# RETIREMENT SAVING IN WAKE OF FINANCIAL MARKET VOLATILITY

DECEMBER 2008





# **EXECUTIVE SUMMARY**

This paper summarizes results from two surveys conducted by the Investment Company Institute (ICI) in the past few months. With recent financial market volatility and millions of households personally directing their retirement savings, ICI sought to get a sense of retirement savers' reactions to the current market conditions. ICI took a two-pronged approach: surveying defined contribution (DC) plan recordkeepers regarding participant activity and conducting a household survey asking American households about their thoughts on their retirement accounts and retirement plan reforms suggested in policy circles.

Results from the DC plan recordkeeper survey, covering more than 22 million DC plan accounts, indicated:

- » DC plan participants have not tapped their accounts during this time of market volatility any more than in the past: only 3.7 percent of DC plan participants took withdrawals in 2008, with only 1.2 percent taking hardship withdrawals. In addition, loan activity in 2008 was stable.
- » Participants continued saving in their plans; only 3 percent stopped contributions in 2008.
- » Most participants stayed the course with their asset allocations; fewer than one in seven changed the asset allocation of their account balances, and fewer than one in 10 changed their contribution mix.

The household survey polled respondents regarding their views on retirement plan saving and offered them the opportunity to voice their opinions of reform proposals and policy priorities for the next U.S. president.

- » Most households with DC accounts agreed that these plans helped them think of the long term and made it easier for them to save. Slightly more than four in 10 DC-owning households indicated they probably wouldn't be saving for retirement if it weren't for their DC plans. Nevertheless, saving paycheck-by-paycheck made only about half of households surveyed less worried about the stock market.
- » More than 80 percent of DC-owning households said the immediate tax exclusion for retirement contributions was a big incentive to contribute.
- » Households' views on policy changes and priorities revealed a preference to preserve retirement account features and flexibility and to strengthen Social Security. A majority of households disagreed with proposals to remove or reduce tax incentives for retirement savings.
- » Households also indicated that they did not want the government to take away their ability to make investment decisions in their accounts or to replace their accounts with either a government promise or a government bond. More than two-thirds of households indicated that replacing retirement accounts with a government promise would not be an important policy for the U.S. president to support.
- » More than nine in 10 households rated strengthening Social Security as an important policy for the new president to support; 86 percent favored supporting policies that would control healthcare costs; and 85 percent favored policies that would encourage more workers to save in DC plans and IRAs.

1

### INTRODUCTION

Individual Retirement Accounts (IRAs) and defined contribution (DC) plan accounts<sup>1</sup> have become a common feature of the U.S. retirement landscape. More than half of total U.S. retirement assets are held in such accounts,<sup>2</sup> and nearly two-thirds of U.S. households have a portion of their assets invested in them.<sup>3</sup> The turmoil in the financial markets during this past year have led some opinion leaders and policymakers to raise questions about the value that these retirement accounts provide American workers and retirees.

Against this backdrop, ICI sought to find out: (1) what, if anything, households have done with respect to their retirement accounts in response to the financial market volatility, (2) what their views were on their 401(k) plans, and (3) what their opinions were on some proposed policy changes and priorities. The research has two components. The first is a survey of firms that keep the account-level records of 401(k) and other DC plans. The surveyed firms track the accounts of about 40 percent of all DC plan participants, and these firms provided information on DC plan participant withdrawals, loans, contributions, and changes in account balances through October 2008. The second component consists of answers to questions included in a series of national telephone surveys that GfK Custom Research North America fielded in October, November, and December 2008, covering a total sample of 3,000 U.S. households.

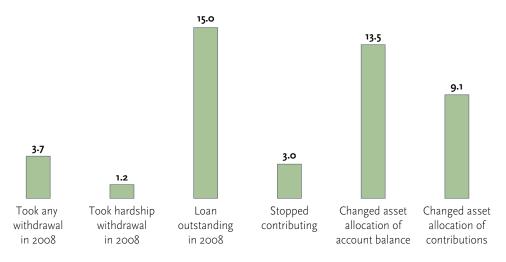
## PARTICIPANT RESPONSE TO FINANCIAL MARKET VOLATILITY

News reports have suggested that investors have reacted to the nearly year-long recession and the sharp drop in stock prices by tapping their workplace retirement accounts, reducing or stopping contributions, or changing how their existing balances or new contributions are invested. The recordkeeping firms that ICI surveyed to examine these reports represent a broad range of DC plans and cover 22.5 million employer-based retirement plan participant accounts. The broad scope of the recordkeeper survey respondents provides valuable inferences to recent withdrawal, contribution, loan, and asset allocation decisions of participants in these plans.

