

RESEARCH PERSPECTIVE

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401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2006

KEY FINDINGS

- The average 401(k) retirement account rose for the fourth consecutive year in 2006. Propelled by strong stock market returns, the average 401(k) account increased 17 percent in 2006, according to the annual update of the EBRI/ICI 401(k) database. The EBRI/ICI analysis is based on the largest compilation of data on participants in 401(k) plans, which are now the primary retirement savings vehicle for the vast majority of working Americans covered by retirement plans.
- 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 seven-year period from 1999 to 2006 (which included one of the worst bear markets for stocks since the Great Depression):
 - The average 401(k) account balance increased at an annual growth rate of 8.7 percent over the period, to \$121,202 at year-end 2006.
 - The median 401(k) account balance increased at an annual growth rate of 15.1 percent over the period, to \$66,650 at year-end 2006.
- The bulk of 401(k) assets is invested in stocks. On average, at year-end 2006, about two-thirds of 401(k) participants' assets are invested in equity securities through equity funds, the equity portion of balanced funds, and company stock. About one-third is in fixed-income securities such as stable value investments and bond and money market funds. These relative shares have changed little over the past 11 years.
- 401(k) participants continue to seek diversification of their investments. The share of 401(k) accounts invested in company stock continues to shrink, falling by 2 percentage points (to 11 percent) in 2006. That continued a steady decline that started in 1999. Recently hired 401(k) participants contribute to this trend: they are less likely to hold employer stock.
- New employees embrace lifestyle/lifecycle funds. Across all age groups, more new or recent hires are investing their 401(k) assets in balanced funds, including "lifestyle" or "lifecycle" funds. At yearend 2006, 24 percent of the account balances of recently hired participants in their twenties were invested in balanced funds, compared with 19 percent in 2005, and about 7 percent in 1998.
- Participants' 401(k) loan activity is modest. In 2006, 18 percent of all 401(k) participants eligible for loans had taken a loan against their 401(k) account. Most loans tend to be small, amounting, on average, to 12 percent of the remaining account balance.

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, and now serve as the most popular defined contribution (DC) plan, representing the largest number of participants and assets. In 2006, 50 million American workers were active 401(k) plan participants. By year-end 2006, 401(k) plan assets had grown to represent 16 percent of all retirement assets, with \$2.7 trillion in assets. In an ongoing collaborative effort, the Employee Benefit Research Institute (EBRI)3 and the Investment Company Institute (ICI)4 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 2006.5 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 2006; the fourth looks at participants' asset allocations; and the fifth looks at participants' 401(k) loan activity.

EBRI/ICI 401(k) DATABASE

Sources and Type of Data

Several EBRI and ICI members provided records on active participants in 401(k) plans for which they kept records at year-end 2006. These plan recordkeepers include mutual fund companies, insurance companies, and consulting firms. Although the EBRI/ICI project has collected data from 1996 through 2006, the universe of data providers varies from year to year. In addition, the sample of plans using a given provider can change. Thus, aggregate figures in this report generally should not be used to

About the EBRI/ICI Database

The EBRI/ICI Participant-Directed Retirement Plan Data Collection Project is the largest, most representative repository of information about individual 401(k) plan participant accounts. As of December 31, 2006, the EBRI/ICI database includes statistical information about:

- 20.0 million 401(k) plan participants, in
- 53,931 employer-sponsored 401(k) plans, holding
- \$1.228 trillion in assets.

The 2006 EBRI/ICI database covers 40 percent of the universe of 401(k) plan participants, 12 percent of plans, and 46 percent of 401(k) plan assets.

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

estimate time trends, unless otherwise indicated. Records were encrypted to conceal the identity of employers and employees but were coded so that both could be tracked over multiple years. Data provided for each participant include date of birth, from which an age group is assigned; date of hire, from which a tenure range is assigned; outstanding loan balance; funds in the participant's investment portfolios; and asset values attributed to those funds. An account balance for each participant is the sum of the participant's assets in all funds. 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.

Investment Options

Investment options are grouped into eight categories.7 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, and balanced funds are pooled accounts invested in both stocks and bonds. 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)⁸ and other stable value funds,⁹ 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.10

Distribution of Plans, Participants, and Assets by Plan Size

The 2006 EBRI/ICI database contains information on 53,931 401(k) plans with \$1.228 trillion in assets and 20.0 million participants (Figure 1). Most of the plans in the database are small: 43 percent of the plans in the database have 25 or fewer participants, and 32 percent

Figure 1	FIGURE 1									
401(k) PLAN CHARACTERIST	ICS BY NUMBER OF	PLAN PARTICIPANTS, 2	006							
Number of Plan Participants	Total Plans	Total Participants	Total Assets	Average Account Balance						
1 to 10	10,595	60,684	\$3,271,136,768	\$53,904						
11 to 25	12,590	215,695	10,352,850,461	47,998						
26 to 50	9,673	349,620	16,446,217,460	47,040						
51 to 100	7,521	533,944	25,091,339,115	46,992						
101 to 250	6,241	985,744	47,204,381,398	47,887						
251 to 500	2,896	1,023,244	48,811,260,649	47,702						
501 to 1,000	1,723	1,222,735	63,068,104,508	51,580						
1,001 to 2,500	1,384	2,155,521	113,965,797,333	52,872						
2,501 to 5,000	653	2,290,175	129,899,221,263	56,720						
5,001 to 10,000	313	2,144,822	141,478,240,897	65,963						
>10,000	342	9,036,004	628,445,072,293	69,549						
All	53,931	20,018,188	1,228,033,622,146	61,346						

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, 78 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 18 percent of the plans have assets of \$250,000 or less, and another 32 percent have plan assets between \$250,001 and \$1,250,000 (Figure 2).

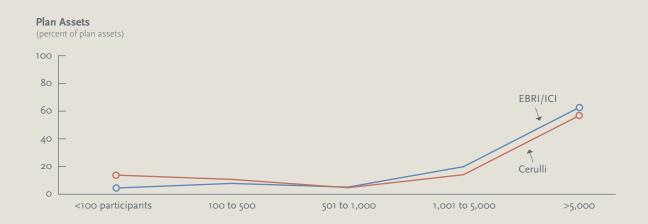
Relationship of EBRI/ICI Database Plans to the Universe of All 401(k) Plans

The 2006 EBRI/ICI database is a representative sample of the estimated universe of 401(k) plans. At year-end 2006, 401(k) plans held \$2.7 trillion in assets, and the EBRI/ICI database represents about 46 percent of that total. The year-end 2006 EBRI/ICI database also covers 40 percent of the universe of active 401(k) plan participants and 12 percent of all 401(k) plans. The distribution of assets, participants, and plans in the EBRI/ICI database for 2006 is similar to that reported for the universe of plans as estimated by Cerulli Associates (Figure 3).

Total Plan Assets	Total Plans	Total Participants	Total Assets	Average Account Balanc
\$0 to \$250,000	9,749	104,130	\$995,569,641	\$9,561
>\$250,000 to \$625,000	8,932	179,807	3,790,362,963	21,080
>\$625,000 to \$1,250,000	8,570	274,274	7,775,610,380	28,350
>\$1,250,000 to \$2,500,000	7,964	413,572	14,162,640,262	34,245
>\$2,500,000 to \$6,250,000	7,979	821,817	31,589,372,391	38,438
>\$6,250,000 to \$12,500,000	3,924	887,706	34,552,271,777	38,923
>\$12,500,000 to \$25,000,000	2,587	1,062,639	45,041,610,679	42,387
>\$25,000,000 to \$62,500,000	2,025	1,830,017	79,356,274,791	43,364
>\$62,500,000 to \$125,000,000	887	1,675,914	77,129,176,826	46,022
>\$125,000,000 to \$250,000,000	582	1,977,204	102,643,721,668	51,914
>\$250,000,000	732	10,791,108	830,997,010,768	77,008

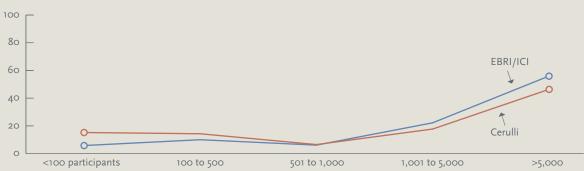
EBRI/ICI DATABASE REPRESENTS WIDE CROSS-SECTION OF 401(k) UNIVERSE

401(k) plan characteristics by number of participants: EBRI/ICI database vs. Cerulli estimates for all 401(k) plans, 2006



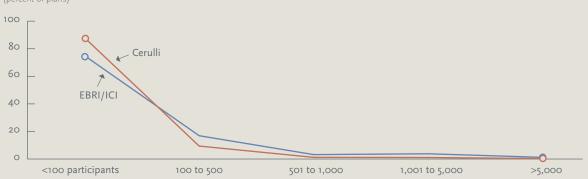
Participants





Plans

(percent of plans)



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

The Typical 401(k) Plan Participant

The EBRI/ICI database includes 401(k) participants of a wide range of age and tenure. Fifty-five percent of participants are in their thirties or forties, while 12 percent of participants are in their twenties and 8 percent are in their sixties (Figure 4). The median age of the participants in the 2006 EBRI/ICI database is 44 years, the same as in 2005. Thirty-three percent of the participants have five or fewer years of tenure, while 6 percent have more than 30 years of tenure. The median tenure at the current employer is eight years, also the same as in 2005.

