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401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2004

by Sarah Holden and Jack VanDerhei[1]

Defined contribution (DC) plans are one of the primary means by which Americans save for retirement, and 401(k) plans are the most common type of DC plan. In an ongoing collaborative effort, the Employee Benefit Research Institute (EBRI)[2] and the Investment Company Institute (ICI)[3] collect annual data on millions of 401(k) plan participants to present an accurate portrayal of the behavior of 401(k) plan participants.

This issue of *Perspective* updates ICI and EBRI's research of 401(k) plan participant activity through year-end 2004, and notes several key findings:

- **Consistent participation in 401(k) plans remains essential to successful saving:** Consistent participation has had a significant impact on individuals' ability to accumulate sizeable gains in 401(k) account balances since 1999. By year-end 2004, the average account balance among 401(k) participants who had held accounts since at least 1999 increased by 36 percent, despite experiencing one of the worst bear markets for stocks since the Great Depression; rising 15 percent in 2004 alone. Notably, older and longer-tenured participants have higher-than-average balances, and younger and shorter-tenured participants have smaller-than-average balances.
- **Equity investing remains popular in 401(k) plans:** The bulk of 401(k) participants' assets remained in equity securities at year-end 2004. On average, 67 percent of participants' assets are invested in equity securities through equity funds, the equity portion of balanced funds, and company stock.
- **Investment preferences are shifting to simpler options:** Lifestyle and lifecycle funds have increased in popularity in recent years among both plan sponsors and plan participants due to increasing concern that many participants require investment guidance and/or simpler investment choices. For example, recently hired 401(k) plan participants in their twenties currently hold a higher percentage of their 401(k) accounts in balanced funds—which include lifestyle and lifecycle funds—than their peers did in 1998.
- **Loans are widely available, but rarely taken:** Although research indicates that permitting loans increases both participation and contribution rates in 401(k) plans, concern exists that individuals will undo those benefits by taking the money out prior to retirement. However, loan activity among 401(k) plan participants continues to be limited: In 2004, 19 percent of participants in plans that offered loans have loans outstanding. On average, among participants with loans, the loan represents 13 percent of the remaining account balance at year-end 2004.

About the EBRI/ICI Database

The EBRI/ICI Participant-Directed Retirement Plan Data Collection Project is the world's largest repository of information about individual 401(k) plan participant accounts. As of December 31, 2004, the EBRI/ICI database includes statistical information about:

- ***16.3 million 401(k) plan participants,** in*
- ***45,783 employer-sponsored 401(k) plans,** holding*
- ***$926.2 billion** in assets.*

The 2004 EBRI/ICI database covers approximately 38 percent of the universe of 401(k) plan participants, 10 percent of plans, and 44 percent of 401(k) plan assets.

The EBRI/ICI data are unique because they cover a wide variety of plan recordkeepers and, therefore, a wide range of plan sizes offering a variety of investment alternatives. In addition, the database covers a broad range of 401(k) plans, from very large corporations to small businesses.

INTRODUCTION

The EBRI/ICI database contains account-level information for nearly 40 percent of the estimated 43 million U.S. workers who participated in 401(k) plans at year-end 2004.[4] In addition, the inclusion of a consistent set of participants with accounts from year-end 1999 through year-end 2004 allows meaningful analysis of changes in account balances over time.

This report includes two sections. The first section focuses on account balance information for participants who have consistently maintained accounts between 1999 and 2004. The second section provides a snapshot of all 401(k) participants at year-end 2004, reviewing their account balances, asset allocations, and loan activity.

CHANGES IN 401(k) PARTICIPANTS' ACCOUNT BALANCES

The average 401(k) account balance of all participants at year-end 2004 was $56,878, up from the year-end 2003 level of $51,569. The median account balance (or mid-point, with half above and half below) was $19,926 in 2004, up from $17,909 in 2003. However, these year-to-year "snapshots" can be deceptive, since the sample of 401(k) participants changes as older, high-account workers leave the 401(k) system and younger, low-account workers enter. Comparing a consistent sample of participants, as done in this report, provides the most meaningful analysis of 401(k) account balance trends.

