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Appendix: Additional Figures for the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project for Year-End 2004

by Sarah Holden and Jack VanDerhei[1]

INTRODUCTION

The September 2005 issue of *Perspective* covers the year-end 2004 data gathered by the Employee Benefit Research Institute (EBRI)[2] and the Investment Company Institute (ICI)[3] in their collaborative effort—the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project.[4] This Appendix provides supplementary tables and charts for the September 2005 *Perspective* (Holden and VanDerhei (September 2005)).

EBRI/ICI DATABASE

Source and Type of Data

Several EBRI and ICI members provided records on active participants in the 401(k) plans for which they keep records at year-end 2004. These plan recordkeepers include mutual fund companies, insurance companies, and consulting firms. Although the EBRI/ICI project has collected data from 1996 through 2004, the universe of data

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providers varies from year to year. In addition, the sample of plans using a given provider can change. Thus, aggregate figures in this Appendix and in Holden and VanDerhei (September 2005) generally should not be used to 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 participant date of birth, from which an age cohort is assigned; participant 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.[5] 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.

FIGURE A1

EBRI/ICI Database: 401(k) Plan Characteristics by Number of Plan Participants, 2004

Number of Plan Participants	Total Plans	Total Participants	Total Assets	Average Account Balance
1 to 10	8,150	50,226	$2,038,139,848	$40,579
11 to 25	11,531	197,884	$7,258,784,792	$36,682
26 to 50	8,679	313,979	$11,552,285,508	$36,793
51 to 100	6,448	456,906	$17,318,759,431	$37,904
101 to 250	5,314	835,379	$32,688,724,463	$39,130
251 to 500	2,291	807,147	$32,233,557,057	$39,935
501 to 1,000	1,297	909,790	$40,878,998,369	$44,932
1,001 to 2,500	1,053	1,617,265	$77,549,915,916	$47,951
2,501 to 5,000	488	1,707,624	$92,557,080,626	$54,202
5,001 to 10,000	246	1,710,746	$102,557,522,870	$59,949
>10,000	286	7,676,648	$509,538,716,887	$66,375
All	45,783	16,283,594	$926,172,485,766	$56,878

Note: The median account balance at year-end 2004 is $19,926.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Investment Options

Investment options are grouped into eight categories.[6] 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)[7] and other stable value funds[8] 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.[9]

Distribution of Plans, Participants, and Assets by Plan Size

The 2004 EBRI/ICI database contains 45,783 401(k) plans with $926 billion in assets and 16.3 million participants (Figure A1). Most of the plans in the database are small, as measured by the number of plan participants or total plan assets. Forty-three percent of the plans in the database have 25 or fewer participants, and 33 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, 78 percent of participants are in plans with more than 1,000 participants, and these same plans account for 84 percent of all plan assets. Because most of the plans have a small number of participants, the asset size for many plans is modest. About 21 percent of the plans have assets of $250,000 or less, and another 36 percent have plan assets between $250,001 and $1,250,000 (Figure A2).

FIGURE A2

EBRI/ICI Database: 401(k) Plan Characteristics by Plan Assets, 2004

Total Plan Assets	Total Plans	Total Participants	Total Assets	Average Account Balance
$0 to $250,000	9,431	117,159	$1,089,460,292	$9,299
>$250,000 to $625,000	9,105	204,869	$3,770,129,133	$18,403
>$625,000 to $1,250,000	7,604	288,212	$6,832,851,351	$23,708
>$1,250,000 to $2,500,000	6,225	396,640	$11,090,342,193	$27,961
>$2,500,000 to $6,250,000	5,937	729,533	$23,486,911,019	$32,194
>$6,250,000 to $12,500,000	2,851	753,139	$25,201,623,401	$33,462
>$12,500,000 to $25,000,000	1,765	813,365	$30,897,272,652	$37,987
>$25,000,000 to $62,500,000	1,264	1,232,514	$49,332,462,936	$40,026
>$62,500,000 to $125,000,000	636	1,327,350	$55,913,537,698	$42,124
>$125,000,000 to $250,000,000	418	1,483,585	$75,091,173,484	$50,615
>$250,000,000	547	8,937,228	$643,466,721,607	$71,998
All	45,783	16,283,594	$926,172,485,766	$56,878

Note: The median account balance at year-end 2004 is $19,926.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

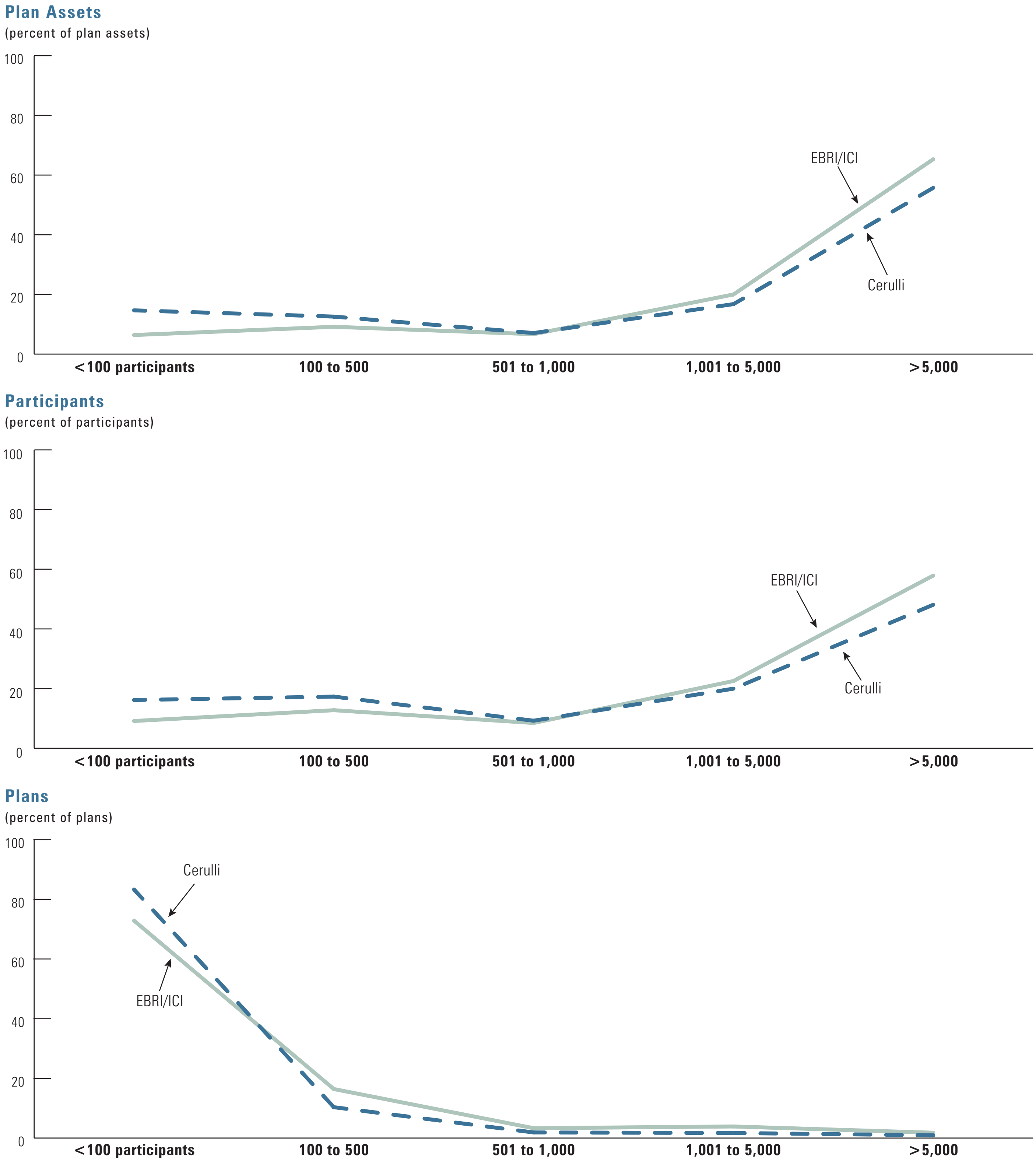
Relationship of Database Plans to the Universe of Plans

The 2004 EBRI/ICI database is a representative sample of the estimated universe of 401(k) plans. ICI (August 2005) estimates that 401(k) plans held $2.109 trillion in assets at year-end 2004 and the EBRI/ICI database represents about 44 percent of 401(k) plan assets. The year-end 2004 EBRI/ICI database covers about 36 percent of the universe of 401(k) plan participants and 11 percent of all 401(k) plans.[10,11] The distribution of assets, participants, and plans in the EBRI/ICI database for 2004 is similar to that reported for the universe of plans estimated by Cerulli Associates (Figure A3).

FIGURE A3

EBRI/ICI Database Represents Wide Cross-Section of 401(k) Universe, 2004

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



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

The Typical 401(k) Plan Participant

Participants in 401(k) plans cover wide ranges of age and tenure. Fifty-eight percent of participants are in their thirties or forties, while 11 percent of participants are in their twenties and 7 percent are in their sixties (Figure A4). The median age of the participants in the 2004 EBRI/ICI database is 44 years, the same as in the 2003 EBRI/ICI database. Thirty-five percent of the participants have five or fewer years of tenure, while 7 percent have more than 30 years of tenure. The median tenure at the current employer is seven years, the same as in 2003. Salary information available for a subset of participants indicates that the median annual salary among that group is $20,625.[12]

CHANGES IN 401(k) PARTICIPANTS' ACCOUNT BALANCES

The EBRI/ICI database is constructed from 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 2004. Analyzing a consistent group of participants removes the effect of participants and plans entering and leaving the database (and/or 401(k) universe) on the overall average.[13] Nearly 40 percent, or 4.0 million, of the participants with accounts at the end of 1999 had accounts at the end of each year from 1999 through 2004.