CHANGES IN 401(k) PARTICIPANTS' ACCOUNT BALANCES

The EBRI/ICI database is constructed from the administrative records of 401(k) plans. 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 this analysis. Furthermore, account balances are net of unpaid loan balances. This section examines the change in account balances of a group of participants who held accounts at the end of each year from 1999 through 2006. Analyzing a group of consistent participants removes the effect of participants and plans entering and leaving the database (and/or 401(k) universe) on the overall average.11 About 29 percent, or 3.0 million, of the participants with accounts at the end of 1999 had accounts at the end of each year from 1999 through 2006.12

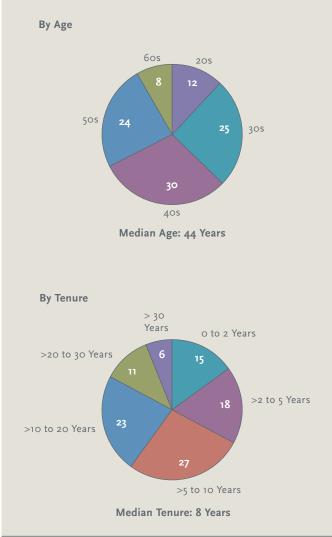
In any given year, the change in a participant's account balance is the sum of three factors:

- new contributions by the participant and/or the employer;
- 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.

FIGURE 4

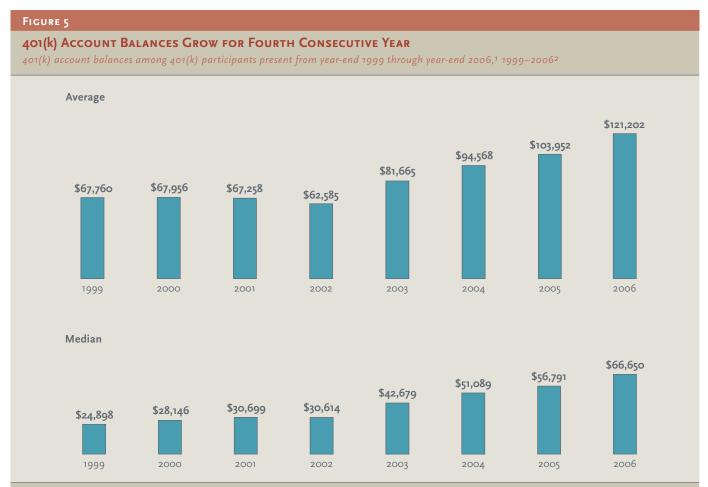
MORE THAN ONE-THIRD OF 401(k) PARTICIPANTS ARE IN THEIR 20S OR 30S OR HAVE SHORT JOB TENURE

Percentage of 401(k) plan participants by age or tenure, 2006



Note: Components may not add to 100 percent because of rounding. Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project All told, from year-end 1999 to year-end 2006, the average account balance among the group of consistent participants increased 79 percent, rising from \$67,760 at year-end 1999 to \$121,202 at year-end 2006 (Figure 5). This translates into an annual average growth rate of 8.7 percent over the seven-year period. The average 401(k) account balance among this group rose and fell over the course of seven years, corresponding to the overall performance

of the equity markets during that period (Figure 6). For many participants, diversification of assets and ongoing contributions helped to temper the impact of equity market performance on their 401(k) account balances. The median account balance (or midpoint, with half above and half below) among this consistent group also grew, rising 168 percent from \$24,898 in 1999 to \$66,650 in 2006 (an annual average growth rate of 15.1 percent).



¹Account 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.

²The analysis is based on a sample of 3.0 million participants with account balances at the end of each year from 1999 through 2006. Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE 6

PERCENTAGE CHANGE IN AVERAGE ACCOUNT BALANCES AMONG 401(k) PARTICIPANTS PRESENT FROM YEAR-END 1999 THROUGH YEAR-END 2006¹ BY AGE AND TENURE²

Age Group ²	Tenure (years) ²	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	1999 to 2006
20s	All	95.0	46.0	20.2	59.4	30.7	21.9	27.0	1,004.3
	>5 to 10	108.7	52.2	22.8	62.1	32.9	22.8	26.8	1,208.6
30s	All	15.3	12.4	0.7	48.6	25.6	17.7	23.9	255.2
	>5 to 10	40.4	27.2	9.4	56.9	30.2	21.3	26.0	510.3
	>10 to 20	6.8	5.8	-3.9	43.6	22.5	15.2	22.2	168.9
40s	All	2.5	0.9	-6.4	36.8	19.7	13.3	20.1	115.9
	>5 to 10	24.9	16.8	4.3	49.4	27.2	19.4	23.9	327.8
	>10 to 20	1.9	0.6	-7.1	37.1	19.7	13.2	20.2	112.6
	>20 to 30	-0.9	-2.5	-8.4	32.3	17.0	10.9	18.3	79.6
50s	All	0.5	-1.4	-7.1	30.8	16.4	10.5	17.2	81.5
	>5 to 10	24.1	15.2	4.6	45.1	26.5	19.1	23.3	303.3
	>10 to 20	3.4	1.9	-6.5	33.7	19.3	13.2	19.3	112.2
	>20 to 30	-1.1	-3.3	-8.3	29.3	15.2	9.6	16.7	67.0
	>30	-2.0	-3.5	-8.0	27.6	13.1	7.0	14.0	53.2
60s	All	-3.2	-4.0	-8.5	22.5	9.6	3.7	9.3	29.3
	>5 to 10	23.3	14.8	4.5	40.5	24.4	16.1	19.2	258.3
	>10 to 20	4.3	0.9	-5.2	29.3	16.5	10.2	13.8	88.4
	>20 to 30	-1.8	-3.3	-8.0	23.5	10.7	4.6	9.7	36.9
	>30	-6.2	-6.2	-10.2	19.2	6.0	0.2	6.7	6.8
All¹	All	0.3	-1.0	-6.9	30.5	15.8	9.9	16.6	78.9

¹The analysis is based on a sample of 3.0 million participants with account balances at the end of each year from 1999 through 2006.

Among the consistent group, there is 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. Among participants who have had accounts at least since year-end 1999, 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 2006. For example, the average account balance of participants in their twenties rose 1,004 percent (a 40.9 percent annual average growth rate) between the end of 1999 and the end of 2006 (Figure 6). Because younger participants' account balances

² Age and tenure groups are based on participant age and tenure at year-end 2006.

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

tend to be small (Figure 7), contributions produce significant growth in them. In contrast, the average account balance of older participants or those with longer tenures showed more modest growth (Figure 6). For example, the average account balance of participants in their sixties increased 29 percent (a 3.7 percent annual

average growth rate) between year-end 1999 and year-end 2006 (Figure 6). Investment returns, rather than annual contributions, generally account for most of the growth in accounts with larger balances. In addition, participants in their sixties have a higher propensity to make withdrawals.¹³

Age Group ²	Tenure (years) ²	1999	2000	2001	2002	2003	2004	2005	2006
20s	All	2,558	4,988	7,282	8,754	13,950	18,236	22,236	28,248
	>5 to 10	2,147	4,480	6,817	8,371	13,568	18,037	22,158	28,09
30s	All	17,277	19,918	22,382	22,549	33,503	42,082	49,550	61,36
	>5 to 10	9,086	12,760	16,232	17,757	27,856	36,263	43,995	55,45
	>10 to 20	24,913	26,607	28,160	27,065	38,874	47,625	54,851	67,00
40s	All	50,147	51,423	51,908	48,599	66,490	79,588	90,149	108,26
	>5 to 10	17,316	21,627	25,262	26,346	39,369	50,070	59,772	74,07
	>10 to 20	49,613	50,574	50,886	47,258	64,809	77,563	87,805	105,50
	>20 to 30	81,560	80,805	78,823	72,177	95,491	111,677	123,814	146,48
50s	All	82,059	82,495	81,350	75,546	98,811	115,006	127,058	148,92
	>5 to 10	19,954	24,769	28,524	29,847	43,300	54,770	65,248	80,46
	>10 to 20	57,100	59,067	60,185	56,282	75,237	89,738	101,585	121,16
	>20 to 30	114,985	113,703	109,896	100,760	130,294	150,121	164,487	192,00
	>30	114,259	111,939	108,020	99,431	126,869	143,508	153,484	174,99
60s	All	121,982	118,088	113,375	103,711	127,008	139,140	144,269	157,72
	>5 to 10	21,406	26,393	30,301	31,679	44,519	55,390	64,324	76,69
	>10 to 20	62,602	65,309	65,892	62,437	80,718	94,030	103,616	117,93
	>20 to 30	130,165	127,834	123,572	113,670	140,334	155,348	162,473	178,25
	>30	181,395	170,237	159,753	143,459	170,971	181,269	181,621	193,70
All¹	All	67,760	67,956	67,258	62,585	81,665	94,568	103,952	121,20

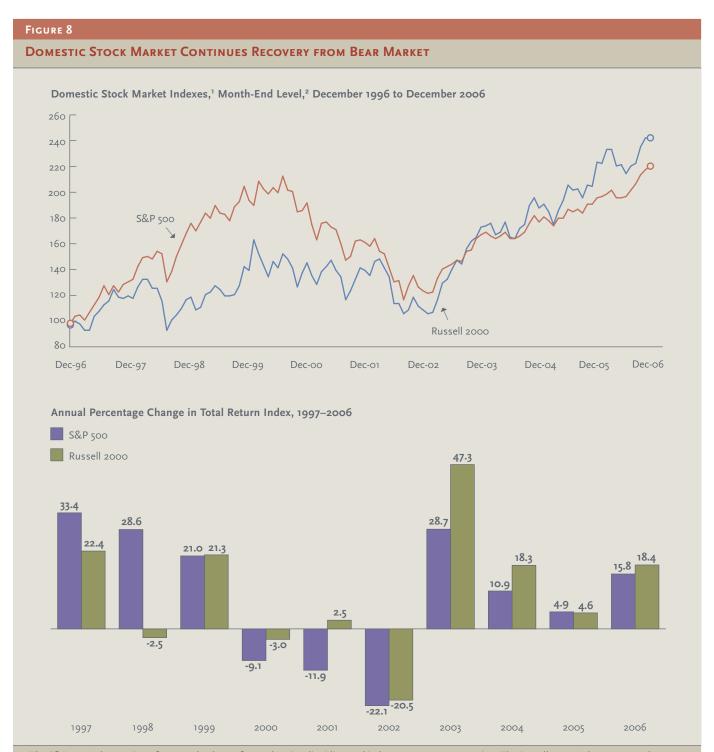
¹The analysis is based on a sample of 3.0 million participants with account balances at the end of each year from 1999 through 2006.