The withdrawal and contribution data indicate that most DC plan participants continued to participate in their retirement plans at work; through October 2008, only 3.7 percent of plan participants had taken withdrawals from their participant-directed retirement plans, with 1.2 percent taking hardship withdrawals (Figure 1).<sup>4</sup> This level of withdrawal activity is in line with past years' experiences among the recordkeepers, and it is consistent with the rate of withdrawal activity observed in the EBRI/ICI 401(k) database in 2000 (at the beginning of the 2000–2002 bear market in equities).<sup>5</sup>

FIGURE 1

# **Defined Contribution Plan Participant Activities in 2008**Summary of recordkeeper data through October 2008; percentage of participants



Source: ICI survey of DC plan recordkeeper data (January-October 2008)

In 2008, 15 percent of DC plan participants had a loan outstanding, as reported by the sample of recordkeepers. This recent loan activity also is in line with historical experience: the EBRI/ICI 401(k) database for year-end 2007 finds that 16 percent of 401(k) participants had loans outstanding at year-end 2007, in line with the past decade. The size of 401(k) loans, measured either as the dollar amount or as a percentage of the account balance, tends to be quite small according to the EBRI/ICI research. Furthermore, participants tend to repay the loans (with interest) to their accounts, thereby limiting the negative effects that loans would have on the overall accumulations at retirement.

Just as few participants are tapping their DC plan accounts, few have stopped contributing to them. Although there is concern that plan participants might stop devoting some of their paychecks to retirement saving during times of financial stress, recordkeepers indicate that only 3 percent of plan participants have stopped making contributions this year.

The current survey of recordkeeping firms also gathered information about asset allocation changes in DC account balances or contributions. During 2008, 13.5 percent of the participants had changed the asset allocation of their account balance, while 9 percent had changed the asset allocation of their contributions. Again, these data are not significantly different from other years, and are consistent with the behavior observed during the recession and bear market earlier this decade.<sup>9</sup>

ICI augmented the information on participant activities in their workplace retirement plans with questions about withdrawals and asset allocation in IRA accounts on the household surveys that GfK conducted. Similar to the DC plan participants, very few IRA-owning households took an unplanned withdrawal from their IRAs (Figure 2). Among IRA-owning households, 6 percent had taken unplanned withdrawals from their IRAs in response to the recent financial market performance. Most households withdrawing money were 60 or older and therefore generally eligible to do so without incurring a tax penalty. Finally, 14 percent of IRA-owning households indicated that they had rebalanced their IRA assets (moving some or all of an existing IRA account out of stocks and into fixed-income investments, or out of fixed-income investments and into stocks, or both).

FIGURE 2

IRA-Owning Households' Activities

Percentage of IRA-owning households performing the action indicated by age or household income, fall 2008

	All	Age of household survey respondent				
	households	Younger than 35	35 to 59	60 to 64	65 or older	
Rebalanced existing account assets	14	12	13	21	17	
Took an unplanned withdrawal	6	1	5	7	11	
Employed	3	1	3	5	3	
Not employed	3	0	2	2	8	
Made no change	73	78	76	67	67	
Number of respondents	1,060					

	_	Household income				
	All households	Less than \$30,000	\$30,000 to \$49,999	\$50,000 or more		
Rebalanced existing account assets	14	10	17	15		
Took an unplanned withdrawal	6	10	7	4		
Employed	3	4	3	3		
Not employed	3	6	4	1		
Made no change	73	71	73	74		
Number of respondents	1,060					

# VIEWS ON BENEFITS OF DC ACCOUNTS

The household survey explored a variety of characteristics of 401(k) plans to understand the benefits that workers value in 401(k) and other participant-directed retirement plans. A large majority of DC plan—owning households agreed that employer-sponsored retirement accounts helped them "think about the long term, not just my current needs" (90 percent), and that payroll deduction "makes it easier for me to save" (88 percent) (Figure 3). There was little variation in responses among age and income groups, although respondents who were youngest (younger than 35) and oldest (65 or older) were somewhat less likely to agree that payroll deduction made it easier for them to save, compared with households aged 35 to 64.

