

RETIREMENT: ARE PLAN SPONSORS AND PARTICIPANTS PARTING WAYS?*

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TODAY TWO TRENDS HAVE COMBINED TO DRAW attention to retirement in America. First, the aging of the U.S. population has shifted focus from the accumulation stage of retirement saving and planning to the distribution or “decumulation” phase. Comprised of more than 78 million individuals, the Baby Boom generation represented 26 percent of the U.S. population in 2007. Second, over the past two decades, defined contribution (DC) plans have evolved to be the predominant private-sector pension plan. About 6 in 10 U.S. households headed by a Baby Boomer had DC accounts in 2007; almost three-quarters had DC plan accounts or individual retirement accounts (IRAs). Looking ahead as the Baby Boom and future generations start entering retirement, the questions of how the process will impact 401(k) and other DC plan sponsors, DC plan assets, and indeed the retirees themselves arise. To explore these questions, it is instructive to look back at activities to date involving retirement and DC plans.

This paper combines data from three very different sources to analyze the distribution decisions and activities of DC plan participants at retirement. First, the U.S. Department of Labor’s Form 5500 data are used to study distribution activity among DC plans. With the rollover activity into IRAs and the demographic pressures of the aging Baby Boom generation, there is much discussion of the drain on 401(k) and other DC plans as a result. This section of the paper explores whether this drain is a myth or a reality. Second, a proprietary survey conducted by the Profit Sharing/401k Council of America (PSCA)¹ explores plan sponsors’ thinking around the distribution decisions of their participants. Finally, a proprietary survey conducted by the Investment Company Institute (ICI)² gathered information regarding the distribution decisions of a group of recent retirees. This household survey, fielded in the fall of 2007, examines the choices made by DC plan participants at retirement. In

addition, this section of the paper explores the sources consulted by retirees when making the distribution decision and the motivations behind the choices.

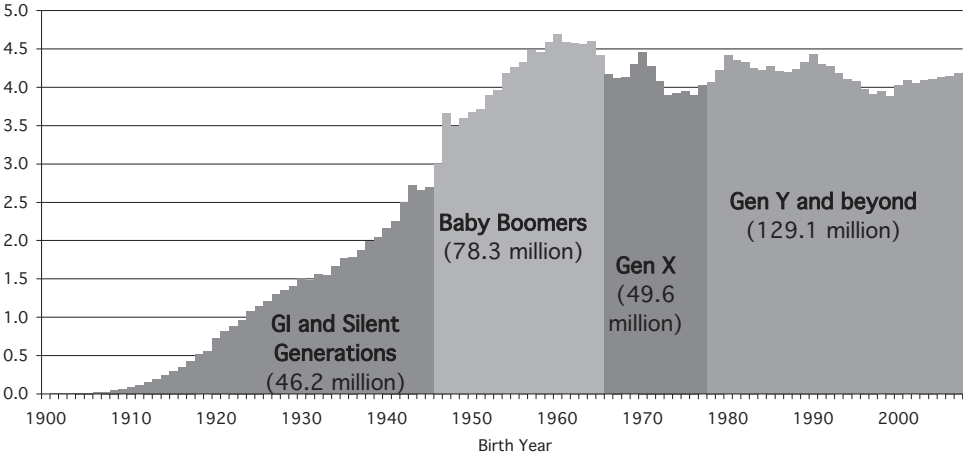
DEMOGRAPHICS AND THE RETIREMENT MARKET LANDSCAPE

Research finds that demographic changes tend to work slowly through financial markets over time.³ Nevertheless, the maturing of the Baby Boom generation has not gone without notice. In 2007, Baby Boomers numbered 78.3 million individuals and represented 26 percent of the U.S. population (Figure 1).⁴ Although the U.S. population does not dramatically decline after the Baby Boom and millions of individuals have retired prior to the Baby Boom, there is a great deal of emphasis on the pending retirement of the Baby Boom generation. The potential stresses resulting from an aging population include pressures on Social Security and Medicare to provide benefits as the ratio of beneficiaries to workers rises and pressures in the financial markets as retirees convert savings into income. While research finds the impact of generational shifts on financial markets in aggregate to be minor, the changes may be significant for a given DC plan, a given asset manager, or a given retiree.