 $^{^2}$ Age and tenure groups are based on participant age and tenure at year-end 2006.

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

These changes in participant account balances reflect changes in stock values during the seven-year time period. The stock market returns posted in 2006 mark the fourth consecutive year of positive returns (whether measured by the Standard and Poor's (S&P) 500 or the Russell 2000 indices), following the three-year bear market of

2000–2002 (Figure 8). For example, the S&P 500 total return index increased 15.8 percent in 2006, after rising 4.9 percent in 2005. Since year-end 2002, the S&P 500 total return index has climbed 73.3 percent and the Russell 2000 total return index has more than doubled.



¹The S&P 500 Index consists of 500 stocks chosen for market size, liquidity, and industry group representation. 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).

² All indexes are set to 100 in December 1996.

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

YEAR-END 2006 SNAPSHOT OF 401(k) PARTICIPANTS' ACCOUNT BALANCES

In any given year, the EBRI/ICI database provides a snapshot of the 401(k) account balances at year-end, which reflects the entrance of new plans and new participants and the exit of participants who retire or change jobs. At year-end 2006, the average account balance was \$61,346

and the median account balance was \$18,986 (Figure 9). Because of the changing composition of the universe over time, it is not correct to presume that the change in the average or median account balance for the database as a whole reflects the experience of "typical" 401(k) plan participants.



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.

²The sample of participants changes over time.

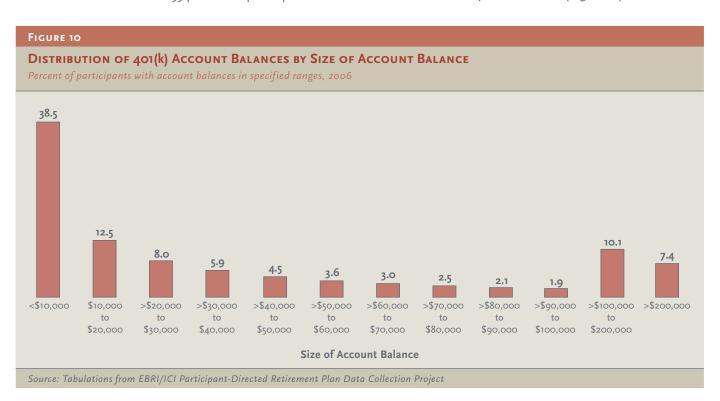
There is wide variation in 401(k) plan participants' account balances at year-end 2006. Nearly three-quarters of the participants in the 2006 EBRI/ICI database have account balances that are lower than \$61,346, the size of the average account balance. In fact, 38.5 percent of participants have account balances of less than \$10,000, while 17.5 percent of participants have account balances greater than \$100,000 (Figure 10). The variation in account balances partly reflects the effects of participant age, tenure, contribution behavior, rollovers from other plans, asset allocation, withdrawals, loan activity, and employer contribution rates. Information in the EBRI/ICI database can be used to examine 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 2006 EBRI/ ICI database. 14 Examination of the age composition of account balances finds that 53 percent of participants with

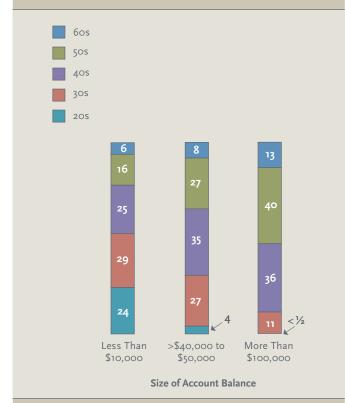
account balances of less than \$10,000 are in their twenties or thirties (Figure 11). Similarly, more than one-half of participants with account balances greater than \$100,000 are in their fifties or sixties. The positive correlation between age and account balance is expected because younger workers are likely to have lower incomes and to have had less time to accumulate a balance with their current employer. In addition, they are less likely to have in their current plan accounts rollovers from a previous employer's plan.

There is also a positive correlation between account balance and tenure among participants represented by the 2006 EBRI/ICI database. A participant's tenure with an employer serves as a proxy for the length of time a worker has participated in the 401(k) plan.¹⁵ Indeed, 58 percent of participants with account balances of less than \$10,000 have five or fewer years of tenure, while 76 percent of participants with account balances greater than \$100,000 have more than 10 years of tenure (Figure 12).¹⁶



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

Percent of participants with account balances in specified ranges,

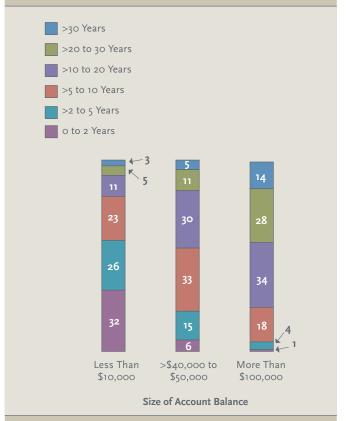


Note: Percentages may not add to 100 percent because of rounding. Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE 12

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

Percent of participants with account balances in specified ranges,



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

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 is \$20,076, compared with \$190,593 for participants in their sixties with more than 30 years of tenure (Figure 13). To Similarly, the average account balance of participants in their forties with up to two years of tenure is \$14,725, compared with \$133,321 for participants in their forties with more than 20 years of tenure.

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

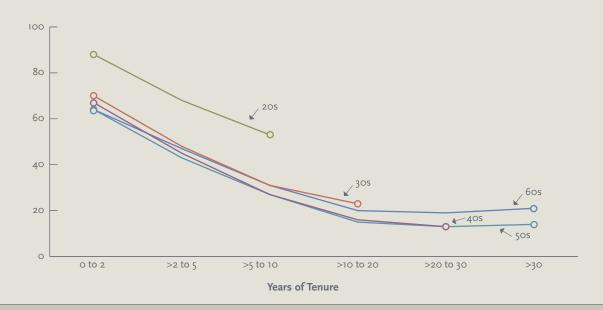
age group, shorter tenure tends to mean that a higher percentage of participants will have account balances of less than \$10,000. For example, 88 percent of participants in their twenties with two or fewer years of tenure have account balances of less than \$10,000, compared with 53 percent of participants in their twenties with between five and 10 years of tenure (Figure 14). Older workers display a similar pattern. For example, 64 percent of participants in their sixties with two or fewer years of tenure have account balances of less than \$10,000. In contrast, only about 20 percent of those in their sixties with more than 20 years of tenure have account balances of less than \$10,000. In

FIGURE 13
ACCOUNT BALANCES INCREASE WITH AGE AND TENURE
Average 401(k) account balance by age and tenure, 2006

	Tenure (years)								
Age Group	0 to 2	>2 to 5	>5 to 10	>10 to 20	>20 to 30	>30			
20s	\$4,571	\$10,414	\$17,120						
30s	11,257	22,368	37,438	\$55,693					
40s	14,725	29,010	49,995	89,822	\$133,321				
50s	17,854	32,532	54,491	99,794	174,272	\$167,806			
60s	20,076	31,914	51,268	93,636	157,069	190,593			

Note: At year-end 2006, the average account balance among all 20.0 million 401(k) plan participants is \$61,346; the median account balance is \$18,986. 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
Percent of participants with account balances less than \$10,000 at year-end 2006



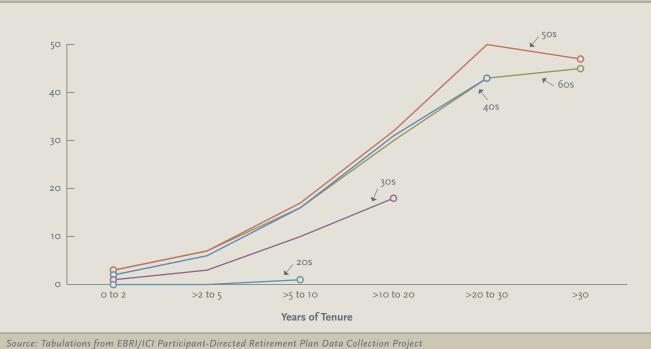
In a given age group, longer tenure tends to mean that a higher percentage of participants will have account balances greater than \$100,000. For example, about 11 percent of participants in their sixties with 10 or fewer years of tenure have account balances in excess of \$100,000 (Figure 15). However, about 43 percent of participants in their sixties with between 20 and 30 years of tenure with their current employer have account balances greater than \$100,000. The percentage increases to 45 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 long-tenured participants at their current employers' 401(k) plans. Retirement savings held at previous employers or amounts rolled over to IRAs are not included in the analysis. To capture as long a savings history as possible, only long-tenured participants are included in this analysis. However, it is important to note that the tenure variable is the time that individuals have

FIGURE 15 401(k) ACCOUNT BALANCES GREATER THAN \$100,000 BY PARTICIPANT AGE AND TENURE

Percent of participants with account balances greater than \$100,000 at year-end 2006



Source. Tabaliations from EBN/ICI Furnal pants-directed Retirement Front Data Confection Froject

FIGURE 16								
MEDIAN ACCOUNT BALAN	CE1 AMONG LONG-1	TENURED ² PARTICIE	PANTS BY AGE AND	SALARY, 2006				
Participant Age Group								
Salary Range	20 s	30s	40s	50s	60s			
\$20,000 to \$40,000	\$6,719	\$22,839	\$58,957	\$76,788	\$66,147			
>\$40,000 to \$60,000	16,393	38,693	78,834	99,932	97,588			
>\$60,000 to \$80,000	39,383	71,897	132,531	163,935	160,051			
>\$80,000 to \$100,000	56,194	114,298	196,592	243,382	237,303			
>\$100,000	57,794	163,769	290,349	367,413	350,576			

¹Account balances are based on administrative records and cover the account balance at the 401(k) plan participant's current employer. Retirement savings held in plans at previous employers or rolled over into individual retirement accounts (IRAs) are not included. Account balances are net of loan balances.

