

EBRI Databook on Employee Benefits
Chapter 13:
Sec. 401(k) Plans

UPDATED NOVEMBER 2011

401(k) Balances and Changes Due to Market Volatility

The Employee Benefit Research Institute and the Investment Company Institute have been collaborating since 1996 to develop the most comprehensive database on 401(k) plan participants yet assembled. Participant data include demographic, contribution, asset allocation, and loan and withdrawal activity information. The [November 2010 Issue Brief](#) presents analysis of data collected for 2009 on 51,852 plans with 20.7 million participants and \$1.21 trillion in assets.

For a comprehensive listing of EBRI research utilizing this database, please see [the Defined Contribution and Participant Behavior Research Program](#) Web site.

The Employee Benefit Research Institute is giving monthly updates of 401(k) account balance estimates.

Data for the following tables are from the U.S. Department of Labor, Employee Benefit Security Administration (EBSA) tabulations of the Form 5000:

- Table 13.1 401(k) Trends in Number of Plans and Participants
- Table 13.2 401(k) Financial Trends

These tabulations are published when available and posted on the EBSA Web page at <http://www.dol.gov/ebsa/publications/main.html>. To locate the document desired, see section titled "Funded Research Papers." The title of the specific document is *Private Pension Plan Bulletin Historical Tables and Graphs*.

EBRI Research on 401(k) Plans based on the EBRI/ICI 401(k) Database

► Balances

What is the average and median account balance for all participants in the EBRI/ICI 401(k) Database from 1996-2009?

See Figure 9 on page 16 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

Data represents account balances with current employer only.

What percentage of participants had an account balance of less than \$10,000 and what percentage had more than \$100,000 in 2009?

See Figure 10 on page 17 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

Data represents account balances with current employer only.

► Asset Allocation

What is the average asset allocation in 401(k) plans from 1996-2009 (selected years)?

See Figure 20 on page 23 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

What is the average asset allocation in 401(k) plans by age in 2009?

- See Figure A21 on page 25 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)
- What is the average asset allocation in 401(k) plans by investment option and participant age in 2009?
See Figure 23 on page 27 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)
- What is the average asset allocation in 401(k) plans by investment option and salary in 2009?
See Figure 24 on page 28 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

Recent Hires

- What is the average asset allocation among participants with two or fewer years of tenure?
See Figure 39 on page 42 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#) Data is presented by participant age and investment option.
- What percentage of recently hired participants holds company stock from 1998 to 2009 by age?
See Figure 40 on page 43 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

Use of Target Date Funds

- What percentages of a consistent set of 401(k) plan participants who were in a plan offering Target-Date funds and who used them in 2007, 2008, and/or 2009 by various factors?
See Figure 1 on page 5 in the [August 2011 Issue Brief "Target-Date Fund Use in 401\(k\) Plans and the Persistence of Their Use, 2007-2009"](#). Data is presented for the following demographics: age, tenure, account balance and plan size (number of participants).
- What percentages of 401(k) plan participants who were in a plan offering Target-Date funds and who used them in 2007 and were still offered them in 2008 and 2009 by various factors including whether auto-enrolled in 2007?
See Figure 5 on page 11 in the [August 2011 Issue Brief "Target-Date Fund Use in 401\(k\) Plans and the Persistence of Their Use, 2007-2009"](#). Data is presented for the following demographics: age, tenure, account balance and plan size (number of participants).
- What percentages of Target-Date Fund users have all of their assets in Target-Date Funds in 2007, 2008, and 2009?
See Figure 6 on page 12 in the [August 2011 Issue Brief "Target-Date Fund Use in 401\(k\) Plans and the Persistence of Their Use, 2007-2009"](#). Data is presented for the following demographics: age, tenure, account balance and plan size (number of participants).
- What was their asset allocation in 2009 among 401(k) participants who had all of their assets allocated to target-date funds in 2007 but none in 2009?
See figure 10 on page 18 in the [August 2011 Issue Brief "Target-Date Fund Use in 401\(k\) Plans and the Persistence of Their Use, 2007-2009"](#). Data is presented for the following demographics: age, tenure, account balance and plan size (number of participants).

► Loans

- What percentage of 401(k) plans offer loans, by plan size, 2009?
See Figure 43 on page 44 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)
- What percentage of 401(k) plan participants have a loan by age, tenure, account size, or salary, 1996-2009 (selected years)?
See Figure 47 on page 46 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

► 401(k) Accumulations and Future Retiree Income

- What is the impact of continuous coverage in a 401(k) plan on median replacement rates for participants turning 65 between 2035 and 2039?
See Figure 1 on page 5 in the [November 2002 Issue Brief "Can 401\(k\) Accumulations Generate Significant Income for Future Retirees?"](#)
- What is the impact of various participant behaviors on median replacement rates from 401(k) plans for

persons reaching age 65 between 2030 and 2039?

