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John Rea,
executive editor;
Sue Duncan,
managing editor.

1401 H Street, NW
Suite 1200
Washington, DC 20005

www.ici.org

Appendix: Additional Figures for the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project for Year-End 2003

by Sarah Holden and Jack VanDerhei[1]

OVERVIEW AND SUMMARY

The August 2004 issue of *Perspective* covers the year-end 2003 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 August 2004 *Perspective*.

THE EBRI/ICI DATABASE

Relationship of Database Plans to the Universe of Plans

The 2003 EBRI/ICI database appears to be a representative sample of the estimated universe of 401(k) plans. ICI (June 2004) estimates 401(k) plans held $1,885 billion in assets at year-end 2003 and the EBRI/ICI database represents about 41 percent of 401(k) plan assets. The distribution of assets, participants, and plans in the EBRI/ICI database for 2003 is similar to that reported for the universe of plans estimated by Cerulli Associates (Figure A1).[5]

Distribution of Plans, Participants, and Assets by Plan Size

The 2003 EBRI/ICI database contains 45,152 401(k) plans with $776.0 billion in assets and 15,047,358 participants (Figure A2). Because most of the plans have a small number of participants, the asset size for many plans is modest. About 25 percent of the plans have assets of $250,000 or less, and another 38 percent have plan assets between $250,001 and $1,250,000.

[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 Jennifer McCain at ICI who assisted in preparing the graphics.

[2] The Employee Benefit Research Institute is a nonprofit, nonpartisan, public policy research organization that 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 8,643 open-end investment companies ("mutual funds"), 629 closed-end investment companies, 126 exchange-traded funds (ETFs), and five sponsors of unit investment trusts. Its mutual fund members manage assets of approximately $7.4 trillion, accounting for approximately 95 percent of total industry assets, and represent more than 86 million individual shareholders.

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

[5] The latest U.S. Department of Labor, Employee Benefits Security Administration (Summer 2004) estimate of the universe of 401(k) type plans is for plan-year 1999. For 1999, it reported 335,121 401(k) type plans covering 38.6 million active participants with $1,790 billion in assets.

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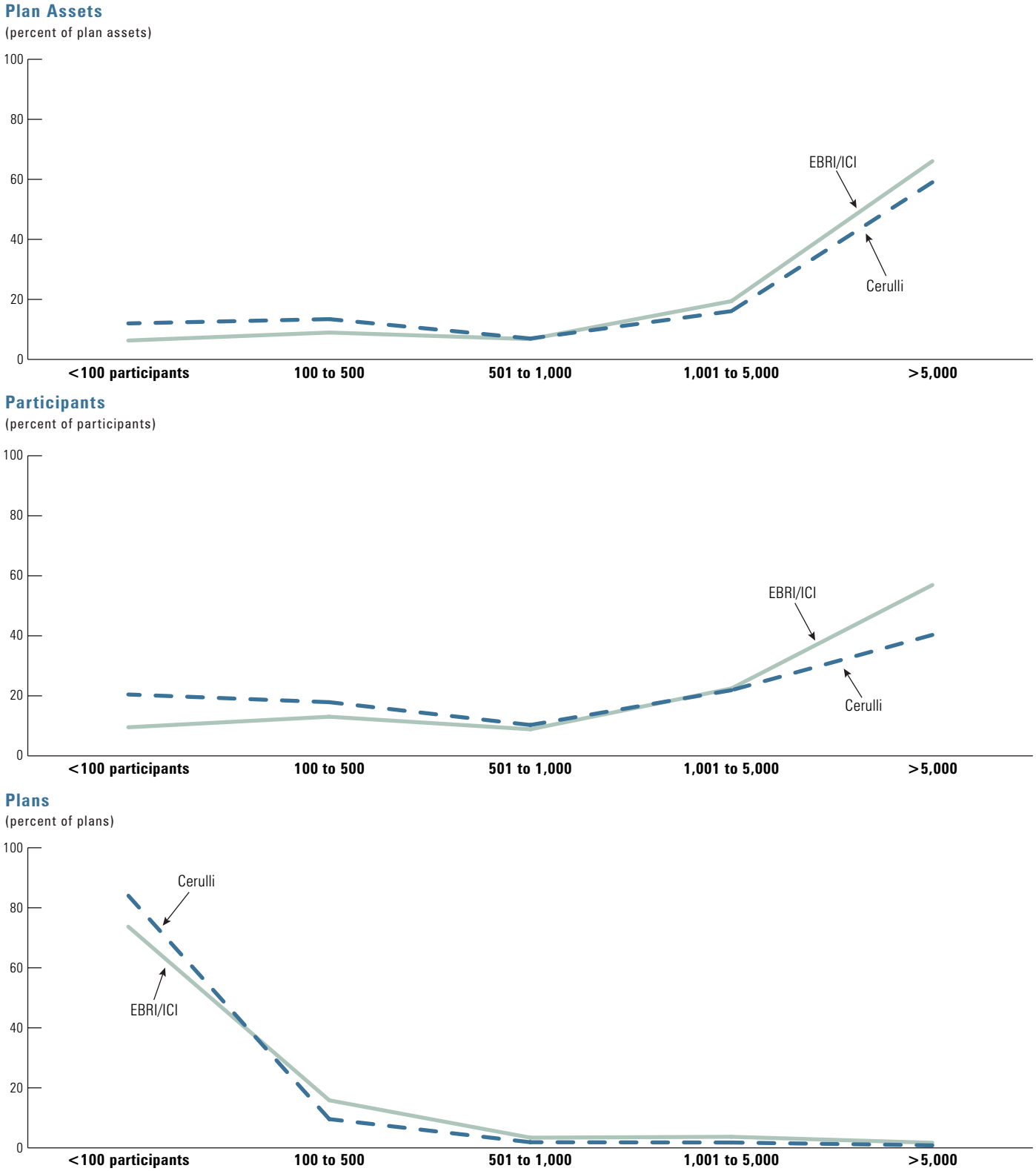
FIGURE A1

401(k) Plan Characteristics by Number of Participants: EBRI/ICI Database vs. Cerulli Estimates for All 401(k) Plans, 2003



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

FIGURE A2

EBRI/ICI Database: 401(k) Plan Characteristics by Plan Assets, 2003

Total Plan Assets	Total Plans	Total Participants	Total Assets	Average Account Balance
$0 to $250,000	11,086	145,824	$1,334,732,476	$9,153
>$250,000 to $625,000	9,843	249,251	$4,074,706,570	$16,348
>$625,000 to $1,250,000	7,306	318,368	$6,498,203,284	$20,411
>$1,250,000 to $2,500,000	5,486	410,335	$9,729,891,318	$23,712
>$2,500,000 to $6,250,000	5,123	731,178	$20,122,656,694	$27,521
>$6,250,000 to $12,500,000	2,348	723,840	$20,730,717,860	$28,640
>$12,500,000 to $25,000,000	1,517	795,939	$26,495,210,230	$33,288
>$25,000,000 to $62,500,000	1,072	1,214,147	$42,880,168,314	$35,317
>$62,500,000 to $125,000,000	531	1,184,618	$46,488,600,349	$39,244
>$125,000,000 to $250,000,000	359	1,325,841	$62,657,268,232	$47,259
>$250,000,000	481	7,948,017	$534,972,153,126	$67,309
All	45,152	15,047,358	$775,984,308,452	$51,569

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

The Typical 401(k) Plan Participant

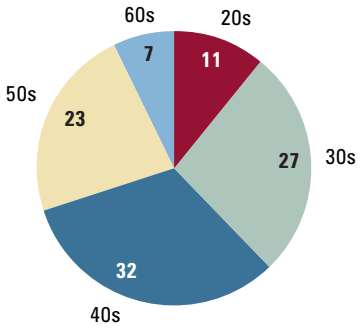
Participants in 401(k) plans cover wide ranges of age and tenure. Fifty-nine percent of participants are in their thirties or forties, while 11 percent of participants are in their twenties and 7 percent are in their sixties (Figure A3). The median age of the participants in the 2003 EBRI/ICI database is 44 years, one year older than the median age in 2002 EBRI/ICI database. Thirty-six 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 seven years, the same as in 2002. Salary information available for a subset of participants indicates that the median annual salary among that group is $27,895.[6]

[6] In some analyses, the subset is restricted to participants earning $20,000 or more. The median salary in that subsample is about $45,625 in 2003.