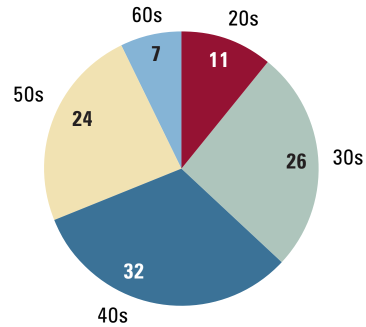
The average 401(k) account balance for this consistent group of participants edged down less than 1 percent from 1999 to 2000, declined another 1 percent in 2001, fell almost 8 percent in 2002, then increased nearly 30 percent in 2003 and about 15 percent in 2004 (Figure A5). For many participants, diversification of assets and ongoing contributions helped to temper the impact of the equity markets on their 401(k) account balances. All told, from year-end 1999 to year-end 2004, the average account balance among the consistent group of participants increased 36 percent, rising from $67,016 at year-end 1999 to $91,042 at year-end 2004 (Figure A6).[14]

FIGURE A4

Over a Third of 401(k) Participants are in Their 20s or 30s or Have Short Tenure

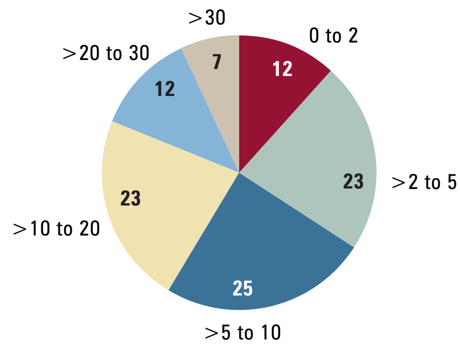
Percentage of 401(k) participants by age or tenure, 2004

By Age Group



Median Age: 44 years

By Tenure (years)



Median Tenure: 7 years

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

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

FIGURE A5

Average Account Balances for Most Age Groups Increase from 1999 Levels

Percentage change in average account balances among 401(k) participants present from year-end 1999 through year-end 2004[1] by age and tenure[2]

Age Group[2]	Tenure (years)[2]	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	1999 to 2004
20s	All	26.0	19.7	4.9	52.1	27.1	205.9
	0 to 2	53.8	34.1	12.1	58.8	30.8	380.3
	>2 to 5	18.6	15.1	2.2	50.3	25.7	163.7
	>5 to 10	8.8	7.1	-3.0	43.0	22.7	98.4
30s	All	4.5	2.9	-5.9	39.1	20.7	69.8
	0 to 2	31.7	21.1	5.7	52.5	27.9	228.8
	>2 to 5	10.5	8.0	-2.1	45.0	23.2	108.7
	>5 to 10	1.8	1.1	-7.6	37.9	19.9	57.1
	>10 to 20	-0.1	-1.5	-9.2	33.7	17.8	40.8
40s	All	0.8	-0.9	-7.7	32.0	17.3	42.8
	0 to 2	27.8	18.3	5.4	47.6	27.0	198.8
	>2 to 5	10.5	7.3	-1.6	40.8	22.7	101.7
	>5 to 10	2.7	1.0	-6.8	34.4	19.1	54.9
	>10 to 20	-0.9	-2.3	-9.4	30.2	16.4	32.8
	>20 to 30	-1.5	-3.2	-8.6	29.2	14.8	29.3
50s	All	-3.1	-3.1	-8.4	25.1	11.8	20.2
	0 to 2	28.8	18.3	6.3	44.7	26.0	195.4
	>2 to 5	12.6	7.9	-0.4	37.9	21.9	103.3
	>5 to 10	4.5	1.3	-5.6	30.9	17.6	53.7
	>10 to 20	-0.3	-2.1	-8.1	25.9	13.6	28.2
	>20 to 30	-3.9	-4.6	-9.3	23.6	10.3	13.3
	>30	-9.5	-6.2	-10.8	20.1	6.1	-3.5
60s	All	-7.2	-5.6	-9.4	15.1	4.3	-4.7
	0 to 2	19.8	14.6	4.9	35.0	20.3	134.0
	>2 to 5	12.0	6.1	-0.8	29.4	18.0	80.0
	>5 to 10	3.5	-0.5	-6.0	22.6	11.9	32.7
	>10 to 20	-1.8	-3.2	-8.1	17.4	7.6	10.3
	>20 to 30	-5.9	-6.0	-9.6	14.7	4.4	-4.2
	>30	-10.0	-7.0	-10.3	13.2	1.8	-13.5
All[1]	All	-0.5	-1.2	-7.5	29.6	15.3	35.9

[1] based on a sample of 4.0 million participants with account balances at the end of each year from 1999 through 2004

[2] Age and tenure groups are based on participant age and tenure at year-end 1999.

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

FIGURE A6

Average Account Balances Among 401(k) Participants Present from Year-End 1999 Through Year-End 2004[1] by Age and Tenure,[2] 1999–2004

Age Group[2]	Tenure (years)[2]	1999	2000	2001	2002	2003	2004
20s	All	$10,410	$13,111	$15,698	$16,472	$25,046	$31,844
	0 to 2	$6,056	$9,316	$12,494	$14,006	$22,240	$29,088
	>2 to 5	$12,285	$14,574	$16,775	$17,151	$25,771	$32,391
	>5 to 10	$19,043	$20,722	$22,193	$21,534	$30,792	$37,788
30s	All	$37,514	$39,204	$40,333	$37,957	$52,793	$63,710
	0 to 2	$13,097	$17,253	$20,886	$22,085	$33,681	$43,067
	>2 to 5	$23,370	$25,814	$27,888	$27,301	$39,589	$48,780
	>5 to 10	$42,581	$43,354	$43,838	$40,486	$55,828	$66,915
	>10 to 20	$62,889	$62,834	$61,876	$56,190	$75,149	$88,519
40s	All	$70,092	$70,620	$70,011	$64,643	$85,320	$100,106
	0 to 2	$16,262	$20,790	$24,602	$25,933	$38,273	$48,598
	>2 to 5	$28,008	$30,955	$33,227	$32,704	$46,044	$56,494
	>5 to 10	$52,532	$53,955	$54,498	$50,798	$68,277	$81,350
	>10 to 20	$95,537	$94,634	$92,415	$83,691	$108,998	$126,903
	>20 to 30	$99,208	$97,688	$94,553	$86,455	$111,684	$128,246
50s	All	$107,495	$104,187	$100,914	$92,441	$115,605	$129,218
	0 to 2	$17,092	$22,020	$26,054	$27,705	$40,079	$50,491
	>2 to 5	$29,100	$32,753	$35,333	$35,200	$48,539	$59,166
	>5 to 10	$57,392	$59,974	$60,759	$57,335	$75,027	$88,212
	>10 to 20	$108,416	$108,046	$105,735	$97,150	$122,351	$139,017
	>20 to 30	$154,891	$148,809	$141,890	$128,727	$159,168	$175,565
	>30	$163,656	$148,059	$138,881	$123,902	$148,868	$158,003
60s	All	$143,161	$132,840	$125,376	$113,627	$130,788	$136,400
	0 to 2	$18,556	$22,232	$25,483	$26,744	$36,093	$43,414
	>2 to 5	$27,017	$30,247	$32,104	$31,852	$41,217	$48,636
	>5 to 10	$56,646	$58,602	$58,315	$54,836	$67,204	$75,182
	>10 to 20	$104,956	$103,033	$99,702	$91,661	$107,602	$115,791
	>20 to 30	$149,618	$140,828	$132,440	$119,674	$137,302	$143,372
	>30	$210,082	$189,010	$175,761	$157,570	$178,350	$181,622
All[1]	All	$67,016	$66,649	$65,865	$60,926	$78,983	$91,042

[1] *based on a sample of 4.0 million participants with account balances at the end of each year from 1999 through 2004*

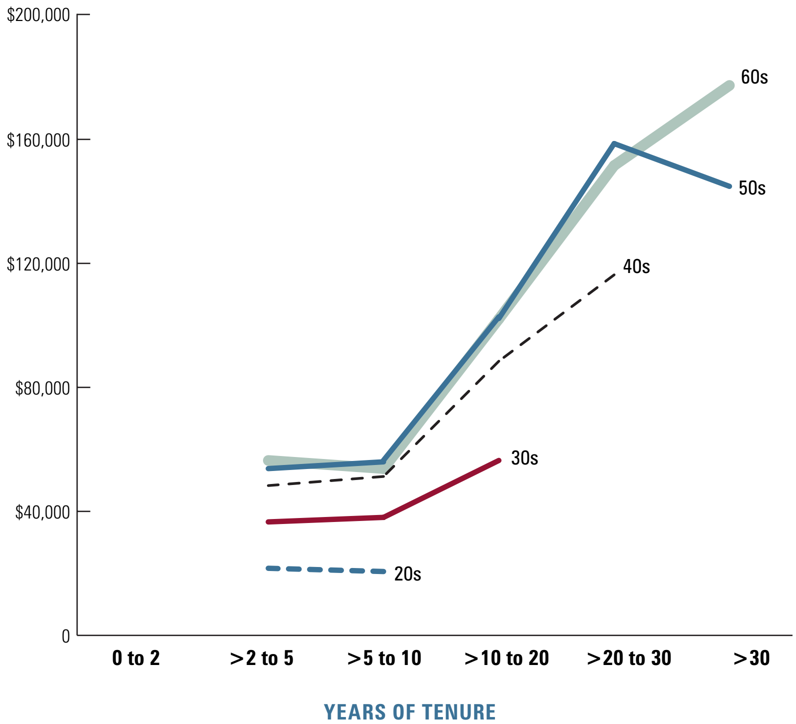
[2] *Age and tenure groups are based on participant age and tenure at year-end 1999.*

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

FIGURE A7

Average 401(k) Account Balances Increase with Age, Tenure in Consistent Sample

Average 401(k) account balance at year-end 2004 by age and tenure[1] among participants present from year-end 1999 through year-end 2004[2]



[1] Age and tenure groups are based on participant age and tenure at year-end 2004. Because these participants have been present at least since 1999, the minimum tenure is 5 years.

[2] based on a sample of 4.0 million participants with account balances at the end of each year from 1999 through 2004

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

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 is influenced by the performance of financial markets and the allocation of assets in the individual's account; and withdrawals, borrowing, and loan repayments. A sense of the relationship among the three factors can be seen in the change in average account balances among participants grouped by age and tenure. In the consistent group of 4.0 million participants, participants who were younger or had fewer years of tenure experienced the largest increases in average account balances between year-end 1999 and year-end 2004. For example, the average account balance of participants in their twenties rose about 206 percent between the end of 1999 and the end of 2004 (Figure A5). Because their account balances tend to be small (Figure A7), contributions produce significant growth in them.

In contrast, the average account balance of older participants with longer tenures had not yet recovered from the impact of the bear market. For example, the average account balance of participants in their sixties with more than 30 years of tenure was still down nearly 14 percent between year-end 1999 and year-end 2004 (Figure A5). This decline in assets reflects the magnitude of the impact of investment returns on these larger account balances; annual contributions are able to provide only a minor boost to large account balances. In addition, participants in their sixties have a higher propensity to make withdrawals.[15]

YEAR-END 2004 SNAPSHOT OF AVERAGE AND MEDIAN ACCOUNT BALANCES

For any given year, the EBRI/ICI database captures a snapshot of the year-end account balances, which reflect the entrance of new plans and new participants and the exit of participants who retire or change jobs. At year-end 2004, the average account balance was $56,878 and the median account balance was $19,926 (Figure A8). As explained in the previous section, because of the changing composition of the database over time, it is not correct to construe the change in average or median account balance for the entire database as the experience of "typical" 401(k) plan participants.

FIGURE A8

Snapshots of Year-End Account Balances

401(k) plan participant account balances,[1] 1996–2004[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.

