1	10.4		19.0
1,001 to 5,000	41.5	8.7	5.3	15.9	8.4		15.7
>5,000	34.2	10.2	4.2	14.3	10.4		20.9
All	35.9	9.9	4.4	14.7	10.0		19.7
PLANS WITH COMPANY STOCK AND GICs[3] AND/OR OTHER STABLE VALUE FUNDS							
1 to 100	32.7	13.7	6.0	9.5	6.8	16.6	7.3
101 to 500	34.8	11.9	9.2	8.0	4.0	17.9	6.6
501 to 1,000	33.9	11.4	8.6	6.7	3.4	17.4	13.5
1,001 to 5,000	36.9	10.4	7.1	6.8	3.5	18.1	11.4
>5,000	37.0	6.3	6.8	7.2	2.2	21.2	16.5
All	36.6	6.8	6.9	7.1	2.3	20.7	15.7

[1] Minor investment options are not shown; therefore, row percentages will not add to 100 percent.

[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

Figure 26

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

Percentage of participants,[1, 2] 2009

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	60.0	2.9	2.3	3.1	3.1	3.7	4.2	4.0	4.1	3.8	8.8
30s	43.8	3.5	3.2	4.1	4.4	5.6	6.0	6.0	6.3	5.2	11.8
40s	39.7	4.1	3.6	4.5	4.8	6.2	6.5	6.4	6.6	5.1	12.6
50s	41.3	5.2	4.3	5.1	5.3	6.6	6.4	6.0	5.5	3.7	10.6
60s	47.8	5.6	4.4	5.0	5.0	5.8	5.3	4.3	3.9	2.6	10.3
All	44.8	4.2	3.6	4.4	4.6	5.7	5.9	5.6	5.6	4.3	11.1

[1]The analysis includes the 20.7 million participants in the year-end 2009 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

Figure 27

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

Percentage of participants, 2009

	Percentage of account balance invested in equity funds			
	Zero	1 to 20 percent	>20 to 80 percent	>80 percent
ALL	44.8	7.8	31.8	15.4
AGE GROUP				
20s	60.0	5.2	22.2	12.6
30s	43.8	6.7	32.4	17.0
40s	39.7	7.7	34.9	17.7
50s	41.3	9.5	34.9	14.3
60s	47.8	10.0	29.3	12.9
YEARS OF TENURE				
0 to 2	59.0	4.8	22.9	13.3
>2 to 5	50.1	5.7	29.2	15.0
>5 to 10	40.9	7.9	35.2	16.1
>10 to 20	34.7	9.8	37.7	17.7
>20 to 30	34.1	12.1	38.3	15.5
>30	41.3	12.6	33.1	13.0
SALARY				
$20,000 to $40,000	51.4	9.2	28.7	10.6
>$40,000 to $60,000	40.1	11.0	35.7	13.1
>$60,000 to $80,000	32.4	11.5	41.4	14.7
>$80,000 to $100,000	26.6	11.6	46.3	15.5
>$100,000	22.9	12.4	48.1	16.6

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 equiities. 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

stock or balanced funds, which include target date funds. Indeed, 71 percent of participants with no equity funds had investments in either company stock or balanced funds at year-end 2009 (Figure 28). For example, 77 percent of participants in their twenties without equity funds held equities through company stock, balanced funds, or both. Indeed, 48 percent of participants in their twenties without equity funds held target date funds—which will tend to be highly concentrated in equity securities for that age group—as their only equity investment. Another 8 percent of participants 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. Sixteen 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).

Among individual participants, the allocation of account balances to equities (equity funds, company stock, and the equity portion of balanced funds) varies widely around the average of 60 percent for all participants in the 2009 database. Thirty-nine percent of participants had more than 80 percent of their account balances invested in equities, while 13 percent held no equities at all in 2009 (Figure 30).

Figure 28

Percentage of 401(k) Plan Participants Without Equity Fund Balances Who Have Equity Exposure by Participant Age or Tenure, 2009

	Percentage of participants without equity 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	Combination of company stock and/or target date funds* and/or non–target date balanced funds
Age group					
20s	**77.4**	47.7	8.0	5.4	16.3
30s	**75.4**	43.4	5.9	8.9	17.2
40s	**71.7**	36.8	5.5	12.0	17.4
50s	**67.9**	30.8	5.1	14.9	17.0
60s	**60.5**	23.9	5.6	17.4	13.5
All	**70.9**	36.9	6.0	11.6	16.4
Years of tenure					
0 to 2	**78.0**	52.5	7.5	3.5	14.6
>2 to 5	**70.9**	40.2	7.0	4.5	19.2
>5 to 10	**71.4**	29.4	5.3	17.2	19.6
>10 to 20	**67.8**	22.9	5.4	22.0	17.5
>20 to 30	**60.9**	16.6	5.9	21.8	16.6
>30	**55.9**	13.6	5.4	23.0	13.9
All	**70.9**	36.9	6.0	11.6	16.4

**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 total in first column because of rounding. "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated. 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 29

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

Percentage of account balances, 2009

	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	50.1	20.6	5.4	5.4	8.2	7.1	1.1	2.1	100
30s	41.7	15.2	8.0	8.1	11.7	10.0	2.8	2.4	100
40s	30.4	12.2	10.2	9.5	17.9	13.3	4.3	2.1	100
50s	21.3	9.9	12.5	10.9	25.8	13.6	4.4	1.6	100
60s	14.6	7.7	14.6	13.1	34.2	10.6	4.0	1.2	100
All[4]	24.2	10.6	11.9	10.7	24.8	12.1	4.0	1.7	100
YEARS OF TENURE									
0 to 2	49.0	15.5	8.9	7.1	11.7	5.5	1.0	1.4	100
>2 to 5	45.5	14.8	8.4	9.2	11.9	6.6	1.8	1.9	100
>5 to 10	34.1	12.0	11.4	11.3	17.1	9.1	2.9	2.2	100
>10 to 20	26.5	9.6	11.6	11.2	21.6	12.9	4.4	2.1	100
>20 to 30	16.9	8.4	12.1	10.4	29.6	15.4	5.5	1.7	100
>30	10.4	6.8	12.5	12.3	37.9	14.5	4.6	1.1	100
All[4]	24.2	10.6	11.9	10.7	24.8	12.1	4.0	1.7	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.

[4]The analysis includes the 9.3 million participants with no equity funds at year-end 2009.

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

Figure 30

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

Asset allocation distribution of 401(k) participant account balance to equities[1] by age; percentage of participants,[2, 3] 2009

	Percentage of account balance invested in equities[1]					
Age group	Zero	1 to 20 percent	>20 to 40 percent	>40 to 60 percent	>60 to 80 percent	>80 percent
20s	13.6	3.3	3.6	6.5	18.8	54.2
30s	10.8	4.2	5.3	9.0	19.8	51.0
40s	11.2	5.4	6.3	10.4	27.4	39.2
50s	13.3	7.8	8.6	18.2	26.2	26.0
60s	18.9	10.4	12.9	20.3	15.2	22.3
All[2]	13.1	6.0	7.1	12.4	22.8	38.6

[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 20.7 million 401(k) plan participants in the year-end 2009 EBRI/ICI 401(k) 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

Distribution of Participants' Balanced Fund Allocations by Age

Individual 401(k) participants' asset allocation to balanced funds varies widely around an average of 17 percent (Figure 20, top panel). For example, half of participants held no balanced funds, while 22 percent of participants held more than 80 percent of their accounts in balanced funds in 2009 (Figure 31). At year-end 2009, half of 401(k) participants held balanced funds, similar to 51 percent of participants at year-end 2008.[52] At year-end 2009, balanced fund use by participants was about evenly split between target date funds and non–target date balanced funds: 33 percent of 401(k) participants held target date funds, 20 percent held non–target date balanced funds, and nearly 3 percent held both. The increase in balanced fund use between year-end 2008 and year-end 2009 resulted from the increased use of target date funds; at year-end 2008, 31 percent of 401(k) participants held target date funds.

Figure 31

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

Percentage of participants,[1, 2] 2009

	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	39.5	4.4	3.9	3.5	2.2	2.2	3.1	1.7	1.7	1.6	36.1
30s	46.4	6.8	5.8	5.1	3.1	2.6	2.7	1.7	1.7	1.5	22.7
40s	50.5	7.6	6.0	5.4	3.3	2.7	2.5	1.5	1.5	1.3	17.5
50s	53.1	7.7	5.8	5.4	3.4	2.7	2.5	1.5	1.4	1.3	15.3
60s	59.0	6.8	4.7	4.5	2.9	2.5	2.2	1.3	1.2	1.1	13.8
All	50.0	6.9	5.5	4.9	3.1	2.6	2.6	1.5	1.5	1.4	20.1
	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	56.2	2.5	2.1	2.0	1.4	1.4	2.2	1.2	1.3	1.4	28.5
30s	63.3	4.1	3.0	2.6	1.7	1.6	1.8	1.2	1.3	1.2	18.2
40s	68.4	4.5	2.9	2.6	1.7	1.5	1.5	1.0	1.1	1.0	13.8
50s	71.2	4.6	2.7	2.4	1.6	1.4	1.4	0.9	0.9	0.9	11.9
60s	75.8	3.9	2.1	1.9	1.3	1.2	1.1	0.7	0.8	0.8	10.5
All	67.4	4.1	2.7	2.4	1.6	1.5	1.6	1.0	1.1	1.0	15.8
	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	80.9	3.5	2.6	1.9	1.0	0.8	0.9	0.5	0.4	0.3	7.2
30s	79.9	4.8	3.7	2.8	1.4	1.0	0.9	0.5	0.4	0.3	4.2
40s	79.2	5.1	4.0	3.3	1.6	1.2	1.0	0.5	0.4	0.3	3.4
50s	79.0	5.1	4.0	3.4	1.8	1.3	1.1	0.5	0.4	0.3	3.1
60s	80.9	4.4	3.3	2.9	1.7	1.3	1.1	0.5	0.4	0.3	3.0
All	79.8	4.7	3.6	3.0	1.5	1.1	1.0	0.5	0.4	0.3	4.0

[1]The analysis includes the 20.7 million participants in the year-end 2009 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

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 2009, 44 percent of participants in their twenties held target date funds, compared with 24 percent of participants in their sixties in 2009 (Figure 31). More recently hired participants were more likely to hold target date funds than participants with more years on the job: at year-end 2009, 47 percent of participants with two or fewer years of tenure held target date funds, compared with 29 percent of participants with five to 10 years of tenure, and 19 percent of participants with more than 30 years of tenure (Figure 32).