FIGURE A3

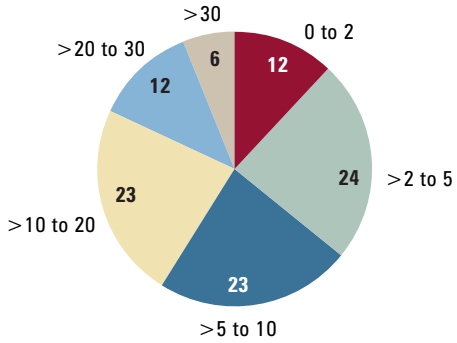
401(k) Participants by Age or Tenure, 2003
(percent of participants)

By Age



Median Age: 44 years

By Tenure (years)



Median Tenure: 7 years

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

ASSET ALLOCATION

Asset Allocation and Investment Options

The investment options[7] that participants are offered by a plan sponsor significantly affect how participants allocate their 401(k) assets. Figure A4 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 28 percent of participants in the 2003 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 (but no company stock) as an investment option, in addition to the "base" options. Alternatively, 17 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.

[7] Investment options are grouped into eight categories. (Account balances are net of loan balances and thus unpaid loan balances are not included in any of the eight asset categories described.) 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)—insurance company products that guarantee a specific rate of return on the invested capital over the life of the contract—and other stable value funds—synthetic GICs (a portfolio of fixed-income securities "wrapped" with a guarantee to provide benefit payments according to the plan at book value) or similar instruments—are reported as one category, "GICs and other stable value funds." 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. Some recordkeepers supplying data 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.

FIGURE A4

Distribution of 401(k) Plans, Participants, and Assets by Investment Options, 2003
(percent of total)[1]

Investment Options Offered by Plan	Plans	Participants	Assets
Equity, Bond, Money, and/or Balanced Funds	41.9	28.2	20.5
Equity, Bond, Money, and/or Balanced Funds, and GICs[2] and/or Other Stable Value Funds	55.3	23.1	17.3
Equity, Bond, Money, and/or Balanced Funds, and Company Stock	1.2	17.0	20.6
Equity, Bond, Money, and/or Balanced Funds, and Company Stock, and GICs[2] and/or Other Stable Value Funds	1.5	31.7	41.5

[1] Column percentages may not add to 100 percent because of rounding.
[2] Guaranteed investment contracts.
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

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

Holden and VanDerhei (August 2004) discuss the impact of investment options on participants' asset allocations in aggregate. Figure A5 presents the analysis of asset allocation by investment options and also by age of participant.

Salary information is available for a subset of participants in the 2003 EBRI/ICI database.[8] Because asset allocation is influenced by the investment options available to participants, Figure A6 presents asset allocation by salary range and by investment options.

Participant asset allocation also varies with plan size (Figure A7, 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 72 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 A7 group plans by investment option and plan size.

[8] 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 A6, on average, allocations to bond funds were 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 (but no company stock), the average allocations to balanced funds and bond funds tended to be higher among participants for whom salary information is available, while the allocation to equity funds tended to be lower (Figure A6, second panel). Among participants in plans with company stock (but no stable value products), allocations to equity funds and bond funds were lower among participants with salary information, while the average allocations to balanced funds and money funds were higher (Figure A6, third panel). Finally, in plans that offer company stock and stable value investment options, the average allocations to balanced funds and company stock were higher among participants with salary information (Figure A6, fourth panel).

FIGURE A5

Average Asset Allocation of 401(k) Accounts by Participant Age and Investment Options, 2003

(percent of account balances)[1]

	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	58.7	12.4	17.7	8.3		
Equity, Bond, Money, and/or Balanced Funds, and GICs[2] and/or Other Stable Value Funds	51.7	12.1	7.1	4.2	23.3	
Equity, Bond, Money, and/or Balanced Funds, and Company Stock	41.7	6.6	14.5	6.9		28.7
Equity, Bond, Money, and/or Balanced Funds, and Company Stock, and GICs[2] and/or Other Stable Value Funds	36.0	8.4	4.7	2.2	21.3	25.3
PLANS WITHOUT COMPANY STOCK, GICs,[2] OR OTHER STABLE VALUE FUNDS						
Age						
20s	62.8	13.8	13.4	8.4		
30s	67.2	11.8	12.5	6.4		
40s	63.1	12.4	14.8	7.1		
50s	55.7	12.8	19.3	8.7		
60s	47.0	12.2	26.1	11.1		
PLANS WITH GICs[2] AND/OR OTHER STABLE VALUE FUNDS						
20s	57.9	13.5	8.1	5.3	13.4	
30s	62.1	12.2	7.0	3.9	13.1	
40s	56.8	12.4	6.9	3.8	18.2	
50s	49.4	12.3	7.1	4.1	25.5	
60s	40.0	11.4	7.2	4.8	35.2	
PLANS WITH COMPANY STOCK						
20s	45.6	7.9	9.8	7.2		28.2
30s	47.8	6.8	9.2	5.6		29.1
40s	44.0	6.8	11.6	6.3		29.7
50s	39.6	6.8	15.5	7.5		28.9
60s	36.5	5.7	22.9	8.0		25.6
PLANS WITH COMPANY STOCK AND GICs[2] AND/OR OTHER STABLE VALUE FUNDS						
20s	42.0	11.5	5.5	3.1	10.5	25.7
30s	45.0	9.0	4.8	2.1	10.0	27.2
40s	40.2	9.0	4.7	2.0	15.0	27.1
50s	34.1	8.4	5.0	2.1	22.9	25.5
60s	27.2	6.9	4.3	2.5	35.7	20.9

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

[2] Guaranteed investment contracts.

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

FIGURE A6

Average Asset Allocation of 401(k) Accounts by Salary and Investment Options, 2003

(percent of account balances)[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	54.5	14.9	21.1	8.5		
>$40,000 to $60,000	59.1	13.4	19.9	6.7		
>$60,000 to $80,000	62.7	11.3	18.8	5.4		
>$80,000 to $100,000	63.6	10.8	18.0	5.1		
>$100,000	61.3	10.7	18.5	5.7		
All	58.7	12.4	17.7	8.3		
PLANS WITH GICs[3] AND/OR OTHER STABLE VALUE FUNDS						
$20,000 to $40,000	43.9	14.9	7.7	5.1	24.2	
>$40,000 to $60,000	47.9	15.3	7.8	4.0	22.8	
>$60,000 to $80,000	50.4	13.5	7.8	3.3	23.8	
>$80,000 to $100,000	50.7	12.2	8.0	2.8	25.4	
>$100,000	53.2	13.0	7.8	3.8	21.2	
All	51.7	12.1	7.1	4.2	23.3	
PLANS WITH COMPANY STOCK						
$20,000 to $40,000	37.2	8.3	12.3	9.3		32.2
>$40,000 to $60,000	36.2	11.1	12.2	8.9		29.5
>$60,000 to $80,000	36.0	11.2	11.2	8.4		29.1
>$80,000 to $100,000	37.5	12.9	11.0	8.5		25.1
>$100,000	38.8	12.4	12.0	7.5		25.3
All	41.7	6.6	14.5	6.9		28.7
PLANS WITH COMPANY STOCK AND GICs[3] AND/OR OTHER STABLE VALUE FUNDS						
$20,000 to $40,000	31.4	12.2	4.7	1.5	22.6	26.7
>$40,000 to $60,000	34.6	11.4	3.8	1.8	20.1	26.9
>$60,000 to $80,000	36.7	11.1	3.5	2.0	18.2	26.4
>$80,000 to $100,000	38.7	9.9	3.6	1.8	17.3	26.2
>$100,000	39.2	8.6	3.9	1.6	15.9	29.1
All	36.0	8.4	4.7	2.2	21.3	25.3

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

[2] Salary information is available for a subset of participants in the EBRI/ICI database. See text footnote 8.