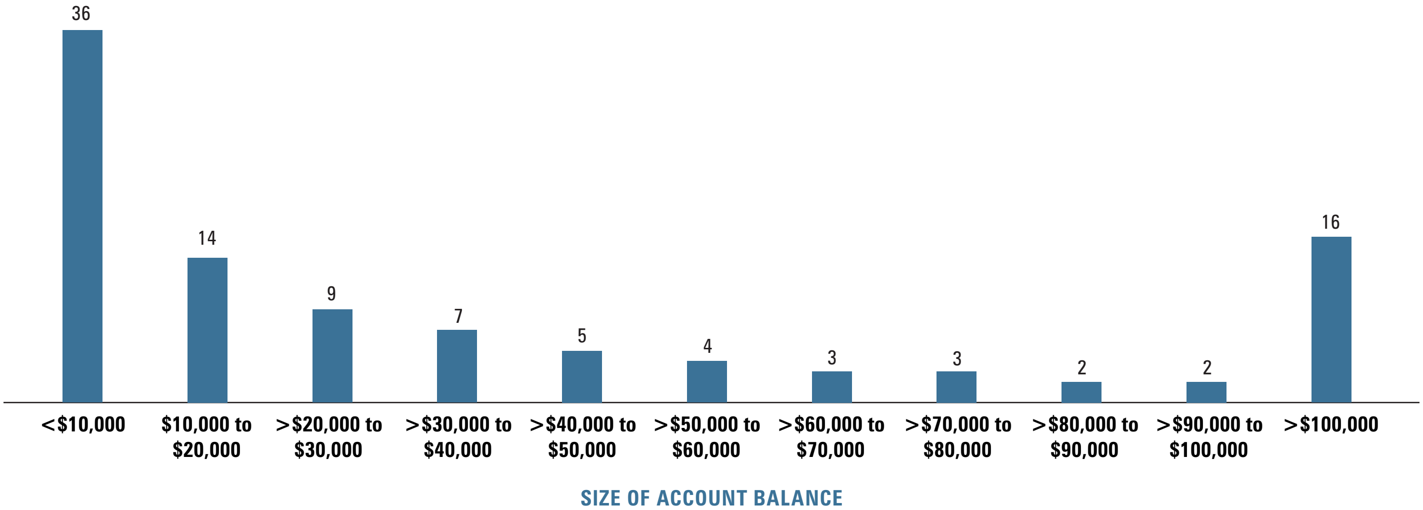
[2] Sample of participants changes over time.

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

FIGURE A9

Distribution of 401(k) Account Balances by Size of Account Balance, 2004

(percent of participants with account balances in specified ranges)



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

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

There is wide variation in 401(k) plan participants' account balances around the average of $56,878 at year-end 2004. Nearly three-quarters of the participants in the 2004 EBRI/ICI database have account balances that are lower than the average. Indeed, 36 percent of participants have account balances of less than $10,000, while 16 percent of participants have account balances greater than $100,000 (Figure A9). The variation in account balances partly reflects the effects of participants' 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

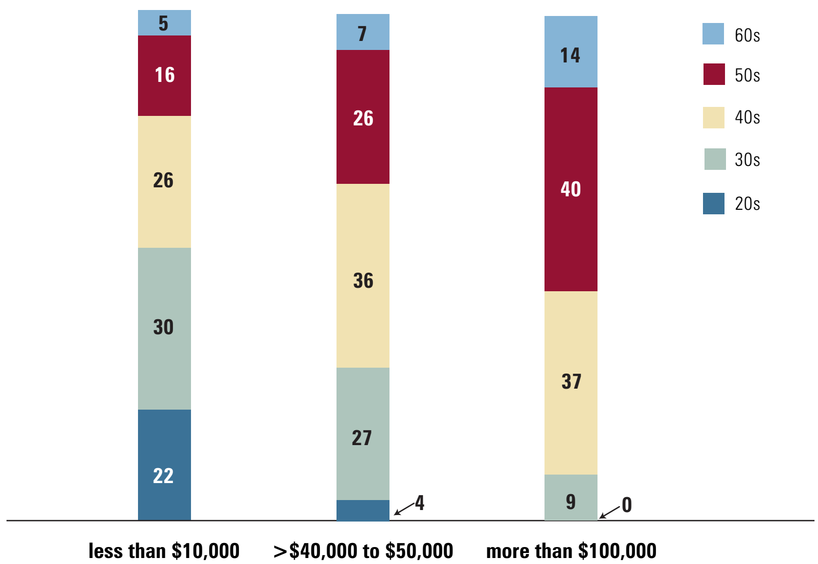
There is a positive correlation between age and account balance among participants in the 2004 EBRI/ICI database.[16] Examination of the age composition of account balances finds that 52 percent of participants with account balances of less than $10,000 are in their twenties or thirties (Figure A10). Similarly, of those with account balances greater than $100,000, more than half 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 rollovers from a previous job's plan in their current plan accounts.

There is a positive correlation between account balance and tenure among participants in the 2004 EBRI/ICI database. The participant's tenure with the employer serves as a proxy for length of participation in the 401(k) plan.[17] Indeed, 58 percent of participants with account balances of less than $10,000 have five or fewer years of tenure, while 84 percent of participants with account balances greater than $100,000 have more than 10 years of tenure (Figure A11).[18]

FIGURE A10

Age Composition of Selected 401(k) Account Balance Categories, 2004

(percent of participants with account balances in specified ranges)

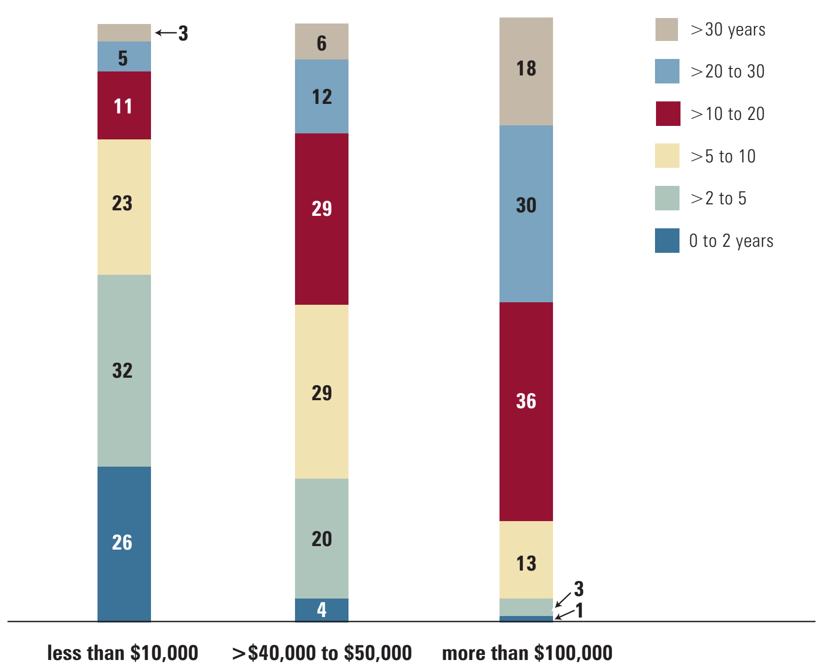


Note: Percentages may not add to 100 percent because of rounding.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE A11

Tenure Composition of Selected 401(k) Account Balance Categories, 2004

(percent of participants with account balances in specified ranges)

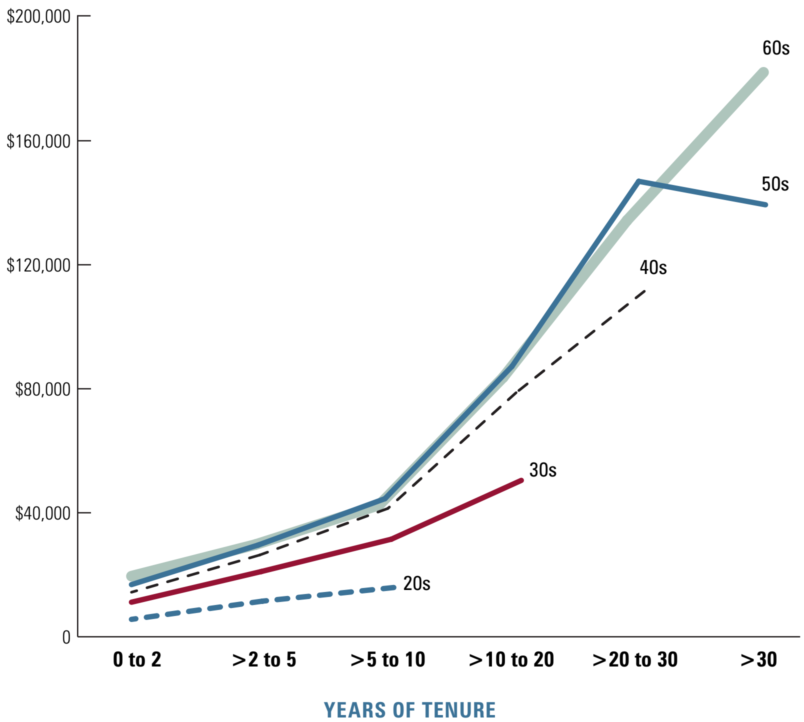


Note: Percentages may not add to 100 percent because of rounding.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE A12

Account Balances Increase with Age and Tenure

Average 401(k) account balance by age and tenure, 2004



Note: The average account balance among all 16.3 million participants is $56,878; the median account balance is $19,926.

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

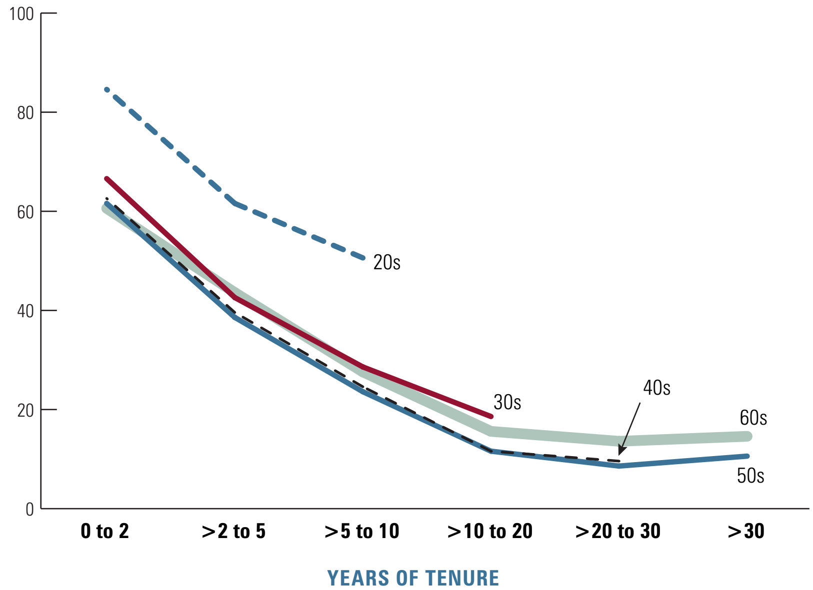
Examining the interaction of both age and tenure with account balances reveals that, for a given age group, average account balance tends to increase with tenure. For example, the average account balance of participants in their sixties with up to two years of tenure is $19,205, compared with $179,189 for participants in their sixties with more than 30 years of tenure (Figure A12). Similarly, the average account balance of participants in their forties with up to two years of tenure is $13,725, compared with $116,436 for participants in their forties with more than 20 years of tenure. The increase in account balance as tenure increases tends to be largest for participants in their fifties and sixties.