²Long-tenured participants are used in this analysis to capture as long a work and savings history as possible. The tenure variable tends to be years with the current employer rather than years of participation in the 401(k) plan. Particularly among older participants, job tenure may not reflect length of participation in the 401(k) plans; the regulations for 401(k) plans were introduced only about 26 years ago.

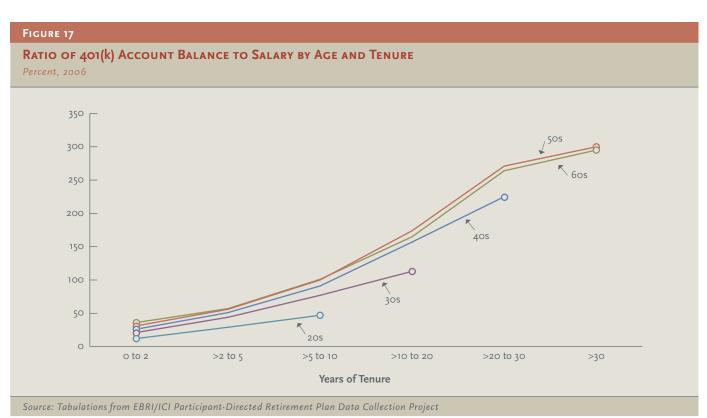
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

been at their current jobs and may not reflect the length of time they have participated in a 401(k) plan (particularly among older participants as 401(k) plans were only introduced about 26 years ago).¹⁹

Older, longer-tenured, and higher-income participants tend to have larger account balances, which are important for meeting their income-replacement needs in retirement. For long-tenured participants in their twenties with salaries between \$20,000 to \$40,000, the median account balance was \$6,719 in 2006 (Figure 16). Long-tenured participants in their twenties earning more than \$100,000 had a median account balance of \$57,794. Among long-tenured participants in their sixties with \$20,000 to \$40,000 in salary in 2006, the median account balance was \$66,147.

For long-tenured participants in their sixties earning more than \$100,000, the median account balance was \$350,576.

The ratio of participant account balance to salary is positively correlated with age and tenure.²⁰ Participants in their sixties, having had more time to accumulate assets, tend to have higher ratios, while those in their twenties have the lowest ratios (Figure 17). In addition, for any given age and tenure combination, the ratio of account balance to salary varies somewhat with salary. For example, among participants in their twenties, the ratio tends to 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).²¹





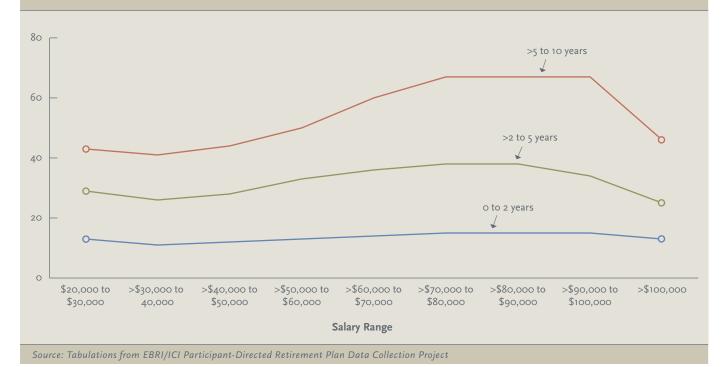
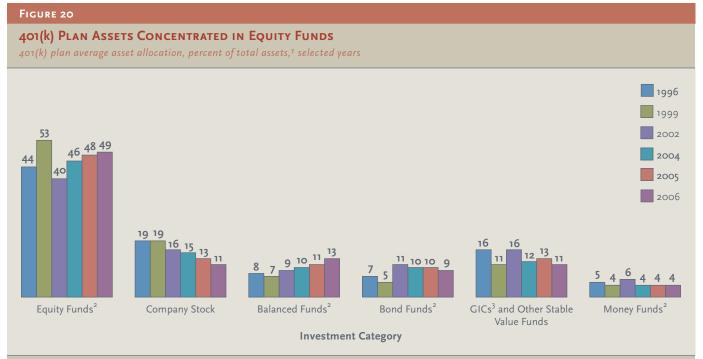


FIGURE 19 RATIO OF 401(k) ACCOUNT BALANCE TO SALARY FOR PARTICIPANTS IN THEIR SIXTIES BY TENURE Percent, 2006 400 >20 years 300 >10 to 20 years 200 >5 to 10 years 100 >2 to 5 years 0 -0 o to 2 years -0 >\$30,000 to >\$40,000 to >\$50,000 to >\$60,000 to >\$70,000 to >\$80,000 to >\$90,000 to >\$100,000 \$20,000 to \$30,000 \$40,000 \$50,000 \$60,000 \$70,000 \$80,000 \$90,000 \$100,000 Salary Range Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

YEAR-END 2006 SNAPSHOT OF 401(k) ASSET ALLOCATION

Consistent with a long-term investment horizon, 401(k) plan participants are heavily invested in equity securities. At year-end 2006, nearly half (49 percent) of 401(k) plan participants' account balances are invested in equity funds, on average (Figure 20). Altogether, equity securities—equity funds, the equity portion of balanced funds,²² and

company stock—represent about two-thirds of 401(k) plan participants' assets. As in previous years, the EBRI/ICI database for year-end 2006 finds that participants' asset allocation varies considerably with age.²³ Younger participants tend to favor equity funds, while older participants are more likely to invest in fixed-income securities such as bond funds, GICs and other stable value funds, or money funds (Figure 21).



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

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

FIGURE 21

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

Percent of account balances, 1 2006

Age Group	Equity Funds	Balanced Funds	Bond Funds	Money Funds	GICs ² and Other Stable Value Funds	Company Stock	Other	Unknown	Total ¹
20s	50.4	19.0	7.5	4.4	6.5	9.3	1.7	1.2	100
30s	57.9	13.5	7.4	3.2	5.2	9.6	2.2	1.0	100
40s	54.3	12.6	7.6	3.4	7.4	11.5	2.4	0.7	100
50s	46.7	13.1	8.9	4.4	11.9	11.8	2.6	0.6	100
60s	39.4	12.2	10.8	6.0	18.8	9.9	2.4	0.5	100
All	49.1	12.9	8.6	4.3	11.0	11.1	2.4	0.7	100

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

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

³GICs are guaranteed investment contracts.

²GICs are guaranteed investment contracts.

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. Twenty-seven percent of participants in the 2006 EBRI/ICI database are in these plans—which generally offer equity funds, bond funds, money funds, and balanced funds as investment options. Another 26 percent of participants are in plans that offer GICs and/or other stable value funds as an investment option, in addition to the "base" options. Alternatively,

13 percent of participants are in plans that offer company stock, but no stable value products, while the remaining 34 percent of participants are offered both company stock and stable value products, in addition to the base options.

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 2006 EBRI/ICI 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.

Investment Options Offered by Plan	Plans	Participants	Assets
Equity, Bond, Money, and/or Balanced Funds	25,716	5,417,288	\$257,314,641,063
Equity, Bond, Money, and/or Balanced Funds, and GICs ¹ and/or Other Stable Value Funds	26,632	5,253,422	266,723,744,069
Equity, Bond, Money, and/or Balanced Funds, and Company Stock	584	2,587,751	199,572,151,262
Equity, Bond, Money, and/or Balanced Funds, and Company Stock, and GICs1 and/or Other Stable Value Funds	999	6,759,727	504,423,055,752
All	53,931	20,018,188	1,228,033,622,146
Investment Options Offered by Plan	Percent of Plans ²	Percent of Participants ²	Percent of Assets
Equity, Bond, Money, and/or Balanced Funds	47.7%	27.1%	21.0%
Equity, Bond, Money, and/or Balanced Funds, and GICs ¹ and/or Other Stable Value Funds	49.4	26.2	21.7
Equity, Bond, Money, and/or Balanced Funds, and Company Stock	1.1	12.9	16.3
Equity, Bond, Money, and/or Balanced Funds, and Company Stock, and GICs1 and/or Other Stable Value Funds	1.9	33.8	41.1
4 ²	100.0	100.0	100.0

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

Percent of account balances, 1 2006

	Equity Funds	Balanced Funds	Bond Funds	Money Funds	GICs ² and Other Stable Value Funds	Company Stock
ALL AGES COMBINED						
Investment Options						
Equity, Bond, Money, and/or Balanced Funds	58.1	17.3	14.4	7.4		
Equity, Bond, Money, and/or Balanced Funds, and GICs ² and/or Other Stable Value Funds	54.1	15.4	5.9	3.4	17.7	
Equity, Bond, Money, and/or Balanced Funds, and Company Stock	44.3	10.6	13.5	7.7		21.1
Equity, Bond, Money, and/or Balanced Funds, and Company Stock, and GICs ² and/or Other Stable Value Funds	43.8	10.2	5.1	1.9	17.4	18.5
D W	C \/.	5				
Plans Without Company Stock, GICs, ² or Other Age Group	21ARTE AV	LUE FUNDS				
20s	55.1	23.3	11.7	8.0		
30s	64.8	16.6	11.4	5.3		
40s	62.8	16.4	12.3	5.8		
50s	55.7	18.1	15.1	7.9		
60s	48.4	17.7	19.9	10.6		
PLANS WITH GICS ² AND/OR OTHER STABLE VALUE FUI	NDS					
20s	53.4	21.4	5.4	3.0	12.3	
30s	62.0	15.7	5.2	2.5	9.8	
40s	59.4	14.9	5.4	2.7	12.9	
50s	52.0	15.4	6.2	3.2	18.9	
60s	43.8	15.0	6.5	3.9	27.4	
Plans with Company Stock						
20s	49.1	15.5	9.8	5.0		18.7
30s	54.0	11.6	9.3	3.9		19.2
40s	49.3	10.9	10.5	5.1		21.8
50s	42.0	10.8	14.3	8.0		22.3
60s	34.8	8.9	20.3	13.2		19.5
PLANS WITH COMPANY STOCK AND GICs ² AND/OR OT						
20s	45.8	15.9	4.9	2.5	9.9	17.6
30s	52.3	11.0	5.1	1.7	8.3	17.9
40s	49.2	10.1	5.0	1.7	11.4	19.4
50s	41.8	10.5	5.4	2.0	18.4	19.0
60s	34.3	9.2	5.2	2.3	30.1	16.7

²GICs are guaranteed investment contracts.