At year-end 2007, the total U.S. retirement market held \$17.9 trillion in assets (Figure 2). Representing both employer-sponsored defined benefit (DB) and DC plans, as well as IRAs and annuity reserves, this retirement nest egg represented 36 percent of U.S. household financial assets.⁵ Federal government retirement plans, the smallest component of the U.S. retirement market, held \$1,197 billion, of which \$232 billion was in the federal Thrift Savings Plan (TSP),⁶ with the remainder primarily invested in nonmarketable government securities held for the federal DB plans.⁷ Annuities (fixed and variable) not held in IRAs or employer-sponsored retirement plans amounted to \$1,592 billion. The next largest component of the total U.S. retirement market is private-sector DB plans, holding \$2,638 billion in assets. State and local government DB plan assets surpass private-sector DB plan assets,

*The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Investment Company Institute, the Profit Sharing/401k Council of America, or their members.

Figure 1: 2007 U.S. Population by Birth Year
Millions



Source: Tabulations of U.S. Census Bureau Population Data (see U.S. Census Bureau).

Figure 2: U.S. Total Retirement Market
Billions of dollars, year-end, selected years

	IRAs	DC plans ¹	State and local government pension plans	Private DB plans	Federal pension plans ²	Annuities ³	Total
1985	241	509	405	813	172	181	2,321
1990	637	892	739	922	340	391	3,921
1995	1,288	1,717	1,344	1,496	541	582	6,968
1999	2,651	3,001	2,361	2,117	774	928	11,833
2000	2,629	2,969	2,335	2,009	797	951	11,690
2001	2,619	2,663	2,254	1,845	860	1,041	11,281
2002	2,533	2,472	1,980	1,670	894	1,001	10,550
2003	2,993 ^e	3,043	2,399	2,025	958	1,125	12,545
2004	3,299	3,335	2,626	2,162	1,023	1,332	13,778
2005	3,652 ^e	3,620	2,765	2,310	1,072	1,443	14,862
2006	4,220 ^e	4,143	3,087	2,559	1,141	1,521	16,671
2007	4,747 ^e	4,502	3,186	2,638	1,197	1,592	17,863

e = estimated

¹DC plans include 403(b) plans, 457 plans, and private employer-sponsored DC plans (including 401(k) plans).

²Federal pension plans include U.S. Treasury security holdings of the civil service retirement and disability fund, the military retirement fund, the judicial retirement funds, the Railroad Retirement Board, and the foreign service retirement and disability fund. These plans also include securities held in the National Railroad Retirement Investment Trust and Federal Employees Retirement System (FERS) Thrift Savings Plan (TSP).

³Annuities include all fixed and variable annuity reserves at life insurance companies less annuities held by IRAs, 403(b) plans, 457 plans, and private pension funds. Some of these annuity reserves represent assets of individuals held outside retirement plan arrangements and IRAs; however, information to separate out such reserves is not available. Note: Components may not add to the total because of rounding.

Sources: Investment Company Institute, Federal Reserve Board, National Association of Government Defined Contribution Administrators, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division (see Investment Company Institute, 2008b and Brady and Holden 2008a, 2008b).

registering \$3,186 billion at year-end 2007. The two largest components of the U.S. retirement market are IRAs, with \$4,747 billion and DC plans with \$4,502 billion at year-end 2007. Both of these components are account-based and generally are participant-directed.

Combined, DC plan and IRA assets accounted for 51 percent of the total U.S. retirement market at year-end 2007 (Figure 2). Although a wide range of ages holds these accounts, older participants hold the bulk of the assets. For example, at year-end 2004, IRA owners aged 60 or older held 57 percent

of all IRA assets.⁸ At year-end 2007, an analysis of 21.8 million active 401(k) plan participants found that 401(k) participants in their fifties or sixties held 55 percent of 401(k) plan assets.⁹ These two statistics combined suggest that as much as \$5 trillion of DC and IRA assets in 2007 were held by older individuals who might move or start to remove assets. The remainder of this paper explores the patterns of flows and withdrawals.