Nearly 40 percent, or 4.0 million, of the participants with 401(k) plan accounts at the end of 1999[5] maintained accounts at the end of each year from 1999 through 2004. An examination of this consistent subgroup of participants helps to more reliably portray the growth of 401(k) plan account balances over time by removing from the analysis the effects of participants and plans who entered or left the EBRI/ICI database.[6]

Participation Through Bear and Bull Markets Boosts Account Growth

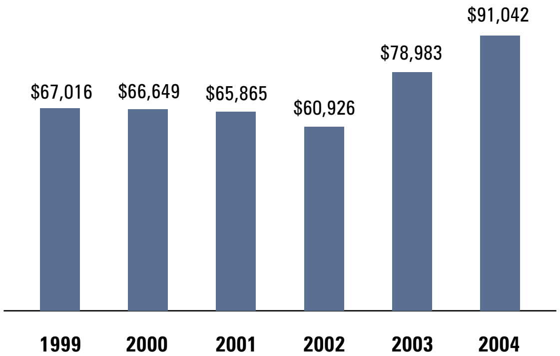
In any given year, three factors contribute to changes in a participant's account balance: new contributions by the participant and/or the employer; total investment return on account balances, which depends on market performance and the allocation of assets in the individual's account; and withdrawals, borrowing, and loan repayments. Among 401(k) plan participants who have had accounts since at least year-end 1999, the average account balance increased 36 percent in the past five years, rising from $67,016 at year-end 1999 to $91,042 at year-end 2004 (Figure 1).[7] In 2004 alone, the average account balance among this consistent group of participants increased 15 percent, due in part to positive equity market returns (Figure 2).

Account balances generally have increased since 1999 because of net contributions each year and stock market appreciation since 2002. For example, contributions made toward the end of the bear market and invested in broad equity market funds have increased more than 40 percent in value, showing the benefit of ongoing participation even though, as of year-end 2004, the broad equity market (as measured by the S&P 500 total return index) had not returned to its mid-2000 peak.[8]

FIGURE 1

401(k) Account Balances Increase for Second Consecutive Year

Average account balances[1] among 401(k) participants present from year-end 1999 through year-end 2004[2]



[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] 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

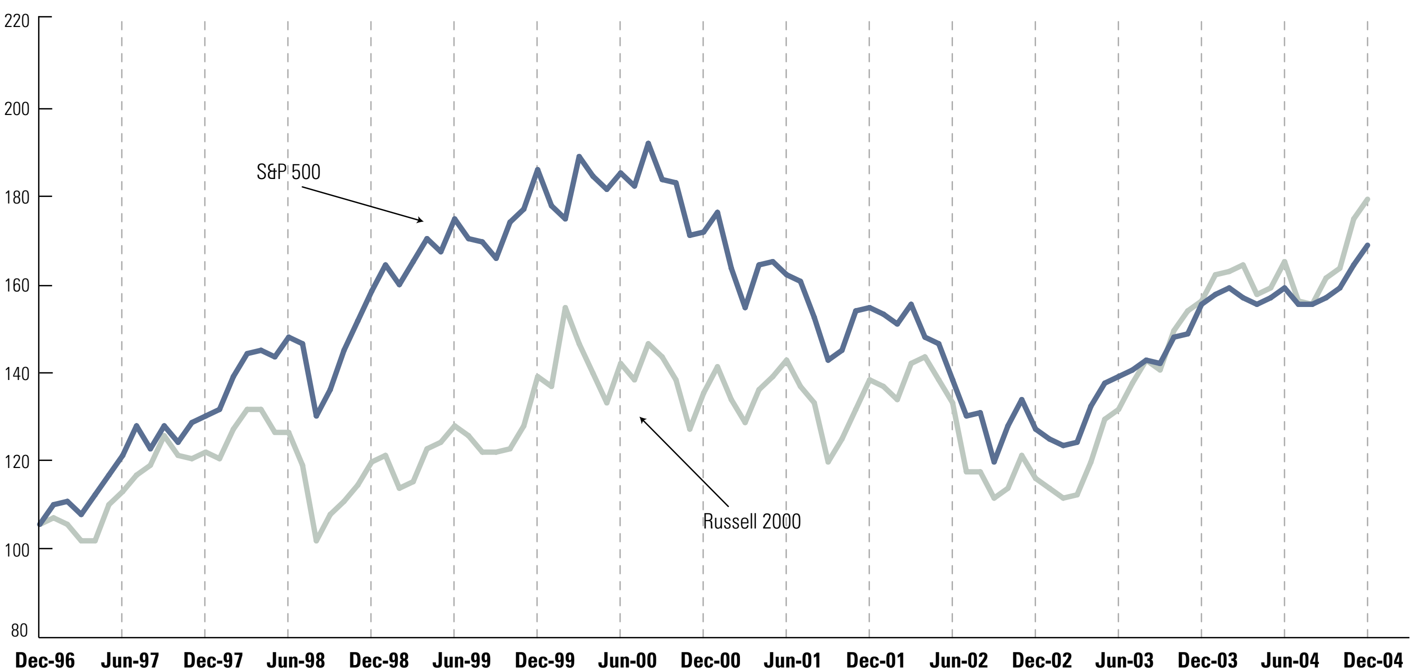
While these averages provide a broad snapshot, they mask the wide range of 401(k) participant account balances. There tends to be a positive correlation between job tenure and account balance in each of the nine years covered by the EBRI/ICI database and among the participants in the consistent group (those with account balances at the end of each year from at least 1999 through 2004). Given that age and tenure are often correlated, there also tends to be a positive correlation between age and account balance.