[3] Guaranteed investment contracts.

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

FIGURE A7

Average Asset Allocation of 401(k) Accounts by Plan Size and Investment Options, 2003

(percent of account balances)[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	53.8	15.9	11.4	8.2	9.8	0.1
101 to 500	55.1	13.9	13.4	7.4	7.5	0.8
501 to 1,000	52.8	13.3	13.6	6.8	8.3	2.9
1,001 to 5,000	48.7	11.7	11.8	6.3	10.7	8.6
>5,000	41.3	7.8	8.6	3.7	14.5	22.0
All	44.6	9.5	9.8	4.7	12.9	16.4
PLANS WITHOUT COMPANY STOCK, GICs,[2] OR OTHER STABLE VALUE FUNDS						
1 to 100	61.4	13.3	14.1	10.1		
101 to 500	58.9	13.9	16.8	8.5		
501 to 1,000	57.3	13.6	18.6	7.8		
1,001 to 5,000	56.9	14.5	17.7	8.7		
>5,000	60.2	8.7	18.9	7.3		
All	58.7	12.4	17.7	8.3		
PLANS WITH GICs[2] AND/OR OTHER STABLE VALUE FUNDS						
1 to 100	47.6	18.0	9.3	6.6	17.8	
101 to 500	50.8	14.3	8.4	5.6	19.3	
501 to 1,000	50.8	13.6	7.4	4.8	22.1	
1,001 to 5,000	51.0	11.9	6.5	4.0	24.8	
>5,000	53.9	9.5	6.2	2.9	25.5	
All	51.7	12.1	7.1	4.2	23.3	
PLANS WITH COMPANY STOCK						
1 to 100[3]	44.1	11.2	6.9	10.7		25.1
101 to 500	47.0	10.2	12.9	14.0		14.1
501 to 1,000	42.4	10.4	12.9	10.0		23.3
1,001 to 5,000	42.3	8.7	14.6	8.1		25.0
>5,000	41.5	5.9	14.5	6.4		29.8
All	41.7	6.6	14.5	6.9		28.7
PLANS WITH COMPANY STOCK AND GICs[2] AND/OR OTHER STABLE VALUE FUNDS						
1 to 100	46.1	13.5	6.6	8.0	15.3	5.3
101 to 500	43.0	12.8	7.6	4.2	17.7	8.3
501 to 1,000	41.0	13.2	4.8	4.6	20.0	12.7
1,001 to 5,000	39.1	10.1	5.1	3.4	23.5	15.9
>5,000	35.6	8.1	4.7	2.0	21.2	26.5
All	36.0	8.4	4.7	2.2	21.3	25.3

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

[2] 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 A8

Asset Allocation Distribution of 401(k) Plan Participant Account Balances to Equity Funds by Age, Tenure, or Salary, 2003

(percent of participants)

	Zero	1% to 20%	>20% to 80%	>80%	Total
ALL	31.6	8.2	38.8	21.4	100
AGE COHORT					
20s	38.3	5.9	36.0	19.8	100
30s	27.6	7.0	40.7	24.7	100
40s	28.4	8.5	40.9	22.2	100
50s	32.5	9.7	38.6	19.2	100
60s	41.4	10.2	31.9	16.4	100
TENURE (years)					
0 to 2	40.8	5.0	37.5	16.7	100
>2 to 5	32.1	6.6	38.3	23.0	100
>5 to 10	26.5	8.2	40.6	24.6	100
>10 to 20	26.9	10.0	41.0	22.2	100
>20 to 30	32.2	11.1	38.7	17.9	100
>30	42.2	10.5	31.8	15.5	100
SALARY					
$20,000 to $40,000	35.5	11.7	38.2	14.6	100
>$40,000 to $60,000	27.0	12.1	43.8	17.1	100
>$60,000 to $80,000	22.9	11.6	47.4	18.2	100
>$80,000 to $100,000	20.3	11.0	49.7	19.0	100
>$100,000	17.0	10.4	51.9	20.7	100

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 A9

Percentage of 401(k) Plan Participants Without Equity Fund Balances Who Have Equity Exposure by Age or Tenure, 2003

	Percentage with Company Stock and/or Balanced Funds
AGE COHORT	
20s	49.4
30s	53.1
40s	54.5
50s	55.3
60s	51.4
All	52.8
TENURE (years)	
0 to 2	43.6
>2 to 5	53.1
>5 to 10	54.9
>10 to 20	55.7
>20 to 30	58.1
>30	56.2
All	52.8

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

Distribution of Equity Fund Allocations and Participant Exposure to Equities

On average, 45 percent of participant account balances are allocated to equity funds in the year-end 2003 EBRI/ICI database (Figure A7, top panel). 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 (Figure A8). 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.

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

FIGURE A10

Average Asset Allocation for 401(k) Plan Participants Without Equity Fund Balances by Age or Tenure, 2003
(percent of account balances)

	Balanced Funds	Bond Funds	Money Funds	GICs[1] and Other Stable Value Funds	Company Stock	Other	Unknown	Total[2]
AGE COHORT								
20s	26.6	11.7	18.0	16.6	24.7	1.6	0.6	100
30s	20.0	12.4	13.8	16.7	33.3	2.9	0.6	100
40s	15.6	12.9	11.3	23.0	33.4	3.0	0.5	100
50s	12.6	13.7	10.1	30.8	29.3	2.8	0.5	100
60s	9.0	15.9	9.5	41.2	21.4	2.5	0.5	100
All	13.1	13.9	10.7	30.4	28.2	2.9	0.5	100
TENURE (years)								
0 to 2	25.4	19.0	20.9	19.5	13.6	0.9	0.6	100
>2 to 5	25.2	15.0	18.3	18.5	20.3	1.8	0.7	100
>5 to 10	20.2	14.7	15.4	18.7	27.7	2.6	0.6	100
>10 to 20	14.6	13.2	12.0	25.7	30.2	3.5	0.5	100
>20 to 30	11.3	12.2	8.8	32.9	30.9	3.3	0.4	100
>30	7.5	12.7	6.6	44.2	25.5	2.8	0.6	100
All	13.1	13.9	10.7	30.4	28.2	2.9	0.5	100

[1] *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

equity funds have investments in either company stock or balanced funds or both (Figure A9). As a result, many participants with no equity funds have exposure to equity-related investments through company stock and/or balanced funds (Figure A10).