Saving in employer-sponsored retirement plans and IRAs has certain tax advantages. For example, contributions that a worker makes to these plans reduce a worker's taxable income by the amount of the contribution. In addition, the

FIGURE 3

#### DC-Owning Households' Views on DC Savings Vehicle

Percentage of DC-owning households agreeing with each statement by age or household income, fall 2008

		Age of household survey responder			
	All households	Younger than 35	35 to 49	50 to 64	65 or older
My employer-sponsored retirement account helps me think about the long term, not just my current needs.	90	89	91	92	86
Payroll deduction makes it easier for me to save.	88	85	90	91	86
The immediate tax savings from my retirement plan are a big incentive to contribute.	81	78	80	83	84
Knowing that I'm saving from every paycheck makes me less worried about the stock market's performance.	54	57	49	52	60
I probably wouldn't save for retirement if I didn't have a retirement plan at work.	43	38	44	45	50
Number of respondents	1,575				

		Household income		
	All households	Less than \$30,000	\$30,000 to \$49,999	\$50,000 or more
My employer-sponsored retirement account helps me think about the long term, not just my current needs.	90	87	91	91
Payroll deduction makes it easier for me to save.	88	84	88	90
The immediate tax savings from my retirement plan are a big incentive to contribute.	81	75	79	84
Knowing that I'm saving from every paycheck makes me less worried about the stock market's performance.	54	46	56	54
I probably wouldn't save for retirement if I didn't have a retirement plan at work.	43	59	47	38
Number of respondents	1,575			

Note: Figure reports percentage of households who "strongly agreed" or "somewhat agreed" with the statement. The remaining households "somewhat disagreed" or "strongly disagreed."

retirement accounts benefit from tax-deferred growth because taxes are not due until the individual withdraws money from the account. More than 80 percent of DC-owning households agreed that the "immediate tax savings from my retirement plan are a big incentive to contribute" (Figure 3). Agreement was high across all age and income groups, although it was higher for households with incomes of \$50,000 or more (84 percent) compared with households with incomes below \$30,000 (75 percent).

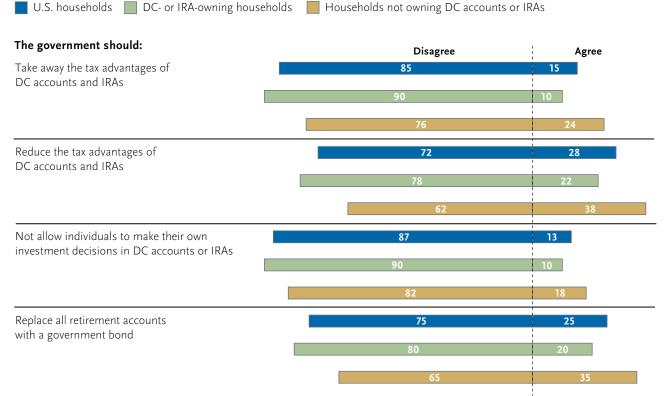
Two other possible benefits resonated less with retirement plan participants. Saving from each paycheck into a retirement plan helps workers to continue investing in down markets, dollar-cost average their investments, and benefit when stock and bond markets recover. Interviewees were asked whether "knowing that I'm saving from every paycheck makes me less worried about the stock market's performance." A slight majority (54 percent) agreed with that statement, with support being the greatest among youngest households (younger than 35) and oldest households (65 or older) (Figure 3).

A minority of households with DC accounts (43 percent) agreed with the statement that "I probably wouldn't save for retirement if I didn't have a retirement plan at work" (Figure 3). Agreement was the weakest among working-age households and households with incomes of \$50,000 or more. The fact that these respondents were more likely to disagree is consistent with other household survey information that finds that these groups typically list retirement as the most important savings goal.<sup>11</sup> In addition, for households with incomes of \$50,000 or more, Social Security provides a lower replacement of income in retirement than it does for households earning below \$50,000, making it far more necessary for middle- and upper-income households to have retirement savings to supplement their Social Security benefits.<sup>12, 13</sup>

FIGURE 4

#### Households' Opinions of Suggested Changes

Percentage agreeing or disagreeing with each statement by ownership status, fall 2008



#### Number of respondents: 3,000

Note: Figure plots percentage of households who "strongly agreed" or "somewhat agreed" with the statement in the "Agree" column and the remaining households who "somewhat disagreed" or "strongly disagreed" in the "Disagree" column.