Moreover, the aggregate averages don't reveal the wide range in rates of change in participants' account balances. In the consistent group, 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 206 percent between the end of 1999 and the end of 2004 (Figure 3). This increase reflects the strong impact of contributions on account balances for this age group. Because their account balances tend to be small, contributions produce significant growth in them.

FIGURE 2

Domestic Stock Market Begins to Recover from Bear Market

Domestic stock market indexes,[1] month-end level,[2] December 1996 to December 2004



[1] The S&P 500 Index consists of 500 stocks chosen for market size, liquidity, and industry group representation. The Russell 2000 Index measures the performance of the 2,000 smallest U.S. companies (based on total market capitalization) included in the Russell 3000 Index (which tracks the 3,000 largest U.S. companies).

[2] All indexes are set to 100 in December 1996.

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

FIGURE 3

Average Account Balances for Most Age Groups Increase from 1999 Levels

Average account balances among 401(k) participants present from year-end 1999 through year-end 2004[1] by age,[2] 1999–2004

Age Group[2]	1999	2000	2001	2002	2003	2004
20s	$10,410	$13,111	$15,698	$16,472	$25,046	$31,844
30s	$37,514	$39,204	$40,333	$37,957	$52,793	$63,710
40s	$70,092	$70,620	$70,011	$64,643	$85,320	$100,106
50s	$107,495	$104,187	$100,914	$92,441	$115,605	$129,218
60s	$143,161	$132,840	$125,376	$113,627	$130,788	$136,400
All[1]	$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 group is based on participant age at year-end 1999.

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

In contrast, the average account balance of older participants (particularly those with longer tenures) had not yet recovered from the impact of the bear market. For participants in their sixties, the average account balance is still down nearly 5 percent at year-end 2004 compared with year-end 1999 (Figure 3). This decline in assets reflects the magnitude of the impact of investment returns on these larger account balances, while 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.[9] Nevertheless, even for these older participants, continued contributions through the bear market helped to mitigate the impact of the market decline on their account balances.

UPDATED TRENDS IN ACCOUNT BALANCES, ASSET ALLOCATION, AND LOAN ACTIVITY

The year-end 2004 EBRI/ICI database includes information for 16.3 million 401(k) plan participants' accounts, and allows for an accurate present-day snapshot of 401(k) plan participants.[10]

Saving Builds Account Balances

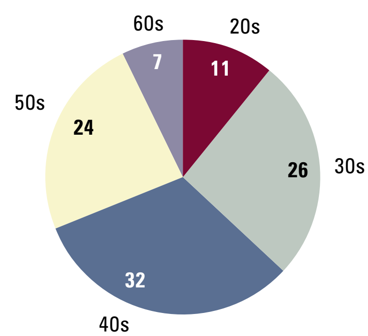
The average 401(k) account balance of all participants at year-end 2004 is $56,878.[11] Half of the participants in the database have account balances less than $19,926 (the median account balance), while half hold more. As noted above, younger participants and those just starting their current jobs tend to have smaller account balances, while older participants and those with longer tenure tend to have higher account balances. These averages blend the experiences of 16.3 million diverse 401(k) plan participants, many of whom are young and/or new to their jobs. Indeed, about 37 percent of participants in the year-end 2004 EBRI/ICI database are in their twenties or thirties, and about a similar percentage have five or fewer years of tenure (Figure 4).

FIGURE 4

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

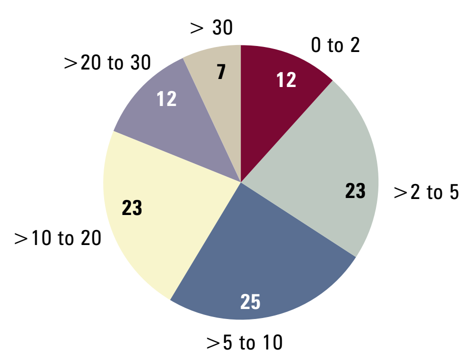
Percentage of 401(k) plan participants by age or tenure, 2004

By Age



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

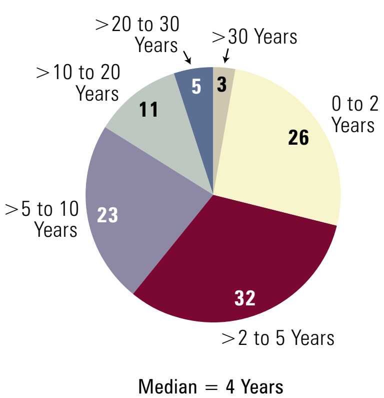
Many observers wonder whether such account balances will be able to provide significant income in retirement.[12] However, this question cannot be answered by looking at these aggregate account balances for two key reasons.