See Figure 7 on page 16 in the [November 2002 Issue Brief "Can 401\(k\) Accumulations Generate Significant Income for Future Retirees?"](#)

What is the impact of equity market investment returns on median 401(k) replacement rates among participants reaching age 65 between 2030 and 2039?

See Figure 9 on page 19 in the [November 2002 Issue Brief "Can 401\(k\) Accumulations Generate Significant Income for Future Retirees?"](#)

► **401(k) Accumulations and future retiree income – Impact of Automatic Enrollment**

What is the impact of automatic enrollment on participation rates by worker income quartile?

See Figure 7 on page 11 in the [July 2005 Issue Brief "The Influence of Automatic Enrollment, Catch-Up, and IRA Contributions on 401\(k\) Accumulations at Retirement"](#)

What is the median projected replacement rate among 401(k) plan participants who are in a plan with automatic enrollment compared with all workers eligible to participate in a 401(k) plan?

See Figure 10 on page 4 in the [July 2005 Issue Brief "The Influence of Automatic Enrollment, Catch-Up, and IRA Contributions on 401\(k\) Accumulations at Retirement"](#)

What are the median replacement rates from 401(k) accumulations for workers turning 65 between 2030 and 2039 by income quartile at age 65?

See Figure 1 on page 4 in the [September 2007 Notes](#) article "The Expected Impact of Automatic Escalation of 401(k) Contributions on Retirement Income".

Data is presented for the following 4 scenarios:

- 1) Baseline 401(k) participants.
- 2) All eligible workers (401(k) participants and eligible non-participants)
- 3) Automatic enrollment (3% contribution rate: money market fund)
- 4) Automatic enrollment (6% contribution rate: life-cycle fund)

See page 2 of the article in the introduction section for definitions of each of the 4 scenarios.

See Figure 4 on page 6 for results if the employee maintains their contribution rate upon job change.

See Figure 5 on page 7 for results if the employee started over at the minimum contribution rate upon job change.

What is the self-reported maximum deferral rate under automatic escalation?

See Figure 2 on page 4 in the [September 2007 Notes](#) article "The Expected Impact of Automatic Escalation of 401(k) Contributions on Retirement Income".

Data is for 2007.

What is the impact of automatic enrollment on 401(k) plan accumulations by income quartile?

See figure 12 on page 19 in the [April 2010 Issue Brief, "The Impact of Automatic Enrollment in 401\(k\) Plans on Future Retirement Accumulations: A Simulation Study Based on Plan Design Modifications of Large Plan Sponsors"](#)

► **Analysis of Consistent Sample from 1999-2009**

401(k) participants in the consistent sample were older and had longer tenures than the universe of 401(k) participants by year-end 2009.

See Figures A6 and A7 on page 54 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

What were the average and median 401(k) account balances among individuals in the consistent sample, 1999-2009?

See Figure A8 on page 55 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

What was the percentage change in average 401(k) account balances among individuals in the consistent sample, 1999-2009?

See Figure A10 on page 56 in the [November 2010 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2009"](#)

Past Reports Based on the EBRI/ICI 401(k) Database:

- [January 1999 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances and Loan Activity"](#)

- [February 2000 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 1998"](#)
- [February 2001 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 1999"](#)
- [November 2001 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity In 2000"](#)
- [March 2003 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2001"](#)
- [September 2003 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2002"](#)
- [August 2004 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2003"](#)
- [September 2005 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2004"](#)
- [August 2006 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2005"](#)
- [August 2007 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2006"](#)
- [December 2008 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2007"](#)
- [July 2009 Issue Brief :What Does Consistent Participation in 401\(k\) Plans Generate?"](#)
- [October 2009 Issue Brief "401\(k\) Plan Asset Allocation, Account Balances, and Loan Activity in 2008"](#)

Other EBRI Research on 401(k) Plans

► Automatic Enrollment

What percentage of 401(k) or 403(b) sponsors are considering or have adopted automatic enrollment features?

See figures 9 and 10 on page 21 in the [July 2007 Issue Brief, "Retirement Income Adequacy After PPA and FAS 158: Part One—Plan Sponsors' Reactions"](#)

Data is presented as a function of whether the DB plan is closed to new hires or is frozen for all members.

What is the impact of automatic enrollment and automatic escalation of contributions on 401(k) plan accumulations as a multiple of final earnings?