# VIEWS ON POLICY CHANGES AND PRIORITIES

Some opinion leaders and policymakers have questioned the public policy value of the tax deferral that 401(k)s and IRAs receive. Survey respondents were asked whether the government should take away these tax advantages. A very large majority, 85 percent, disagreed that the tax incentives should be removed (Figure 4). Opposition to elimination of the tax deferral was the strongest among households with such accounts, with 90 percent opposing the removal of the tax incentives. But even 76 percent of the households without these accounts opposed eliminating the incentives. Prime working-age households (aged 35 to 64) were slightly more likely to oppose removal of the tax incentive, compared with the youngest and oldest households (Figure 5).

The survey also posed the question of whether the tax advantages should be reduced. A very large, albeit somewhat smaller, majority opposed reducing the tax advantages of these accounts. Nearly three-quarters, 72 percent, of all households disagreed that these tax benefits should be reduced (Figure 4). Among households with retirement accounts, 78 percent disagreed with reducing the tax benefits, whereas among households without such accounts, 62 percent disagreed with reducing the tax benefits. Opposition to reducing the tax incentives was the greatest among households between the ages of 35 and 64, with three-quarters of these households opposed to reducing the tax incentives (Figure 5).

FIGURE 5

#### Households' Opinions of Suggested Changes

Percentage of U.S. households disagreeing with each statement by age or household income, fall 2008

		Age of household survey respondent			
The government should:	All households	Younger than 35	35 to 49	50 to 64	65 or older
Take away the tax advantages of DC accounts and IRAs	85	80	89	87	83
Reduce the tax advantages of DC accounts and IRAs	72	69	75	76	68
Not allow individuals to make their own investment decisions in DC accounts or IRAs	87	85	89	89	83
Replace all retirement accounts with a government bond	75	66	75	80	80
Number of respondents	3,000				

		Household income		
The government should:	All households	Less than \$30,000	\$30,000 to \$49,999	\$50,000 or more
Take away the tax advantages of DC accounts and IRAs	85	75	85	92
Reduce the tax advantages of DC accounts and IRAs	72	62	70	81
Not allow individuals to make their own investment decisions in DC accounts or IRAs	87	83	89	90
Replace all retirement accounts with a government bond	75	63	75	84
Number of respondents	3,000			

Note: Figure reports percentage of households who "strongly disagreed" or "somewhat disagreed" with the statement. The remaining households "somewhat agreed" or "strongly agreed."

And although middle- and upper-income households were more likely to be opposed, a majority of very low income households also did not support reducing the tax incentives. Among households with incomes of \$50,000 or more, 81 percent disagreed with reducing the tax incentives, compared with 62 percent of the households making less than \$30,000.

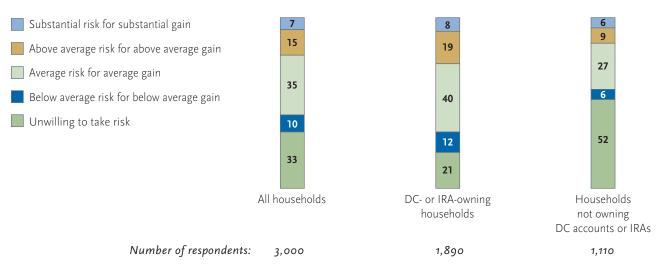
Others have questioned the wisdom of allowing individuals to make their own investment decisions in their retirement accounts. Various changes to the pension laws were adopted in 2006 with broad bipartisan support in Congress to give employers more flexibility in assisting their workers make investment decisions. <sup>14</sup> More recent proposals would go further by dictating certain types of investment choices, and some have even suggested that the government take over these plans or prevent future workers from investing in them. When interviewees were asked if they agreed or disagreed with the statement that the "government should not allow individuals to make their own investment decisions" in DC retirement accounts and IRAs, 87 percent disagreed with this statement (Figure 4). Disapproval of this statement was the strongest among respondents between the ages of 35 and 64, with 89 percent opposing the proposal (Figure 5). Individuals in households with incomes of less than \$30,000 also rejected the policy at similar levels. The degree of opposition was higher among households with retirement plans (90 percent) than it was for those without such plans (82 percent) (Figure 4).

In a similar vein, some academics have proposed that the federal government assume the risk of individuals' retirement accounts or direct how the savings should be invested. These proposals found strong opposition among households with retirement accounts and those without such accounts. Respondents were asked how they viewed a proposal for the government to "replace all retirement accounts with a government bond." Three-quarters of respondents disagreed with this proposal, with the strongest opposition among households aged 50 or older, or households with income of \$30,000 or more (Figures 4 and 5). Among households with retirement accounts, 80 percent opposed this proposal, but even 65 percent of households without these accounts disagreed with this recommendation.