First and most importantly, these aggregate measures are based on accounts held by participants from a wide range of ages and tenures, many of whom are years away from retirement and have only just started saving for retirement. Young workers or those just starting out at their current jobs simply have not had the time to accumulate significant balances. Indeed, the majority of participants with an account balance less than $10,000 only recently started at their current jobs. Fifty-eight percent of participants with account balances less than $10,000 have been at their current employers five years or less (Figure 5).

FIGURE 5

More than Half of Participants with Small Accounts Are New to Their Jobs

Percentage of participants[1] with a 401(k) account balance less than $10,000 by tenure,[2] 2004



[1] At year-end 2004, 5.9 million, or 36 percent of, participants have account balances less than $10,000.

[2] Job tenure is generally years working at current employer, and thus may overstate years of participation in the current employer's 401(k) plan.

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

Second, since 401(k) plans were introduced relatively recently (about 25 years ago),[13] even older and longer-tenured employees could have participated in a 401(k) plan for, at most, about half of a career.[14] Nevertheless, the average account balance among participants in their sixties with more than 30 years of job tenure is $179,189 at year-end 2004 (Figure 6).

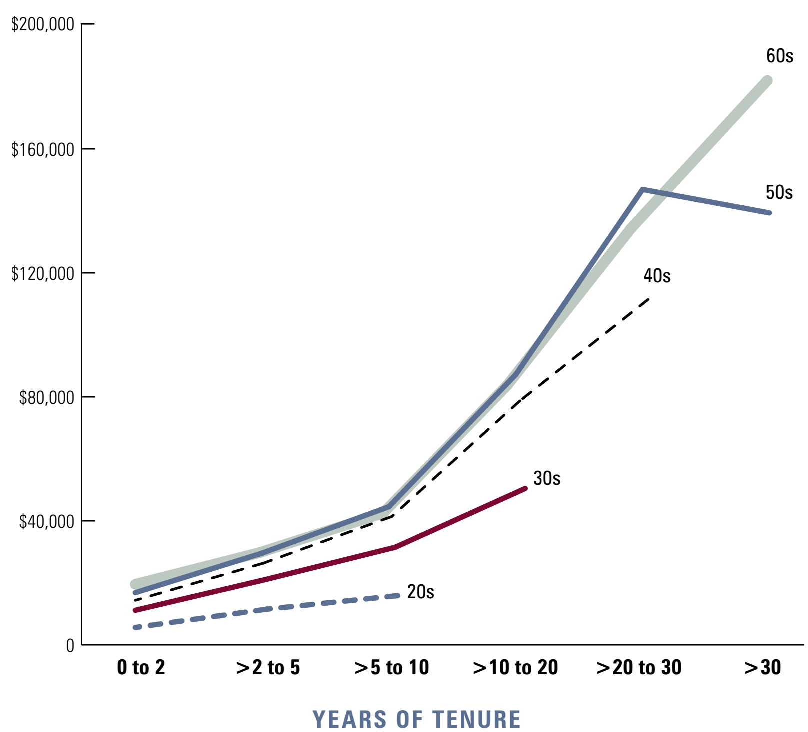
Average Asset Allocation Suggests that Investors Have a Long-Term Investment Horizon

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 7).[15] Altogether, equity securities—equity funds, the equity portion of balanced funds,[16] and company stock—represent about two-thirds of 401(k) plan participants' assets.[17] On average, asset allocations of 401(k) plan participants are little changed in 2004. Previous research indicates that in any given year, 401(k) plan participants generally do not rebalance or change the asset allocation in their accounts.[18]