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

Percent of account balances, 1 2006

Salary ²	Equity Funds	Balanced Funds	Bond Funds	Money Funds	GICs ³ and Other Stable Value Funds	Company Stock
Plans Without Company Sto	ск, GICs,³ or Отнег	R STABLE VALUE F	UNDS			
\$20,000 to \$40,000	51.8	25.6	14.2	6.6		
>\$40,000 to \$60,000	55.3	22.3	14.2	6.4		
>\$60,000 to \$80,000	59.1	18.8	13.7	6.0		
>\$80,000 to \$100,000	61.3	16.1	14.0	5.5		
>\$100,000	64.0	15.3	13.1	5.6		
All	58.1	17.3	14.4	7.4		
PLANS WITH GICs ³ AND/OR OTH	ier Stable Value Fu	NDS				
\$20,000 to \$40,000	47.1	19.5	6.3	2.0	20.1	
>\$40,000 to \$60,000	50.9	19.0	5.6	2.1	17.2	
>\$60,000 to \$80,000	54.0	17.6	5.2	2.0	15.9	
>\$80,000 to \$100,000	56.1	16.2	5.3	1.6	15.5	
>\$100,000	59.7	16.7	5.8	2.2	12.9	
All	54.1	15.4	5.9	3.1	17.7	
Plans with Company Stock						
\$20,000 to \$40,000	49.3	11.5	11.6	6.0		19.3
>\$40,000 to \$60,000	45.8	14.3	11.8	5.0		19.9
>\$60,000 to \$80,000	44.9	14.9	9.7	6.5		20.7
>\$80,000 to \$100,000	47.4	15.0	8.4	6.9		19.5
>\$100,000	50.7	15.9	9.6	5.7		14.8
All	44.3	10.6	13.5	7.7		21.1
Plans with Company Stock at	nd GICs³ and/or O	ther Stable Val	ue Funds			
\$20,000 to \$40,000	35.4	11.5	3.6	0.9	19.1	28.2
>\$40,000 to \$60,000	36.7	15.7	3.7	1.1	14.9	26.5
>\$60,000 to \$80,000	41.0	15.3	4.0	1.1	13.0	24.5
>\$80,000 to \$100,000	45.0	13.6	4.4	1.0	12.4	22.1
>\$100,000	47.0	12.7	4.2	1.0	12.9	20.3
All	43.8	10.2	5.1	1.9	17.4	18.5

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

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

³GICs are guaranteed investment contracts.

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

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 offer company stock as an investment option. For example, less than 1 percent of participants in small plans are offered company stock as an investment option, while 69 percent of participants in plans with more than 5,000 participants are offered company stock as an investment option. 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 2006 EBRI/ICI database finds that, on average, 49 percent of participant account balances are allocated to equity funds (Figure 20). However, individual asset allocations vary widely across participants. For example, nearly 36 percent of participants hold no equity funds, while 21 percent of participants hold more than

80 percent of their balances in equity funds (Figures 26 and 27). Furthermore, the percentage of participants holding no equity funds varies with age, with 47 percent of participants in their twenties, 31 percent of participants in their forties, and 42 percent of participants in their sixties holding no 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 stock or balanced funds. Indeed, 58 percent of participants with no equity funds have investments in either company stock or balanced funds (Figure 28). For example, 46 percent of participants in their twenties without equity funds hold balanced funds as their only equity investment; 6 percent of participants in their twenties without equity funds hold both balanced funds and company stock; and 10 percent have only company stock as their equity investment. As a result, many participants with no equity funds have exposure to equity-related investments through company stock and/or balanced funds (Figure 29).

AVERAGE ASSET ALLOCATION OF 401(k) ACCOUNTS BY PLAN SIZE¹ AND INVESTMENT OPTIONS

Percent of account balances, 1 2006

Plan Size by Number of Participants	Equity Funds	Balanced Funds	Bond Funds	Money Funds	GICs ² and Other Stable Value Funds	Compan Stock
ALL PLANS						
1 to 100	55.5	20.1	9.0	6.5	7.5	0.1
101 to 500	56.1	16.9	10.9	5.8	7.3	0.7
501 to 1,000	54.4	16.2	10.7	5.2	7.8	2.4
1,001 to 5,000	51.5	14.5	10.0	4.7	9.4	6.2
>5,000	46.5	11.0	7.7	3.7	12.4	15.4
All	49.1	12.9	8.6	4.3	11.0	11.1
Plans Without Company Stock, GIO	Cs,² or Other St	ABLE VALUE FUN	IDS			
1 to 100	58.4	18.9	11.8	9.4		
101 to 500	58.3	17.6	14.5	7.6		
501 to 1,000	56.7	17.9	15.7	7.2		
1,001 to 5,000	57.5	17.7	15.3	6.7		
>5,000	59.1	15.7	13.8	7.2		
All	58.1	17.3	14.4	7.4		
Plans with GICs ² and/or Other Sta	BLE VALUE FUND	S				
1 to 100	53.0	21.4	6.3	3.8	14.6	
101 to 500	54.3	16.4	6.1	3.1	17.3	
501 to 1,000	54.8	15.8	5.5	2.2	18.1	
1,001 to 5,000	52.2	15.5	5.7	2.6	19.3	
>5,000	54.8	13.2	5.8	3.5	17.3	
All	54.1	15.4	5.9	3.1	17.7	
Plans with Company Stock						
1 to 100 ³	40.4	27.4	7.0	9.0		14.8
101 to 500	45.8	13.5	11.1	11.2		16.8
501 to 1,000	47.9	11.9	10.1	8.3		20.1
1,001 to 5,000	49.3	11.1	13.4	6.6		17.9
>5,000	42.7	10.3	13.7	7.9		22.2
All	44.3	10.6	13.5	7.7		21.1
Plans with Company Stock and GIC	S ² AND/OR OTHE	er Stable Value	Funds			
1 to 100	45.5	10.5	5.9	5.1	16.7	6.3
101 to 500	47.8	14.1	5.7	2.4	16.0	6.9
501 to 1,000	45.1	11.3	3.7	2.9	16.8	11.8
1,001 to 5,000	43.1	11.1	4.4	2.7	19.0	13.9
>5,000	43.8	10.0	5.2	1.8	17.2	19.3
All	43.8	10.2	5.1	1.9	17.4	18.5

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

²GICs are guaranteed investment contracts.

³Because few plans fall into this category, these percentages may be heavily influenced by a few outliers.

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

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

Percent of participants, 1, 2 2006

	Percentage of Account Balance Invested in Equity 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	47.0	1.8	2.4	3.6	3.6	4.7	5.9	5.4	6.2	5.1	14.3
30s	32.7	2.5	2.9	4.2	4.5	6.1	7.3	7.2	8.1	6.8	17.6
40s	31.4	3.1	3.3	4.6	4.9	6.4	7.7	7.3	8.0	6.4	16.9
50s	34.2	4.1	3.9	5.2	5.4	6.6	7.7	6.9	6.9	5.1	14.1
60s	41.8	4.9	4.1	5.0	5.0	5.8	6.6	5.4	5.1	3.6	12.7
All	35.6	3.2	3.3	4.5	4.8	6.1	7.2	6.7	7.2	5.8	15.6

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

FIGURE 27

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

Percent of participants, 2006

	Percentage of Account Balance Invested in Equity Funds								
	Zero	1 percent to 20 percent	>20 percent to 80 percent	>80 percent					
ALL	35.6	6.5	36.5	21.4					
AGE GROUP									
20s	47.0	4.3	29.4	19.4					
30s	32.7	5.4	37.4	24.5					
40s	31.4	6.4	38.9	23.3					
50s	34.1	7.9	38.7	19.2					
60s	41.8	9.0	32.9	16.3					
TENURE (YEARS)									
0 to 2	45.4	3.5	30.8	20.3					
>2 to 5	40.7	5.1	35.4	18.9					
>5 to 10	30.3	6.4	39.0	24.4					
>10 to 20	26.9	8.2	41.2	23.8					
>20 to 30	31.4	9.8	40.0	18.8					
>30	43.2	10.8	32.3	13.7					
SALARY									
\$20,000 to \$40,000	41.8	9.0	34.6	14.6					
>\$40,000 to \$60,000	32.5	9.9	40.2	17.3					
>\$60,000 to \$80,000	25.6	9.3	44.8	20.4					
>\$80,000 to \$100,000	20.8	8.4	47.9	22.9					
>\$100,000	17.8	7.0	48.3	26.9					

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

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

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

FIGURE 28

PERCENTAGE OF 401(k) PLAN PARTICIPANTS WITHOUT EQUITY FUND BALANCES WHO HAVE EQUITY EXPOSURE BY PARTICIPANT AGE OR TENURE, 2006

		Percentage of Participar	nts Without Equity Funds	
	Company Stock and/or Balanced Funds ¹	Balanced Funds as Only Equity Investment	Both Balanced Funds and Company Stock	Company Stock as Only Equity Investment
Age Group				
20s	61.9	46.3	5.9	9.7
30s	60.2	40.0	6.6	13.6
40s	58.8	34.9	6.7	17.2
50s	58.6	31.0	6.5	21.2
60s	52.7	24.8	4.9	23.1
All ²	58.4	35.5	6.3	16.6
TENURE (YEARS)				
0 to 2	62.6	48.5	6.2	7.9
>2 to 5	59.5	40.4	6.4	12.8
>5 to 10	57.3	33.3	7.4	16.7
>10 to 20	56.1	27.5	7.4	21.2
>20 to 30	56.0	18.3	6.3	31.4
>30	52.4	11.6	3.9	36.9
All ²	58.4	35.5	6.3	16.6

¹Components may not add to the total in the first column because of rounding.