FIGURE 6

Households' Willingness to Take Risk

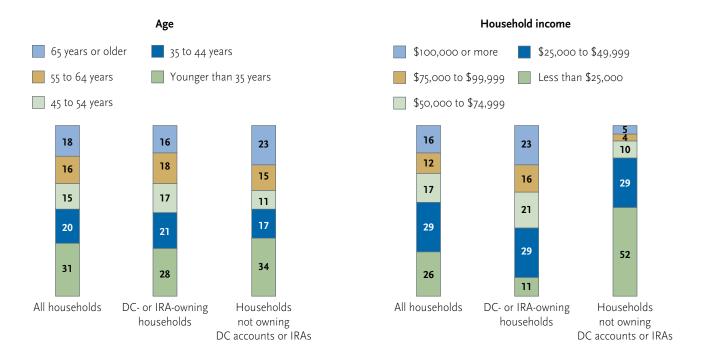
Percentage of U.S. households by ownership status, fall 2008



The greater level of opposition to the government replacing retirement accounts with a government bond among individuals with 401(k)-type plans and IRAs is driven, in part, by the fact that the balances in these accounts are workers' own retirement savings; and despite the recent downturn in the stock market, government control of workers' savings is not a popular remedy for the recent market events. In addition, participants in such plans are clearly willing to take more investment risk, on average, than are households not investing in these plans. When asked about their willingness to take risk, two-thirds of DC- or IRA-owning households were willing to take average or more risk, compared with 42 percent of the households not invested in these plans (Figure 6). The lower risk preference among nonparticipants is likely one of the reasons that they would be more willing for the government to replace such plans with a government bond. These nonparticipating households tend to be lower-income and younger households who are living more at the economic margins, and they are therefore less able and willing to put any assets at risk because they rely on these savings to meet current consumption needs (Figure 7). Also, Social Security replaces the largest portion of incomes for lower-income households in retirement.

Opinion Survey of U.S. Households

Percentage of U.S. households by ownership status and demographic characteristics, fall 2008



The question about government replacement of 401(k)s was alternatively posed as how "important would it be for the new U.S. president to support a policy to take over peoples' retirement accounts, such as 401(k) accounts, and replace them with a government promise." More than two-thirds of the respondents said that this should not be an important policy for the new president to support (Figure 8). Seventy-one percent of the households with retirement accounts said that this was not an important policy for the new president to support, but even 61 percent of those without retirement accounts did not see it as important to adopt. Households older than 34 and those with incomes above \$30,000 viewed this policy the most negatively (Figure 9).

By comparison, 94 percent of recently surveyed households said that it was important for the new president to support a policy "that would strengthen Social Security," 86 percent favored supporting a policy to control healthcare costs, and 85 percent favored policies that would encourage more workers to participate in retirement plans and save in IRAs

(Figure 8).

# FIGURE 8 Households' Opinions on Proposed Policies Percentage labeling policy "important" or "very important" by ownership status, fall 2008 U.S. households DC- or IRA-owning households Households not owning DC accounts or IRAs The U.S. president should support a policy that would: Not important Important Take over people's retirement accounts, such as 401(k) accounts, and replace them with a government promise Strengthen Social Security Control healthcare costs

Number of respondents: 3,000

Encourage more workers to participate in retirement plans and save in IRAs

Note: Figure plots percentage of households who labeled the policy "very important" or "important" in the "Important" column and the remaining households who labeled the policy "not too important" or "not at all important" in the "Not important" column.

#### FIGURE 9

# Households' Opinions on Proposed Policies

Percentage of U.S. households labeling policy "important" or "very important" by age or household income, fall 2008

		Age o	survey respond	ondent	
The U.S. president should support a policy that would:	All households	Younger than 35	35 to 49	50 to 64	65 or older
Take over people's retirement accounts, such as 401(k) accounts, and replace them with a government promise	32	42	29	28	28
Strengthen Social Security	94	94	94	95	94
Control healthcare costs	86	88	88	84	83
Encourage more workers to participate in retirement plans and save in IRAs	85	82	85	85	86
Number of respondents	3,000				

		Household income			
The U.S. president should support a policy that would:	All households	Less than \$30,000	\$30,000 to \$49,999	\$50,000 or more	
Take over people's retirement accounts, such as 401(k) accounts, and replace them with a government promise	32	43	33	24	
Strengthen Social Security	94	96	96	91	
Control healthcare costs	86	90	89	83	
Encourage more workers to participate in retirement plans and save in IRAs	85	84	86	85	
Number of respondents	3,000				

Note: Figure reports percentage of households who labeled the policy "very important" or "somewhat important." The remaining households labeled the policy "not too important" or "not at all important."