FIGURE 6

Account Balances Increase with Age and Tenure

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



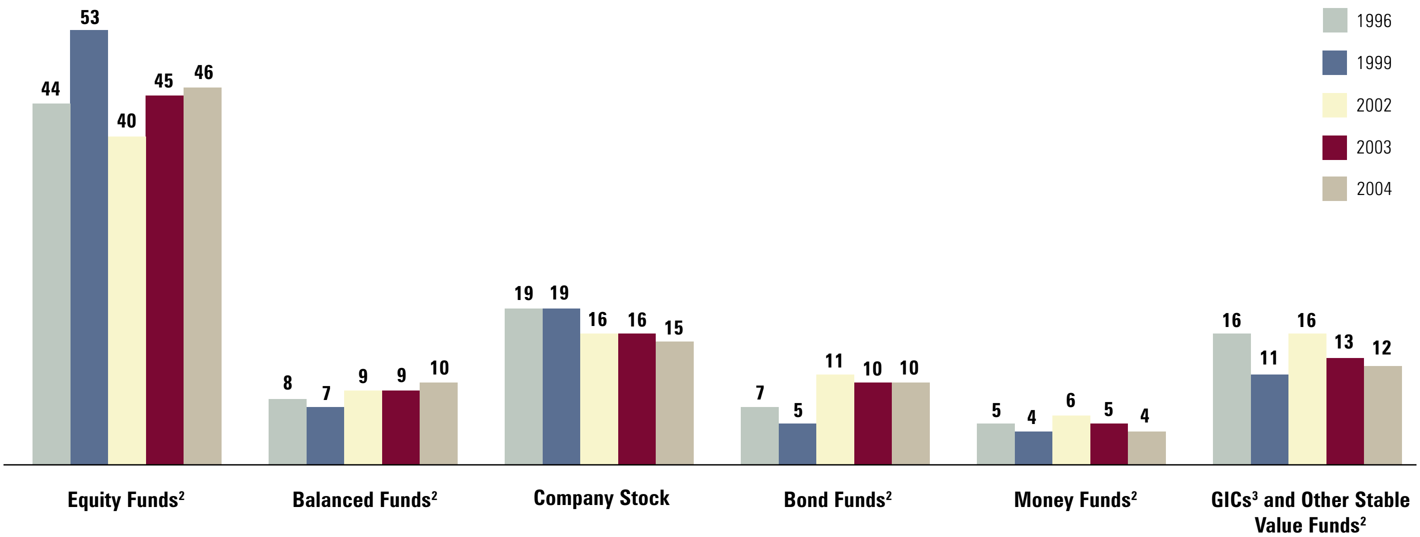
Note: The average account balance among all 16.3 million participants is $56,878; the median account balance is $19,926.

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

FIGURE 7

401(k) Plan Assets Concentrated in Equity Funds

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



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

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

[3] GICs are guaranteed investment contracts.

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

Younger 401(k) Plan Participants Tend to Favor Equities

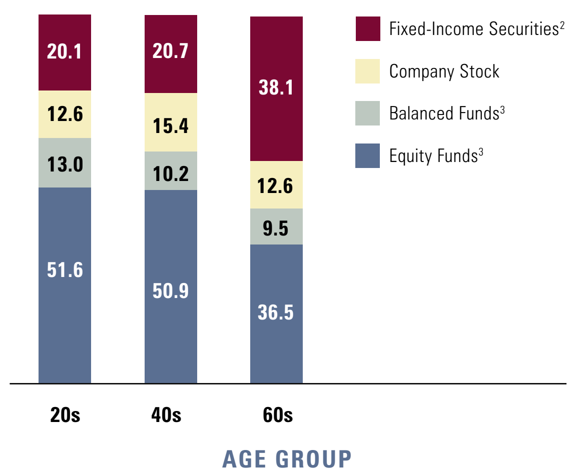
As observed in prior years, younger 401(k) plan participants still tend to hold a higher portion of their accounts in equity assets than older participants, who tend to invest more in fixed-income assets such as bond funds, guaranteed investment contracts (GICs) and other stable value funds, or money funds. On average, participants in their twenties have 52 percent of their account balances invested in equity funds, compared with about 37 percent of account balances for participants in their sixties (Figure 8).[19] Participants in their twenties hold only about 20 percent of their accounts in fixed-income securities (bond funds, GICs and other stable value funds, and money funds combined), while those in their sixties hold 38 percent of their assets in these investments.[20] Allocations to company stock continue to be very similar across age groups. Participants in their twenties have about 13 percent of their 401(k) plan account balances in company stock as did participants in their sixties, while those in their forties have 15 percent.

Again, these averages hide a wide range of individual activity. 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. Among these participants, 59 percent hold 20 percent or less of their account balances in company stock, including about 37 percent who do not hold company stock at all (Figure 9).[21] In contrast, about 11 percent

FIGURE 8

Allocation to Equity Funds Decreases with Age

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



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

[2] Fixed-income securities include bond funds, guaranteed investment contracts (GICs) and other stable value funds, and money funds.

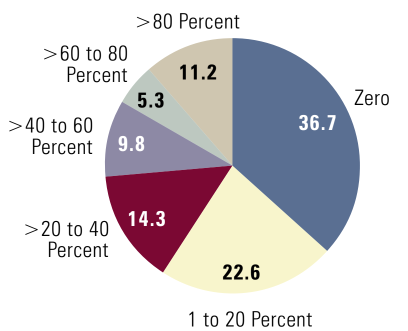
[3] "Funds" include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated.

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

FIGURE 9

More Than a Third of Participants Forgo Holding Company Stock

Asset allocation distribution of participant account balance to company stock in 401(k) plans with company stock,[1] percent of participants,[2] 2004



[1] Includes the 7.8 million participants in plans that offer company stock as an investment option.