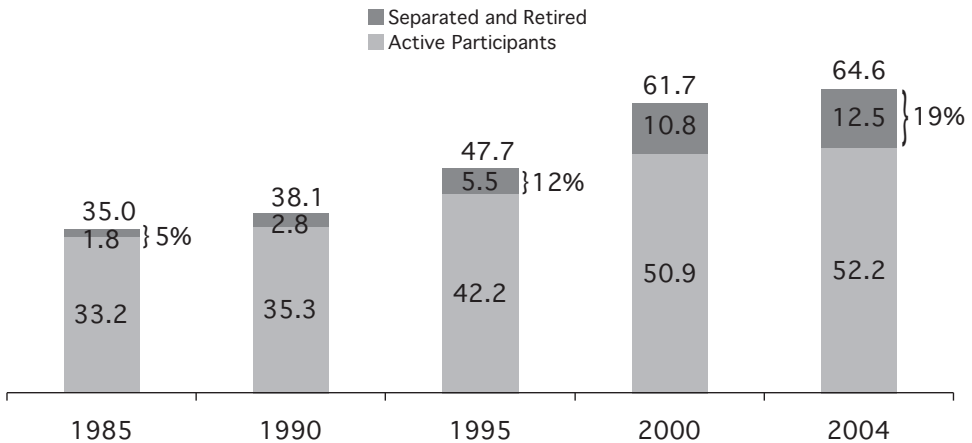
PRIVATE-SECTOR DC PLANS

Private-sector DC plans typically must file a Form 5500 annually with the Department of Labor. Individual filings¹⁰ as well as aggregated tabulations¹¹ are publicly available and are useful to analyze contribution and withdrawal activity in private-sector DC plans. As the title of this paper suggests, the research question is whether DC plan sponsors and participants are parting ways. One measure suggests they might not be parting ways as often as in the past. The number of participants in DC plans who are separated (i.e., no longer working for the plan sponsor) or retired has risen over time, both in absolute amount and as a share of participants. In 1985, separated and retired DC plan participants were 5 percent of all DC plan participants, compared with 12 percent in 1995, and 19 percent in 2004 (Figure 3).¹² Although some

of the increase likely results as both plans and participants mature over time, it may also indicate a rising propensity of workers to leave balances at previous employers. Indeed, The Vanguard Group, which is a large recordkeeper of DC plans, finds a rising trend in the percentage of participants in the plans that they recordkeep that leave their account balances behind in the plan when they leave the employer. Among participants leaving their employers in 2000, 29 percent left the balance in the plan; in 2007, 47 percent of terminating participants left their balances in the plan.¹³

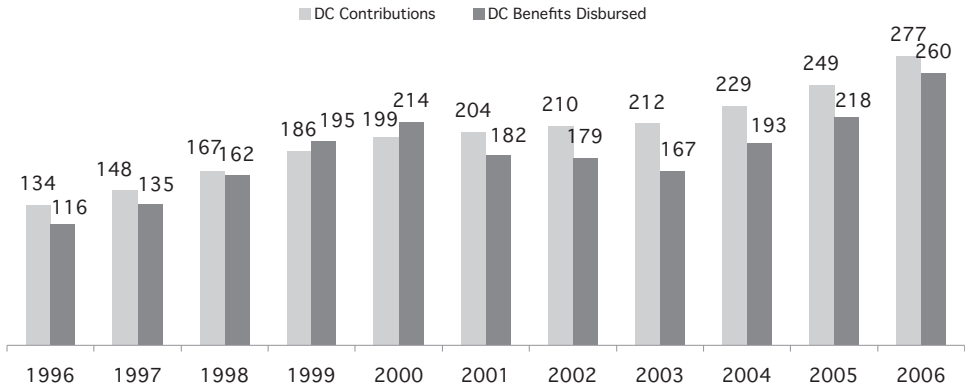
On the other hand, Form 5500 data show that DC benefits disbursed (which includes rollovers out of plans) have edged up over time. In 2006, a record \$260 billion was paid out of private-sector DC plans (Figure 4). Nevertheless, the outflow only represented 9 percent of assets and, in aggregate, private-sector DC plans received \$277 billion in contributions (employer contributions, employee contributions, and rollovers into plans) in 2006, or 10 percent of assets. With the exceptions of 1999 and 2000, contributions have tended to exceed benefit payments among private-sector DC plans. In 2006, altogether, DC plans experienced net contributions of \$16 billion. In 2005, in aggregate, DC plans reported \$218 billion in benefits paid out, \$249 billion in contributions coming in, netting to a \$31 billion net inflow.