The distribution of account balances underscores the effects of age and tenure on account balances. In a given age group, fewer years of tenure means a higher percentage of participants with 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 54 percent of participants in their twenties with between five and 10 years of tenure (Figure A13). 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 18 percent of those in their sixties with more than 20 years of tenure have account balances of less than $10,000.[19]

FIGURE A13

401(k) Account Balances Less Than $10,000 by Participant Age and Tenure, 2004

(percent of participants with account balances less than $10,000)

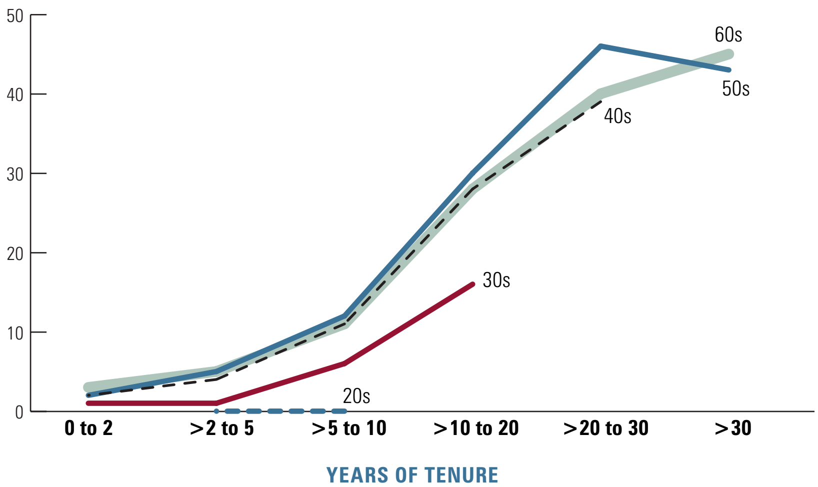


Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE A14

401(k) Account Balances Greater Than $100,000 by Participant Age and Tenure, 2004

(percent of participants with account balances greater than $100,000)



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

In a given age group, longer tenure means a higher percentage of people with account balances greater than $100,000. For example, about 8 percent of participants in their sixties with 10 or fewer years of tenure have account balances in excess of $100,000 (Figure A14). However, about 40 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 A15 (top panel) reports the account balances of current long-tenure 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-tenure 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 their length of participation in 401(k) plans (particularly among older participants as 401(k) plans were only introduced about 25 years ago).

Older, longer-tenure, and higher-income participants tend to have higher account balances, which are important for meeting their retirement income replacement needs. In 2004, long-tenure participants in their twenties with salaries between $20,000 and $40,000 had a median account balance of $9,069. Long-tenure participants in their twenties earning more than $100,000, had a

FIGURE A15

Long-Tenure Participants Hold Significant 401(k) Account Balances

Median Account Balance[1] Among Long-Tenure[2] Participants by Age and Salary, 2004

	Participant Age Group				
Salary Range	**20s**	**30s**	**40s**	**50s**	**60s**
$20,000 to $40,000	$9,069	$25,785	$42,182	$57,168	$48,914
>$40,000 to $60,000	$17,996	$41,922	$61,583	$76,920	$83,180
>$60,000 to $80,000	$33,941	$70,735	$94,162	$117,964	$140,167
>$80,000 to $100,000	$45,534	$104,018	$150,166	$182,656	$223,936
>$100,000	$47,525	$132,395	$229,878	$297,250	$323,711

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

[2] *Long-tenure participants are used in this analysis to capture as long a work and savings history as possible (see figure footnote 1). The tenure variable tends to be years with the current employer rather than years of participation in the 401(k) plan. Particularly among older participants, job tenure may not reflect length of participation in the 401(k) plans; the regulations for 401(k) plans were introduced only about 25 years ago.*

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

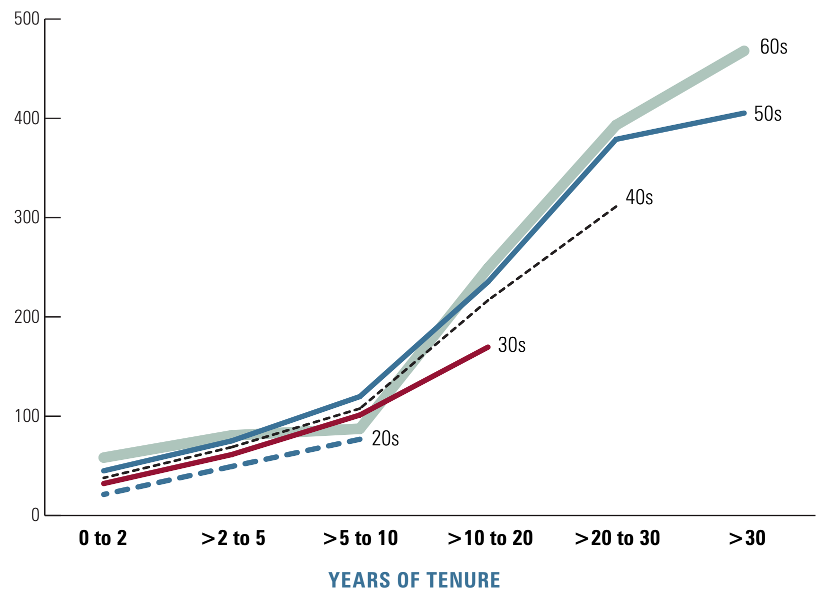
median account balance of $47,525 (Figure A15, top panel). Among long-tenure participants in their sixties with $20,000 to $40,000 in salary in 2004, the median account balance was $48,914. For long-tenure participants in their sixties earning more than $100,000, the median account balance was $323,711.

The ratio of account balance to salary in 2004 varies with age, tenure, and salary.[20] The ratio of participant account balance to salary is positively correlated with age and tenure. 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 A15, bottom panel).

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 A16). However, at high salary levels the ratio tends to decline somewhat. A similar pattern occurs among participants in their sixties (Figure A17).[21]

Ratio of 401(k) Account Balance to Salary by Age and Tenure, 2004

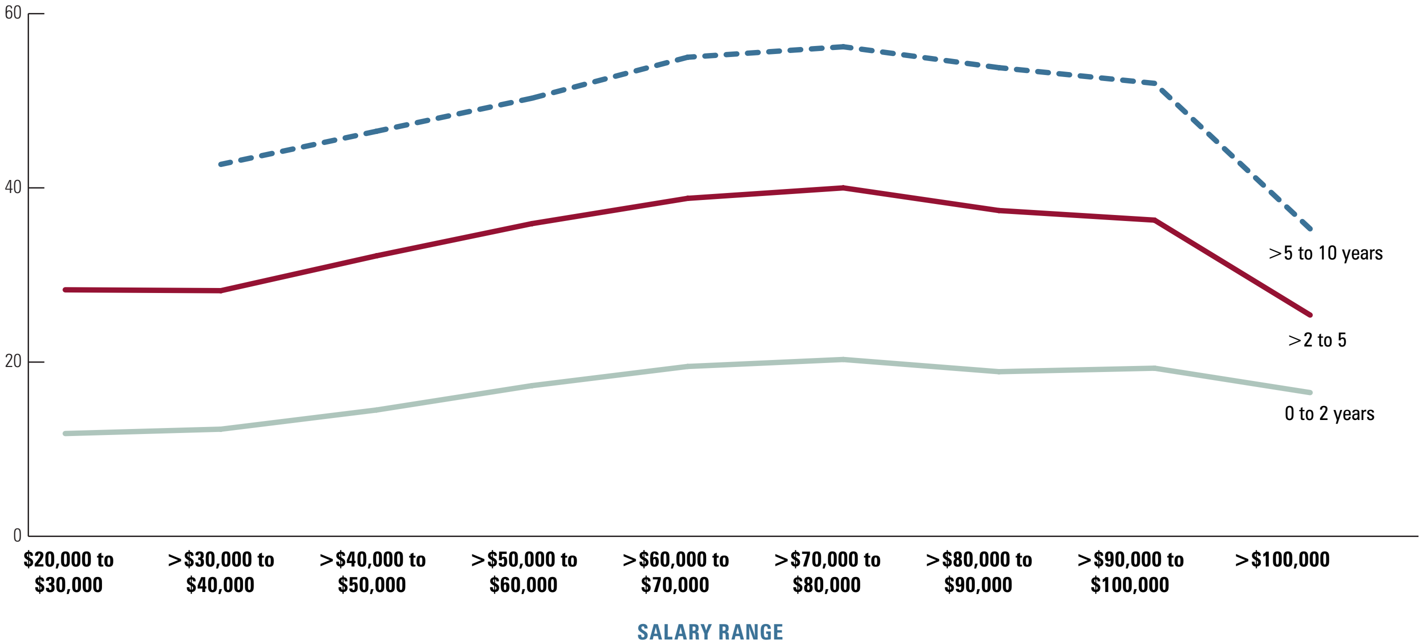
(percent)