Figure 32

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

Percentage of participants,[1, 2] 2009

	Percentage of account balance invested in balanced funds										
Years of tenure	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	39.1	4.0	3.7	3.5	2.2	2.3	3.3	1.7	1.7	1.6	36.8
>2 to 5	45.4	5.5	5.0	4.7	2.9	2.7	2.8	1.8	1.9	1.7	25.5
>5 to 10	52.6	7.4	6.1	5.5	3.4	2.8	2.6	1.6	1.6	1.5	15.0
>10 to 20	55.8	9.0	6.5	5.8	3.5	2.7	2.4	1.4	1.3	1.2	10.4
>20 to 30	58.9	9.8	6.5	5.5	3.4	2.5	2.1	1.2	1.1	1.0	7.9
>30	63.2	9.2	5.6	4.7	3.1	2.3	1.9	1.1	1.0	0.9	7.1
All	50.0	6.9	5.5	4.9	3.1	2.6	2.6	1.5	1.5	1.4	20.1
	Percentage of account balance invested in target date funds[3]										
Years of tenure	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	53.4	2.6	2.3	2.3	1.5	1.6	2.5	1.2	1.4	1.3	29.9
>2 to 5	62.9	3.3	2.6	2.5	1.7	1.7	1.8	1.3	1.4	1.4	19.4
>5 to 10	70.7	4.4	2.9	2.6	1.8	1.6	1.5	1.1	1.2	1.1	11.2
>10 to 20	75.4	5.2	2.9	2.4	1.6	1.3	1.1	0.8	0.8	0.8	7.6
>20 to 30	78.9	5.5	2.8	2.2	1.4	1.1	1.0	0.6	0.6	0.6	5.3
>30	81.4	5.2	2.3	1.8	1.2	1.0	0.8	0.5	0.5	0.5	4.7
All	67.4	4.1	2.7	2.4	1.6	1.5	1.6	1.0	1.1	1.0	15.8
	Percentage of account balance invested in non–target date balanced funds										
Years of tenure	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	83.5	2.7	2.1	1.6	0.8	0.7	0.8	0.4	0.4	0.3	6.7
>2 to 5	79.6	4.0	3.4	2.7	1.3	1.0	1.0	0.5	0.5	0.4	5.6
>5 to 10	78.6	5.1	4.1	3.4	1.7	1.2	1.1	0.5	0.4	0.4	3.4
>10 to 20	77.3	6.0	4.5	3.8	2.0	1.4	1.2	0.5	0.4	0.3	2.5
>20 to 30	77.1	6.5	4.5	3.6	2.1	1.4	1.1	0.5	0.4	0.3	2.3
>30	79.1	6.0	3.9	3.2	1.9	1.3	1.0	0.5	0.4	0.3	2.3
All	79.8	4.7	3.6	3.0	1.5	1.1	1.0	0.5	0.4	0.3	4.0

[1]The analysis includes the 20.7 million participants in the year-end 2009 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 by Age

Participants' allocations to company stock remained in line with previous years. Forty-six percent (or 9.5 million) of the 401(k) participants in the 2009 EBRI/ICI 401(k) database were in plans that offered company stock as an investment option (Figure 22). Among these participants, 72 percent held 20 percent or less of their account balances in company stock, including 48 percent who held none (Figure 33). On the other hand, about 5 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 Age

Percentage of participants,[1, 2] 2009

	Percentage of account balance invested in company stock										
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	60.3	11.0	7.2	5.3	3.5	4.9	2.1	1.0	0.7	0.5	3.4
30s	49.0	14.3	9.7	7.8	5.0	4.5	2.6	1.5	1.1	0.8	3.6
40s	44.9	15.9	10.1	8.0	5.3	4.4	3.0	1.9	1.4	1.0	4.2
50s	42.9	17.3	10.1	7.9	5.2	4.1	3.0	2.0	1.5	1.1	5.0
60s	46.6	16.1	8.8	7.0	4.4	3.5	2.7	1.8	1.4	1.1	6.5
All	47.7	15.2	9.4	7.4	4.9	4.3	2.7	1.7	1.2	0.9	4.5

[1]The analysis includes the 9.5 million participants in plans with company stock at year-end 2009.
[2]Row percentages may not add to 100 percent because of rounding.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure 34

More Recently Hired 401(k) Plan Participants Tend to Hold Balanced Funds

Percentage of recently hired participants[1] holding balanced funds,[2] 1998–2009

	Age group					
Year	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

[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

Asset Allocation of Recently Hired Participants

Comparing snapshots of newly hired 401(k) plan participants' asset allocations provides further insight into the recent investment allocation activity of plan participants. Balanced funds, which include lifestyle and target date funds, have increased in popularity among 401(k) participants. Recently hired participants in 2009 tended to be more likely to hold balanced funds compared with recent hires in the past. Sixty-one percent of recently hired participants in 2009 held balanced funds, compared with 60 percent of recently hired participants 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 2009, 47 percent of recently hired 401(k) participants held target date funds, while 17 percent held non–target date funds, and 2 percent held both target date and non–target date balanced funds (Figure 35). All of the increase in balanced fund use among recently hired participants between year-end 2008 and year-end 2009 resulted from increased use of target date funds: at year-end 2008, 44 percent of recently hired 401(k) participants held target date funds, 19 percent held non–target date balanced funds, and 2 percent held both.

Figure 35

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

Percentage of recently hired participants, 2006–2009

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

**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, and the 3.1 million recently hired participants in 2009 . "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 36

Recently Hired Participants Now Hold Higher Concentrations in Balanced Funds

Percentage of recently hired participants holding balanced fund assets,[1, 2] 1998, 2006, 2007, 2008, and 2009

	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
	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

[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; and the 1.9 million recently hired participants holding balanced funds in 2009.
[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

Among those who held balanced funds, recently hired participants in 2009 were more likely to hold a high concentration of their accounts in balanced funds compared with past years. At year-end 2009, 61 percent of recently hired participants holding balanced funds had more than 90 percent of their account balance invested in balanced funds, compared with 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 2009, 64 percent of recently hired participants holding target date funds held more than 90 percent of their account balance in target date funds (Figure 37). Forty-one 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 2009.

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, 43 percent of recently hired participants in their twenties held more than 90 percent of their account balances in balanced funds,

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] 2009

	Percentage of account balance invested in balanced funds		
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
	Percentage of account balance invested in target date funds[3]		
Age group	**>0 to 50 percent**	**>50 to 90 percent**	**>90 percent**
20s	17.4	13.8	68.8
30s	23.9	14.1	62.0
40s	24.6	13.8	61.6
50s	24.4	13.5	62.1
60s	24.8	13.2	62.0
All	22.1	13.8	64.1
	Percentage of account balance invested in non–target date balanced funds		
Age group	**>0 to 50 percent**	**>50 to 90 percent**	**>90 percent**
20s	39.4	10.5	50.1
30s	52.3	11.0	36.6
40s	52.9	11.5	35.6
50s	53.0	11.8	35.2
60s	52.7	11.6	35.7
All	48.4	11.1	40.6

[1]The analysis includes the 1.9 million recently hired participants (those with two or fewer years of tenure) holding balanced funds in 2009; the 1.4 million recently hired participants holding target date funds in 2009; and the 0.5 million recently hired participants holding non–target date balanced funds in 2009.

[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 401(k) participants,[1, 2] 2009

	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	35.9	3.4	3.1	2.8	1.8	1.9	3.8	1.6	1.6	1.5	42.5
30s	38.8	4.3	4.2	3.8	2.4	2.4	3.3	1.8	1.8	1.6	35.7
40s	40.7	4.2	4.0	4.0	2.4	2.4	3.1	1.8	1.8	1.5	34.0
50s	41.3	4.2	3.8	3.9	2.5	2.5	3.0	1.7	1.7	1.6	33.8
60s	46.4	4.3	3.4	3.5	2.2	2.3	2.7	1.4	1.5	1.5	30.8
All	39.1	4.0	3.7	3.5	2.2	2.3	3.3	1.7	1.7	1.6	36.8
	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	51.5	2.1	1.9	1.8	1.2	1.3	3.0	1.2	1.3	1.3	33.4
30s	52.7	2.8	2.6	2.5	1.6	1.7	2.5	1.3	1.4	1.4	29.4
40s	54.5	2.8	2.5	2.5	1.6	1.7	2.3	1.3	1.4	1.3	28.0
50s	54.8	2.9	2.4	2.5	1.6	1.7	2.2	1.2	1.3	1.3	28.0
60s	59.0	2.9	2.1	2.2	1.5	1.5	1.9	1.0	1.2	1.3	25.4
All	53.4	2.6	2.3	2.9	1.5	1.6	2.5	1.2	1.4	1.3	29.9
	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	82.3	2.7	1.8	1.2	0.6	0.6	0.8	0.4	0.4	0.3	8.8
30s	83.6	3.0	2.4	1.7	0.8	0.7	0.7	0.4	0.4	0.3	6.0
40s	83.9	2.7	2.3	1.9	0.9	0.7	0.8	0.4	0.4	0.3	5.7
50s	84.5	2.5	2.2	1.8	0.9	0.8	0.8	0.4	0.3	0.3	5.5
60s	85.8	2.3	1.9	1.7	0.9	0.8	0.8	0.4	0.3	0.2	5.1
All	83.5	2.7	2.1	1.6	0.8	0.7	0.8	0.4	0.4	0.3	6.7

[1]The analysis includes the 3.1 million recently hired participants (those with two or fewer years of tenure) in 2009.
[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

compared with 34 percent of recent hires in their forties and 31 percent of recent hires in their sixties in 2009 (Figure 38). Concentrated target date fund use ranged from 33 percent of recent hires in their twenties holding more than 90 percent of their account balances in target date funds to 25 percent of recently hired participants in their sixties with that concentration. In addition, at year-end 2009, 42 percent of the account balances of recently hired participants in their twenties was invested in balanced funds, compared with 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).[53] At year-end 2009, among recently hired participants in their twenties, target date funds accounted for 75 percent of their balanced fund assets, or 31 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 23 percent of the account balance assets of recently hired participants in their twenties at year-end 2008 (non–target date funds were 13 percent at year-end 2008 and 10 percent at year-end 2009).[54] The pattern of target date and non–target date fund use varied with participant age and lineup of plan investment options.

Figure 39

Average Asset Allocation of 401(k) Accounts by Participant Age and Investment Options Among 401(k) Participants with Two or Fewer Years of Tenure[1]