# APPENDIX: THE GFK OMNITEL SURVEY

OmniTel is a weekly national telephone omnibus service of GfK Custom Research North America. The sample for each week's OmniTel wave consists of 1,000 completed interviews, made up of male and female adults (in approximately equal number), all 18 years of age or older. Each OmniTel study is based on a random digit dialing (RDD) probability sample of all telephone households in the continental United States.<sup>15</sup> The median age among households in the survey was 42 years old, and the median income was \$45,000. The overall sampling error for the survey is ± 1.8 percentage points at the 95 percent confidence level.<sup>16</sup>

#### **NOTES**

- <sup>1</sup> DC plans include 401(k), 403(b), 457, and other DC plans.
- <sup>2</sup> See Investment Company Institute 2008.
- <sup>3</sup> More than half (52 percent) of U.S. households had DC accounts, 41 percent had IRAs, and 64 percent held DC accounts or IRAs on net data tabulated from ICI's Annual Mutual Fund Shareholder Tracking Survey fielded in May and June 2008; sample of 4.100 households.
- <sup>4</sup> There are two types of withdrawals possible from DC plans: non-hardship and hardship. An in-service withdrawal occurs if the participant is still employed by the plan sponsor. Generally, participants withdrawing after age 59½ are categorized as non-hardship withdrawals. A participant seeking a hardship withdrawal must demonstrate financial hardship and generally faces a 10 percent penalty on the taxable portion of the withdrawal. If a plan allows loans, participants are generally required to first take a loan before they are permitted to take a hardship withdrawal.
- The Employee Benefit Research Institute (EBRI) and ICI collaborate on an annual 401(k) data collection project. Analysis of the 2000 EBRI/ICI 401(k) database found that 4.5 percent of active 401(k) plan participants had taken in-service withdrawals, including hardship withdrawals. Withdrawal activity varied with participant age; participants younger than 60 were much less likely to take a withdrawal compared with participants in their sixties. See Holden and VanDerhei 2002a and 2002b.
- <sup>6</sup> The EBRI/ICI 401(k) database update reports loan activity among 401(k) participants in plans that allow loans. Ninety percent of participants in the database were in plans that offer loans; among those participants, 18 percent had a loan outstanding at year-end 2007. This translates to 16 percent of all active 401(k) participants having a loan outstanding. The year-end 2007 EBRI/ICI database includes statistical information about 21.8 million 401(k) participants in 56,232 plans, with \$1.425 trillion in assets. See Holden, VanDerhei, Alonso, and Copeland 2008.
- <sup>7</sup> At year-end 2007, the median loan outstanding was \$4,167 and represented, on average, 12 percent of the remaining account balance. See Holden, VanDerhei, Alonso, and Copeland 2008.
- <sup>8</sup> The EBRI/ICI 401(k) Accumulation Projection Model examines the impact of loan activity on future 401(k) accumulations. See Holden and VanDerhei 2002a.
- <sup>9</sup> Although the EBRI/ICI 401(k) database does not have information on participant trading activity, it is possible to compare snapshots of year-end asset allocations among participants present in multiple years in the database. An analysis of changes in year-end asset allocation among a consistent group of 5.3 million 401(k) participants between year-end 1999 and year-end 2002 suggests that 71 percent of 401(k) participants did not actively change their equity fund allocation during that time period. See Holden and VanDerhei 2003. Historically, recordkeepers find that in any given year, DC plan participants generally do not rebalance in their accounts (for references to this research, see endnote 80 in Holden, Brady, and Hadley 2006).
- The benefit of tax deferral is not the upfront tax deduction. Indeed, in many cases the benefits of tax deferral will be equivalent to the tax benefits of Roth treatment, which does not involve an upfront tax deduction. Although not immediately obvious, if tax rates are the same at the time of contribution and the time of distribution, the tax treatment of a Roth contribution—where contributions are taxed but investment earnings and distributions are untaxed—provides the same tax benefits as tax deferral. Because of this fact, tax economists often equate the benefit of tax deferral to earning investment returns—interest, dividends, and capital gains—that are free from tax.