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

FIGURE A16

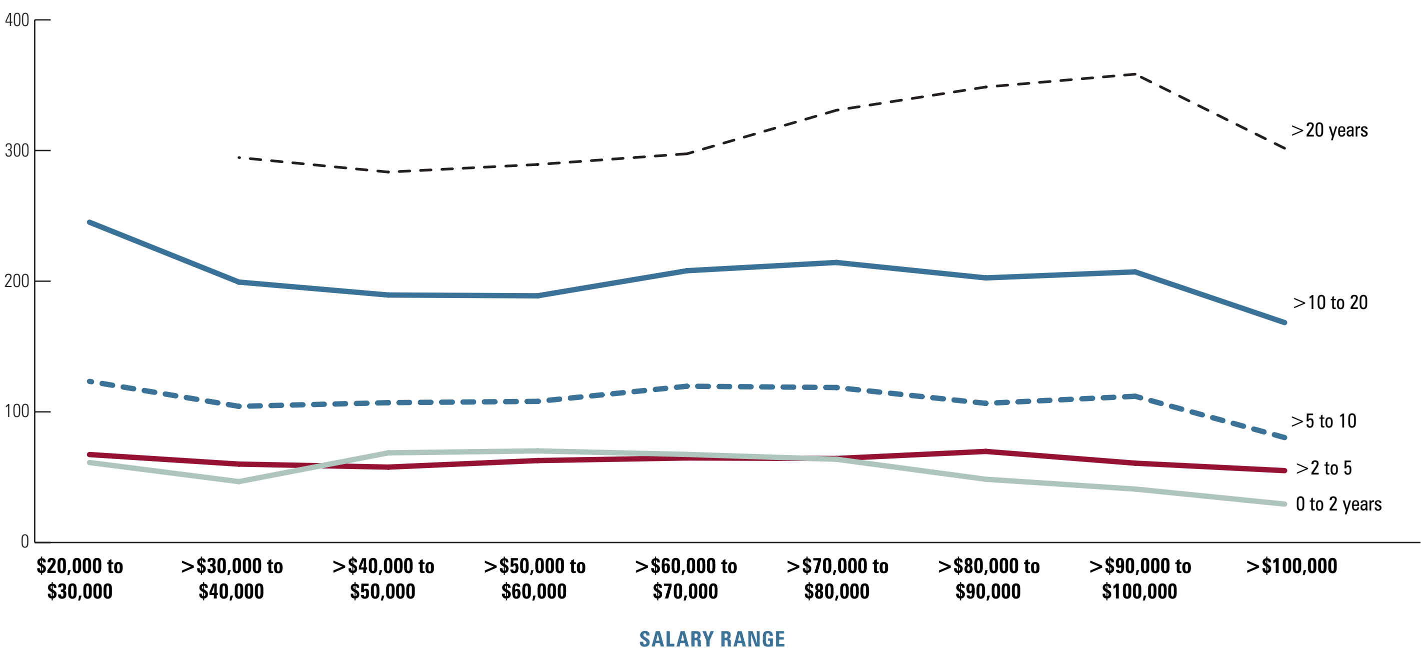
Ratio of 401(k) Account Balance to Salary for Participants in Their Twenties by Tenure and Salary, 2004
(percent)



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

FIGURE A17

Ratio of 401(k) Account Balance to Salary for Participants in Their Sixties by Tenure and Salary, 2004
(percent)



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

FIGURE A18

401(k) Plan Assets Concentrated in Equity Funds—Concentration Decreases with Participant Age

Average asset allocation of 401(k) accounts by participant age, percent of assets, 2004

Age Group	Equity Funds	Balanced Funds	Bond Funds	Money Funds	GICs[1] and Other Stable Value Funds	Company Stock	Other	Unknown	Total[2]
20s	51.6	13.0	9.0	5.1	6.0	12.6	1.3	1.4	100
30s	56.1	10.3	8.3	3.6	5.4	13.5	1.5	1.3	100
40s	50.9	10.2	8.7	3.6	8.4	15.4	1.7	1.2	100
50s	43.8	10.3	10.3	4.1	13.3	15.1	1.9	1.2	100
60s	36.5	9.5	12.3	4.8	21.0	12.6	1.9	1.3	100
All	46.4	10.1	9.8	4.0	12.1	14.5	1.8	1.2	100

[1] GICs are guaranteed investment contracts.

[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 2004 SNAPSHOT OF ASSET ALLOCATION

Consistent with a long-term investment horizon, 401(k) plan participants are heavily invested in equity securities. At year-end 2004, nearly half (46 percent) of 401(k) plan participants' account balances are invested in equity funds, on average (Figure A18). 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 2004 finds that participant asset allocations vary 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 A19

Distribution of 401(k) Plans, Participants, and Assets by Investment Options, 2004
(percent of total)

Investment Options Offered by Plan	Plans	Participants	Assets
Equity, Bond, Money, and/or Balanced Funds	43.5	29.0	21.1
Equity, Bond, Money, and/or Balanced Funds, and GICs[1] and/or Other Stable Value Funds	53.8	23.2	18.6
Equity, Bond, Money, and/or Balanced Funds, and Company Stock	1.1	16.2	20.0
Equity, Bond, Money, and/or Balanced Funds, and Company Stock, and GICs[1] and/or Other Stable Value Funds	1.6	31.6	40.3

[1] *GICs are guaranteed investment contracts.*
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Asset Allocation and Investment Options

The investment options that participants are offered by a plan sponsor significantly affect how participants allocate their 401(k) assets. Figure A19 presents the distribution of plans, participants, and assets by four combinations of investment offerings. The first category is the base group that consists of plans that do not offer company stock, guaranteed investment contracts (GICs), or other stable value funds. About 29 percent of participants in the 2004 EBRI/ICI database are in these plans—which generally offer equity funds, bond funds, money funds, and balanced funds as investment options. Another 23 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, 16 percent of participants are in plans that offer company stock, but no stable value products, while the remaining 32 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, or Plan Size

As discussed above, asset allocation varies with participant age. Thus, Figure A20 presents the analysis of asset allocation by investment option and also by age of participant.

Salary information is available for a subset of participants in the 2004 EBRI/ICI database.[24] Because asset allocation is influenced by the investment options available to participants, Figure A21 presents asset allocation by salary range and by investment option.

Participant asset allocation also varies with plan size (Figure A22, 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 70 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 A22 group plans by investment option and plan size.

FIGURE A20

Investment Menu and Participant Age Influence Asset Allocation

Average asset allocation of 401(k) accounts by participant age and investment options, percent of assets,[1] 2004

	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	58.5	12.9	17.5	6.6		
Equity, Bond, Money, and/or Balanced Funds, and GICs[2] and/or Other Stable Value Funds	52.4	12.6	6.7	3.6	21.5	
Equity, Bond, Money, and/or Balanced Funds, and Company Stock	42.3	8.0	14.0	5.9		26.6
Equity, Bond, Money, and/or Balanced Funds, and Company Stock, and GICs[2] and/or Other Stable Value Funds	39.2	8.6	5.3	1.9	20.1	22.8
PLANS WITHOUT COMPANY STOCK, GICs,[2] OR OTHER STABLE VALUE FUNDS						
Age Group						
20s	60.6	15.7	13.6	7.2		
30s	66.4	12.3	12.8	5.2		
40s	63.2	12.7	14.6	5.6		
50s	55.8	13.4	18.8	6.9		
60s	47.5	12.8	25.1	8.6		
PLANS WITH GICs[2] AND/OR OTHER STABLE VALUE FUNDS						
20s	56.4	14.6	7.6	4.4	12.8	
30s	62.1	12.6	6.8	3.3	11.5	
40s	57.9	12.7	6.6	3.3	16.0	
50s	50.3	12.8	6.8	3.6	23.3	
60s	41.1	12.0	6.6	4.1	33.4	
PLANS WITH COMPANY STOCK						
20s	48.1	8.6	9.9	6.5		25.4
30s	50.8	7.2	9.2	4.8		26.1
40s	45.8	7.5	11.0	5.3		27.8
50s	39.9	8.3	14.9	6.4		27.2
60s	34.7	8.5	21.7	7.3		23.4
PLANS WITH COMPANY STOCK AND GICs[2] AND/OR OTHER STABLE VALUE FUNDS						
20s	43.6	12.3	5.8	2.9	10.0	23.1
30s	48.2	9.3	5.4	1.9	9.1	23.8
40s	43.9	9.0	5.3	1.8	13.6	24.1
50s	37.2	8.7	5.5	1.9	21.5	23.1
60s	29.9	7.1	4.7	2.1	34.5	19.8

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

[2] GICs are guaranteed investment contracts.

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

FIGURE A21

Average Asset Allocation of 401(k) Accounts by Participant Salary and Investment Options, 2004

(percent of assets)[1]

Salary[2]	Equity Funds	Balanced Funds	Bond Funds	Money Funds	GICs[3] and Other Stable Value Funds	Company Stock
PLANS WITHOUT COMPANY STOCK, GICs,[3] OR OTHER STABLE VALUE FUNDS						
$20,000 to $40,000	55.0	16.7	20.6	6.7		
>$40,000 to $60,000	59.8	14.6	18.5	6.0		
>$60,000 to $80,000	61.3	14.4	17.5	5.5		
>$80,000 to $100,000	60.9	14.7	16.9	5.5		
>$100,000	61.0	13.7	14.8	6.4		
All	58.5	12.9	17.5	6.6		
PLANS WITH GICs[3] AND/OR OTHER STABLE VALUE FUNDS						
$20,000 to $40,000	47.3	12.7	8.5	3.3	22.4	
>$40,000 to $60,000	50.7	13.4	8.0	2.6	21.6	
>$60,000 to $80,000	54.0	12.4	8.2	1.9	21.6	
>$80,000 to $100,000	54.9	11.7	8.4	1.6	21.8	
>$100,000	57.8	11.9	7.6	2.0	18.7	
All	52.4	12.6	6.7	3.6	21.5	
PLANS WITH COMPANY STOCK						
$20,000 to $40,000	42.3	7.3	13.5	7.3		28.6
>$40,000 to $60,000	44.1	8.7	12.0	7.8		26.4
>$60,000 to $80,000	45.5	9.6	12.6	6.5		24.4
>$80,000 to $100,000	46.1	10.2	12.4	6.0		23.5
>$100,000	44.9	9.7	12.9	5.6		24.8
All	42.3	8.0	14.0	5.9		26.6
PLANS WITH COMPANY STOCK AND GICs[3] AND/OR OTHER STABLE VALUE FUNDS						
$20,000 to $40,000	38.0	7.0	6.5	1.5	23.6	21.9
>$40,000 to $60,000	39.7	7.8	5.6	2.6	23.1	19.6
>$60,000 to $80,000	41.9	7.6	5.8	2.7	21.4	17.8
>$80,000 to $100,000	44.7	7.7	6.3	2.4	19.7	16.2
>$100,000	44.4	8.5	6.1	1.9	17.7	18.3
All	39.2	8.6	5.3	1.9	20.1	22.8

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

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

[3] GICs are guaranteed investment contracts.