Percentage of account balances,[2] 1998 and 2009

	Equity funds		Balanced funds: Total		Balanced funds: Target date funds[3]	Balanced funds: Non–target date balanced funds	Bond funds		Money funds		GICs[4] and other stable value funds		Company stock	
Age group	1998	2009	1998	2009	2009	2009	1998	2009	1998	2009	1998	2009	1998	2009
ALL														
20s	66.9	35.0	7.4	41.5	31.3	10.2	5.1	8.2	4.0	3.1	3.7	3.5	10.5	6.1
30s	67.8	41.2	8.0	33.7	25.0	8.7	5.1	9.5	4.1	3.7	3.2	4.2	9.4	4.8
40s	64.5	41.1	9.7	30.5	21.7	8.8	5.9	10.1	5.1	4.1	4.4	6.4	8.0	5.1
50s	60.5	35.8	11.3	29.2	19.8	9.4	6.6	11.9	5.9	5.0	6.7	10.4	6.5	5.1
60s	50.0	30.9	12.1	24.8	15.6	9.2	8.7	13.2	7.8	6.0	13.3	17.2	5.7	5.2
All	64.8	38.2	9.1	31.7	22.6	9.1	5.7	10.4	4.9	4.3	4.6	7.5	8.6	5.2
PLANS WITHOUT COMPANY STOCK, GICs,[4] OR OTHER STABLE VALUE FUNDS														
20s	77.8	40.6	7.8	40.8	35.3	5.5	7.7	10.9	4.9	4.9				
30s	77.9	46.4	8.4	32.1	26.8	5.3	7.2	12.9	4.8	5.6				
40s	74.0	46.6	9.9	29.8	23.7	6.2	8.3	14.2	6.0	6.4				
50s	70.3	41.4	11.3	29.9	23.1	6.8	10.0	17.6	6.5	8.3				
60s	59.4	37.5	11.8	27.4	19.4	8.0	13.5	21.1	12.2	10.5				
All	75.0	43.9	9.3	31.5	25.4	6.1	8.2	14.8	5.7	6.7				
PLANS WITH GICs[4] AND/OR OTHER STABLE VALUE FUNDS														
20s	73.4	34.2	7.3	46.4	27.8	18.6	3.9	8.2	2.9	1.7	9.1	7.3		
30s	73.5	38.8	8.1	40.4	23.5	17.0	4.1	6.9	2.8	2.3	7.9	9.1		
40s	69.0	38.8	9.4	35.9	19.0	16.9	5.0	6.8	3.4	2.7	9.5	13.7		
50s	63.6	34.0	10.2	33.6	15.6	18.1	5.9	8.0	4.6	3.4	11.9	19.1		
60s	52.7	30.8	11.2	29.5	11.9	17.6	6.8	9.3	7.2	5.1	19.2	23.9		
All	69.7	36.2	7.9	36.8	19.4	17.4	5.0	7.5	3.5	2.9	10.1	14.4		
PLANS WITH COMPANY STOCK														
20s	51.8	33.0	6.1	38.5	32.8	5.8	5.0	9.2	5.4	3.8			29.5	11.7
30s	56.0	41.0	6.6	28.6	23.0	5.5	5.3	11.2	5.2	4.9			24.6	11.0
40s	54.4	41.1	8.2	25.3	20.9	4.5	6.5	12.7	6.4	5.6			22.6	12.0
50s	53.2	35.0	9.8	24.8	20.7	4.0	6.9	16.8	8.6	7.2			19.4	12.4
60s	47.2	28.6	11.1	21.5	17.0	4.5	14.3	21.8	6.4	9.7			19.3	12.2
All	54.2	37.9	7.2	27.8	22.9	4.9	6.3	13.2	6.1	5.7			24.1	11.8
PLANS WITH COMPANY STOCK AND GICs[4] AND/OR OTHER STABLE VALUE FUNDS														
20s	56.2	30.2	8.2	40.5	28.4	12.0	2.3	4.7	2.5	1.7	6.7	6.5	22.0	14.1
30s	56.3	36.5	8.9	33.5	25.0	8.5	2.6	6.3	3.3	1.6	5.9	8.1	20.6	11.3
40s	53.8	36.6	11.0	29.4	21.9	7.5	2.8	6.9	5.0	1.8	7.8	11.1	17.3	11.6
50s	49.3	31.7	13.8	26.4	19.6	6.8	3.3	7.5	5.3	2.3	11.8	17.7	14.5	11.8
60s	38.0	26.0	14.3	19.9	14.8	5.2	2.6	7.1	4.9	2.0	27.8	30.9	10.7	11.8
All	54.1	33.5	10.1	29.8	22.0	7.8	2.4	6.6	2.4	1.9	10.1	13.6	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 3.1 million participants with two or fewer years of tenure in 2009.*

[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

Comparing recently hired participants in 2009 with their similar age groups in 1998 also illustrates that asset allocation to company stock and equity funds tended to be lower in 2009 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).[55]

Figure 40

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

Percentage of recently hired 401(k) participants offered and holding company stock by participant age, 1998–2009

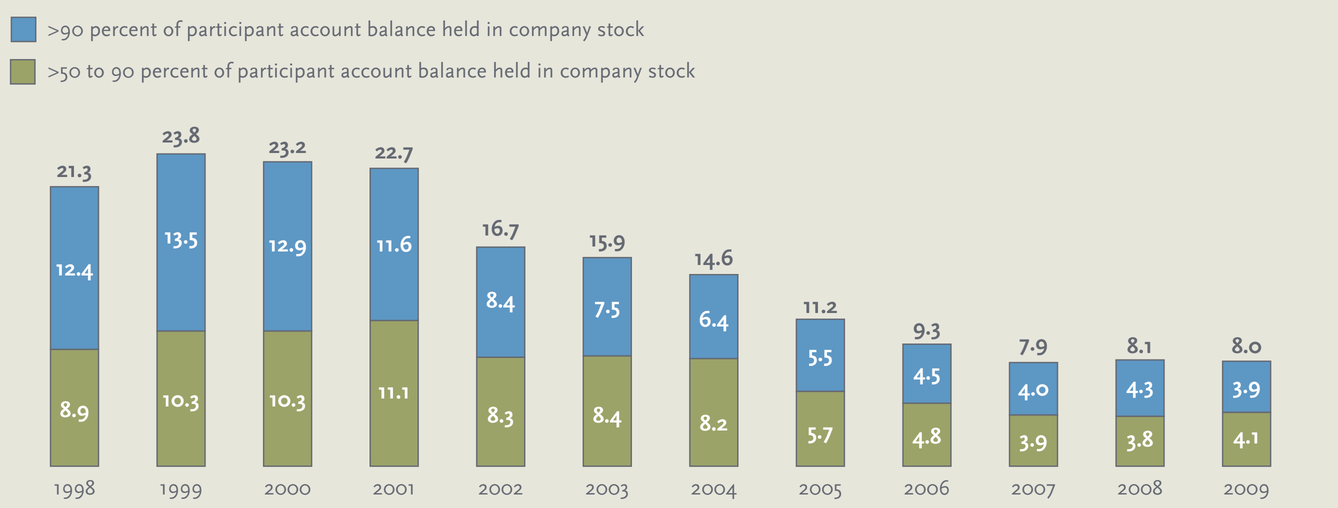
Age group	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
20s	60.8	61.1	60.5	58.1	53.9	49.6	49.8	45.4	40.0	35.4	32.9	32.3
30s	61.9	62.3	61.6	60.0	57.2	53.3	52.3	47.6	43.6	40.4	37.4	36.2
40s	59.8	60.6	59.5	58.8	55.9	52.6	52.0	47.3	43.6	40.7	37.9	37.0
50s	57.6	58.8	57.4	57.9	53.9	51.2	49.5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

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 401(k) participants offered company stock holding the percentage of their account balance indicated in company stock, 1998–2009



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 401(k) participants in plans offering company stock as an investment option,[1, 2] 2009

	Percentage of account balance invested in company stock										
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	67.7	6.2	5.0	4.3	3.2	6.1	1.8	0.8	0.6	0.4	3.8
30s	63.8	8.0	6.5	5.4	3.8	4.9	2.0	0.9	0.7	0.5	3.6
40s	63.0	8.2	6.5	5.6	4.0	4.5	2.2	1.0	0.7	0.5	4.0
50s	62.4	8.8	6.7	5.5	3.9	4.2	2.2	1.0	0.7	0.5	4.2
60s	59.5	10.3	7.0	5.0	3.8	3.8	2.3	1.2	0.8	0.9	5.4
All	64.5	7.7	6.0	5.1	3.7	5.0	2.0	0.9	0.6	0.5	3.9

[1]The analysis includes the 1.3 million participants with two or fewer years of tenure in 2009 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 2009 Snapshot of 401(k) Plan Loan Activity

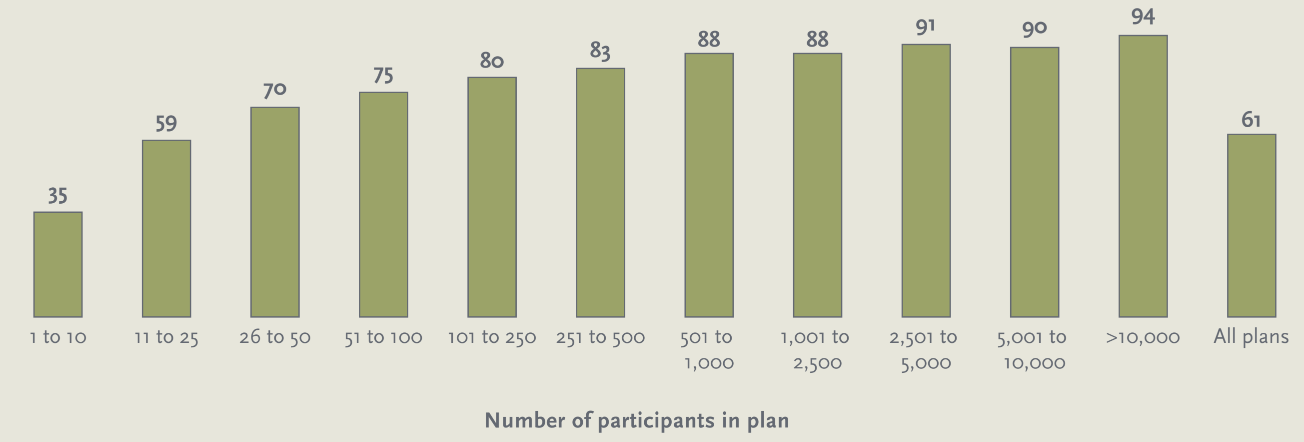
Availability and Use of 401(k) Plan Loans by Plan Size

Sixty-one percent of the 401(k) plans for which loan data were available in the 2009 EBRI/ICI 401(k) database offered a plan loan provision to participants (Figure 43).[56] The loan feature was more commonly associated with large plans (as measured by the number of participants in the plan). Ninety-four percent of plans with more than 10,000 participants included a loan provision, compared with 35 percent of plans with 10 or fewer participants. There is modest variation in participant loan activity by plan size, ranging from 17 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 more than 5,000 participants (Figure 44). Loan ratios vary only slightly when participants are grouped based on the size of their 401(k) plans (as measured by the number of plan participants). Among participants in plans with 100 or fewer participants, the loan ratio was 18 percent of the remaining assets in 2009, while in plans with more than 10,000 participants, the loan ratio was 15 percent (Figure 45).

In the 14 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 a loan outstanding. At year-end 2009, the percentage of participants offered loans with loans outstanding ticked up to 21 percent. 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 19 percent had a loan outstanding at year-end 2009.[57] On average, over the past 14 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 of loan amounts gets converted into distributions in any given year (meaning that most loans are repaid).[58]

Figure 43

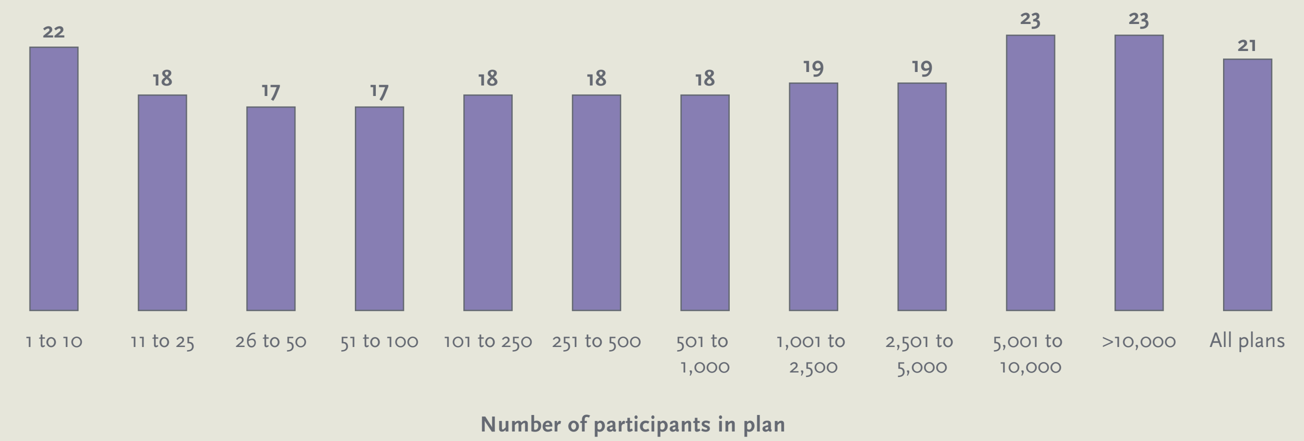
Percentage of 401(k) Plans Offering Loans by Plan Size, 2009