Figure 3: Separated/Retired Participants Are a Rising Share of Defined Contribution Plan Participants
Millions of private-sector DC plan participants, selected years



Source: U.S. Department of Labor (2008a).

Figure 4: Private-Sector Defined Contribution Plans: Flows In and Out
Billions of dollars, private-sector DC plans, 1996–2006



Note: Contributions consist of employer contributions, participant contributions, contributions from others (including rollovers into a plan), and non-cash contributions. Benefits are total benefit payments reported as a component of plan expenses (including rollovers out of a plan).

Source: U.S. Department of Labor (2008a, 2008c).

These aggregate numbers mask significant differences in net flow experience across individual plans. Indeed, in plan-year 2005, 73 percent of DC plans holding 54 percent of plan assets reported net inflows (i.e., contributions greater than benefits; Figure 5).¹⁴ Nineteen percent of plans holding 45 percent of plan assets reported net outflows. The remaining fraction of plans (8 percent), which were small (representing 1 percent of assets) reported no flows or offsetting inflows and outflows. These data suggest that one out of five DC plans had, on net, participants taking money as they left the employer.

These outflows need to be analyzed in context, perhaps relative to the individual plan's assets. Again, a range of experiences is evident. While 39 percent of DC plans paid no benefits out in plan-year 2005, 10 percent paid out more than 20 percent of plan assets (Figure 6). For many plans, only 5 percent or less of plan assets was disbursed in 2005 (28 percent of all DC plans, which represents 46 percent of DC plans with withdrawals).

Why might a plan sponsor care? There are many reasons why a plan sponsor might care. A plan sponsor might be paternalistic and concerned about management of the money outside of the plan. The plan sponsor might be concerned about the economics of the plan itself if the large size of the plan's assets has moved the plan into lower

cost investment options, which economies of scale make feasible.¹⁵ Or the plan sponsor—involved with monitoring investment options, working to increase participation, participant education, or perhaps automatic enrollment—might not be focusing on the potential impact of aging participants on the plan. To understand plan sponsors' thinking on this issue, the Profit Sharing/401k Council of America (PSCA) conducted a survey of its members in early 2008.

PLAN SPONSOR THINKING ON THE DISTRIBUTION PHASE

PSCA conducts annual surveys of its members gathering information on plan design.¹⁶ In addition to the usual annual survey, in early 2008, PSCA fielded a short ad hoc survey of its members regarding their thinking around the retirement process for their participants.¹⁷

DC plan sponsors typically offer a variety of distribution options. Virtually all of PSCA's 1,000+ member firms offered lump-sum distributions as an option and all offered direct transfer to IRAs or a subsequent qualified plan (Figure 7).¹⁸ One out of five 401(k) or profit-sharing plan sponsors offered annuities. Many plans offered participants the choice to leave the account in the plan. About three-quarters of PSCA member plans permitted

Figure 5: Contribution and Distribution Activity Among Private-Sector Defined Contribution Plans

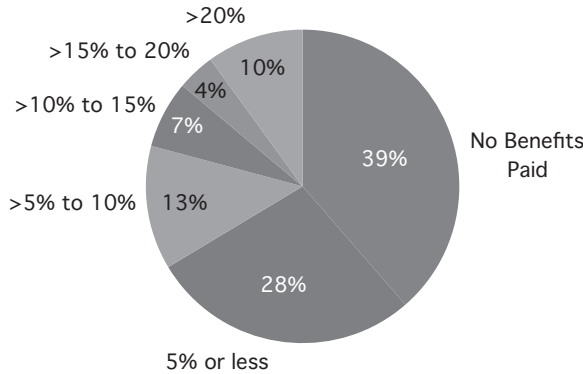
Defined Contribution Plans					
	Contributions (\$billions)	Benefits (\$billions)	Number of Plans	Percent of Plans	Percent of Plan Assets
Reported Zero Flows or Equal Flows	\$0.0*	\$0.0*	53,332	8.40%	1.00%
More Contributions than Benefits	\$182.60	\$81.50	457,670	72.50%	54.30%
More Benefits than Contributions	\$65.10	\$136.50	120,479	19.10%	44.70%
Total	\$247.70	\$218.00	631,481	100%	100%

* amount less than \$50 million .