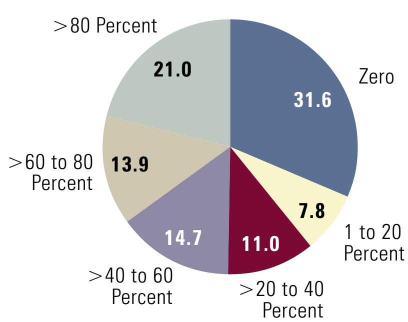
[2] Components do not add to 100 percent because of rounding.

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

FIGURE 10

Percent of Assets Allocated to Equity Funds Varies Widely Among Participants

Asset allocation distribution of 401(k) participant account balance to equity funds, percent of participants, 2004



Note: Includes the 16.3 million participants in the year-end 2004 EBRI/ICI database.

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

have more than 80 percent of their account balances invested in company stock. Furthermore, analysis of the asset allocation of recently hired participants finds that recently hired participants in 2004 are less likely than their counterparts in 1998 to invest in their employer's stock.[22]

Among individual participants, the allocation of account balances to equity funds also varies widely around the average of 46 percent for all participants in the 2004 EBRI/ICI database. Indeed, 21 percent of participants have more than 80 percent of their account balances invested in equity funds, while about 32 percent hold no equity funds at all (Figure 10).[23] However, in aggregate, about 53 percent of participants with no equity fund balances have exposure to the stock market through company stock and/or balanced funds.

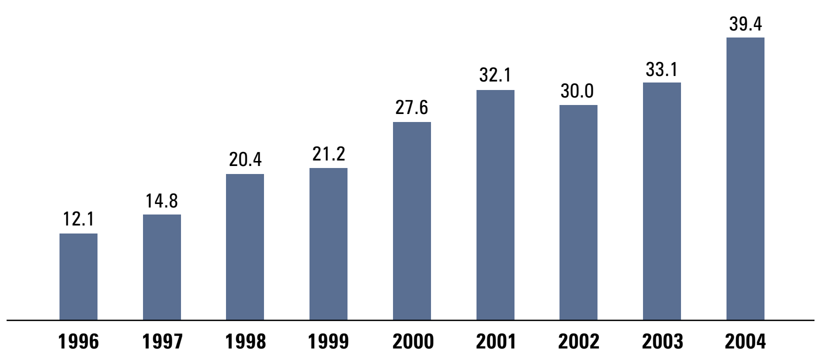
Lifestyle and Lifecycle Funds Gain Popularity

In recent years, various reports have indicated that lifestyle and lifecycle funds have become increasingly popular. For example, Profit Sharing/401(k) Council of America (PSCA; 1997–2005) reports that more 401(k) plan sponsors are offering lifestyle and/or lifecycle funds as an investment option (Figure 11).[24] 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.

FIGURE 11

More 401(k) Plans Offering Lifestyle, Lifecycle Funds

Percent of plans offering lifestyle and/or lifecycle funds, 1996–2004



Source: Profit Sharing/401(k) Council of America, Annual Surveys

In the EBRI/ICI database, lifestyle and lifecycle funds are included in the balanced fund category and among recently hired participants there has been a rising trend in the percentage of account balances invested in balanced funds. 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 12). A similar pattern occurs across all age groups.[25]

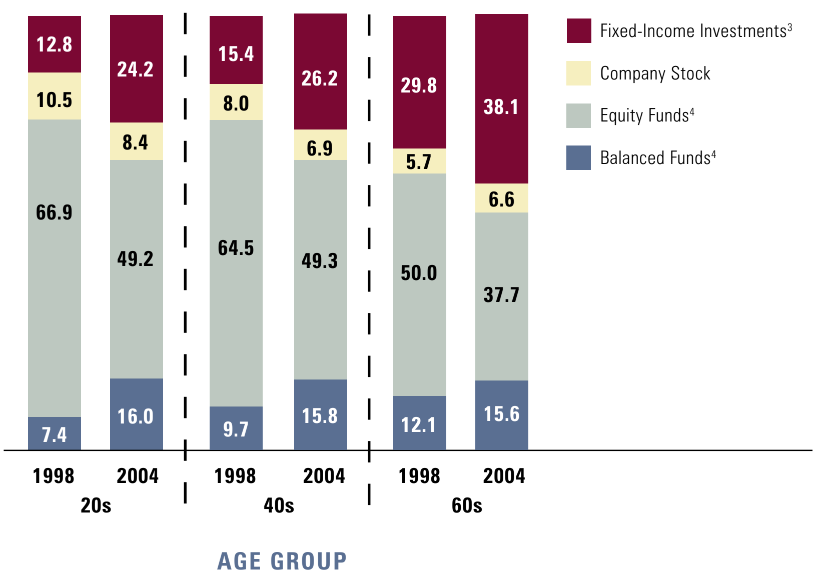
Plans Offering 401(k) Loans Are Common, But Loans Are Rarely Taken

Most participants in 401(k) plans are in plans that offer borrowing privileges.[26] Indeed, research indicates that offering a loan provision increases participation and contribution rates in 401(k) plans,[27] but concerns are also raised that individuals save only to then take those savings out.