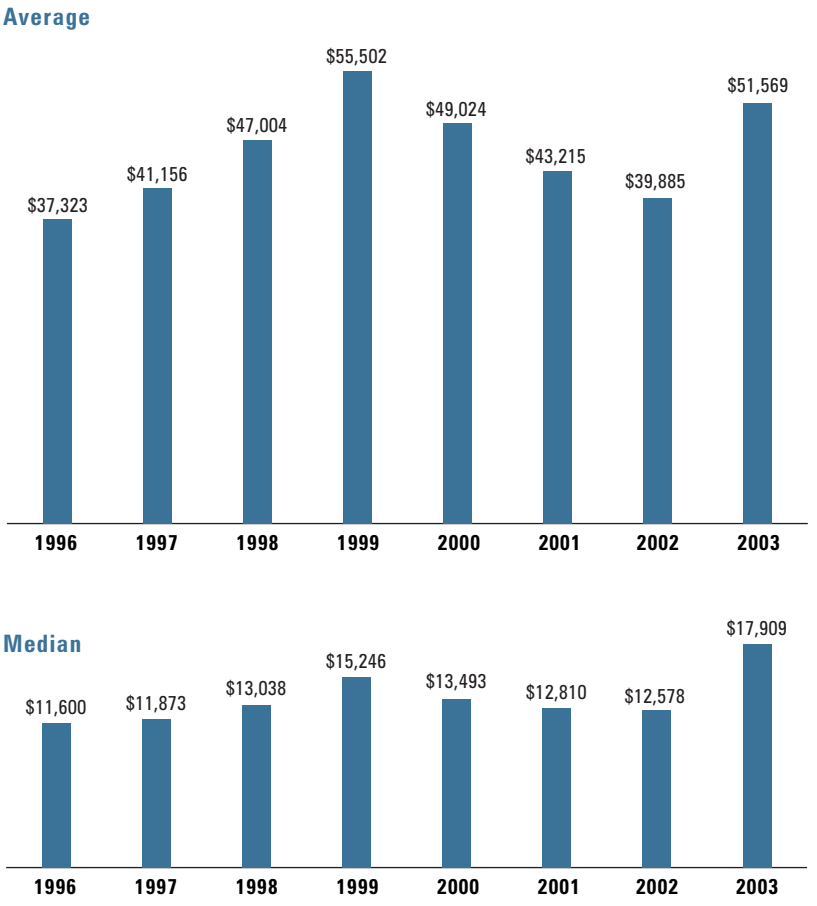
ACCOUNT BALANCES

Average and Median 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. In addition, the EBRI/ICI database for any given year captures a snapshot of the account balances at year-end and thus reflects the entrance of new plans and new participants and the exit of participants who retire or change jobs. At year-end 2003, the average account balance was $51,569 and the median account balance was $17,909 (Figure A11).[9] Because of the changing composition of the universe over time, it is not correct to construe the change in average or median account

FIGURE A11

401(k) Plan Participant Account Balances,[1] 1996–2003[2]



[1] Account balances are participant account balances held in the 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.

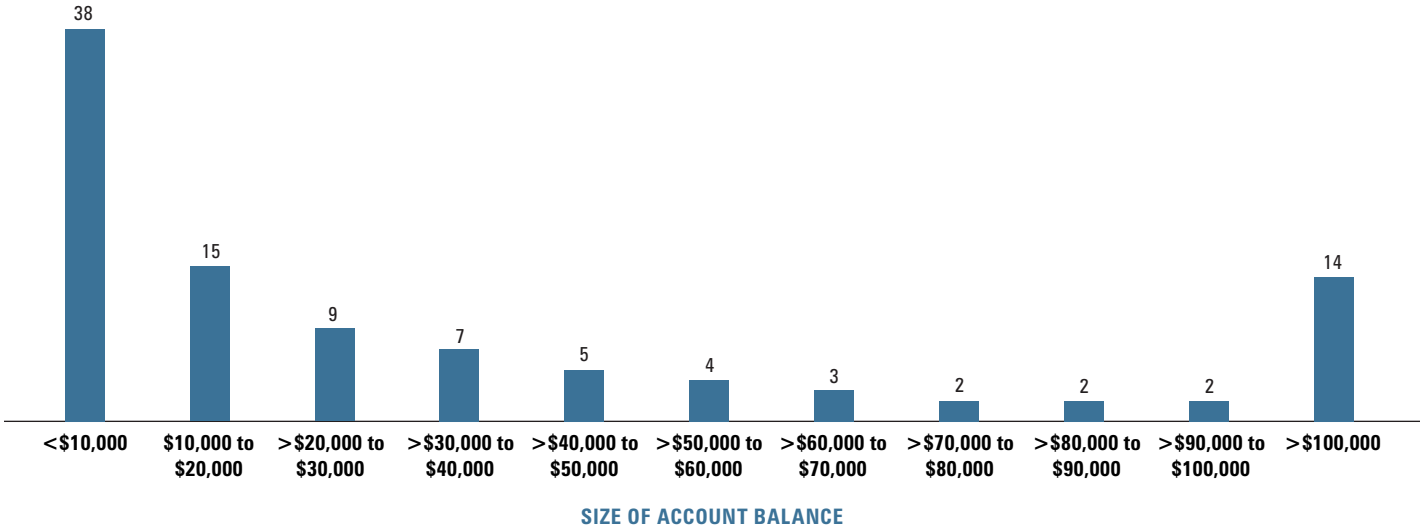
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

[9] A wide range of average account balances is reported for 401(k) type plans. Data for the 1999 universe of 401(k) type plans reported in the U.S. Department of Labor, Employee Benefits Security Administration (Summer 2004) suggest an average account balance (including loan balances as a part of account assets) per *active* participant of $46,357 compared with the $55,502 average account balance in the year-end 1999 EBRI/ICI database. The U.S. Department of Labor (Summer 2004) report also implies an average account balance (including loan balances as a part of account assets) per *active* participant of $41,822 in 1998, a figure that is within 12 percent of the $47,004 average balance from the 1998 EBRI/ICI database. Profit Sharing/401(k) Council of America (2003) suggests that the average account balance (also including loans) for plan sponsors participating in their 2002 survey, which includes profit-sharing and combination plans as well as 401(k) plans, is approximately $76,250.

FIGURE A12

Distribution of 401(k) Account Balances by Size of Account Balance, 2003

(percent of participants with account balances in specified ranges)



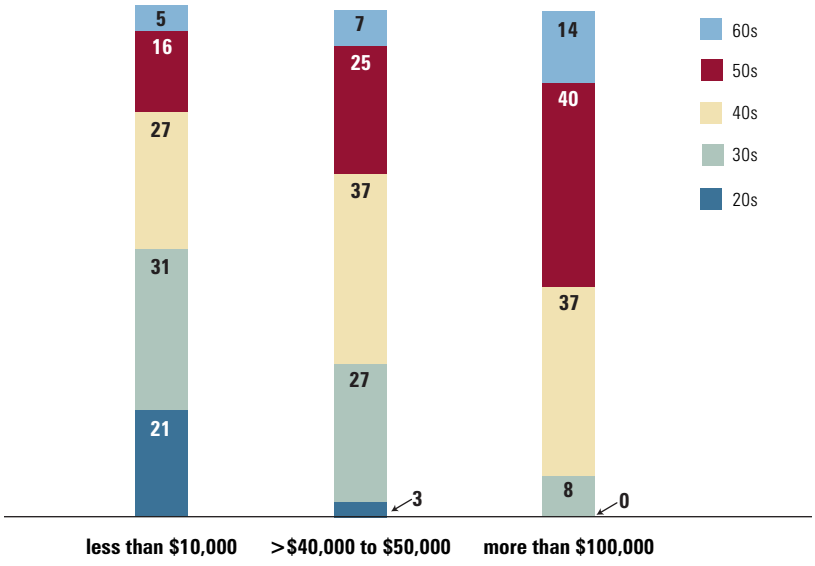
Note: Percentages may not add to 100 percent because of rounding.

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

FIGURE A13

Age Composition of Selected 401(k) Account Balance Categories, 2003

(percent)



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

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

balance for the entire database as the experience of "typical" 401(k) plan participants.[10,11]

There is wide variation in 401(k) plan participants' account balances around the average of $51,569 at year-end 2003. About three-quarters of the participants in the 2003 EBRI/ICI database have account balances that are lower than the average. Indeed, 38 percent of participants have account balances of less than $10,000, while 14 percent of participants have account balances greater than $100,000 (Figure A12). 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 age, tenure, and salary of participants.