Note: Contributions include employer contributions, participant contributions, and contributions from others (including rollovers into a plan), but exclude the small amount of non-cash contributions reported each year. Plan assets are beginning of plan-year assets (\$2.6 trillion).

Source: Tabulation of Form 5500 Data for Plan-Year 2005.

Figure 6: Benefits Disbursed Relative to Plan Assets
Percent of private-sector DC plans by benefits paid relative to plan assets, plan-year 2005



Note: Benefits paid in plan-year 2005 relative to beginning of plan-year assets. Components do not add to 100 percent because of rounding.

Source: Tabulation of Form 5500 Data for Plan-Year 2005.

balances of more than \$5,000 to remain in the plan, and nearly 30 percent allowed balances of \$5,000 or less to stay in the plan. About half offered the option of setting up installments distributed over time out of the plan. Smaller plans (measured by number of participants) were less likely to offer

participants the option of leaving the money in the plan compared with larger plans.

The PSCA short survey conducted in early 2008 asked plan sponsors to think about their philosophy and policies regarding retiring participants.¹⁹ When asked about their plan’s philosophy with respect

Figure 7: Retirement Distribution Options Offered
Percent of plans by plan size, 2007

Distribution type	Plan size by number of participants					
	1 to 49	50 to 199	200 to 999	1,000 to 4,999	5,000 or more	All plans
Lump sum	98.3%	99.4%	100.0%	99.5%	99.4%	99.3%
Installments	33.1%	57.1%	53.6%	53.1%	58.9%	51.0%
Annuities	17.4%	28.6%	19.6%	19.3%	18.4%	20.5%
Retain in plan (if balance is \$5,000 or less)	18.5%	28.6%	30.9%	29.7%	36.7%	28.8%
Retain in plan (if balance is more than \$5,000)	54.5%	76.4%	75.3%	85.4%	81.6%	74.6%
Direct Transfer to IRA/Subsequent Plan*	*	*	*	*	*	*

*This option is required by law.

Source: Profit Sharing/401k Council of America (2008).

to retiring participants and whether they left their money in the plan or took it with them, 84 percent indicated that they were indifferent and that it was up to the participant. Eleven percent indicated their philosophy was to encourage participants to think about taking their account balances with them, while 5 percent indicated they encouraged retiring participants to think about leaving their balances in the plan.

Most plan sponsors in the PSCA short survey indicated that they provided retiring participants with many resources to make their distribution decision. More than three-quarters provided educational materials explaining the distribution options of the plan and two-thirds had a retirement income calculator available online (Figure 8). Nearly one-third held seminars on retirement asset and income planning and about one-third provided access to an employer-selected financial adviser. Only 11 percent of 401(k) and profit-sharing plan sponsors indicated that they only provided the notices required by law and no additional education, guidance, or information.

Another survey of 40 DC plan sponsors conducted in 2008 by CAPTRUST Financial Advisors explored what plan sponsors understood “retirement income” to mean.²⁰ Asking the open-ended question, “What is retirement income?” the survey found a range of thoughts. Many DC plan sponsors (28 percent) focused on the accumulation, the pool of assets required to generate retirement income (Figure 9). Eight percent mentioned accumulated assets (DC plan assets and IRAs) as well as income (DB distributions and Social Security) and 13 percent tied the assets and income to maintaining a standard of living. Eighteen percent defined retirement income as “monthly income” and 13 percent called it “lifetime income.” The remaining one-fifth had very holistic definitions of retirement

income, mentioning education and planning and tools. Regardless of the definition of retirement income, nearly three-quarters viewed retirement income as a combination of process as well as product.