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

FIGURE A22

Average Asset Allocation of 401(k) Accounts by Participant Plan Size and Investment Options, 2004

(percent of assets)[1]

Plan Size by Number of Participants	Equity Funds	Balanced Funds	Bond Funds	Money Funds	GICs[2] and Other Stable Value Funds	Company Stock
ALL PLANS						
1 to 100	55.7	17.9	10.7	6.4	8.3	0.1
101 to 500	56.2	14.9	13.1	6.1	6.4	0.6
501 to 1,000	54.1	13.9	13.2	5.6	7.3	2.9
1,001 to 5,000	49.5	12.0	12.0	5.3	10.2	7.7
>5,000	43.4	8.3	8.6	3.2	13.8	19.6
All	46.4	10.1	9.8	4.0	12.1	14.5
PLANS WITHOUT COMPANY STOCK, GICs,[2] OR OTHER STABLE VALUE FUNDS						
1 to 100	61.1	15.2	13.8	8.2		
101 to 500	59.3	14.3	16.8	6.9		
501 to 1,000	58.0	14.2	18.0	6.5		
1,001 to 5,000	57.0	14.4	18.3	7.0		
>5,000	59.0	9.5	17.9	5.5		
All	58.5	12.9	17.5	6.6		
PLANS WITH GICs[2] AND/OR OTHER STABLE VALUE FUNDS						
1 to 100	51.3	20.2	8.2	4.9	15.0	
101 to 500	53.1	16.3	7.6	4.4	16.5	
501 to 1,000	52.4	14.8	6.5	3.9	19.5	
1,001 to 5,000	50.9	12.0	6.6	3.5	23.0	
>5,000	53.4	9.3	6.0	2.9	24.3	
All	52.4	12.6	6.7	3.6	21.5	
PLANS WITH COMPANY STOCK						
1 to 100[3]	53.2	11.2	7.1	13.2		5.2
101 to 500	47.4	8.7	13.1	15.6		13.7
501 to 1,000	44.8	9.6	13.3	8.5		22.6
1,001 to 5,000	43.5	9.4	14.7	6.7		23.4
>5,000	41.9	7.5	13.9	5.6		27.5
All	42.3	8.0	14.0	5.9		26.6
PLANS WITH COMPANY STOCK AND GICs[2] AND/OR OTHER STABLE VALUE FUNDS						
1 to 100	46.2	13.7	6.5	5.0	17.9	4.7
101 to 500	44.2	14.5	6.7	3.6	17.0	6.7
501 to 1,000	42.5	13.2	3.9	2.9	20.3	13.2
1,001 to 5,000	41.1	10.7	5.5	3.2	21.2	14.5
>5,000	38.9	8.3	5.2	1.8	20.0	24.0
All	39.2	8.6	5.3	1.9	20.1	22.8

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

[2] GICs are guaranteed investment contracts.

[3] Because 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

FIGURE A23

Asset Allocation Distribution of Participant Account Balance to Company Stock in 401(k) Plans with Company Stock[1] by Age, 2004
(percent of participants)[2]

	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	44.9	8.2	8.4	7.8	6.2	5.3	4.9	2.8	2.0	1.4	8.1
30s	37.4	11.7	9.9	8.6	6.8	5.6	4.7	3.0	2.3	1.8	8.3
40s	34.8	13.8	9.9	8.3	6.7	5.6	4.6	3.2	2.4	1.9	8.9
50s	34.2	15.5	9.5	7.7	6.1	5.1	4.3	3.0	2.4	1.9	10.3
60s	37.0	16.0	7.9	6.2	5.0	4.2	3.5	2.6	2.2	1.9	13.5
All	36.7	13.2	9.4	8.0	6.3	5.3	4.5	3.0	2.3	1.8	9.4

[1] Includes the 7.8 million participants in plans with company stock.
[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 A24

Asset Allocation Distribution of 401(k) Participant Account Balance to Equity Funds by Age, 2004
(percent of participants)[1,2]

	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	39.5	2.4	3.1	4.7	4.7	6.2	7.1	6.3	6.8	4.9	14.4
30s	27.8	3.1	3.5	5.1	5.4	7.3	7.9	7.4	8.2	6.3	18.1
40s	28.1	3.9	4.1	5.6	5.8	7.5	8.1	7.2	7.6	5.6	16.6
50s	31.9	4.7	4.6	6.0	6.0	7.3	7.7	6.5	6.5	4.6	14.1
60s	41.0	5.3	4.7	5.6	5.4	6.2	6.3	5.0	4.7	3.3	12.6
All	31.6	3.8	4.0	5.4	5.6	7.1	7.6	6.8	7.1	5.2	15.8

[1] Includes the 16.3 million participants in the year-end 2004 EBRI/ICI database.
[2] 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' Company Stock Allocations by Age

Participants' allocations to company stock remain in line with previous years. About half (or 7.8 million) of the 401(k) participants in the 2004 EBRI/ICI database are in plans that offer company stock as an investment option (Figure A19). Among these participants, 59 percent hold 20 percent or less of their account balances in company stock, including 37 percent who hold none (Figure A23). On the other hand, about 11 percent have more than 80 percent of their account balances invested in company stock.

Distribution of Equity Fund Allocations and Participant Exposure to Equities

On average, 46 percent of participant account balances are allocated to equity funds in the year-end 2004 EBRI/ICI database (Figure A18). However, individual asset allocations vary widely across participants. For example, 32 percent of participants hold no equity funds, while 21 percent of participants hold more than 80 percent of their balances in equity funds (Figures A24 and A25).

FIGURE A25

Asset Allocation Distribution of 401(k) Plan Participant Account Balances to Equity Funds by Age, Tenure, or Salary, 2004
(percent of participants)

	Percentage of Account Balance Invested in Equity Funds			
	Zero	1% to 20%	>20% to 80%	>80%
ALL	31.6	7.8	39.6	21.0
AGE GROUP				
20s	39.5	5.5	35.7	19.3
30s	27.8	6.6	41.3	24.4
40s	28.1	7.9	41.8	22.2
50s	31.9	9.3	40.1	18.7
60s	41.0	10.0	33.1	15.9
TENURE (years)				
0 to 2	40.3	4.3	37.8	17.5
>2 to 5	34.3	6.3	38.6	20.7
>5 to 10	26.6	7.8	41.3	24.3
>10 to 20	26.1	9.6	42.1	22.3
>20 to 30	31.0	11.0	40.3	17.8
>30	42.0	10.6	32.9	14.5
SALARY				
$20,000 to $40,000	33.9	9.7	38.8	17.5
>$40,000 to $60,000	25.2	9.9	43.9	21.0
>$60,000 to $80,000	20.2	9.2	47.9	22.7
>$80,000 to $100,000	17.3	8.4	50.4	23.9
>$100,000	15.7	7.7	50.1	26.6

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

FIGURE A26

Percentage of 401(k) Plan Participants Without Equity Fund Balances Who Have Equity

Exposure by Participant Age or Tenure, 2004

	Percentage with Company Stock and/or Balanced Funds
AGE GROUP	
20s	51.7
30s	53.5
40s	54.6
50s	55.2
60s	51.2
All	53.1
TENURE (years)	
0 to 2	49.2
>2 to 5	53.9
>5 to 10	55.2
>10 to 20	55.1
>20 to 30	56.8
>30	55.7
All	53.1

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

Furthermore, the percentage of participants holding no equity funds tends to increase with age. In contrast, the percentage of participants holding no equity funds tends to fall as salary increases (Figure A25).

Participants with no equity fund balances may still have exposure to the stock market through company stock or balanced funds. Indeed, 53 percent of participants with no equity funds have investments in either company stock or balanced funds (Figure A26). As a result, many participants with no equity funds have exposure to equity-related investments through company stock and/or balanced funds (Figure A27).

FIGURE A27

Average Asset Allocation for 401(k) Plan Participants Without Equity Fund Balances by Participant Age or Tenure, 2004
(percent of assets)

	Balanced Funds	Bond Funds	Money Funds	GICs[1] and Other Stable Value Funds	Company Stock	Other	Unknown	Total[2]
AGE GROUP								
20s	32.1	10.4	16.1	16.4	20.7	2.2	1.8	100
30s	24.9	11.9	13.1	16.1	27.9	3.9	2.1	100
40s	19.0	12.3	10.6	22.0	30.0	4.0	1.9	100
50s	15.2	13.3	9.3	29.9	26.8	3.7	1.6	100
60s	11.0	15.6	8.5	40.2	19.9	2.9	1.8	100
All3	15.9	13.5	9.8	29.9	25.3	3.6	1.7	100
TENURE (years)								
0 to 2	35.0	18.2	16.9	16.2	10.5	2.0	1.1	100
>2 to 5	29.1	14.6	16.3	18.1	17.9	2.5	1.2	100
>5 to 10	24.5	13.5	14.2	18.0	24.7	3.4	1.5	100
>10 to 20	17.3	12.6	10.8	24.4	28.8	4.7	1.2	100
>20 to 30	13.3	11.8	7.9	32.2	29.5	4.1	1.0	100
>30	8.7	12.9	5.7	44.5	24.1	3.1	0.9	100
All[3]	15.9	13.5	9.8	29.9	25.3	3.6	1.7	100

[1] *GICs are guaranteed investment contracts.*
[2] *Row percentages may not add to 100 percent because of rounding.*
[3] *Includes the 5.1 million participants with no equity funds at year-end 2004.*
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

Asset Allocation of Recently Hired Participants

Comparing snapshots of newly hired participants' asset allocations gives us further insight into recent investment allocation activity of 401(k) plan participants. As discussed in Holden and VanDerhei (September 2005), lifestyle and lifecycle funds,[25] which are included in balanced funds, have increased in popularity. For example at year-end 2004, 16 percent of the account balances of recently hired participants in their twenties is invested in balanced funds, compared with about 7 percent among that age group in 1998 (Figure A28). A similar pattern occurs across all age groups. Furthermore, the shift is more dramatic in plans that do not offer company stock or GICs or other stable value funds.

Comparing recently hired participants in 2004 to recently hired participants in 1998 also highlights that asset allocation to company stock and equity funds is lower now compared to 1998, while asset allocation to fixed-income securities has increased (Figure A28).

FIGURE A28

Average Asset Allocation of 401(k) Accounts by Participant Age and Investment Options Among Participants with Two or Fewer Years of Tenure,[1] 1998 and 2004
(percent of assets)[2]