[10] For an analysis of the change in account balances of the group of participants with accounts at the end of each year from 1999 through 2003, see Holden and VanDerhei (August 2004).

[11] The difference in average account balance between the consistent subset at year-end 2003 ($76,809) and the entire year-end 2003 EBRI/ICI database ($51,569) is explained, in part, by the different tenure composition of the participants. While 36 percent of the participants in the year-end 2003 EBRI/ICI database have five or fewer years of tenure and 18 percent have more than 20 years of tenure (Figure A3), at year-end 2003, only 10 percent of the consistent subset of participants have five or fewer years of tenure and 28 percent have more than 20 years of tenure.

Relationship of Age and Tenure to Account Balances

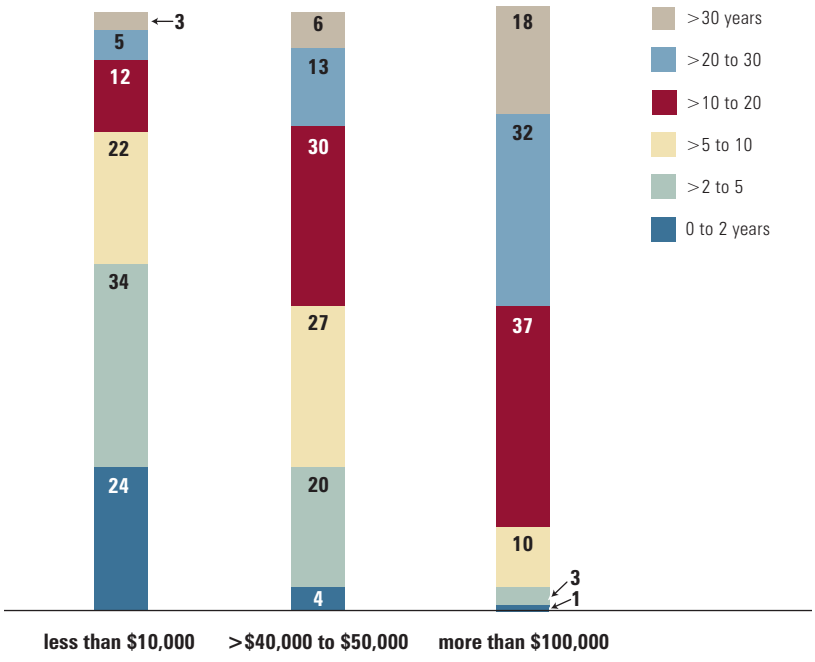
There is a positive correlation between age and account balance among participants in the 2003 EBRI/ICI database.[12] Examination of the age composition of account balances finds that 52 percent of participants with account balances of less than $10,000 are in their twenties or thirties (Figure A13). 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 2003 EBRI/ICI database. The participant's tenure with the employer serves as a proxy for length of participation in the 401(k) plan.[13] Indeed, 58 percent of those participants with account balances of less than $10,000 have five or fewer years of tenure, while 87 percent of those participants with account balances greater than $100,000 have more than 10 years of tenure (Figure A14).[14]

FIGURE A14

Tenure Composition of Selected 401(k) Account Balance Categories, 2003

(percent)



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

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

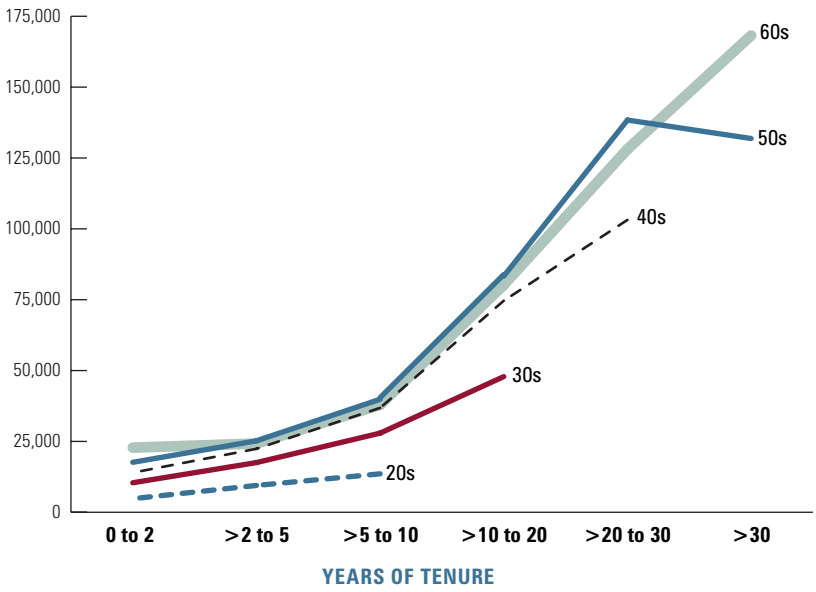
[13] Approximately 4 percent of the participants in the database had a missing tenure range and were not included in this analysis. In addition, for one data provider, "years of participation" are used for the tenure variable.

[14] 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 A15

Average 401(k) Account Balance by Age and Tenure, 2003

(dollars)

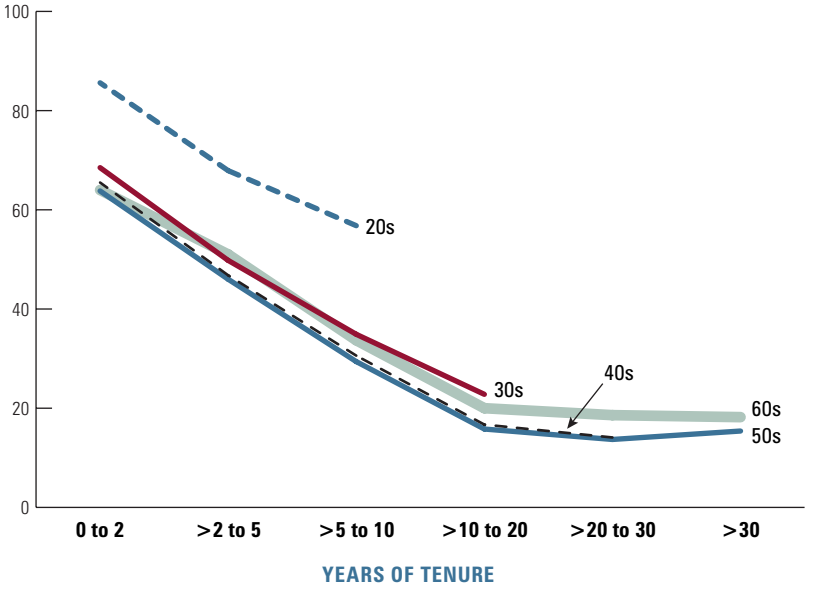


Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE A16

401(k) Account Balances Less Than $10,000 by Age and Tenure, 2003

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



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

Examining the interaction of both age and tenure with account balances reveals that, for a given age group, average account balances tend to increase with tenure. For example, the average account balance of participants in their sixties with up to two years of tenure is $22,797, compared with $168,213 for participants in their sixties with more than 30 years of tenure (Figure A15). Similarly, the average account balance of participants in their forties with up to two years of tenure is $13,970, compared with $103,156 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, 86 percent of participants in their twenties with two or fewer years of tenure have account balances of less than $10,000, compared with 57 percent of participants in their twenties with between five and 10 years of tenure (Figure A16). 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.[15]

[15] 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.

In a given age group, longer tenure means a higher percentage of people with account balances greater than $100,000. For example, about 6 percent of participants in their sixties with 10 or fewer years of tenure have account balances in excess of $100,000 (Figure A17). However, about 37 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 43 percent for participants in their sixties with more than 30 years of tenure.