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

Figure 44

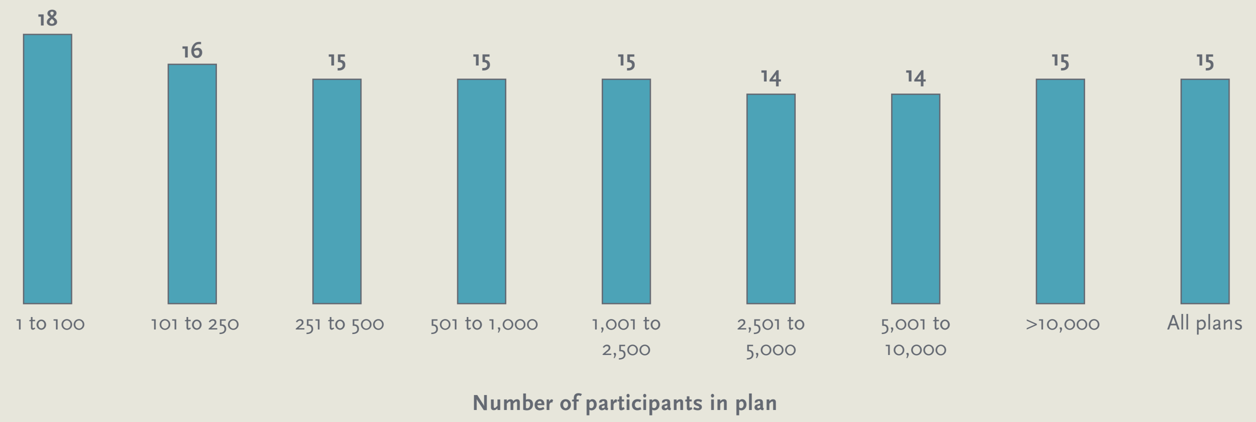
Percentage of Eligible 401(k) Participants with 401(k) Loans by Plan Size, 2009



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, 2009



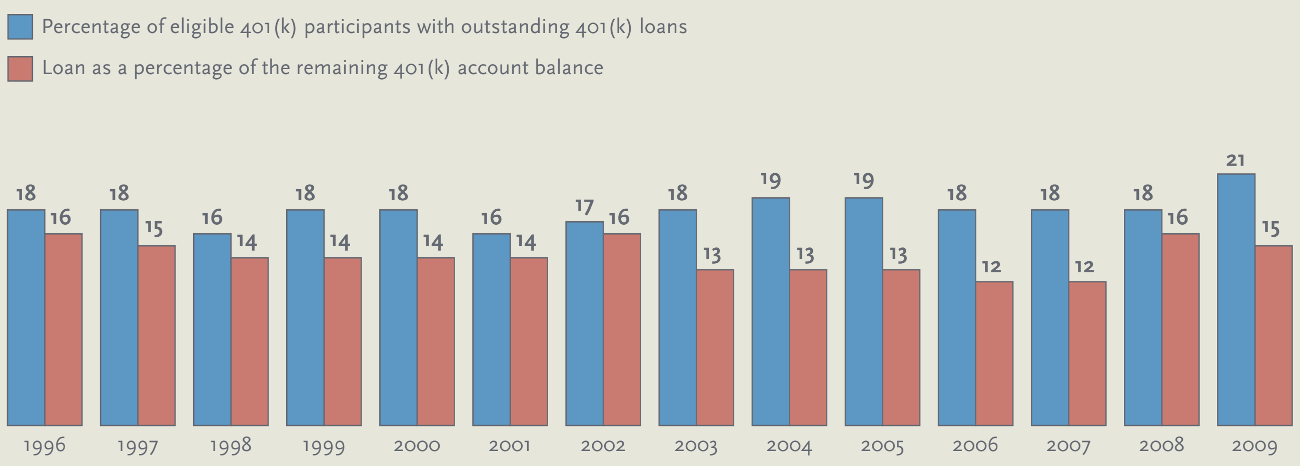
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

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

In the 2009 EBRI/ICI 401(k) database, 89 percent of participants were in plans offering loans. However, as has been the case for the 14 years that the database has tracked 401(k) plan participants, relatively few participants made use of this borrowing privilege. Nevertheless, loan activity ticked up in 2009. At year-end 2009, 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

Figure 46

Few 401(k) Participants Had Outstanding 401(k) Loans; Loans Tended to Be Small, 1996–2009



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

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. Only 16 percent of participants with account balances of less than $10,000 had loans outstanding.

Figure 47

401(k) Loan Activity Varied Across 401(k) 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
ALL	18	18	17	19	18	18	21
AGE GROUP							
20s	12	11	10	11	10	10	13
30s	20	19	18	20	20	20	23
40s	22	21	20	22	22	22	26
50s	17	17	17	19	19	19	22
60s	9	9	9	10	10	11	12
YEARS OF TENURE							
0 to 2	6	5	4	5	7	6	9
>2 to 5	15	14	12	14	15	15	17
>5 to 10	24	23	21	22	23	23	25
>10 to 20	27	26	26	26	26	26	29
>20 to 30	25	26	25	24	24	25	27
>30	13	16	15	17	17	18	19
SIZE OF ACCOUNT BALANCE							
<$10,000	12	11	11	12	11	12	16
$10,000 to $20,000	26	23	22	26	25	26	28
>$20,000 to $30,000	26	25	22	27	26	26	28
>$30,000 to $40,000	25	25	23	26	26	26	28
>$40,000 to $50,000	24	25	23	25	26	25	27
>$50,000 to $60,000	24	24	22	24	25	24	25
>$60,000 to $70,000	23	24	22	23	24	23	25
>$70,000 to $80,000	26	23	22	22	23	22	24
>$80,000 to $90,000	23	23	21	21	23	21	23
>$90,000 to $100,000	22	22	21	20	22	20	23
>$100,000 to $200,000	22	20	19	18	19	18	19
>$200,000	18	15	13	13	13	12	13
SALARY RANGE							
$40,000 or less	18	17	13	19	20	19	24
>$40,000 to $60,000	20	23	21	26	28	27	30
>$60,000 to $80,000	18	23	20	24	24	24	26
>$80,000 to $100,000	17	21	17	22	21	20	23
>$100,000	14	16	13	16	14	14	16

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

Average Loan Balances

Among participants with outstanding 401(k) loans at the end of 2009, the average unpaid balance was $7,346, compared with $7,191 in the year-end 2008 database (Figure 48). The median loan balance outstanding was $3,972 at year-end 2009, compared with $3,889 in the year-end 2008 database. With account balances generally higher on average in 2009 compared with 2008, the ratio of the loan outstanding to the remaining account balance edged down in 2009 (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),[59] and salary (lower the higher the participant's salary). Overall, loans from 401(k) plans tended to be small, with the vast majority of 401(k) participants in all age groups having no loan at all (Figure 50).

Figure 48

Average 401(k) Loan Balances

Average and median loan balances for 401(k) participants with 401(k) loans, 1998–2009

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
ALL	16	14	16	13	12	16	15
AGE GROUP							
20s	30	30	28	24	25	29	26
30s	22	20	22	19	19	25	22
40s	16	15	16	13	13	18	16
50s	12	11	12	10	10	13	12
60s	10	9	10	8	8	11	10
YEARS OF TENURE							
0 to 2	27	24	27	23	21	25	22
>2 to 5	24	25	25	21	22	26	23
>5 to 10	23	21	23	19	18	24	20
>10 to 20	15	14	16	13	13	17	16
>20 to 30	11	10	11	9	8	12	11
>30	7	8	10	8	7	9	9
SIZE OF ACCOUNT BALANCE							
<$10,000	39	39	37	35	36	39	39
$10,000 to $20,000	32	32	31	29	30	33	31
>$20,000 to $30,000	28	28	28	25	26	29	27
>$30,000 to $40,000	23	24	25	22	23	26	25
>$40,000 to $50,000	22	21	22	20	21	24	22
>$50,000 to $60,000	19	19	20	18	19	21	21
>$60,000 to $70,000	16	17	18	16	17	19	19
>$70,000 to $80,000	16	15	16	15	16	18	17
>$80,000 to $90,000	14	14	15	14	14	16	16
>$90,000 to $100,000	13	13	13	13	13	15	15
>$100,000 to $200,000	10	9	10	9	10	11	11
>$200,000	5	5	5	4	5	5	5
SALARY RANGE							
$40,000 or less	17	19	18	18	17	21	19
>$40,000 to $60,000	17	16	16	16	15	19	17
>$60,000 to $80,000	15	13	14	13	12	17	14
>$80,000 to $100,000	14	12	12	11	11	14	12
>$100,000	14	10	10	9	9	11	10

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 50

Loans from 401(k) Plans Tend to Be Small

Percentage of eligible participants by age, 2009

401(k) loan as a percentage of remaining 401(k) account balance	Age group			
	20s	40s	60s	All
Zero (no loan)	87%	75%	88%	79%
1 to 10 percent	2	7	5	6
>10 to 20 percent	2	6	2	4
>20 to 30 percent	2	4	1	3
>30 to 80 percent	5	8	3	7
>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

Appendix

This year's update of the EBRI/ICI 401(k) database reported on a consistent group of participants, or longitudinal sample. This appendix includes additional information on the 2003–2009 consistent group (Figures A1–A5, which were discussed in conjunction with the main report). For completeness, it contains all of the usual annual updates for the older 1999–2009 consistent group of participants (Figures A3 and A6–A12). In addition, changes in asset allocation for a consistent group of participants with accounts at year-end 2008 and year-end 2009 are presented in Figures A13 and A14.

Comparison of 2003–2009 Consistent Group of 401(k) Participants to EBRI/ICI 401(k) Database

About three in 10, or 4.3 million, of the 401(k) participants with accounts at the end of 2003 in the EBRI/ICI 401(k) database had accounts at the end of each year from 2003 through 2009.[60] Figures A1 and A2 compare the age and tenure distributions of the 2003–2009 consistent group with the cross-sectional database. Figure A3 highlights the distribution of account balance sizes across the database at year-end 2009, the 2003–2009 consistent group, and the 1999–2009 consistent group. Figures A4 and A5 provide information on the asset allocation of participants in the 2003–2009 consistent group by age.

Analysis of the 1999–2009 Consistent Group

Participants' Ages, Tenures, and Account Balances in the 1999–2009 Consistent Group

About 16 percent, or 1.6 million, of the 401(k) participants with accounts at the end of 1999 in the database had accounts at the end of each year from 1999 through 2009.[61] These 1.6 million 401(k) participants make up a group of consistent participants (or a longitudinal sample), which removes the effect of participants and plans entering and leaving the database. Initially, this group was demographically similar to the entire EBRI/ICI 401(k) database at year-end 1999. However, by year-end 2009, these participants had grown older (Figure A6), accrued longer job tenures (Figure A7), and accumulated larger account balances compared with the cross-section of participants in the entire year-end 2009 database (Figures A3 and A8).

The 1999–2009 consistent group's account balances highlight the accumulation effect of ongoing 401(k) participation. At year-end 2009, 21 percent of the consistent group had more than $200,000 in their 401(k) accounts at their current employers, while another 20 percent had between $100,000 and $200,000 (Figure A3). In contrast, in the broader database, 7 percent of participants had accounts with more than $200,000, and less than 10 percent had accounts between $100,000 and $200,000 (Figures A3 and 10).