	Equity Funds		Balanced Funds		Bond Funds		Money Funds		GICs[3] and Other Stable Value Funds		Company Stock	
	1998	2004	1998	2004	1998	2004	1998	2004	1998	2004	1998	2004
ALL[1]												
Age Group												
20s	66.9	49.2	7.4	16.0	5.1	12.0	4.0	5.7	3.7	6.5	10.5	8.4
30s	67.8	53.1	8.0	14.7	5.1	12.9	4.1	5.0	3.2	5.3	9.4	6.9
40s	64.5	49.3	9.7	15.8	5.9	14.1	5.1	5.7	4.4	6.5	8.0	6.9
50s	60.5	44.2	11.3	16.6	6.6	15.4	5.9	6.6	6.7	9.1	6.5	6.2
60s	50.0	37.7	12.1	15.6	8.7	17.0	7.8	7.1	13.3	14.0	5.7	6.6
All	64.8	48.8	9.1	15.6	5.7	13.9	4.9	5.8	4.6	7.1	8.6	6.9
PLANS WITHOUT COMPANY STOCK, GICs,[3] OR OTHER STABLE VALUE FUNDS												
20s	77.8	54.4	7.8	19.0	7.7	17.0	4.9	8.3				
30s	77.9	57.4	8.4	16.4	7.2	17.8	4.8	6.9				
40s	74.0	53.3	9.9	17.7	8.3	19.5	6.0	8.1				
50s	70.3	48.0	11.3	19.4	10.0	21.4	6.5	9.6				
60s	59.4	42.3	11.8	19.1	13.5	25.1	12.2	10.8				
All	75.0	52.9	9.3	17.8	8.2	19.4	5.7	8.3				
PLANS WITH GICs[3] AND/OR OTHER STABLE VALUE FUNDS												
20s	73.4	51.2	7.3	16.7	3.9	9.9	2.9	5.0	9.1	14.0		
30s	73.5	55.4	8.1	15.0	4.1	10.7	2.8	4.3	7.9	11.9		
40s	69.0	52.4	9.4	16.0	5.0	11.8	3.4	4.6	9.5	13.4		
50s	63.6	47.0	10.2	15.4	5.9	13.3	4.6	5.4	11.9	17.3		
60s	52.7	38.7	11.2	13.5	6.8	13.4	7.2	5.8	19.2	27.6		
All	69.7	51.0	7.9	15.5	5.0	11.7	3.5	4.8	10.1	14.8		
PLANS WITH COMPANY STOCK												
20s	51.8	46.6	6.1	11.9	5.0	14.0	5.4	6.8			29.5	19.4
30s	56.0	49.8	6.6	11.7	5.3	14.1	5.2	6.1			24.6	17.0
40s	54.4	45.1	8.2	12.6	6.5	15.7	6.4	7.0			22.6	18.0
50s	53.2	39.6	9.8	14.3	6.9	17.4	8.6	8.3			19.4	18.0
60s	47.2	35.8	11.1	11.6	14.3	20.8	6.4	7.5			19.3	20.6
All	54.2	45.6	7.2	12.4	6.3	15.5	6.1	6.9			24.1	17.9
PLANS WITH COMPANY STOCK AND GICs[3] AND/OR OTHER STABLE VALUE FUNDS												
20s	56.2	43.5	8.2	14.9	2.3	7.3	2.5	3.0	6.7	11.0	22.0	17.7
30s	56.3	47.9	8.9	14.3	2.6	8.2	3.3	2.7	5.9	9.7	20.6	14.6
40s	53.8	44.0	11.0	15.2	2.8	8.6	5.0	2.9	7.8	11.7	17.3	15.1
50s	49.3	38.3	13.8	15.8	3.3	9.1	5.3	3.0	11.8	16.6	14.5	15.0
60s	38.0	31.3	14.3	15.9	2.6	9.6	4.9	3.6	27.8	20.7	10.7	17.5
All	54.1	43.4	10.1	15.0	2.4	8.4	2.4	3.0	10.1	12.4	18.6	15.4

[1] Based on samples of 1.2 million participants with two or fewer years of tenure in 1998 and 1.8 million participants with two or fewer years of tenure in 2004.

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

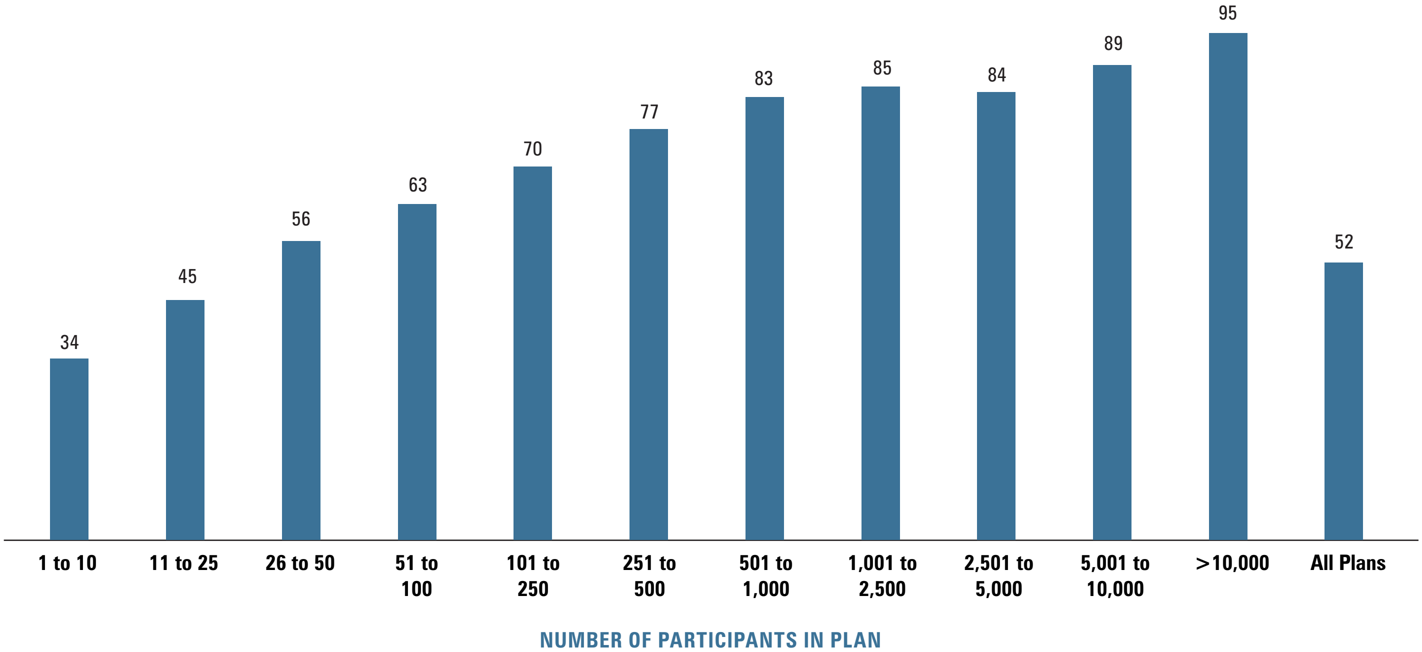
[3] GICs are guaranteed investment contracts.

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

FIGURE A29

Loans Are Widely Available

Percentage of 401(k) plans offering loans by plan size, 2004



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

YEAR-END 2004 SNAPSHOT OF PLAN LOAN ACTIVITY

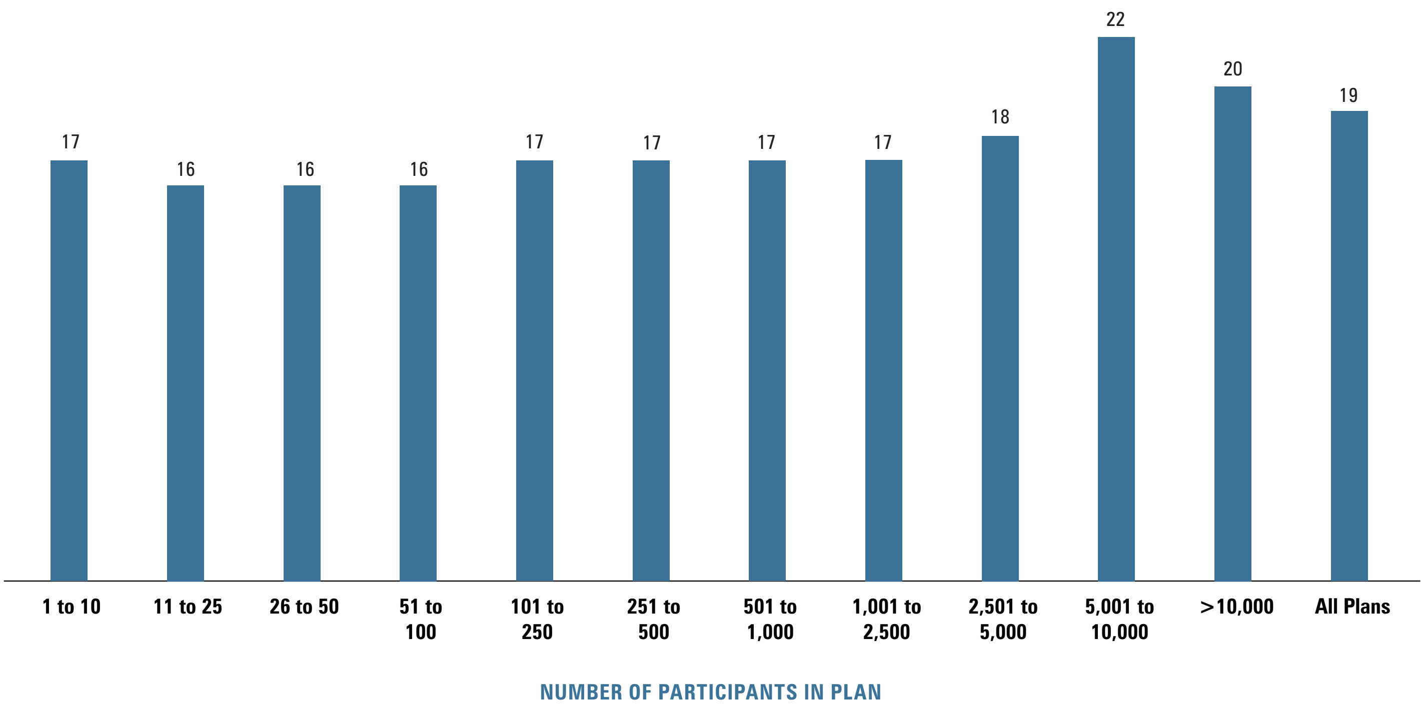
Availability and Use of Plan Loans by Plan Size

Fifty-two percent of the plans for which loan data are available in the 2004 EBRI/ICI database offer a plan loan provision to participants (Figure A29).[26] The loan feature is more commonly associated with large plans (as measured by the number of participants in the plan). Ninety-five percent of plans with more than 10,000 participants include a loan provision, compared with 34 percent of plans with 10 or fewer participants.

There is little variation in participant loan activity by plan size. Participants in smaller plans that offer loans tend to be a little less likely to have taken out a loan than participants in larger plans (Figure A30). 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 A31).