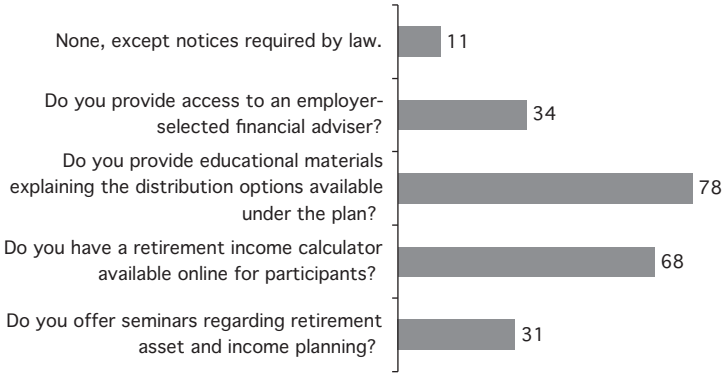
DC PLAN PARTICIPANTS’ THINKING AT RETIREMENT

In the fall of 2007, ICI conducted a survey of recent retirees with DC plans. The goal of the survey was to find out what DC plan participants do with their DC account balances at retirement and what resources they consult in the process of deciding.²¹ Specifically, the survey was conducted between October 23, 2007, and December 9, 2007. It included 608 primary or co-decision makers for household saving and investing who retired within the past five years (between 2002 and the time of the survey). Each survey respondent had assets in DC plans or similar employer-sponsored, individual account plans at retirement. The majority of the retirees surveyed had participated in 401(k) plans, but respondents also included those who had been in 403(b) plans, the federal government’s Thrift Savings Plan, 457 plans, and employer-sponsored IRAs. The sample was selected to be representative of the national population of recently retired participants in such plans.²²

Among recent DC plan retirees surveyed, 70 percent recalled having a choice of distribution options, while 30 percent recalled only having one way to distribute their DC account balance (most often as a lump sum). With regard to the question posed in the title of this paper, this survey found that at least 70 percent of recent DC plan retirees parted ways with their DC plan sponsor at retirement.

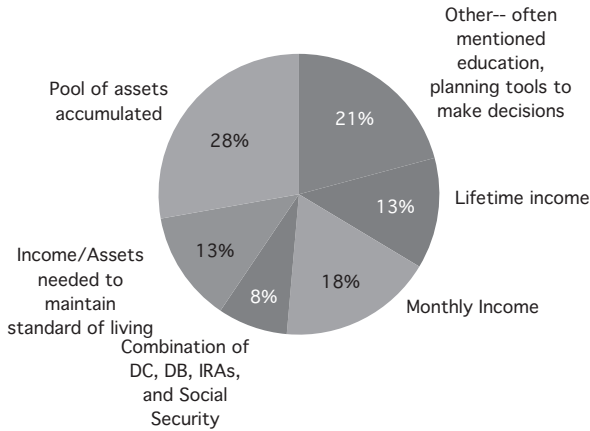
At the end of the day, whether recalling choice or not, just over half (52 percent) of DC plan partici-

Figure 8: Which of the Following Education/Guidance/Information Does Your Company Provide to Retiring Participants?
Percent of plan sponsors answering "yes," 2008



Note: Multiple responses are included.
 Source: Profit Sharing/401k Council of America, Survey of Members.

Figure 9: What Is Retirement Income?
Percent of plan sponsors' responses falling into the category indicated, 2008



Note: Components do not add to 100 percent because of rounding.
 Source: Shoff (2008).

pants parted ways with their employer by receiving all of their distributions as lump sums (Figure 10). Another 18 percent of recent DC plan retirees also parted ways with their employer by annuitizing their entire account balance. Twenty-two percent of recent DC plan retirees left their balances with the plan; with 16 percent deferring distribution and

6 percent setting up installment payments from the account. The remaining 9 percent of respondents did a combination of distribution options with their DC accounts at retirement.

Although they did not continue to maintain the account within the DC plan, many retirees taking lump-sum distributions preserved the assets

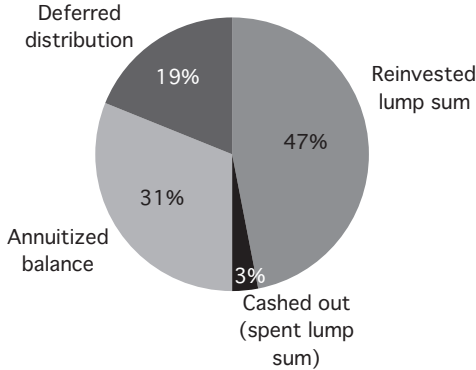
Figure 10: What Happened to Defined Contribution Accounts at Retirement?
Percent of respondents¹

9	Multiple dispositions
7	Lump sum, spent all
11	Lump sum, spent some, reinvested some
34	Lump sum, reinvested all
16	Deferred distribution of entire balance
6	Installment payments
18	Annuitized entire balance

¹Seventy percent of respondents reported having a choice of distribution options; 30 percent recalled having no choice. Responses are from a survey of employees retiring between 2002 and 2007 who were interviewed in the fall of 2007.