See figure 6 on page 14 in the [June 2008 Issue Brief, "the Impact of PPA on Retirement Savings for 401\(k\) Participants"](#). Data is present assuming future eligibility is a function of current eligibility.

See figure 7 on page 15 in the [June 2008 Issue Brief, "the Impact of PPA on Retirement Savings for 401\(k\) Participants"](#). Data is present assuming future eligibility is not a function of current eligibility.

What is the success rate of achieving an 80 percent real replacement rate from Social Security and 401(k) accumulations combined using various assumptions?

See figure 3 on page 7 in the [November 2010 Issue Brief, "The Impact of Auto-Enrollment and Automatic Contribution Escalation on Retirement Income Adequacy"](#).

NOTE: See text on pages 5-8 for explanation of the results in figures 3 and 4.

What is the probability of success from modifying plan design features of automatic escalation and participant behavior?

See figure 4 on page 7 in the [November 2010 Issue Brief, "The Impact of Auto-Enrollment and Automatic Contribution Escalation on Retirement Income Adequacy"](#). Eleven design features are presented in the table.

NOTE: See text on pages 5-8 for explanation of the results in figures 3 and 4.

► Participation/Contributions

Data-set used is the Census Bureau's Survey of Income and Program Participation.

What is the level of participation in 401(k) plans among Americans ages 21-64 by various demographic characteristics?

See Figure 1 on page 4 in [October 2011 Notes “Ownership of Individual Retirement Accounts \(IRAs\) and 401\(k\)-Type Plans, 1996-2009”](#). Data is for years 1996, 2001, 2005, and 2009.

See Figure 3 on page 7 for data on ownership of a 401(k) plan only and 401(k) plan plus an IRA in [October 2011 Notes “Ownership of Individual Retirement Accounts \(IRAs\) and 401\(k\)-Type Plans, 1996-2009”](#). Data is for years 1996, 2001, 2004, 2005, and 2009.

Data is presented for the following demographics: age, family income (2004\$), education level, race/ethnicity, marital status, and gender.

What is the average number of years contributing to a 401(k) plan among Americans ages 21-64 by various demographic characteristics?

See Figure 4 on page 10 in [May 2004 Notes “Retirement Accounts and Wealth, 2001”](#). Data is from Nov. 1997-Feb. 1998; Nov. 1999-Feb. 2000; and Sept. 2001-Dec. 2001.

What is the mean amount contributed to a 401(k) plan among Americans ages 21-64 by various demographic characteristics?

See Figure 4 on page 7 in [October 2007 Notes “401\(k\)-Type Plan and Individual Retirement Accounts”](#). Data is for years 1996, 2001, and 2004.

Data is presented for the following demographics: age, family income (2004\$), education level, race/ethnicity, marital status, and gender.

What percentage of participants contributed the maximum amount to a 401(k) plan among Americans ages 21-64 by various demographic characteristics?

See Figure 4 on page 7 in [October 2007 Notes “401\(k\)-Type Plan and Individual Retirement Accounts”](#). For data from 1996, 2001, and 2004.

Data is presented for the following demographics: age, family income (2004\$), education level, race/ethnicity, marital status, and gender.

What is the percentage and number of wage and salary workers participating in a salary reduction (401(k)-type) plan by state?

[Salary reduction plan participation by state, 2003](#)

Data-set used is the Federal Reserve Board’s Survey of Consumer Finance. The unit of observation in the SCF is the family. Data is percentage of family heads.

Among all families surveyed, of those participating in a retirement plan, what percentage participated in a 401(k) type plan, 1992, 2004, and 2007?

See Figure 2 on page 7 in [August 2009 Issue Brief, “Individual Account Retirement Plans: An Analysis of the 2007 Survey of Consumer Finances, with Market Adjustments to June 2009”](#)

Data is presented for the following demographics: family income, age of family head, education of family head, race, housing status, and net worth percentile.

Among families headed by an individual under age 65 and a worker, of those participating in a retirement plan, what percentage participated in a 401(k) type plan, 1992, 2001, and 2004?

See Figure 3 on page 8 in [August 2009 Issue Brief, “Individual Account Retirement Plans: An Analysis of the 2007 Survey of Consumer Finances, with Market Adjustments to June 2009”](#)

Data is presented for the following demographics: family income, age of family head, education of family head, race, housing status, and net worth percentile.

► **Account Balances**

Data-set used is the Census Bureau’s Survey of Income and Program Participation.

What is the average account balance in 401(k) plans among Americans ages 21-64 by various demographic characteristics?

See Figure 4 on page 10 in [May 2004 Notes “Retirement Accounts and Wealth, 2001”](#).

For data from Nov. 1997-Feb. 1998; Nov. 1999-Feb. 2000; and Sept. 2001-Dec. 2001.