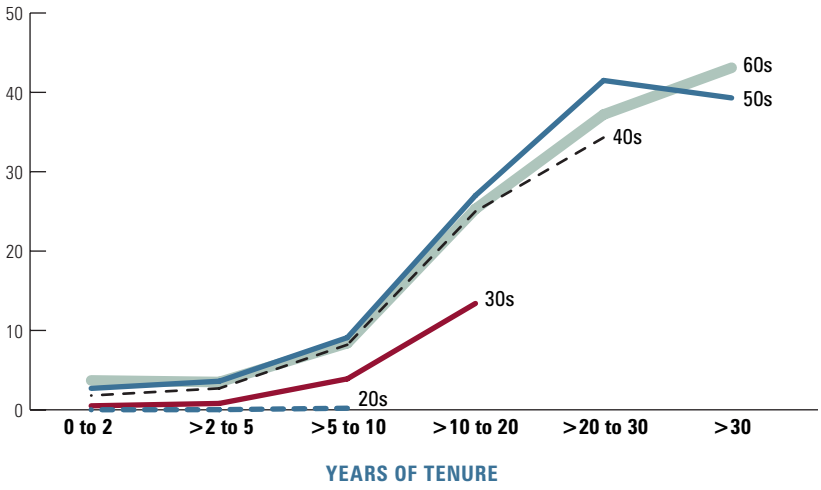
Relationship Between Account Balances and Salary

This section examines how the ratio of 2003 account balances to 2003 salary varies with age, tenure, and salary.[16] The ratio of participant account balances 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 A18).

FIGURE A17

401(k) Account Balances Greater Than $100,000 by Age and Tenure, 2003

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

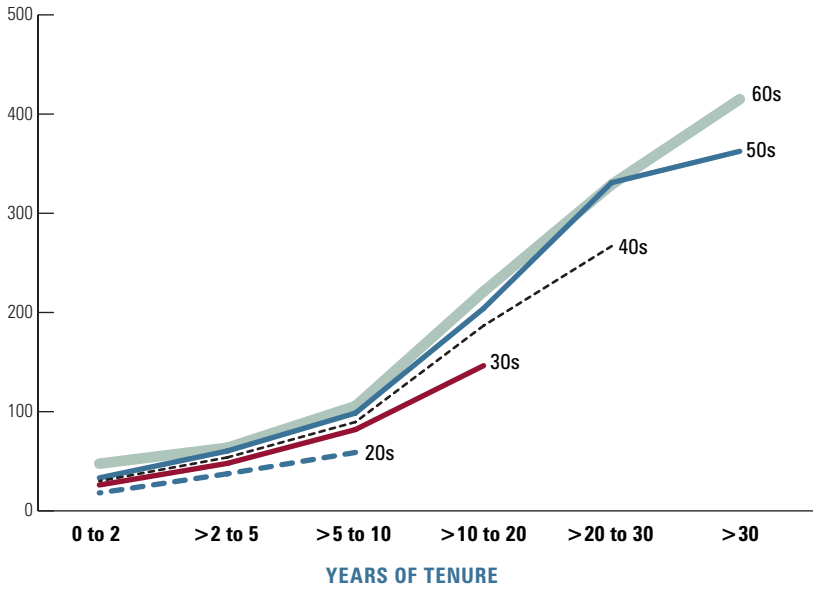


Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE A18

Ratio of 401(k) Account Balance to Salary by Age and Tenure, 2003

(percent)



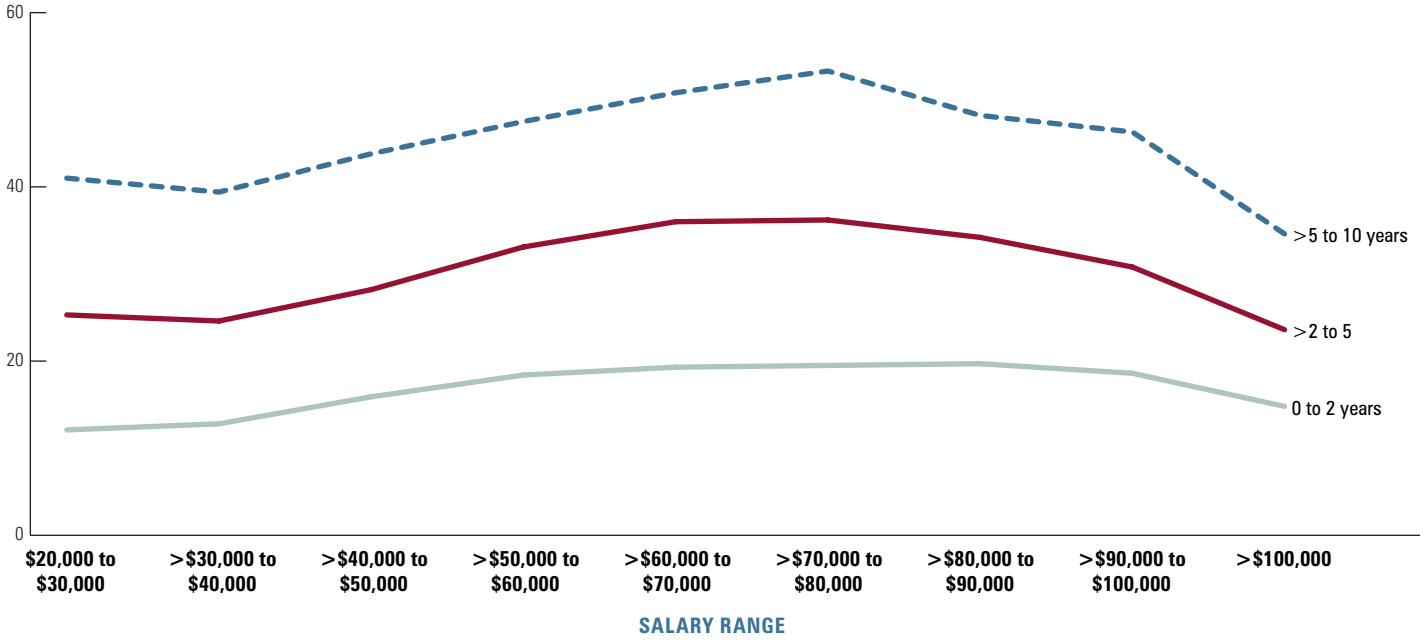
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

[16] 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 (August 2004).

FIGURE A19

Ratio of 401(k) Account Balance to Salary for Participants in Their Twenties by Tenure, 2003

(percent)