FIGURE A30

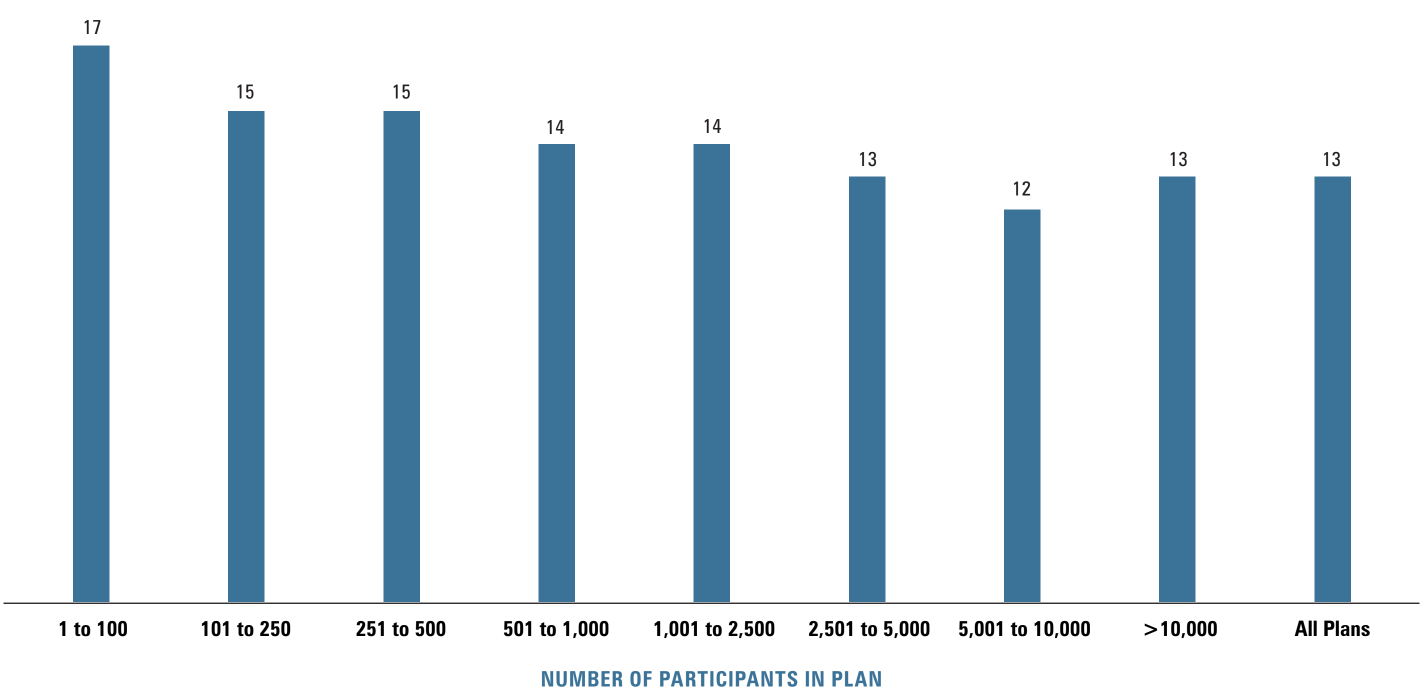
Percentage of Eligible 401(k) Plan Participants with Loans by Plan Size, 2004



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

FIGURE A31

Loan Balances as a Percentage of 401(k) Account Balances for Participants with Loans by Plan Size, 2004



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

Characteristics of Participants with Outstanding Loans

In the 2004 EBRI/ICI database, 87 percent of participants are in plans offering loans. However, as has been the case for the nine years that the EBRI/ICI databases have tracked 401(k) plan participants' loan activity, relatively few participants make use of this borrowing privilege. At year-end 2004, only 19 percent of those eligible for loans had loans outstanding (Figure A32).

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 13 percent of participants with account balances of less than $10,000 had loans outstanding. Furthermore, participants earning between $40,001 and $100,000 are more likely to have a loan outstanding than those earning more or less.

FIGURE A32

Percentage of Eligible 401(k) Participants with Loans from the Plan by Participant Age, Tenure, Account Size, or Salary, 1996, 2000, and 2004

	1996	2000	2004
ALL	18	18	19
AGE GROUP			
20s	12	11	12
30s	20	19	21
40s	22	21	22
50s	17	17	19
60s	9	9	10
TENURE (years)			
0 to 2	6	5	5
>2 to 5	15	14	15
>5 to 10	24	23	23
>10 to 20	27	26	27
>20 to 30	25	26	25
>30	13	16	18
ACCOUNT SIZE			
<$10,000	12	11	13
$10,000 to $20,000	26	23	26
>$20,000 to $30,000	26	25	26
>$30,000 to $40,000	25	25	25
>$40,000 to $50,000	24	25	24
>$50,000 to $60,000	24	24	23
>$60,000 to $70,000	23	24	21
>$70,000 to $80,000	26	23	21
>$80,000 to $90,000	23	23	20
>$90,000 to $100,000	22	22	20
>$100,000	21	18	16
SALARY RANGE			
$40,000 or less	18	17	9
>$40,000 to $60,000	20	23	24
>$60,000 to $80,000	18	23	22
>$80,000 to $100,000	17	21	20
>$100,000	14	16	12

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

FIGURE A33

Loan Balances as a Percentage of 401(k) Account Balances for Participants with Loans by Participant Age, Tenure, Account Size, or Salary, 1996, 2000, and 2004

	1996	2000	2004
ALL	16	14	13
AGE GROUP			
20s	30	30	25
30s	22	20	20
40s	16	15	14
50s	12	11	11
60s	10	9	9
TENURE (years)			
0 to 2	27	24	25
>2 to 5	24	25	22
>5 to 10	23	21	19
>10 to 20	15	14	14
>20 to 30	11	10	9
>30	7	8	8
ACCOUNT SIZE			
<$10,000	39	39	36
$10,000 to $20,000	32	32	30
>$20,000 to $30,000	28	28	26
>$30,000 to $40,000	23	24	23
>$40,000 to $50,000	22	21	21
>$50,000 to $60,000	19	19	19
>$60,000 to $70,000	16	17	17
>$70,000 to $80,000	16	15	15
>$80,000 to $90,000	14	14	14
>$90,000 to $100,000	13	13	13
>$100,000	7	7	7
SALARY RANGE			
$40,000 or less	17	19	16
>$40,000 to $60,000	17	16	13
>$60,000 to $80,000	15	13	12
>$80,000 to $100,000	14	12	11
>$100,000	14	10	9

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

Average Loan Balances

Among participants with outstanding loans at the end of 2004, the average unpaid balance is $6,946.[27] 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 13 percent at year-end 2004 (Figure A33). In addition, the same as in other years, there is variation around this average with age (the older the participant, the lower the loan ratio), tenure (the longer the participant's tenure, the lower the loan ratio), account balance (the higher the account balance, the lower the loan ratio), and salary (the higher the participant's salary, the lower the loan ratio).

NOTES

[1] Sarah Holden, Senior Economist, Research Department at the Investment Company Institute (ICI) and Jack VanDerhei, Temple University, Employee Benefit Research Institute (EBRI) Fellow. Special thanks to Luis Alonso, Research Analyst at EBRI, who managed the database. In addition, thanks to Elizabeth Zacharias at ICI who assisted in preparing the graphics.

[2] The Employee Benefit Research Institute is a nonprofit, nonpartisan, public policy research organization, which does not lobby or take positions on legislative proposals.

[3] The Investment Company Institute is the national association of the U.S. investment company industry. Its membership includes 8,501 open-end investment companies ("mutual funds"), 662 closed-end investment companies, 144 exchange-traded funds (ETFs), and five sponsors of unit investment trusts. Its mutual fund members manage assets of approximately $8.370 trillion, accounting for approximately 95 percent of total industry assets; these funds serve approximately 87.7 million individual shareholders in more than 51.2 million households.

[4] In this effort, EBRI and ICI have collected data from some of their members that serve as plan recordkeepers. The data include demographic information, annual contributions, plan balances, asset allocation, and loan balances.

[5] Account balances are net of unpaid loan balances. Thus, unpaid loan balances are not included in any of the eight asset categories described.

[6] 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.

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

[8] 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.

[9] Some recordkeepers were unable to provide complete asset allocation detail on certain pooled asset classes for one or more of their clients. Only plans in which at least 90 percent of all plan assets could be identified were included in the final EBRI/ICI database.

[10] Estimates for number of 401(k) participants and plans are from Cerulli (2005).

[11] The latest U.S. Department of Labor, Employee Benefits Security Administration (February 2006) estimate of the universe of 401(k)-type plans is for plan-year 2001. For 2001, estimates indicate there were 366,568 401(k) type plans covering 42.0 million active participants with $1,682 billion in assets.

[12] This median is calculated across all participants for which salary information is available, which includes participants who are part time or have worked for only part of the year. In some analyses, the subset is restricted to participants earning $20,000 or more. The median salary in that subsample is about $47,504.

[13] 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 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 that they recordkeep can also influence the change in aggregate average account balance. Thus, to ascertain what is happening to 401(k) participants' account balances, a consistent set of participants must be analyzed.

[14] For further discussion, see Holden and VanDerhei (September 2005).

[15] For statistics indicating the higher propensity of withdrawals among participants in their sixties, see Holden and VanDerhei (November 2002—Appendix).

[16] Approximately 1½ percent of the participants in the database had a missing birth date; were younger than 20 years old; or were older than 69 years old. They were not included in this analysis.

[17] Approximately 6 percent of the participants in the database had a missing tenure range and were not included in this analysis. In addition, for one data provider, "years of participation" are used for the tenure variable.

[18] 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-tenure 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 3 percent of them have between two and five years of tenure (Figure A11).

[19] Two possible explanations for the low account balances among this group are: (1) that their employer's 401(k) plan has only recently been established (indeed, 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) that the employee only recently joined the plan. In either event, job tenure would not accurately reflect actual 401(k) plan participation.

[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 defined contribution plans, possibly from previous employment. For recent references to such research, see Holden and VanDerhei (July 2005).

[21] The tendency of the ratio of account balances to salary 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 constrain these high-income individuals' ability to save. The contribution limits (elective deferral limits in Internal Revenue Code (IRC) Section 402(g); total contribution limits in IRC Section 415(c)); and nondiscrimination rules (Actual Deferral Percentage and Actual Contribution Percentage (ADP/ACP) nondiscrimination rules in IRC Sections 401(k) and 401(m)) aim to assure that employees of all income ranges attain the benefits of the 401(k) plan.

[22] At year-end 2004, 65 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 2004 EBRI/ICI database; participants in their thirties hold 13 percent; participants in their forties hold 34 percent; participants in their fifties hold 38 percent; and participants in their sixties hold the remaining 14 percent of the total assets. For the distribution of participants by age or tenure, see Figure A4.

[24] On average, asset allocation to most investment categories by participants with salary information is broadly similar to the asset allocation for those missing salary information, in aggregate. However, as shown in Figure A21, on average, allocations to balanced funds and bond funds are higher among participants for whom salary information is available in plans without company stock, GICs, or other stable value funds (top panel). In addition, in plans offering GICs and/or other stable value funds, the average allocations to bond funds tend to be higher among participants for whom salary information is available, while the allocations to money funds tend to be lower (Figure A21, second panel). Among participants in plans with company stock, allocations to bond funds are lower among participants with salary information, while the average allocations to equity funds and money funds are higher (Figure A21, third panel). Finally, in plans that offer company stock and stable value investment options, the average allocations to balanced funds and company stock tend to be lower among participants with salary information (Figure A21, fourth panel).

[25] Lifestyle funds maintain a predetermined risk level and generally use words such as "conservative," "moderate," or "aggressive" in their names 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.

[26] 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 had no participant take 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.

[27] The median loan balance outstanding is $3,893 at year-end 2004.

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