Reflecting their higher average age and tenure, the 1999–2009 consistent group also had median and average account balances that were much higher than the median and average account balances of the broader database (Figure A8). At year-end 2009, the average 401(k) account balance of the 1999–2009 consistent group was $131,438 (Figure A8), more than double the average account balance of $58,351 among participants in the entire database (Figure 9). The median 401(k) account balance among the consistent participants was $73,175 at year-end 2009 (Figure A8), more than four times the median account balance of $17,794 among participants in the entire database (Figure 9).

At year-end 2009, 401(k) account balances varied with both age and tenure among the 1999–2009 consistent group of participants, as they do in the cross-sectional database. Younger participants or those with shorter job tenure tended to have smaller account balances, while those who were older or had longer job tenure tended to have higher account balances. For example, within the 1999–2009 consistent group, participants in their thirties at year-end 2009 had an average account balance of $64,688, compared with an average of $162,522 for participants in their sixties (Figure A9).

Changes in Participants' Account Balances in the 1999–2009 Consistent Group

In any given year, the change in a participant's account balance is the sum of three factors: new contributions by the participant or the employer or both; total investment return on account balances, which depends on the performance of financial markets and on the allocation of assets in an individual's account; and withdrawals, borrowing, and loan repayments. The change in any individual participant's account balance is influenced by the magnitudes 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.

All told, from year-end 1999 through year-end 2009, the average account balance among the group of consistent participants grew 95.0 percent, rising from $67,420 at year-end 1999 to $131,438 at year-end 2009 (Figures A8, A9, and A10). This translates into an annual average growth rate of 6.9 percent over the 10-year period. The median account balance (or midpoint, with half above and half below) among this consistent group also grew, rising 199.5 percent from $24,435 in 1999 to $73,175 in 2009 (an annual average growth rate of 11.6 percent; Figure A8).

Among the 1999–2009 consistent group, there was a wide range of individual participant experience, often influenced by the relationship among the three factors mentioned above: contributions, investment returns, and withdrawal and loan activity. Participants who were younger or had fewer years of tenure experienced the largest increases in average account balance between year-end 1999 and year-end 2009. For example, the average account balance of participants in their thirties rose 460.2 percent (an 18.8 percent annual average growth rate) between the end of 1999 and the end of 2009 (Figures A9 and A10). Because younger participants' account balances tended to be small (Figure A9), contributions produced significant account balance growth. In contrast, the average account balance of older participants or those with longer tenures showed more modest growth (Figure A10). For example, the average account balance of participants in their sixties increased 46.2 percent (a 3.9 percent annual average growth rate) between year-end 1999 and year-end 2009. Investment returns, rather than annual contributions, generally account for most of the change in accounts with larger balances. In addition, participants in their sixties tend to have a higher propensity to make withdrawals.[62]

These changes in participant account balances also reflect changes in asset values during the 10-year time period (Figure 8). Although asset allocation varied with age and many participants held a range of investments, the impact of stock market performance showed through in 401(k) accounts because 401(k) plan participants tended to be heavily invested in equity securities. At year-end 2009, altogether, equity securities—equity funds, the equity portion of balanced funds,[63] and company stock—represented 59 percent of the 1999–2009 consistent group of 401(k) plan participants' assets (Figure A11). The asset allocation of participants in the consistent group varied with participant age, a pattern that is also observed in the cross-sectional EBRI/ICI 401(k) database. Younger participants generally tended to favor equity 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.

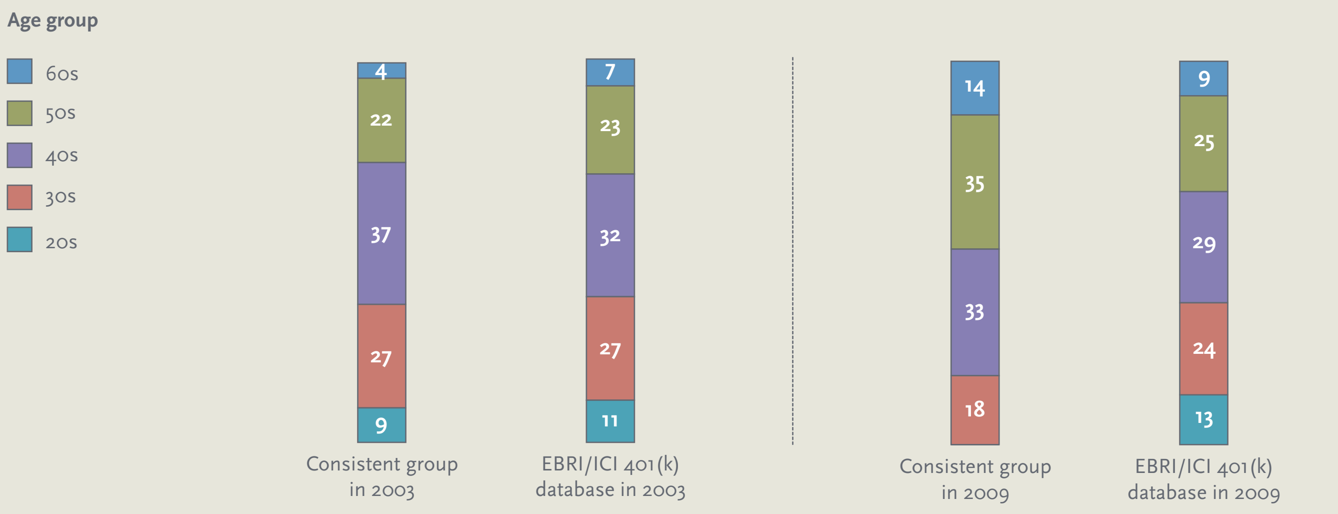
Among individual 401(k) participants in the consistent group, the allocation of account balances to equities varied widely around the average of 59 percent for the 1999–2009 consistent group as a whole. Thirty-seven percent of participants in the 1999–2009 consistent group had more than 80 percent of their accounts invested in equities, while 13 percent held no equities at all in 2009 (Figure A12).

The growth pattern of the 1999–2009 consistent group's average account balances reflects stock market performance over the 10-year time period. The three-year bear market of 2000–2002 pulled 401(k) account balances down. Diversified portfolios and ongoing contributions[64] helped offset the impact of the stock market decline. The average account among the consistent group of participants fell 7.0 percent between year-end 1999 and year-end 2002 (Figure A10), while the S&P 500 total return index fell 37.6 percent and the Russell 2000 Index fell 21.0 percent (Figure 8). Between year-end 2002 and year-end 2007, the S&P 500 total return index climbed 82.9 percent and the Russell 2000 Index more than doubled. The average account balance among the 1999–2009 consistent group of participants increased 127.6 percent between year-end 2002 and year-end 2007 (Figure A10). In 2008, as the S&P 500 total return index fell 37.0 percent and the Russell 2000 Index fell 33.8 percent, the average account balance among the 1999–2009 consistent group of participants decreased 25.3 percent. As the stock market rose in 2009, the average account balance among the 1999–2009 consistent group increased 23.3 percent. The 1999–2009 consistent group's average balance at year-end 2009 was up 95.0 percent compared with year-end 1999; over the 10-year period, the average account balance grew at an annual average rate of 6.9 percent.

Figure A1

Age Distribution of 2003–2009 Consistent Group of 401(k) Participants

Percentage of 401(k) participants by age, year-end 2003 and year-end 2009

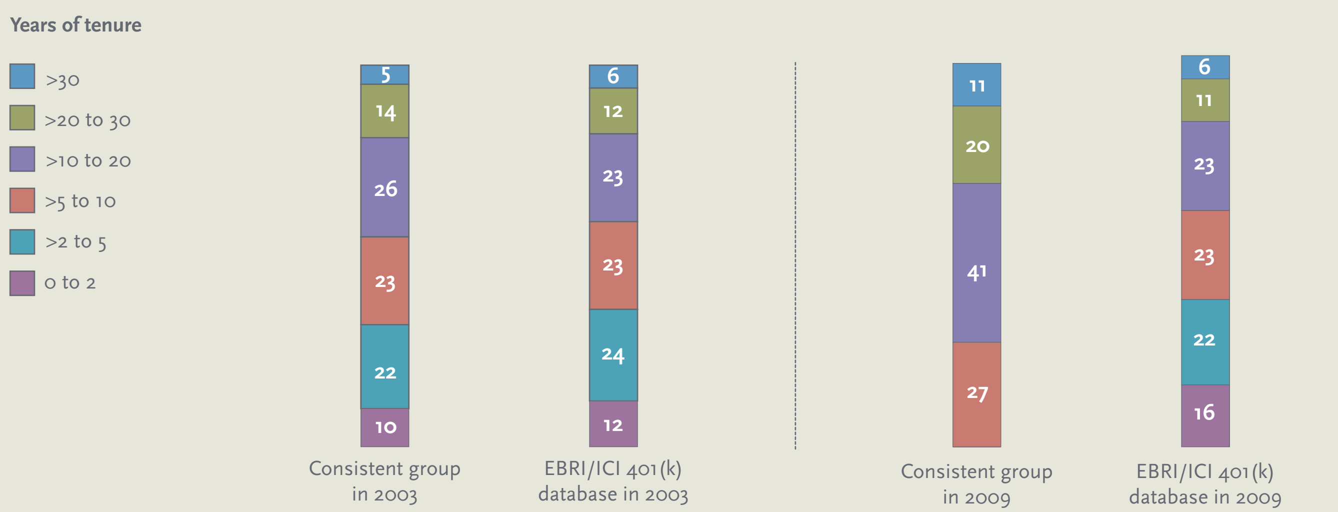


Note: The EBRI/ICI 401(k) database contains 15.0 million 401(k) plan participants at year-end 2003 and 20.7 million at year-end 2009.
The consistent group consists of 4.3 million 401(k) plan participants with account balances at the end of each year from 2003 through 2009. Components may not add to 100 percent because of rounding.
Source: EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure A2

Tenure Distribution of 2003–2009 Consistent Group of 401(k) Participants

Percentage of 401(k) participants by years of tenure, year-end 2003 and year-end 2009