- The Federal Reserve Board's Survey of Consumer Finances includes questions asking households to give their reasons for saving and rank the most important reason for saving. Overall, 36 percent of U.S. households in 2004 reported that saving for retirement was their household's primary reason for saving. Prime working-age and middle- to upper-income households were much more likely to indicate that retirement saving was their household's primary savings goal. See Brady and Sigrist 2008.
- <sup>12</sup> An individual's Social Security benefit (called the Primary Insurance Amount, or PIA) is derived using a formula applied to their monthly earnings, averaged over their lifetime, after adjustment for inflation and real wage growth (called the Average Indexed Monthly Earnings, or AIME). The PIA for newly eligible retirees in 2008 (those born in 1946) is equal to 90 percent of the first \$744 of AIME; plus 32 percent of AIME between \$744 and \$4,483; and 15 percent of any AIME over \$4,483. The decline in the benefit formula percentages from 90 percent to 32 percent and then to 15 percent is the reason why lower earners get a higher benefit relative to their preretirement earnings. See the Social Security Administration website (www.ssa.gov) for more details about benefit formulas and parameters.
- <sup>13</sup> See Brady and Sigrist 2008.
- <sup>14</sup> U.S. Joint Committee on Taxation 2006 summarizes Pension Protection Act changes.
- 15 The RDD sampling system is totally computer based and provides an equal probability of selection for each and every telephone household. All completed interviews are weighted to ensure accurate and reliable representation of the total population, 18 years or older. The raw data are weighted by a custom-designed computer program, which automatically develops a weighting factor for each respondent. This procedure employs five variables: age, gender, education, race/ethnicity, and geographic region. Each interview is assigned a single weight derived from the relationship between the actual proportion of the population with its specific combination of age, gender, education, race/ethnicity, and geographic characteristics and the proportion in the sample that week.
- The use of sample surveys is standard practice for constructing estimates about a total population. Estimates derived through survey sampling are subject to sampling error. As sample size increases, the level of potential sampling error generally becomes smaller.

#### REFERENCES

Brady, Peter, and Stephen Sigrist. 2008. "Who Gets Retirement Plans and Why," *Investment Company Institute Perspective* 14, no. 2 (September).

Investment Company Institute. 2008. "The U.S. Retirement Market, Second Quarter 2008," *Investment Company Institute Fundamentals* 17, no. 3-Q2 (forthcoming). Washington, DC: Investment Company Institute.

Holden, Sarah, Peter Brady, and Michael Hadley. 2006. "401(k)Plans: A 25-Year Retrospective," *Investment Company Institute Perspective* 12, no. 2 (November).

Holden, Sarah, and Jack VanDerhei. 2002a. "Can 401(k) Plans Generate Significant Income for Future Retirees?" *Investment Company Institute Perspective* 8, no. 3, and *EBRI Issue Brief*, no. 251 (November). Washington, DC: Investment Company Institute and Employee Benefit Research Institute.

Holden, Sarah, and Jack VanDerhei. 2002b. "Appendix: EBRI/ICI 401(k) Accumulation Projection Model," *Investment Company Institute Perspective* 8, no. 3A (November). Washington, DC: Investment Company Institute.

Holden, Sarah, and Jack VanDerhei. 2003. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2002," *Investment Company Institute Perspective* 9, no. 5, and *EBRI Issue Brief*, no. 261 (September). Washington, DC: Investment Company Institute and Employee Benefit Research Institute.

Holden, Sarah, Jack VanDerhei, Luis Alonso, and Craig Copeland. 2008. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2007," *Investment Company Institute Perspective* 14, no. 3, and *EBRI Issue Brief*, no. 324 (December). Washington, DC: Investment Company Institute and Employee Benefit Research Institute.

U.S. Joint Committee on Taxation. 2006. "Technical Explanation of H.R. 4, the 'Pension Protection Act of 2006,' as Passed by the House on July 28, 2006, and as Considered by the Senate on August 3, 2006." JCX-38-06 (August). Washington, DC: U.S. Joint Committee on Taxation. Available at www.jct.gov/x-38-06.pdf.



1401 H Street, NW Washington, DC 20005 202/326-5800 www.ici.org

Copyright © 2008 by the Investment Company Institute