 $^{^{\}rm 2} The$ analysis includes the 7.1 million participants with no equity funds at year-end 2006.

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

Percent of account balances, 2006

	Balanced Funds	Bond Funds	Money Funds	GICs ¹ and Other Stable Value Funds	Company Stock	Other	Unknown	Total ²
AGE GROUP								
20s	49.2	6.5	11.9	15.3	12.9	2.3	2.0	100
30s	42.4	8.1	10.8	15.2	17.2	5.3	1.2	100
40s	33.0	9.1	10.3	20.0	21.1	5.6	1.0	100
50s	26.1	10.1	11.0	27.1	20.2	4.9	0.8	100
60s	18.5	12.8	12.5	36.7	15.1	3.7	0.6	100
All ³	27.1	10.3	11.4	27.1	18.3	4.8	0.8	100
TENURE (YEA	ARS)							
0 to 2	56.0	6.7	11.5	13.7	6.8	4.4	0.9	100
>2 to 5	45.2	11.1	13.3	15.6	9.9	3.6	1.3	100
>5 to 10	38.3	9.8	12.8	17.5	15.3	5.2	1.1	100
>10 to 20	29.6	9.7	11.3	22.9	20.0	5.6	0.9	100
>20 to 30	22.4	9.4	10.1	29.4	22.8	5.2	0.7	100
>30	13.9	9.7	11.7	40.7	19.4	3.9	0.6	100
All ³	27.1	10.3	11.4	27.1	18.3	4.8	0.8	100

¹GICs are guaranteed investment contracts.

Among individual participants, the allocation of account balances to equities (equity funds, company stock, and the equity portion of balanced funds) varies widely around the average of 68 percent for all participants in the 2006 EBRI/ICI database. Thirty-nine percent of participants have more than 80 percent of their account balances invested in equities, while 15 percent hold no equities at all in 2006 (Figure 30).

Distribution of Participants' Balanced Fund Allocations by Age

Individual 401(k) participants' asset allocation to balanced funds varies widely around an average of 13 percent (Figure 21). For example, 59 percent of participants hold no balanced funds, while 12 percent of participants hold more than 80 percent of their accounts in balanced funds (Figure 31).

Distribution of Participants' Company Stock Allocations by Age

Participants' allocations to company stock remained in line with previous years. Forty-seven percent (or 9.3 million) of the 401(k) participants in the 2006 EBRI/ICI database are in plans that offer company stock as an investment option (Figure 22). Among these participants, 67 percent hold 20 percent or less of their account balances in company stock, including almost 45 percent who hold none (Figure 32). On the other hand, nearly 9 percent have more than 80 percent of their account balances invested in company stock.

²Row percentages may not add to 100 percent because of rounding. Percentages are dollar-weighted averages.

³The analysis includes the 7.1 million participants with no equity funds at year-end 2006.

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

ASSET ALLOCATION TO EQUITIES VARIES WIDELY AMONG PARTICIPANTS

Asset allocation distribution of 401(k) participant account balance to equities by age, percent of participants, 2,3 2006

	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	17.9	2.3	4.2	8.4	33.8	33.4					
30s	13.0	2.8	4.6	9.1	28.6	42.0					
40s	12.9	3.6	5.3	9.9	26.7	41.5					
50s	14.1	5.2	6.6	11.2	26.1	36.7					
60s	19.7	7.3	7.6	11.1	22.2	32.1					
All ²	14.8	4.0	5.5	9.9	27.4	38.5					

¹Equities include equity funds, company stock, and the equity portion of balanced funds.

FIGURE 31

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

Percent of participants, 1, 2 2006

	Percentage of Account Balance Invested in Balanced Funds											
Age Group	Zero	1 to 10	>10 to 20	>20 to 30	>30 to 40	>40 to 50	>50 to 60	>60 to 70	>70 to 80	>80 to 90	>90 to 100	
20s	53.8	5.5	5.5	4.7	2.5	2.3	2.1	1.6	1.4	1.2	19.4	
30s	57.5	7.3	6.8	5.8	3.0	2.5	2.0	1.3	1.2	0.9	11.6	
40s	59.1	7.3	6.8	6.0	3.3	2.7	2.2	1.2	1.1	0.9	9.4	
50s	60.1	6.9	6.4	5.9	3.5	2.9	2.3	1.3	1.1	0.9	8.7	
60s	65.3	5.6	5.1	5.0	3.1	2.7	2.2	1.1	1.0	0.8	8.1	
All	59.1	6.8	6.3	5.6	3.1	2.6	2.1	1.3	1.1	0.9	10.9	

 $^{^{1}}$ The analysis includes the 20.0 million participants in the year-end 2006 EBRI/ICI database.

FIGURE 32

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

Percent of participants, 1,2 2006

	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	55.1	8.4	7.8	6.7	5.3	4.7	3.2	1.6	1.2	0.8	5.2	
30s	45.6	12.5	9.7	7.9	5.8	4.8	3.3	2.0	1.5	1.2	5.8	
40s	41.8	14.5	9.8	7.8	5.8	4.7	3.4	2.2	1.7	1.4	6.9	
50s	40.8	15.9	9.2	7.1	5.4	4.4	3.2	2.2	1.7	1.4	8.6	
60s	44.2	15.2	7.5	5.8	4.4	3.6	2.8	1.9	1.5	1.4	11.6	
All	44.5	13.6	9.1	7.3	5.5	4.5	3.2	2.1	1.6	1.3	7.3	

¹The analysis includes the 9.3 million participants in plans with company stock.

²The analysis includes the 20.0 million 401(k) plan participants in the year-end 2006 EBRI/ICI database.

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

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

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

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

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

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

Asset Allocation of Recently Hired Participants

Comparing snapshots of newly hired 401(k) plan participants' asset allocations provides further insight into the recent investment allocation activity of plan participants. Lifestyle and lifecycle funds, 24 which are included in balanced funds, have increased in popularity. More recently hired participants hold balanced funds (Figure 33) and are more likely to hold a high concentration of their accounts in balanced funds (Figures 34 and 35). In addition, at year-end 2006, 24 percent of the account balances of recently hired participants in their twenties is invested in balanced funds, compared with 19 percent in

2005, and about 7 percent among that age group in 1998 (Figure 36). A similar pattern occurs across all age groups.

Comparing recently hired participants in 2006 with their similar age groups in 1998 also illustrates that asset allocation to company stock and equity funds is lower now than in 1998, while asset allocation to fixed-income securities tends to increase (Figure 36). Recently hired 401(k) participants are less likely to hold company stock (Figure 37) and less likely to hold a high concentration of their account balance in company stock (Figures 38 and 39).

More Recently Hired 401(k) Plan Participants Hold Balanced Funds Percent of recently hired participants holding balanced funds, 1998–2006										
Age Group	1998	1999	2000	2001	2002	2003	2004	2005	2006	
20s	27.0	28.3	27.1	27.3	32.7	35.1	38.9	43.5	48.5	
30s	29.0	31.0	28.3	26.5	33.1	36.2	39.8	42.8	47.9	
40s	30.5	33.6	30.8	27.9	33.7	35.7	39.8	42.1	46.6	
50s	30.9	34.9	32.1	29.2	33.9	35.5	40.3	43.3	47.8	
60s	28.4	34.9	33.2	29.1	30.2	30.7	36.3	41.6	45.5	
All	28.9	31.3	29.1	27.4	33.0	35.4	39.3	42.8	47.6	

RECENTLY HIRED PARTICIPANTS NOW HOLD HIGHER CONCENTRATIONS IN BALANCED FUNDS

Percent of recently hired participants holding balanced fund assets, 1, 2 1998, 2005, and 2006

Percentage of Account Balance Invested in Balanced Funds Amor	g Those Holding Balanced Funds
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		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
		2005	
Age Group	>0 to 50 percent	>50 to 90 percent	>90 percent
20s	47.5%	11.9%	40.6%
30s	55.5	12.3	32.2
40s	53.5	12.8	33.6
50s	50.2	13.4	36.4
60s	44.2	12.4	43.4
All	51.5	12.4	36.1
		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

¹The analysis includes the 0.4 million recently hired participants (those with two or fewer years of tenure) holding balanced funds in 1998; the 0.9 million recently hired participants holding balanced funds in 2005; and the 1.4 million recently hired participants holding balanced funds in 2006.

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

46.0

43.3

39.5

43.9

FIGURE 35

40s

50s

60s

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

Percent of recently hired participants, 1,2 2006

Percentage of Account Balance Invested in Balanced Funds

13.1

13.3

12.6

13.3

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	5.0	5.3	4.5	2.3	2.2	2.1	1.6	1.6	1.4	22.4
30s	52.1	5.7	6.3	5.6	2.8	2.5	2.1	1.4	1.4	1.1	18.9
40s	53.4	4.9	5.7	5.5	2.6	2.6	2.3	1.3	1.4	1.1	19.0
50s	52.2	4.5	5.2	5.5	2.7	2.8	2.4	1.4	1.5	1.1	20.7
60s	54.5	3.9	4.4	4.6	2.3	2.7	2.3	1.2	1.3	1.0	21.8
All	52.4	5.1	5.6	5.2	2.6	2.5	2.2	1.5	1.5	1.2	20.4

¹The analysis includes participants with two or fewer years of tenure in 2006.