Note: Components do not add to 100 percent because of rounding.
 Source: See Sabelhaus, Bogdan, and Holden (2008).

Figure 11: Disposition of Accumulated Defined Contribution Account Balances at Retirement
Percentage of total accumulated DC account balances¹



¹The sum of DC balances is based on reported or estimated dollar amount in the DC plan from which the individual retired (between 2002 and 2007). Respondents who chose to receive some or all of their account balance in installments are not included.

²Respondents who annuitized some or all of their DC balance reported the amount of their annuity income. Using the respondent's age, gender, marital status, and annual annuity payment, ICI estimated the account balance amount that would be consistent with a market-priced nominal annuity.
 Source: See Sabelhaus, Bogdan, and Holden (2008).

Figure 12: Extent to Which Respondents with Choice Followed Advice
Percentage of respondents who had a choice of distribution option by advice source and extent to which advice was followed¹

	Sources of Advice	Extent to Which Advice Was Followed			
		Great Extent	Some Extent	Very Little Extent	No Extent
Spouse or partner ²	46%	51%	38%	4%	7%
Co-worker, friend or family member other than spouse or partner	23%	19%	59%	16%	6%
Professional financial adviser NOT PROVIDED by your employer	42%	67%	25%	4%	4%
Materials or services provided by your employer ³					
Professional financial adviser PROVIDED by your employer	13%	40%	36%	15%	9%
Seminar or workshop sponsored by your employer	30%	25%	59%	11%	5%
Printed materials provided by your employer	29%	25%	54%	17%	4%
Advice generated by online retirement software PROVIDED by your employer	3%	26%	25%	31%	18%
Advice generated by online retirement software NOT PROVIDED by your employer	5%	22%	51%	15%	12%
Advice from a publication	15%	4%	68%	21%	7%
Advice included in mutual fund company materials	10%	15%	60%	20%	5%
Self ⁴	3%	78%	0%	0%	22%

¹Multiple responses included; 67 percent of respondents mentioned consulting multiple sources of advice. A total of 426 respondents is included in this figure.

²Among retirees with spouses or partners, 54 percent consulted their spouse or partner.

³On net, 46 percent of respondents consulted materials or services provided by their employers.

⁴The sample size for this category is small.

Note: Number of respondents varies. Responses are from a survey of employees retiring between 2002 and 2007 who were interviewed in the fall of 2007.

Source: See Sabelhaus, Bogdan, and Holden (2008).

in another investment account. Within the group who received the distribution as a lump sum, 62 percent rolled the entire amount over into another investment (usually an IRA).²³ About one-quarter of lump-sum recipients rolled over at least part of the balance, and the remaining 14 percent spent the entire amount.

As a result, the fraction of DC balances spent at retirement is very low. Only about 3 percent of DC account balances were spent immediately at retirement (Figure 11). The share of account balance dollars spent is much lower than the share of accounts in which all or some of the proceeds are

spent (Figure 10). This is because there is a strong negative correlation between account balance and the propensity to spend that balance.

PSCA survey results indicate that plan sponsors generally provide materials to retiring plan participants. And, when ICI surveyed recent DC plan retirees as to the resources they consulted to make their distribution decisions, 46 percent indicated they consulted employer-provided resources. Thirty percent said they attended a seminar or workshop sponsored by their employer and 29 percent consulted employer-provided printed materials (Figure 12). Thirteen percent indicated

they consulted with a professional financial adviser provided by their employer. This low usage likely reflects not that the DC plan participant was offered such service didn't use it, but rather that such service was not offered. Forty-two percent of recent DC plan retirees consulted with professional financial advisers that they obtained on their own when making their distribution decision.