FIGURE 12

Participants Now More Likely to Choose Balanced Funds

401(k) plan average asset allocation among participants with two or fewer years of tenure, percent of total,[1,2] 1998 and 2004



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

[2] Drawn from 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.

[3] Fixed-income investments include bond funds, guaranteed investment contracts (GICs) and other stable value funds, and money funds. For a detailed breakdown see Appendix Figure A28.

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

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

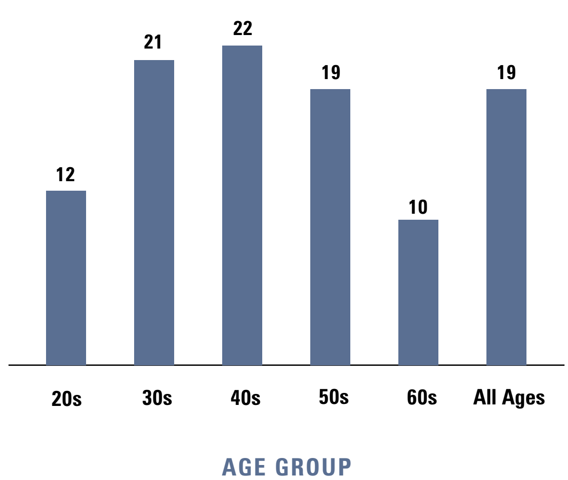
However, as has been the case for the nine years that the EBRI/ICI databases have tracked 401(k) plan participants' loan activity, relatively few participants make use of this borrowing privilege. At year-end 2004, only 19 percent of those eligible for loans have loans outstanding (Figure 13). As in previous years, loan activity varies with age, tenure, salary, account balance, and plan size.[28]

Among participants with outstanding loans at the end of 2004, the average unpaid balance is $6,946.[29] Participants' loan activity in 2004 matches previous years: loan balances as a percentage of account balances (net of the unpaid loan balance) for participants with loans continue to hover around 13 percent.[30] In addition, consistent with previous years, there is variation around this average: Older participants, longer-tenured participants, and participants with higher account balances tend to have lower loan ratios.

FIGURE 13

Few Participants Take Loans from Their 401(k) Plans

Percentage of eligible 401(k) participants with loans by participant age, 2004



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

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, and five sponsors of unit investment trusts. Its mutual fund members manage assets of approximately $8.370 trillion (representing approximately 95 percent of all assets of U.S. mutual funds); these funds serve approximately 87.7 million shareholders in more than 51.2 million households.

[4] For additional details on the composition of plans, participants, and assets in the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project database, see the Appendix, which is available online at: www.ici.org/pdf/per11-4_appendix.pdf.

This update extends previous findings from the project for 1996 through 2003. For year-end 2003 results, see Holden and VanDerhei (August 2004 and August 2004—Appendix). Results for earlier years are available in earlier issues of *Perspective*. All issues of *Perspective* are available through ICI's website at: www.ici.org/perspective/index.html.

Estimate of number of active 401(k) plan participants in 2004 is from Cerulli Associates (2004).

[5] See Holden and VanDerhei (January/February 2001) for the summary of the year-end 1999 results.

[6] When analyzing the change in account balances over time it is important to have a consistent sample. Comparing average account balances across different year-end snapshots can lead to false conclusions. For example, the addition of a large number of new plans (arguably a good event) to the database would tend to pull down the average account balance, which could then be mistakenly described as hurting current participants, but actually would tell us nothing about consistently participating workers. Similarly, the aggregate average account balance would tend to be pulled down if a large number of older participants happened to retire and roll over their account balances. In addition, changes in the sample of recordkeepers and/or changes in the set of plans 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.

[7] The average account balance ($91,042) among the 4.0 million consistent participants is higher than the average account balance ($56,878) among all 16.3 million 401(k) plan participants in the year-end 2004 database because the consistent participants have longer tenure, on average, compared to the entire database (and account balances tend to rise with tenure). Indeed, the minimum tenure in the consistent group at year-end 2004 is five years.

[8] The S&P 500 total return index increased 42.7 percent between December 2002 and December 2004. The Russell 2000 total return index, which represents the smaller of the large corporations, increased 74.2 percent over the same period and had surpassed its peak of early 2000 (Figure 2).

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

[10] The EBRI/ICI data are based on administrative records from a variety of recordkeepers that cover a wide range of plan sizes. For a more detailed description of the database, see the Appendix.

[11] For additional detail on account balances, see the Appendix.