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

40.9

43.4

47.9

42.8

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

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

AVERAGE ASSET ALLOCATION OF 401(k) ACCOUNTS BY PARTICIPANT AGE AND INVESTMENT OPTIONS AMONG PARTICIPANTS WITH TWO OR FEWER YEARS OF TENURE¹

Percent of account balances, 2 1998, 2005, and 2006

	Equity Funds			Balanced Funds			Bond Funds			Money Funds			GICs ³ and Other Stable Value Funds		Company Stock			
						2006						2006					2005	2006
Age Gr																		
ALL PL																		
20s	66.9	50.6	49.7	7.4	19.3	23.8	5.1	9.6	7.1	4.0	4.7	4.4	3.7	6.9	5.9	10.5	7.5	6.6
30s	67.8	55.9	56.4	8.0	16.8	20.1	5.1	10.3	7.5	4.1	3.8	3.6	3.2	5.5	4.5	9.4	5.9	5.1
40s	64.5	52.8	54.1	9.7	17.6	20.3	5.9	10.9	8.0	5.1	4.3	4.0	4.4	6.7	5.6	8.0	6.2	5.2
50s	60.5	47.3	48.6	11.3	18.5	21.8	6.6	12.2	9.0	5.9	4.8	4.8	6.7	9.7	8.0	6.5	5.7	5.0
60s	50.0	42.0	43.5	12.1	16.7	20.3	8.7	13.3	9.8	7.8	5.2	6.2	13.3	14.5	12.2	5.7	5.8	4.7
All	64.8	51.7	52.5	9.1	17.7	21.0	5.7	11.0	8.0	4.9	4.4	4.3	4.6	7.4	6.2	8.6	6.1	5.3
PLANS	s With	оит Со	OMPAN	ү Ѕтос	:к, GIC	s, ³ or (Other	STABLI	e Value	FUND	S							
20s	77.8	53.5	53.4	7.8	24.1	26.9	7.7	14.3	10.5	4.9	7.5	7.9						
30s	77.9	59.6	60.4	8.4	19.5	22.5	7.2	14.5	10.4	4.8	5.8	5.6						
40s	74.0	56.7	58.3	9.9	20.5	23.3	8.3	15.3	10.9	6.0	6.7	6.4						
50s	70.3	50.6	52.0	11.3	22.2	25.8	10.0	17.8	12.8	6.5	7.8	7.8						
60s	59.4	44.8	45.3	11.8	20.9	25.7	13.5	20.3	14.3	12.2	8.5	9.9						
All	75.0	55.1	56.3	9.3	20.9	24.0	8.2	15.8	11.3	5.7	6.9	6.9						
PLANS	S WITH	GICs ³	AND/O	г Отн	er Stai	BLE VAL	ue Fui	NDS										
20s	73.4	52.0	50.7	7.3	20.2	26.1	3.9	6.8	5.1	2.9	3.5	2.5	9.1	14.9	12.0			
30s	73.5	56.4	56.0	8.1	18.1	22.7	4.1	7.3	5.3	2.8	3.0	2.3	7.9	12.3	9.3			
40s	69.0	54.1	54.1	9.4	18.7	22.8	5.0	7.9	5.9	3.4	3.3	2.7	9.5	13.9	10.7			
50s	63.6	49.4	49.4	10.2	18.4	23.3	5.9	9.2	7.1	4.6	3.7	3.2	11.9	17.6	13.6			
60s	52.7	43.9	46.3	11.2	17.3	20.9	6.8	9.5	8.1	7.2	4.8	3.9	19.2	23.5	18.6			
All	69.7	52.8	52.5	7.9	18.6	23.2	5.0	7.9	6.0	3.5	3.4	2.8	10.1	15.0	11.7			
PLANS	S WITH	Сомра	any Sto	эск														
20s	51.8	51.2	50.0	6.1	15.5	20.1	5.0	12.2	9.1	5.4	5.7	5.2				29.5	15.2	14.0
30s	56.0	55.0	54.8	6.6	14.4	18.2	5.3	12.9	8.9	5.2	4.8	4.7				24.6	12.6	11.5
40s	54.4	51.2	51.5	8.2	14.9	18.9	6.5	14.4	9.4	6.4	5.4	6.1				22.6	13.6	12.3
50s	53.2	44.7	44.7	9.8	17.0	20.8	6.9	17.4	10.8	8.6	6.3	8.6				19.4	13.0	12.6
60s	47.2	42.2	37.8	11.1	14.9	20.6	14.3	23.2	12.8	6.4	5.8	14.3				19.3	12.1	11.4
All	54.2	51.0	50.8	7.2	15.1	19.2	6.3	14.5	9.5	6.1	5.4	6.2				24.1	13.3	12.3
PLANS	S WITH	Сомря	ANY STO	OCK AN	ID GIC	S ² AND	/or Ot	THER ST	γable V	ALUE F	UNDS							
20s	56.2	46.5	45.6	8.2	16.3	21.2	2.3	6.3	4.5	2.5	2.5	2.4	6.7	10.4	9.5	22.0	15.9	13.6
30s	56.3	52.3	53.3	8.9	14.4	16.6	2.6	7.0	5.3	3.3	1.9	1.7	5.9	9.0	7.9	20.6	12.7	10.6
40s	53.8	48.6	51.2	11.0	15.1	16.3	2.8	7.2	6.0	5.0	2.2	1.8	7.8	10.9	9.6	17.3	13.6	10.9
50s	49.3	43.4	46.1	13.8	15.6	17.3	3.3	7.2	6.3	5.3	2.2	2.0	11.8	16.4	13.7	14.5	13.1	10.9
60s	38.0	37.5	41.2	14.3	12.9	15.1	2.6	6.8	6.4	4.9	2.2	2.8	27.8	24.9	20.9	10.7	14.2	10.7
All	54.1	47.7	49.4	10.1	15.0	17.1	2.4	7.0	5.7	2.4	2.2	2.0	10.1	12.3	10.6	18.6	13.6	11.2

¹The analysis is based on samples of 1.2 million participants with two or fewer years of tenure in 1998; 2.2 million participants with two or fewer years of tenure in 2005; and 2.8 million participants with two or fewer years of tenure in 2006.

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

 $^{^3} GICs$ are guaranteed investment contracts.

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

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

Percent of recently hired participants offered and holding company stock by age, 1998–2006

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

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

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

FIGURE 38

FEWER NEW PARTICIPANTS HOLD HIGH CONCENTRATIONS IN COMPANY STOCK

Percent of recently hired participants offered company stock holding the percentage of their account balance indicated in company stock, 1998–2006



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 invesment option.

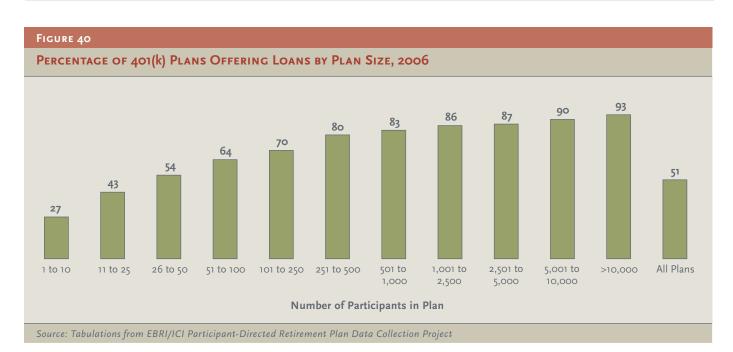
ASSET ALLOCATION DISTRIBUTION OF RECENTLY HIRED PARTICIPANT ACCOUNT BALANCE TO COMPANY STOCK IN 401(k) PLANS WITH COMPANY STOCK BY AGE

Percent of recently hired participants in plans offering company stock as an investment option, 1, 2 2006

	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	60.0	7.6	7.5	6.5	4.8	4.3	2.7	1.1	0.8	0.5	4.3
30s	56.4	9.6	8.8	7.3	4.8	4.1	2.6	1.1	0.8	0.5	4.2
40s	56.4	8.9	8.4	7.6	4.8	4.3	2.6	1.0	0.7	0.5	4.7
50s	57.7	8.9	8.2	7.1	4.5	4.2	2.5	0.9	0.6	0.5	4.9
60s	59.6	8.5	7.7	6.3	4.1	3.8	2.4	0.9	0.6	0.5	5.6
All	58.0	8.6	8.1	7.0	4.8	4.2	2.6	1.0	0.7	0.5	4.5

¹The analysis includes participants with two or fewer years of tenure in 2006 and in plans offering company stock as an investment option.

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



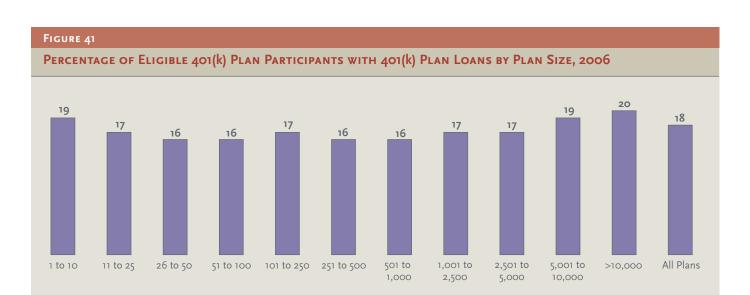
YEAR-END 2006 SNAPSHOT OF 401(k) PLAN LOAN ACTIVITY

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

Fifty-one percent of the 401(k) plans for which loan data are available in the 2006 EBRI/ICI database offer a plan loan provision to participants (Figure 40).²⁵ The loan feature is more commonly associated with large plans (as measured by the number of participants in the plan).