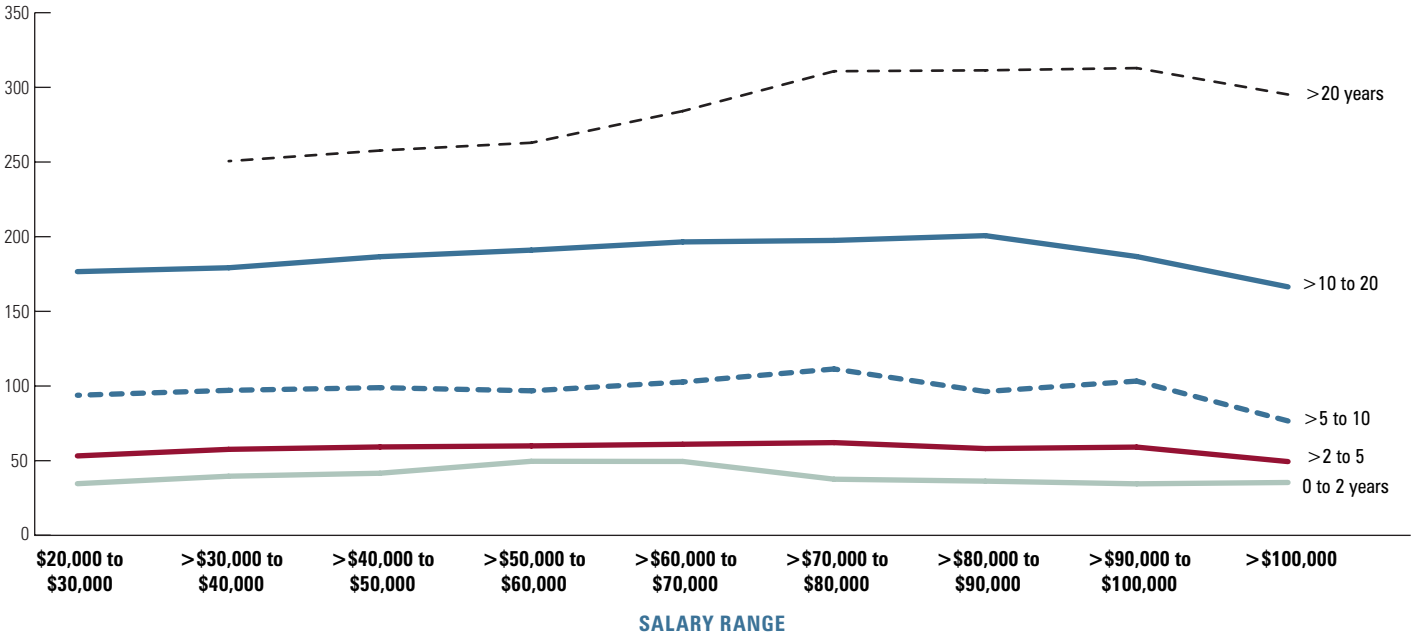


Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE A20

Ratio of 401(k) Account Balance to Salary for Participants in Their Sixties by Tenure, 2003

(percent)

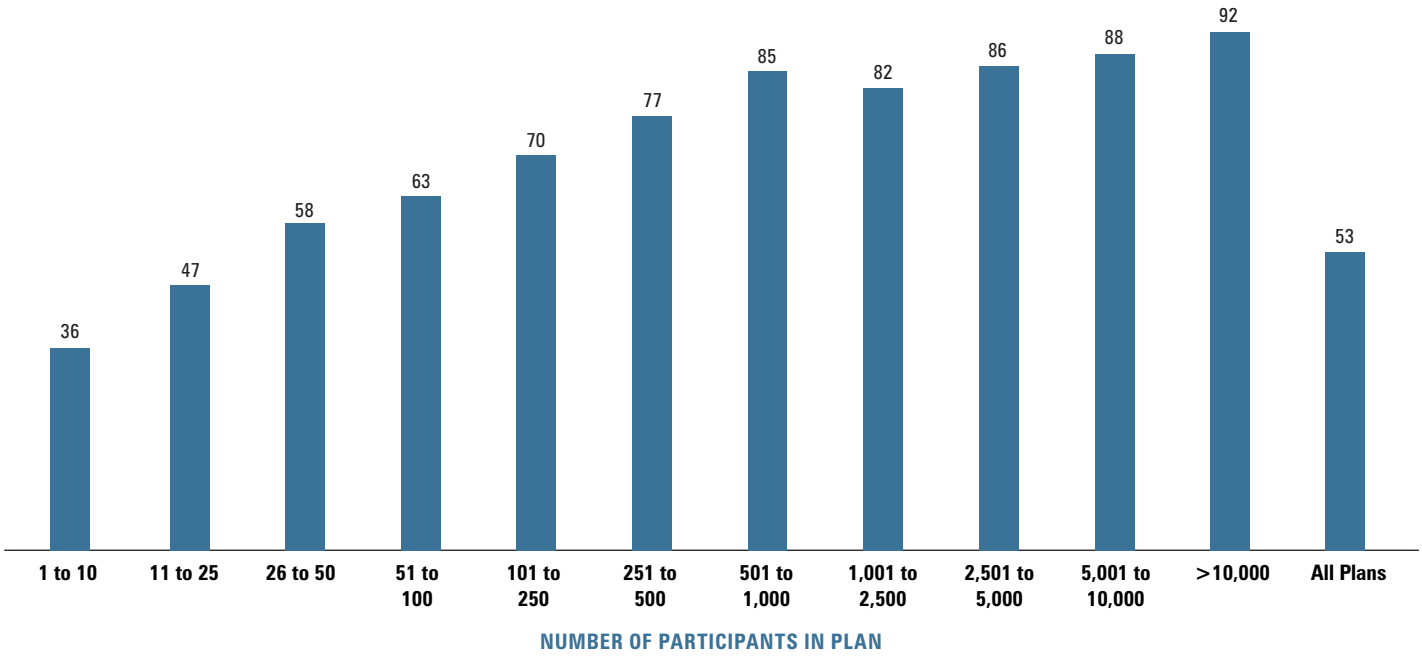


Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

FIGURE A21

Availability of 401(k) Plan Loans by Plan Size, 2003

(percent of plans offering loans)



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

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 A19). However, at high salary levels the ratio tends to decline somewhat. A similar pattern occurs among participants in their sixties (Figure A20).[17]

PLAN LOANS

Availability and Use of Plan Loans by Plan Size

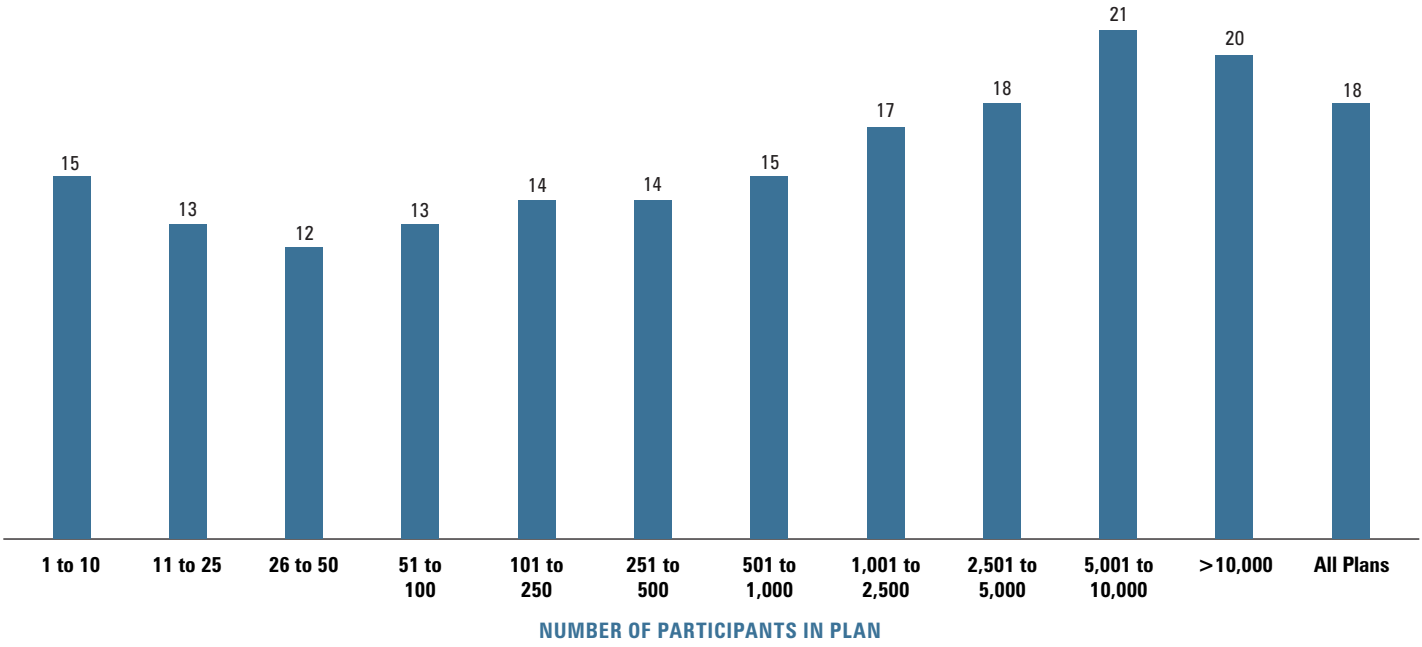
Fifty-three percent of the plans for which loan data are available in the 2003 EBRI/ICI database offer a plan loan provision to participants (Figure A21).[18] The loan feature is more commonly associated with large plans (measured by the number of participants in the plan). Ninety-two percent of plans with more than 10,000 participants

[17] 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.