[12] For research that examines how 401(k) assets might contribute to retirement income for future retirees, see results from the EBRI/ICI 401(k) Accumulation Projection Model published in Holden and VanDerhei (July 2005, November 2002, and November 2002–Appendix). A recent update of the EBRI/ICI 401(k) Accumulation Projection Model examined the impact of automatic enrollment in 401(k) plans over an entire career. Other recent research studies automatic enrollment: For example, see Hewitt Associates (2005a); PSCA (2005); Choi, Laibson, Madrian, and Metrick (July 2004); and The Vanguard Center for Retirement Research (July 2001 and May 2001). Additional recent research focuses on behaviors and factors that influence planning for retirement: For example, see Hurst (August 2005); Lusardi and Mitchell (August 2005); Hewitt Associates (July 2005); Utkus and Mottola (April 2005); Utkus and Young (March 2005); Hurd and Rohwedder (February 2005); Munnell and Sass (January 2005); Hewitt Associates (2005b); Fidelity Investments (2004); Mitchell and Utkus (2004); Ameriks, Nestor, and Utkus (November 2004); and The Vanguard Center for Retirement Research (September 2004).

[13] The Revenue Act of 1978 contained a provision that became Internal Revenue Code §401(k). The law went into effect on January 1, 1980, but it was not until November of 1981 that regulations were issued (see Employee Benefit Research Institute (February 2005)).

[14] It is possible that these older, longer-tenured workers accumulated DC plan assets, e.g., possibly in a profit sharing plan, prior to the introduction of 401(k) plan features. However, generally such DC plan arrangements did not permit employee contributions and often were designed to be supplemental to other employer plans. Nevertheless, it is possible that the average 401(k) account balance of older longer-tenure participants contains some savings accumulated prior to the advent of §401(k).

[15] Investment options are grouped into eight categories. 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; which are 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 (which 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) 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. See further discussion in the Appendix.

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 (see 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.

[16] At year-end 2004, 65 percent of balanced mutual fund assets were invested in equities (see Investment Company Institute, *Quarterly Supplemental Data*).

[17] Unless otherwise indicated, all asset allocation averages are expressed as a dollar-weighted average.

[18] For example, Hewitt Associates (2005b) reports that 11.4 percent of participants in their system made both a transfer and an investment change in 2004; Fidelity Investments (2004) finds 13 percent of DC plan participants in their system made exchanges in 2003; and The Vanguard Center for Retirement Research (September 2004) saw 14 percent of their DC plan participants trade in 2003. Holden and VanDerhei (September 2003) analyzes changes in year-end asset allocations among 5.3 million EBRI/ICI database 401(k) plan participants with accounts at the end of each year from 1999 through 2002. Choi, Laibson, Madrian, and Metrick (July 2004) find that 401(k) plan participants rarely make changes after the initial point of enrollment. Investment Company Institute (March 2001) finds that 89 percent of equity mutual fund shareholders in DC plans made no redemptions or redemption exchanges in 1998. In addition, Investment Company Institute (Spring 2000) finds that 81 percent of 401(k) plan households surveyed made no allocation changes in the 12 months preceding the survey (August 1997 through September 1998).

[19] 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.

[20] The tendency of younger participants to favor equity funds and older participants to favor fixed-income securities holds up even when accounting for investment options offered by the 401(k) plan sponsor (see Appendix Figure A20). The mix of investment options, particularly the inclusion of company stock and/or GICs and other stable value funds, offered by a plan sponsor significantly affects the asset allocation of the participants in a plan.

[21] See Appendix Figure A23 for the asset allocation distribution of participant account balances to company stock by age.

[22] See Appendix Figure A28. At plans that offer company stock as an investment option (but no GICs or stable value funds), about 18 percent of the year-end 2004 account balances of recently hired participants was invested in company stock, compared with about 24 percent among recently hired participants in 1998. At plans that offer both company stock and GICs or stable value funds as investment options, about 15 percent of the year-end 2004 account balances of recently hired participants was invested in company stock, compared with almost 19 percent among those recently hired in 1998.

[23] The percentage of participants holding no equity funds tends to increase with age; the percentage of participants holding no equity funds also tends to increase with tenure (see Appendix Figures A24 and A25).

[24] Investment Company Institute (August 2005) reports lifestyle and lifecycle mutual funds totaled $103 billion at year-end 2004, an increase of 49 percent over the year.

[25] For more detail by participant age group and investment menu, see Appendix Figure A28.

[26] In the 2004 EBRI/ICI database, 87 percent of participants are in plans offering loans.

[27] For example, see Utkus (July 2005); Mitchell, Utkus, and Yang (2005); Holden and VanDerhei (October 2001); Munnell, Sundén, and Taylor (December 2000); and U.S. Government Accountability Office (October 1997).

[28] For additional loan activity analysis, see the Appendix.

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

[30] The median loan amount outstanding as a percentage of remaining account balance is 18 percent at year-end 2004.

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