See Figure 2 on page 4 in [January 2005 Notes “401\(k\)-Type Plan and IRA Ownership”](#).

For data from 1996 and 2002.

What is the median account balance in 401(k) plans among Americans ages 21-64 by various demographic characteristics?

See Figure 4 on page 10 in [May 2004 Notes “Retirement Accounts and Wealth, 2001”](#).

For data from Nov. 1997-Feb. 1998; Nov. 1999-Feb. 2000; and Sept. 2001-Dec. 2001.

For further detail see Figure 2 on page 4 in [January 2005 Notes “401\(k\)-Type Plan and IRA Ownership”](#). For data from 1996 and 2002.

Data-set used is the Federal Reserve Board's Survey of Consumer Finance. The unit of observation in the SCF is the family. Data is percentage of family heads.

Among families with a current employer 401(k) plan, what was the median account balance, 1992, 1998, 2001, and 2004?

See Figure 7 on page 13 in [May 2006 Issue Brief, "Individual Account Retirement Plans: An Analysis of the 2004 Survey of Consumer Finances"](#)

Data is presented for the following demographics: family income, age of family head, education of family head, race, housing status, and net worth percentile.

Among families with a current employer defined contribution plan, what was the median account balance, 1992, 2004, 2007, and 2009?

See Figure 7 on page 13 in [August 2009 Issue Brief, "Individual Account Retirement Plans: An Analysis of the 2007 Survey of Consumer Finances, with Market Adjustments to June 2009"](#)

Data is presented for the following demographics: family income, age of family head, education of family head, race, housing status, and net worth percentile.

What is the relative important of IRA's vs employment-based individual account plans (such as 401(k)) for 2004, 2007, and 2009?

For 2004 data see Figure 9a on page 17

For 2007 data see Figure 9b on page 18

For 2009 data see Figure 9c on page 19 in the [August 2009 Issue Brief, "Individual Account Retirement Plans: An Analysis of the 2007 Survey of Consumer Finances, with Market Adjustments to June 2009"](#)

Data is presented for the following demographics: family income, age of family head, education of family head, race, housing status, and net worth percentile.

Among families with a current employer defined contribution plan and an account with a previous employer, what was the mean account balance, 2004?

See Figure 9b on page 17 in [May 2006 Issue Brief, "Individual Account Retirement Plans: An Analysis of the 2004 Survey of Consumer Finances"](#)

Data is presented for the following demographics: family income, age of family head, education of family head, race, housing status, and net worth percentile.

Among families with a current employer defined contribution plan and an account with a previous employer, what was the mean account balance, 2007?

See Figure 9b on page 18 in [August 2009 Issue Brief, "Individual Account Retirement Plans: An Analysis of the 2007 Survey of Consumer Finance, with Adjustments to June 2009"](#)

Data is presented for the following demographics: family income, age of family head, education of family head, race, housing status, and net worth percentile.

Among families with a current employer defined contribution plan and an account with a previous employer, what was the mean account balance, 2009?

See Figure 9c on page 19 in [August 2009 Issue Brief, "Individual Account Retirement Plans: An Analysis of the 2007 Survey of Consumer Finance, with Adjustments to June 2009"](#)

Data is presented for the following demographics: family income, age of family head, education of family head, race, housing status, and net worth percentile.

► **Asset Allocation**

Data-set used is the Federal Reserve Board's Survey of Consumer Finance. The unit of observation in the SCF is the family. Data is percentage of family heads.

What was the asset allocation of 401(k) plan participants by various demographic characteristics, in 1992?

See Figure 3 on page 9 in [January 2004 Notes "Retirement Plan Participation and Asset Allocation"](#). Data is presented for the following demographics, family income, age of family head, education of family head, race, and net worth percentile.

What was the asset allocation of 401(k) plan participants by various demographic characteristics, in 2001?

See Figure 3 on page 9 in [January 2004 Notes "Retirement Plan Participation and Asset Allocation"](#). Data is presented for the following demographics, family income, age of family head, education of family head, race, net worth percentile.

What was the asset allocation of 401(k) plan participants by various demographic characteristics, in 2004?

See Figure 3 on page 5 in [February 2007 Notes article, “Retirement Plan Participation and Asset Allocation, 2004”](#) Data is presented for the following demographics, family income, age of family head, education of family head, race, net worth percentile.

What was the asset allocation of 401(k) plan participants by various demographic characteristics, in 2007?

See Figure 3 on page 17 in the [November 2009 Notes article, “Retirement Plan Participation and Asset Allocation, 2007”](#) Data is presented for the following demographics, family income, age of family head, education of family head, race, net worth percentile.