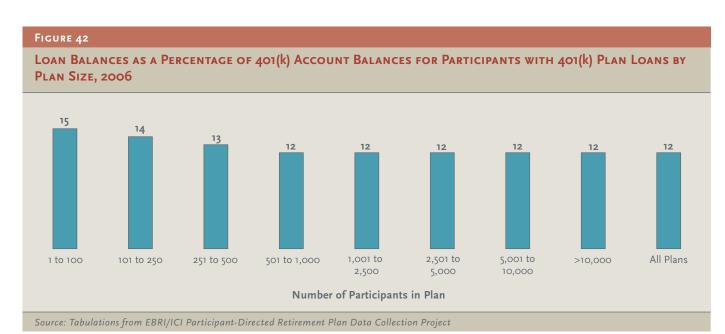
Ninety-three percent of plans with more than 10,000 participants include a loan provision, compared with 27 percent of plans with 10 or fewer participants. There is little variation in participant loan activity by plan size (Figure 41). Loan ratios vary only slightly when participants are grouped based on the size of their 401(k) plans (as measured by the number of plan participants; Figure 42).

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



Number of Participants in Plan

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



Characteristics of Participants with Outstanding 401(k) Plan Loans

In the 2006 EBRI/ICI database, 85 percent of participants are in plans offering loans. However, as has been the case for the 11 years that the EBRI/ICI databases have tracked 401(k) plan participants, relatively few participants make use of this borrowing privilege. At year-end 2006, only 18 percent of those eligible for loans have 401(k) plan loans outstanding (Figure 43). As in previous years, loan activity varies with age, tenure, account balance, and salary. Of those participants in plans offering loans, the highest percentages of participants with outstanding loan balances are among participants in their thirties, forties, or fifties.

In addition, participants with five or fewer years of tenure or with more than 30 years of tenure are less likely to use the loan provision than other participants. Only 11 percent of participants with account balances of less than \$10,000 have loans outstanding (Figure 43).

Average Loan Balances

Among participants with outstanding loans at the end of 2006, the average unpaid balance is \$7,292.26 Again, similar to other years of analysis, loan balances as a percentage of account balances (net of the unpaid loan balance) for participants with loans is 12 percent at yearend 2006 (Figure 44). In addition, as in previous years,

FIGURE 43 PERCENTAGE OF ELIGIBLE PARTICIPANTS WITH 401(k) LOANS BY PARTICIPANT AGE, TENURE, ACCOUNT SIZE, OR SALARY, 1996, 2000, 2005, AND 2006 ALL AGE GROUP 20s 30s 40s 50s 60s TENURE (YEARS) 0 to 2 >2 to 5 >5 to 10 >10 to 20 >20 to 30 >30 ACCOUNT SIZE <\$10,000 \$10,000 to \$20,000 >\$20,000 to \$30,000 >\$30,000 to \$40,000 >\$40,000 to \$50,000 >\$50,000 to \$60,000 >\$60,000 to \$70,000 >\$70,000 to \$80,000 >\$80,000 to \$90,000 >\$90,000 to \$100,000 >\$100,000 to \$200,000 >\$200,000 SALARY RANGE \$40,000 or less >\$40,000 to \$60,000 >\$60,000 to \$80,000 >\$80,000 to \$100,000 >\$100,000 Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE 44

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

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

there is variation around this average that corresponds with age (lower the older the participant), tenure (lower the higher the tenure of the participant), account balance (lower the higher the account balance), and salary (lower

the higher the participant's salary). Overall, loans from 401(k) plans tend to be small, with the vast majority of 401(k) participants in all age groups having no loan at all (Figure 45).

FIGURE 45

LOANS FROM 401(k) PLANS TEND TO BE SMALL

Percent of eligible participants by age, 2006

	Age Group				
Loan as a Percentage of Remaining Account Balance	20 s	40s	60 s	All	
Zero (No Loan)	89%	78%	89%	82%	
1 to 10 percent	2	8	5	6	
>10 to 20 percent	2	5	2	4	
>20 to 30 percent	2	3	1	3	
>30 to 80 percent	4	6	2	5	
>80 percent	(*)	1	(*)	(*)	

^(*) less than ½ percent

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

Notes

- ¹ See Cerulli Associates (2006).
- ² See Brady and Holden (July 2007).
- 3 The Employee Benefit Research Institute (EBRI) is a nonprofit, nonpartisan, public policy research organization, which does not lobby or take positions on legislative proposals.
- 4 The Investment Company Institute (ICI) is the national association of the U.S. investment company industry. ICI members include 8,766 open-end investment companies (mutual funds), 670 closed-end investment companies, 440 exchange-traded funds, and four sponsors of unit investment trusts. Mutual fund members of the ICI have total assets of approximately \$11.242 trillion (representing 98 percent of all assets of U.S. mutual funds); these funds serve approximately 93.9 million shareholders in more than 53.8 million households.
- This update extends previous findings from the project for 1996 through 2005. For year-end 2005 results, see Holden and VanDerhei (August 2006 and August 2006—Appendix). Results for earlier years are available in earlier issues of *ICI Perspective* (www.ici.org/perspective/index.html) and *EBRI Issue Brief* (http://ebri.org/publications/ib/).
- 6 Account balances are net of unpaid loan balances. Thus, unpaid loan balances are not included in any of the eight asset categories described.
- 7 This system of classification does not consider the number of distinct investment options presented to a given participant, but rather the types of options presented. Preliminary research analyzing 1.4 million participants drawn from the 2000 EBRI/ ICI database suggests that the sheer number of investment options presented does not influence participants. On average, participants have 10.4 distinct options but, on average, choose only 2.5 (Holden and VanDerhei (May 2001)). 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.
- 8 GICs are insurance company products that guarantee a specific rate of return on the invested capital over the life of the contract.
- 9 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.
- 10 Some administrators supplying data were unable to provide complete asset allocation detail on certain pooled asset classes for one or more of their clients. The final EBRI/ICI database includes only plans for which at least 90 percent of all plan assets could be identified.

- 11 When analyzing the change in account balances over time, it is important to have a consistent sample. Comparing average account balances across different year-end snapshots can lead to false conclusions. For example, the addition of a large number of new plans (arguably a good event) to the database would tend to pull down the average account balance, which could then be mistakenly described as hurting current participants, but actually would tell us nothing about consistently participating workers. Similarly, the aggregate average account balance would tend to be pulled down if a large number of older participants happened to retire and roll over their account balances. In addition, changes in the sample of recordkeepers and/or changes in the set of plans for which they keep records can also influence the change in aggregate average account balance. Thus, to ascertain what is happening to 401(k) participants' account balances, a set of consistent participants must be analyzed.
- 12 The value of this percentage is lower than it would have been if it were merely reflecting employee turnover and retirement. The EBRI/ICI database has added data providers since 1999 and by definition participants in these plans would not be included in the consistent sample. Moreover, any time a 401(k) plan sponsor changed service providers, all participants in the plan would be excluded from the consistent sample.
- 13 For statistics indicating the higher propensity of withdrawals among participants in their sixties, see Holden and VanDerhei (November 2002).
- ¹⁴ Approximately 1.7 percent of the participants in the database were missing a birth date; were younger than 20 years old; or were older than 69 years old. They were not included in this analysis.
- ¹⁵ Approximately 6.8 percent of the participants in the database were missing a date of hire and were not included in this analysis.
- 16 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 have two or fewer years of tenure and 4 percent of them have between two and five years of tenure (Figure 12).

- 17 Because 401(k) plans were introduced relatively recently (about 26 years ago), even older and longer-tenured employees could have participated in a 401(k) plan for, at most, about half of their careers. The Revenue Act of 1978 contained a provision that became Internal Revenue Code Sec. 401(k). The law went into effect on January 1, 1980, but it was not until November 1981 that proposed regulations were issued (see Holden, Brady, and Hadley (November 2006); Employee Benefit Research Institute (February 2005); and U.S. Internal Revenue Service (November 10, 1981)).
- ¹⁸ 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 (49 percent of all 401(k)-type plans in existence in 1995 were established after 1989 (U.S. Department of Labor (Spring 1999), table B.10)), or (2) the employee only recently joined the plan. In either event, job tenure would not accurately reflect actual 401(k) plan participation.
- 19 It is possible that these older longer-tenured workers accumulated DC plan assets, e.g., possibly in a profit-sharing plan, prior to the introduction of 401(k) plan features. However, generally such DC plan arrangements did not permit employee contributions and often were designed to be supplemental to other employer plans. These participants' account balances that pre-date the 401(k) plan are not included in this analysis, which focuses on 401(k) balance amounts.
- ²⁰ 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 recent references to such research, see Holden and VanDerhei (July 2005).
- ²¹ 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 (see Holden and VanDerhei (October 2001) for a complete discussion of EBRI/ ICI findings and others' research on the relationship between contribution rates and salary) 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.
- ²² At year-end 2006, 62 percent of balanced mutual fund assets were invested in equities (see Investment Company Institute, *Quarterly Supplemental Data*).

- ²³ Participants in their twenties hold approximately 2 percent of the total assets in the 2006 EBRI/ICI database; participants in their thirties hold 12 percent; participants in their forties hold 32 percent; participants in their fifties hold 38 percent; and participants in their sixties hold the remaining 14 percent of the total assets.
- 24 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. Lifecycle funds follow a predetermined reallocation of risk over time to a specified target date, and typically rebalance their portfolios to become more conservative and income-producing by the target date. For additional discussion of lifestyle/lifecycle funds, see Brady and Holden (July 2007).
- ²⁵ 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 the U.S. Government Accountability Office (October 1997) finds that more than 95 percent of 401(k) plans that offer loans had at least one plan participant with an outstanding loan.
- ²⁶ The median loan balance outstanding is \$4,089 at year-end 2006.

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