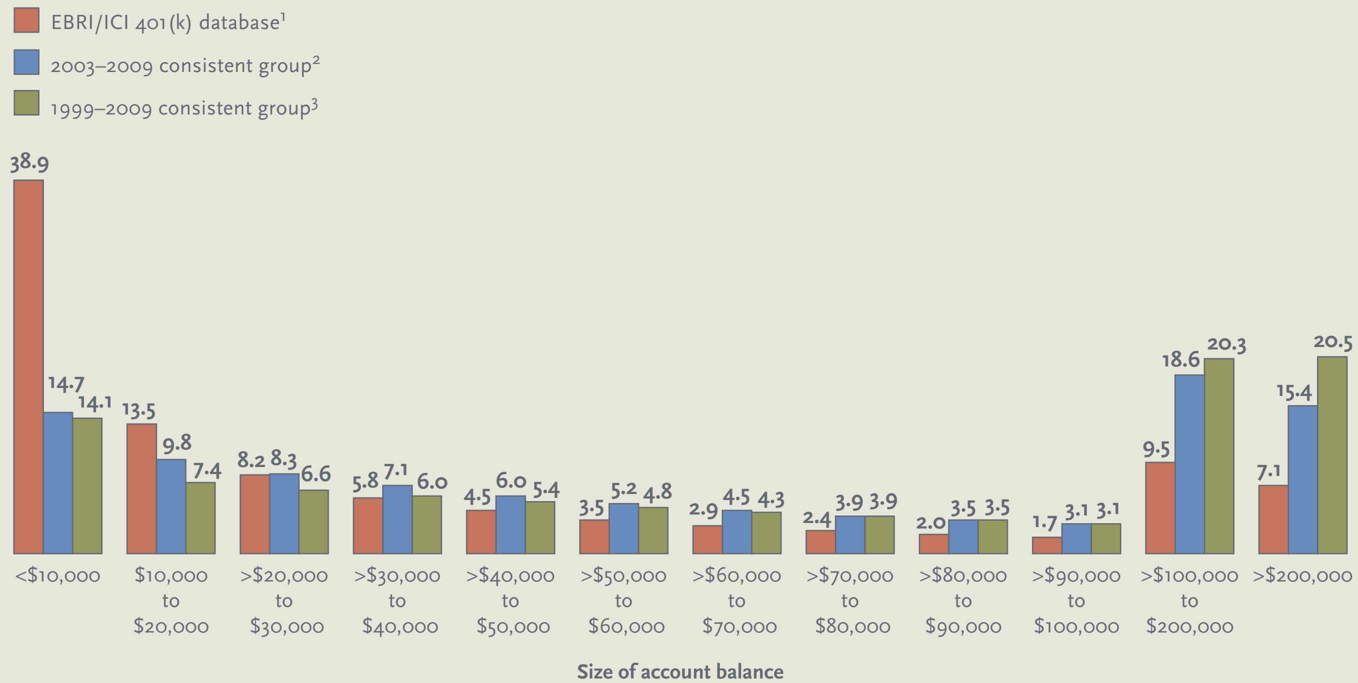


Note: The EBRI/ICI 401(k) database contains 15.0 million 401(k) plan participants at year-end 2003 and 20.7 million at year-end 2009.
The consistent group consists of 4.3 million 401(k) plan participants with account balances at the end of each year from 2003 through 2009. Components may not add to 100 percent because of rounding.
Source: EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure A3

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

Percentage of participants with account balances in specified ranges, 2009



[1]The EBRI/ICI 401(k) database at year-end 2009 represents 20.7 million 401(k) plan participants; the median account balance in the database was $17,794 at year-end 2009.

[2]The 2003–2009 consistent group represents the 4.3 million 401(k) plan participants with account balances at the end of each year from 2003 through 2009; the median account balance among the 2003–2009 consistent group was $59,381 at year-end 2009.

[3]The 1999–2009 consistent group represents the 1.6 million 401(k) plan participants with account balances at the end of each year from 1999 through 2009; the median account balance among the 1999–2009 consistent group was $73,175 at year-end 2009.

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

Figure A4

Average Asset Allocation of 401(k) Accounts of 2003–2009 Consistent Group by Participant Age

Percentage of account balances,[1] 2009

Age group[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	Other	Unknown	Total[1]
20s	46.6	14.0	6.2	10.4	4.6	6.9	9.3	1.0	0.9	100
30s	54.5	8.6	5.3	10.7	3.8	5.2	9.6	1.3	1.0	100
40s	50.3	7.1	5.7	11.4	4.1	7.6	11.2	1.7	0.8	100
50s	40.1	6.9	6.2	13.7	5.0	12.8	12.3	2.3	0.7	100
60s	32.3	6.3	6.2	16.7	6.2	19.9	9.8	2.0	0.6	100
All consistent group[2]	42.3	6.9	5.9	13.5	4.9	12.6	11.2	1.9	0.8	100
EBRI/ICI 401(k) database[5]	40.6	9.5	7.2	11.4	5.3	12.6	9.2	2.7	1.6	100

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

[2]Age group is based on participant age at year-end 2009. Figure reports asset allocation by age group among the consistent group of 4.3 million 401(k) plan participants with account balances at the end of each year from 2003 through 2009.

[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.

[5]The year-end 2009 EBRI/ICI 401(k) database represents 20.7 million 401(k) participants.

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

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

Figure A5

Asset Allocation to Equities Varied Widely Among 401(k) Participants in the 2003–2009 Consistent Group

Asset allocation distribution at year-end 2009 of 401(k) participant account balance to equities[1] by age; percentage of participants[2, 3]

	Percentage of account balance invested in equities[1]					
Age group[4]	Zero	1 to 20 percent	>20 to 40 percent	>40 to 60 percent	>60 to 80 percent	>80 percent
20s	13.1	4.7	6.1	10.6	20.4	45.0
30s	8.2	4.3	5.3	10.5	20.7	50.8
40s	8.4	5.7	6.4	11.8	23.5	44.3
50s	11.5	8.8	8.8	16.4	22.6	32.0
60s	18.4	12.1	11.5	17.2	15.3	25.6
All consistent group[2]	11.5	7.6	7.8	13.7	21.2	38.1
EBRI/ICI 401(k) database[5]	13.1	6.0	7.1	12.4	22.8	38.6

[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 4.3 million 401(k) plan participants with account balances at the end of each year from 2003 through 2009. Asset allocation is as of year-end 2009.

[3] Row percentages may not add to 100 percent because of rounding.

[4] Age group is based on participant age at year-end 2009.

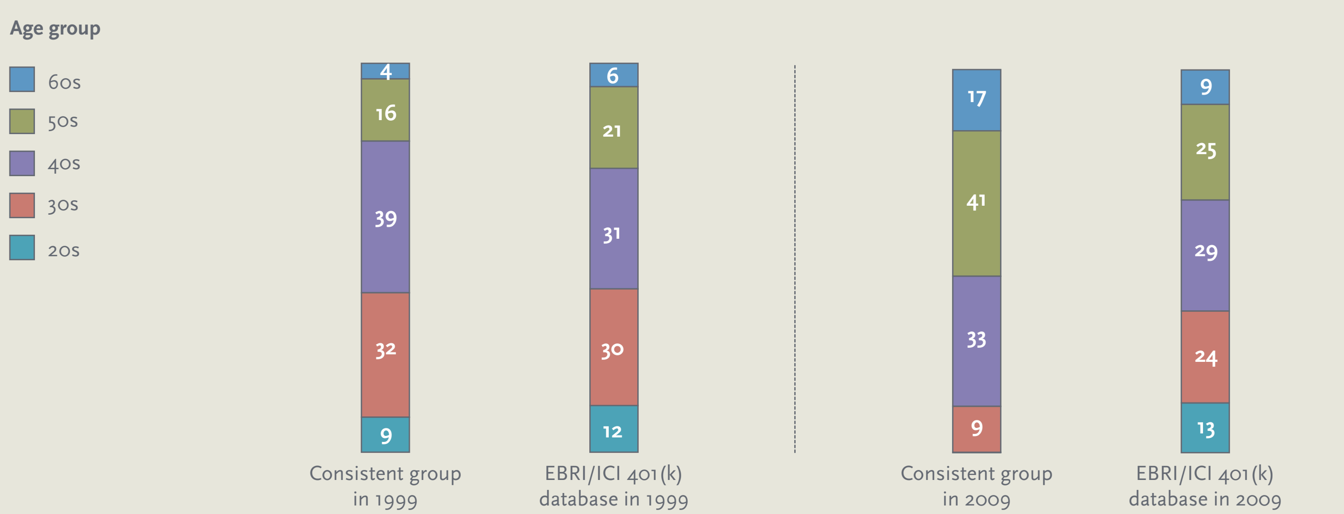
[5] The year-end 2009 EBRI/ICI 401(k) database represents 20.7 million 401(k) participants.

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

Figure A6

The 1999–2009 Consistent Group Was Older Than All 401(k) Participants in the EBRI/ICI 401(k) Database at Year-End 2009

Percentage of participants by age, year-end 1999 and year-end 2009

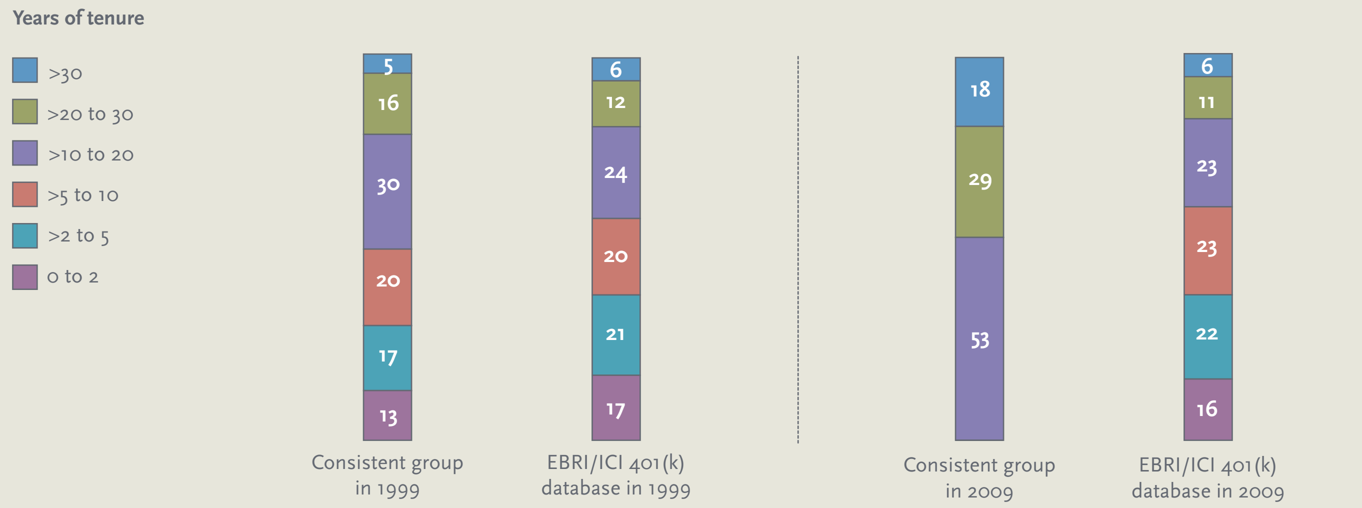


Note: The EBRI/ICI 401(k) database contains 10.3 million 401(k) plan participants at year-end 1999 and 20.7 million at year-end 2009.
The consistent group consists of 1.6 million 401(k) plan participants with account balances at the end of each year from 1999 through 2009. Components may not add to 100 percent because of rounding.
Source: EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure A7

The 1999–2009 Consistent Group Had Longer Tenure Than All Participants in the EBRI/ICI 401(k) Database at Year-End 2009