[18] 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. General Accounting 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.

FIGURE A22

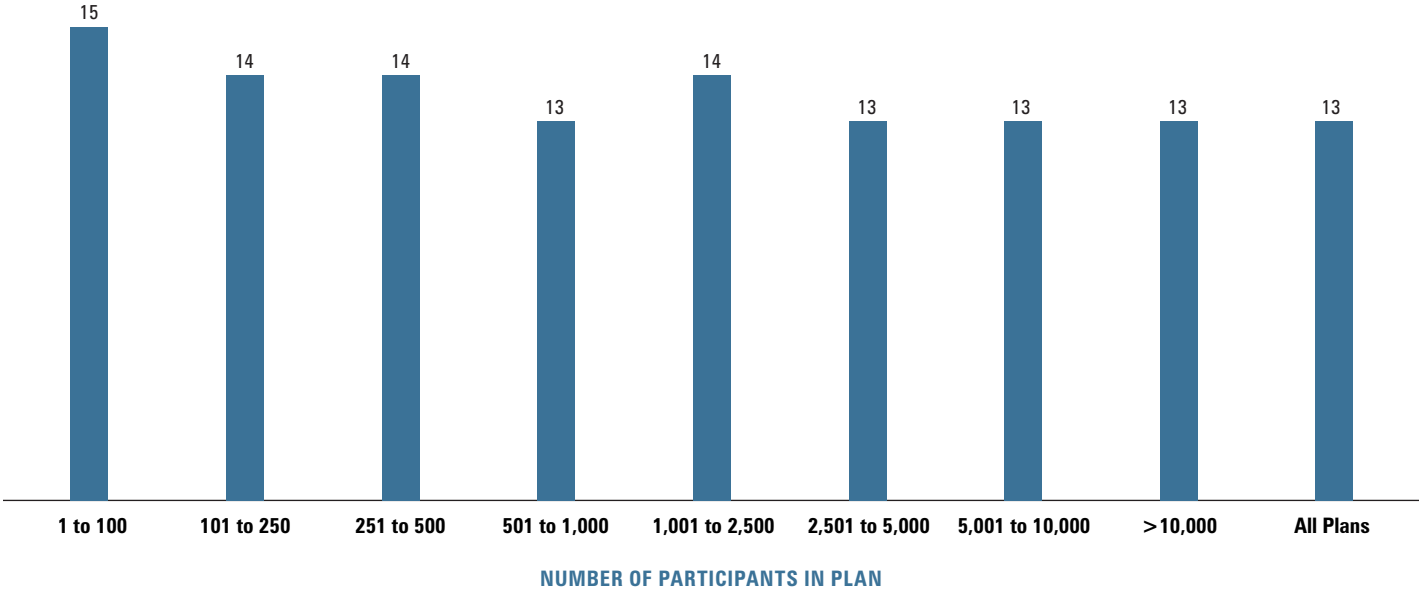
Percentage of Eligible 401(k) Plan Participants with Loans by Plan Size, 2003



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

FIGURE A23

Loan Balances as a Percentage of 401(k) Account Balances for Participants with Loans by Plan Size, 2003



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

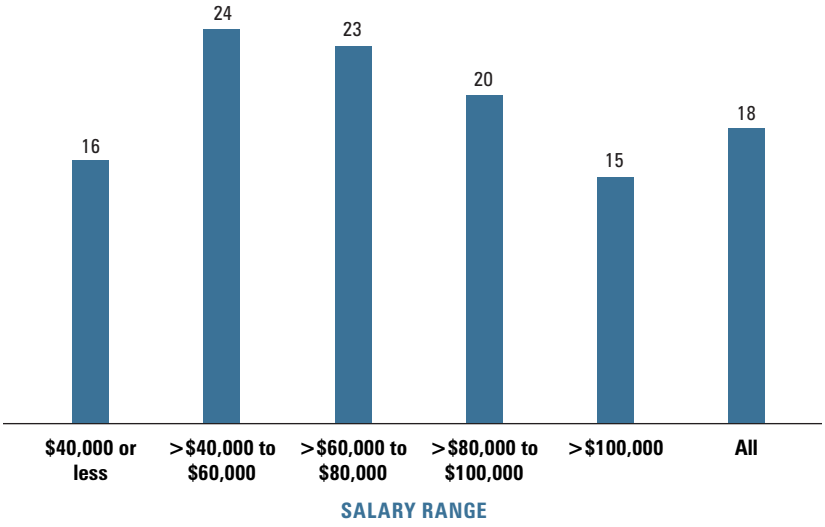
include a loan provision, compared with 36 percent of plans with 10 or fewer participants. Finally, participants in smaller plans that offer loans tend to be less likely to have taken out a loan than participants in larger plans (Figure A22). Loan ratios vary only slightly when participants are grouped based on the size of their 401(k) plans (measured by the number of plan participants; Figure A23).

Loan Activity by Salary

Loan activity varies with salary. Participants earning between $40,001 and $100,000 are more likely to have a loan outstanding than those earning more or less (Figure A24). Among participants with a loan outstanding, loan ratios tend to decrease as salary increases, falling from 16 percent for participants earning $40,000 or less to 9 percent for participants earning in excess of $100,000 (Figure A25).

FIGURE A24

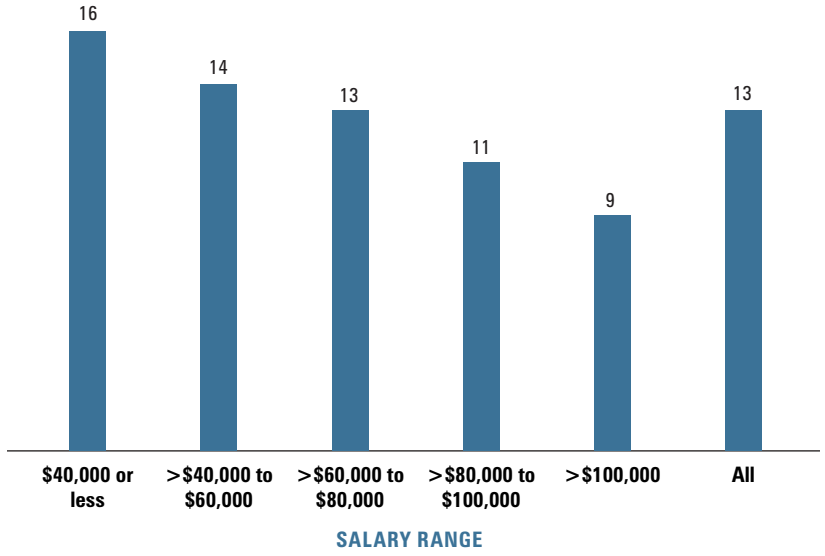
Percentage of Eligible 401(k) Plan Participants with Loans by Salary, 2003



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

FIGURE A25

Loan Balances as a Percentage of 401(k) Account Balances for Participants with Loans by Salary, 2003



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

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