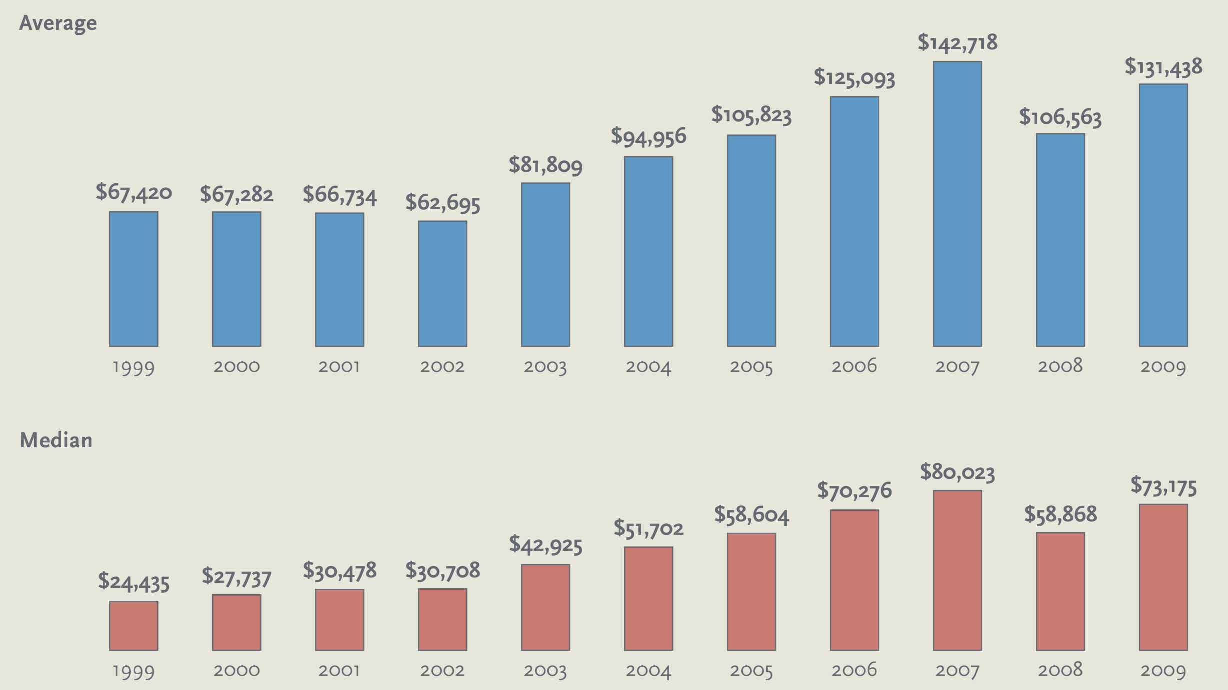
Percentage of participants by years of tenure, year-end 1999 and year-end 2009



Note: The EBRI/ICI 401(k) database contains 10.3 million 401(k) plan participants at year-end 1999 and 20.7 million at year-end 2009.
The consistent group consists of 1.6 million 401(k) plan participants with account balances at the end of each year from 1999 through 2009. Components may not add to 100 percent because of rounding.
Source: EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure A8

401(k) Account Balances[1] Among 401(k) Participants Present from Year-End 1999 Through Year-End 2009[2]



[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 analysis is based on a group of 1.6 million participants with account balances at the end of each year from 1999 through 2009.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure A9

Average Account Balances Among 401(k) Participants Present from Year-End 1999 Through Year-End 2009[1] by Age and Tenure[2]

Age group[2]	Years of tenure[2]	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
30s	All	$11,547	$14,280	$17,106	$18,177	$27,708	$35,439	$42,870	$54,331	$65,438	$47,030	$64,688
	>10 to 20	12,480	15,081	17,793	18,714	28,337	36,082	43,477	54,944	66,085	47,387	65,099
40s	All	41,975	43,067	44,014	41,796	58,198	70,253	80,883	98,697	115,498	82,813	108,716
	>10 to 20	32,686	34,448	36,248	35,070	49,956	61,140	71,431	87,981	103,876	74,214	98,743
	>20 to 30	68,305	67,302	65,785	60,471	81,162	95,596	107,154	128,495	148,020	106,423	136,379
50s	All	73,784	73,989	73,058	68,467	90,506	106,235	119,489	142,640	164,565	123,273	153,344
	>10 to 20	40,480	42,863	44,640	43,220	59,740	72,598	84,379	102,924	120,673	90,063	116,009
	>20 to 30	100,811	98,786	95,466	87,492	114,502	133,098	148,369	176,236	202,645	150,400	186,580
	>30	92,742	92,303	90,043	84,717	109,274	125,899	138,865	163,297	186,200	141,919	170,384
60s	All	111,143	108,789	105,986	98,664	123,175	138,114	148,873	169,525	186,030	142,944	162,522
	>10 to 20	44,268	47,663	49,586	48,312	65,305	78,708	90,389	107,823	123,142	93,082	111,689
	>20 to 30	116,356	114,222	111,017	102,307	129,615	147,416	160,701	184,876	203,783	154,149	176,281
	>30	159,293	152,169	145,806	134,548	163,137	177,483	186,018	206,956	223,003	173,795	192,032
All[1]	All	67,420	67,282	66,734	62,695	81,809	94,956	105,823	125,093	142,718	106,563	131,438

[1]*The analysis is based on a group of 1.6 million participants with account balances at the end of each year from 1999 through 2009.*
[2]*Age and tenure groups are based on participant age and tenure at year-end 2009.*
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure A10

Percent Change in Average Account Balances Among 401(k) Participants Present from Year-End 1999 Through Year-End 2009[1] by Age and Tenure[2]

Selected time periods

Age group[2]	Years of tenure[2]	1999–2002	2002–2007	2007–2008	2008–2009	2007–2009	1999–2009
30s	All	57.4%	260.0%	-28.1%	37.5%	-1.1%	460.2%
	>10 to 20	50.0	253.1	-28.3	37.4	-1.5	421.6
40s	All	-0.4	176.3	-28.3	31.3	-5.9	159.0
	>10 to 20	7.3	196.2	-28.6	33.1	-4.9	202.1
	>20 to 30	-11.5	144.8	-28.1	28.1	-7.9	99.7
50s	All	-7.2	140.4	-25.1	24.4	-6.8	107.8
	>10 to 20	6.8	179.2	-25.4	28.8	-3.9	186.6
	>20 to 30	-13.2	131.6	-25.8	24.1	-7.9	85.1
	>30	-8.7	119.8	-23.8	20.1	-8.5	83.7
60s	All	-11.2	88.5	-23.2	13.7	-12.6	46.2
	>10 to 20	9.1	154.9	-24.4	20.0	-9.3	152.3
	>20 to 30	-12.1	99.2	-24.4	14.4	-13.5	51.5
	>30	-15.5	65.7	-22.1	10.5	-13.9	20.6
All[1]	All	-7.0	127.6	-25.3	23.3	-7.9	95.0

[1]The analysis is based on a group of 1.6 million participants with account balances at the end of each year from 1999 through 2009.
[2]Age and tenure groups are based on participant age and tenure at year-end 2009.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure A11

Average Asset Allocation of 401(k) Accounts of 1999–2009 Consistent Group by Participant Age

Percentage of account balances,[1] 2009

Age group[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	Other	Unknown	Total[1]
30s	57.2	7.0	5.5	9.5	3.6	4.9	9.9	1.5	0.8	100
40s	51.5	6.0	6.0	11.2	4.2	7.6	10.9	1.9	0.7	100
50s	40.9	6.3	6.4	14.0	5.0	13.8	10.6	2.3	0.6	100
60s	31.4	5.5	6.1	17.0	6.1	22.9	8.6	2.0	0.4	100
All consistent group[2]	41.5	5.9	6.1	13.9	4.9	14.9	10.1	2.0	0.6	100
EBRI/ICI 401(k) database[5]	40.6	9.5	7.2	11.4	5.3	12.6	9.2	2.7	1.6	100

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

[2] Age group is based on participant age at year-end 2009. Figure reports asset allocation by age group among the consistent group of 1.6 million 401(k) plan participants with account balances at the end of each year from 1999 through 2009.

[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.

[5] The year-end 2009 EBRI/ICI 401(k) database represents 20.7 million 401(k) participants.

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 A12

Asset Allocation to Equities Varied Widely Among Participants in the 1999–2009 Consistent Group

Asset allocation distribution at year-end 2009 of 401(k) participant account balance to equities[1] by age; percentage of participants[2, 3]

	Percentage of account balance invested in equities[1]					
Age group[4]	Zero	1 to 20 percent	>20 to 40 percent	>40 to 60 percent	>60 to 80 percent	>80 percent
30s	7.9	4.0	4.9	9.9	19.3	54.0
40s	7.8	5.7	6.1	11.6	22.7	46.2
50s	12.0	9.3	8.5	15.9	21.5	32.8
60s	20.6	13.4	10.9	15.7	14.3	25.1
All consistent group[2]	13.1	8.7	7.9	13.5	19.9	36.9
EBRI/ICI 401(k) database[5]	13.1	6.0	7.1	12.4	22.8	38.6

[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 1.6 million 401(k) plan participants with account balances at the end of each year from 1999 through 2009. Asset allocation is as of year-end 2009.

[3] Row percentages may not add to 100 percent because of rounding.

[4] Age group is based on participant age at year-end 2009.

[5] The year-end 2009 EBRI/ICI 401(k) database represents 20.7 million 401(k) participants.

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

Figure A13

Changes in Consistent 401(k) Participants' Investment in Equity Funds, 2008–2009

Percentage of participants[1]

Percentage of account balance invested in equity funds

Percentage in 2008	Percentage in 2009: None	1 to 20	21 to 40	41 to 60	61 to 80	81 to 99	100	Total in 2008[2]
None	**38.5**	0.6	0.3	0.3	0.2	0.1	0.2	40.2
1 to 20	1.0	**6.2**	**1.5**	0.3	0.2	0.1	0.1	9.3
21 to 40	2.2	0.8	**6.3**	**2.1**	0.3	0.1	0.0	11.7
41 to 60	0.8	0.3	1.0	**8.2**	**2.1**	0.2	0.1	12.7
61 to 80	0.3	0.2	0.2	1.1	**7.9**	**1.3**	0.2	11.3
81 to 99	0.2	0.1	0.1	0.2	0.9	**4.8**	0.3	6.5
100	0.2	0.1	0.1	0.1	0.2	0.4	**7.2**	8.4
Total in 2009[3]	43.2	8.2	9.4	12.3	11.8	7.0	8.0	100.0

[1] *Sample of 16.7 million participants with account balances at year-end 2008 and year-end 2009.*
[2] *Percentages across the row may not add to total because of rounding.*
[3] *Percentages in column may not add to total because of rounding.*
Sum of outlined areas: 86.1 percent of participants
Note: "Equity funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in stocks.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Figure A14

Changes in Consistent 401(k) Participants' Investment in Bond Funds, 2008–2009

Percentage of participants[1]

Percentage of account balance invested in bond funds

Percentage in 2008	Percentage in 2009: None	1 to 20	21 to 40	41 to 60	61 to 80	81 to 99	100	Total in 2008[2]
None	**62.0**	1.5	0.5	0.2	0.1	0.1	0.2	64.6
1 to 20	3.7	**11.9**	**1.1**	0.2	0.0	0.0	0.1	16.9
21 to 40	0.4	1.7	**6.5**	**0.5**	0.1	0.0	(*)	9.3
41 to 60	0.1	0.2	0.9	**2.3**	**0.2**	0.0	(*)	3.8
61 to 80	0.1	0.0	0.1	0.5	**0.7**	**0.1**	(*)	1.5
81 to 99	0.1	0.0	0.0	0.0	0.2	**0.6**	0.1	1.0
100	0.1	(*)	(*)	0.1	(*)	0.1	**2.6**	2.9
Total in 2009[3]	66.5	15.3	9.1	3.8	1.4	0.8	3.0	100.0

[1] *Sample of 16.7 million participants with account balances at year-end 2008 and year-end 2009.*
[2] *Percentages across the row may not add to total because of rounding.*
[3] *Percentages in column may not add to total because of rounding.*
(*) = less than 0.05 percent
Sum of outlined areas: 88.5 percent of participants
Note: "Bond funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in bonds.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Notes

1 For data on 401(k) plan assets, participants, and plans through 2007, 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 2010, see Brady, Holden, and Short 2010. 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, ICI estimates the number of active 401(k) participants to be 49.0 million in 2009 and the number of 401(k) plans to be 497,000. 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, and 2010c; and U.S. Department of Labor, Employee Benefits Security Administration 2008a, 2008b, 2010a, and 2010b.

3 See Brady, Holden, and Short 2010.

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 $12.05 trillion and serve more than 90 million shareholders (see Bogdan, Sabelhaus, and Schrass 2010).

6 This update extends previous findings from the project for 1996 through 2008. For year-end 2008 results, see Holden, VanDerhei, and Alonso 2009. 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 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 to the single individual owning them resulted in an overall increase of 7.0 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 26 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 4 percent with the consolidation of their multiple accounts. Future joint research with this new 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. Profit Sharing/401k Council of America 2010 indicates that in 2009, the average number of investment fund options available for participant contributions was 18 among the 931 plans surveyed; Hewitt Associates 2009b indicates an average number of investment options of 20 in 2009. Deloitte Consulting LLP, International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists 2009 report that the average number of funds offered by the 606 401(k) plan sponsors in their survey was 20 in 2008.

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 Brady, Holden, and Short 2010.

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. See discussion in note 2.

18 Automatic enrollment tends to reduce the average tenure of participants in the 401(k) plan. Profit Sharing/401k Council of America 2010 reported a leveling out in the incidence of automatic enrollment in 2009, following several years of a rising trend. Of more than 900 plans surveyed, 38.4 percent had automatic enrollment in 2009, compared with 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-four percent of plans with automatic enrollment in 2009 applied automatic enrollment only to new hires, while 16 percent applied automatic enrollment to all nonparticipants.

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.

21 Account balances are net of unpaid loan balances.

22 See Figures A6 and A7 in the appendix, which compare the age and tenure composition of the 1999–2009 group to the year-end cross-sectional EBRI/ICI 401(k) database.

23 The value of this percentage is lower than it would have been if it were merely reflecting employee turnover and retirement. The EBRI/ICI 401(k) database has added data providers since 2003, and, by definition, participants in these plans would not be included in the consistent group. Moreover, any time a 401(k) plan sponsor changed service providers, all participants in the plan would be excluded from the consistent group. For the year-end 2003 EBRI/ICI 401(k) database update, see Holden and VanDerhei 2004a and 2004b.

24 See Figures A1 and A2 in the appendix for the age and tenure distribution of the 2003–2009 consistent group of participants compared with the age and tenure distribution of the year-end 2003 and year-end 2009 EBRI/ICI 401(k) database.

25 See Figures A4 and A5 in the appendix for asset allocation information for the 2003–2008 consistent group of participants.

26 The distribution of account balances across the 2003–2009 consistent group also highlights their higher accumulations. At year-end 2009, 15.4 percent of the consistent group had more than $200,000 in their 401(k) accounts at their current employers, while another 18.6 percent had between $100,000 and $200,000 (see Figure A3 in the appendix). In contrast, in the broader EBRI/ICI 401(k) database, 7.1 percent of participants had accounts with more than $200,000, and 9.5 percent had accounts between $100,000 and $200,000 (see Figures 10 and A3).

27 For statistics indicating the higher propensity of withdrawals among participants in their sixties, see Holden and VanDerhei 2002.

28 At year-end 2009, 62 percent of balanced mutual fund assets were invested in equities (see Investment Company Institute, Quarterly Supplementary Data).

29 See Figure A4 in the appendix for the average dollar-weighted asset allocation of the 2003–2009 consistent group of participants by age. In addition, as observed in the cross-sectional EBRI/ICI 401(k) database, among individual 401(k) participants in the 2003–2009 consistent group, the allocation of account balances to equities varied widely around the average of 61 percent for the consistent group as a whole. Thirty-eight percent of participants in the consistent group had more than 80 percent of their accounts invested in equities, while almost 12 percent held no equities at all in 2009 (see Figure A5).

30 See total returns for the large company stock index reported in Morningstar 2010.

31 Analysis of contribution activity of 401(k) plan participants in 2009 in the EBRI/ICI 401(k) database has not been conducted. However, results from an ICI survey of DC plan recordkeepers found that only 3.4 percent of participants stopped contributing to their accounts in 2009 (see Holden 2010). In addition, analysis of contribution activity during the bear market of 2000–2002 using the cross-sectional EBRI/ICI 401(k) database, found that overall 401(k) participants' contribution rates were little changed in 2000, 2001, and 2002 when compared to 1999 (see Holden and VanDerhei 2004c). Whether measured in dollar amounts or percentage of salary contributed, on average, 401(k) participants' contribution behavior does not appear to have been materially affected by the bear market in equities from 2000 through 2002.

32 At year-end 2009, 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.

33 At year-end 2009, 6.8 percent of the participants in the database were missing a date of hire entry and were not included in this analysis.

34 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 1 percent of them had two or fewer years of tenure, and 4 percent of them had between two and five years of tenure (see Figure 12).

35 Because 401(k) plans were introduced about 29 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).

36 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 (82 percent of all 401(k)-type plans in existence in 2007 were established after 1989 [tabulations of U.S. Department of Labor Form 5500 data for 2007]), 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.

37 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 pre-date the 401(k) plan are not included in this analysis, which focuses on 401(k) balance amounts.

38 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 60 to 69 in 2009) 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 31 percent. See Congressional Budget Office 2010.

39 The ratio of 401(k) account balance (at the current employer) to salary alone is not an indicator of preparedness for retirement. A complete analysis of preparedness for retirement would require estimating projected balances at retirement by also considering retirement income from Social Security, defined benefit plans, IRAs, and other DC plans, possibly from previous employment. For references to such research, see Holden and VanDerhei 2005. For an analysis of the possible impact of automatic increases in participants' contribution rates in automatic enrollment plans, see VanDerhei 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.

40 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 2009, see The Vanguard Group 2010 and Hewitt Associates 2010.

41 At year-end 2009, 62 percent of balanced mutual fund assets were invested in equities (see Investment Company Institute, Quarterly Supplementary Data).

42 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 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 2010). Covering a year earlier, the ICI survey of recordkeepers covering more than 22 million DC plan participant accounts found that 14.4 percent of DC plan participants changed the asset allocation of their account balances in 2008 and 12.4 percent changed the asset allocation of their contributions during 2008 (see Holden 2010). 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 a year earlier, The Vanguard Group 2009 reported that "despite the substantial market volatility of 2008, only 16 [percent] of participants made one or more portfolio trades or exchanges during the year." Hewitt Associates 2010 found that 16.2 percent of participants traded in their accounts in 2009, and 19.7 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 2009 reflecting households' sentiment toward and confidence in 401(k) plans, see Holden, Sabelhaus, and Reid 2010.)

43 Holden, VanDerhei, and Alonso 2009 presents a similar analysis of changes in asset allocation among a consistent group of participants with account balances at the end of 2007 and 2008 in the 2008 EBRI/ICI 401(k) database. Holden and VanDerhei 2003 presents a similar analysis of changes in asset allocation among a consistent group of participants with account balances at the end of each year from 1999 through 2002 in the EBRI/ICI 401(k) database. Holden, VanDerhei, and Quick 2000 includes an analysis of changes in equity fund asset allocations among participants with account balances at the end of each year from 1996 to 1998 in the EBRI/ ICI 401(k) database.

[44] See Figure A13 in the appendix for a detailed presentation of the changing percentages of account balance invested in equity funds among the 16.7 million 401(k) participants with account balances in the EBRI/ICI 401(k) database at year-end 2008 and year-end 2009.

[45] See Figure A13 in the appendix for a detailed presentation of the changing percentages of account balance invested in equity funds among the 16.7 million 401(k) participants with account balances in the EBRI/ICI 401(k) database at year-end 2008 and year-end 2009.

[46] See Figure A14 in the appendix for a detailed presentation of the changing percentages of account balance invested in bond funds among the 16.7 million 401(k) participants with account balances in the EBRI/ICI 401(k) database at year-end 2008 and year-end 2009.

[47] Participants in their twenties hold approximately 2 percent of the total assets in the 2009 EBRI/ICI 401(k) database; participants in their thirties hold about 12 percent; participants in their forties hold 29 percent; participants in their fifties hold 41 percent; and participants in their sixties hold the remaining 17 percent of the total assets.

[48] See note 11 for additional detail on target date funds.

[49] For year-end 2008 data, see Holden, VanDerhei, and Alonso 2009.

[50] For year-end 2007 data, see Holden et al. 2008.

[51] Target date funds have been increasingly used as the default investment in automatic enrollment plans and in plans' investment lineups (see Profit Sharing/401k Council of America 2010). At year-end 2009, 66 percent of target date mutual fund assets were held in DC plans (see Brady, Holden, and Short 2010).

[52] For year-end 2008 data, see Holden, VanDerhei, and Alonso 2009.

[53] See Holden et al. 2008 and Holden, VanDerhei, and Alonso 2009 for data for earlier years.

[54] For year-end 2008 data, see Holden, VanDerhei, and Alonso 2009.

[55] 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).

[56] Plan-specific information on loan provisions is available for the majority of the plans in the sample (including virtually all of the small plans). Some plans without this information are classified as having a loan provision if any participant in the plan has an outstanding loan balance. This may understate the number of plans offering loans (or participants eligible for loans) because some plans may have offered, but no participant had taken out, a plan loan. It is likely that this omission is small, as U.S. Government Accountability Office 1997 found that more than 95 percent of 401(k) plans that offer loans had at least one plan participant with an outstanding loan.

[57] 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 2008, this measure was 16 percent; in 2007, 16 percent; and in 2006, 15 percent.

[58] In plan-year 2007 (latest data available), only 1.6 percent of the $3.0 trillion in 401(k) plan assets were participant loans. In addition, only $604 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 2010a.

[59] This pattern is driven in part by restrictions placed on loan amounts.

[60] The value of this percentage is lower than it would have been if it were merely reflecting employee turnover and retirement. The EBRI/ICI 401(k) database has added data providers since 2003 and by definition participants in these plans would not be included in the consistent group. Moreover, any time a 401(k) plan sponsor changed service providers, all participants in the plan would be excluded from the consistent group. For the year-end 2003 EBRI/ICI 401(k) database update, see Holden and VanDerhei 2004a and 2004b.

[61] The value of this percentage is lower than it would have been if it were merely reflecting employee turnover and retirement. The EBRI/ICI 401(k) database has added data providers since 1999 and by definition participants in these plans would not be included in the consistent group. Moreover, any time a 401(k) plan sponsor changed service providers, all participants in the plan would be excluded from the consistent group. For the year-end 1999 EBRI/ICI 401(k) database update, see Holden and VanDerhei 2001a.

[62] For statistics indicating the higher propensity of withdrawals among participants in their sixties, see Holden and VanDerhei 2002.

[63] At year-end 2009, 62 percent of balanced mutual fund assets were invested in equities (see Investment Company Institute, Quarterly Supplementary Data).

[64] For an analysis of contribution activity during the bear market of 2000–2002 using the cross-sectional EBRI/ICI 401(k) database, see Holden and VanDerhei 2004c. The analysis found that overall 401(k) participants' contribution rates were little changed in 2000, 2001, and 2002 when compared with 1999. Whether measured in dollar amounts or percentage of salary contributed, on average, 401(k) participants' contribution behavior does not appear to have been materially affected by the bear market in equities from 2000 through 2002.

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