CONCLUSIONS

The point at which an individual retires is a key decisionmaking juncture with trade-offs and several decisions that cannot be easily reversed. This paper looked at the DC plan distribution decision from the point of view of the employer and the retiree. No one distribution solution fits all retirees and survey data indicate that retirees consult multiple sources of information when making the decision. Employers often and increasingly are providing materials and services to assist retirees in this process. For many retirees, leaving the balance in the plan may afford them access to employer-subsidized investing, lower-cost investing as a result of the economies of scale a large 401(k) plan achieves, and other services. For other retirees, expanding the range of investment options, accessing advice, accessing a more full range of annuity options, or consolidation of accounts may make the IRA option their best choice. For other retirees needing an immediate stream of income, choosing an annuity or installment payments may be appropriate. Many retirees will engage in a combination of choices and employers are increasingly recognizing the important role that they play in helping retirees navigate that choice set.

Notes

- ¹ The Profit Sharing/401k Council of America is a nonprofit association of 1,200 companies that sponsor DC plans for five million employees. PSCA offers unbiased best-practices information, research, and technical assistance. For over 60 years, the Profit Sharing/401k Council of America (PSCA) has been the Washington voice of companies that provide DC programs for their employees. For more information, go to <http://www.psc.org/>.
- ² The Investment Company Institute (ICI) is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI

seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. For more information, go to <http://www.ici.org/>.

- ³ See U.S. Government Accountability Office (2006).
- ⁴ Special thanks to Michael Bogdan at ICI for providing the tabulations from the U.S. Census Bureau's population estimates data files. In addition, special thanks to Carolyn Bennett at ICI for preparing and formatting the figures.
- ⁵ The Federal Reserve Board, *Flow of Funds Accounts* reports that households' total financial assets were \$49.5 trillion at year-end 2007 (see Federal Reserve Board, 2008).
- ⁶ See Federal Thrift Savings Plan (2008).
- ⁷ The National Railroad Retirement Investment Trust, which has about \$33 billion in assets, includes equities in its holdings. See National Railroad Retirement Investment Trust (2007).
- ⁸ See Bryant (2008) for data on IRA-owning taxpayers by age of taxpayer.
- ⁹ See Holden et al. (2008), which reports data from the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project.
- ¹⁰ See individual Form 5500 filings on www.freerisa.com.
- ¹¹ See U.S. Department of Labor, Employee Benefits Security Administration's Web site for historical data (e.g., U.S. Department of Labor, 2008a) as well as reports for each individual year (e.g., U.S. Department of Labor, 2008b, 2008c).
- ¹² A change in the reporting of active DC plan participants in 2005 causes a break in the data series. It is not possible to compare 2005 data to prior years. See U.S. Department of Labor (2008b).
- ¹³ See The Vanguard Group (2008).
- ¹⁴ Special thanks to Shaun Lutz at ICI for tabulating the Form 5500 data.
- ¹⁵ See Holden and Hadley (2008) for a discussion of factors that affect fees in 401(k) plans.
- ¹⁶ See Profit Sharing/401k Council of America (2008).
- ¹⁷ PSCA's short survey was conducted by email in early 2008. The 213 survey respondents represented a wide range of plan sizes:

7.5%	1-49 participants
22.0%	50-199 participants
25.0%	200-999 participants
23.0%	1,000-4,999 participants
22.5%	5,000+ participants

 For additional discussion of the survey results, see Wray (2008).
- ¹⁸ By law, DC plans must permit the direct rollover of balances to another qualified plan or IRA. See 26 C.F.R. §1.401(a)(31)-1, Q&A-11.
- ¹⁹ For a summary of the survey results, see Wray (2008).

- ²⁰ The typical DC plan in the sample had average assets of \$60 million and average firm size of 800 employees (see Shoff, 2008).
- ²¹ The 2007 survey (see Sabelhaus et al., 2008) updates a prior DC plan retiree survey conducted by ICI in 2000 (see Investment Company Institute, 2000).
- ²² See Sabelhaus et al. (2008) for details on the survey methodology, a full write-up of the survey results, and a comparison of the survey respondents to all U.S. retiree households and to all U.S. retiree households with DC plans.
- ²³ See Sabelhaus et al. (2008) for the full report summarizing the survey results.

References

- Brady, Peter, and Sarah Holden.
The U.S. Retirement Market, 2007. Washington, D.C.: Investment Company Institute, 2008a. *ICI Fundamentals* 17. <http://www.ici.org/pdf/fm-v17n3.pdf>
Appendix: Additional Data on the U.S. Retirement Market, 2007. Washington, D.C.: Investment Company Institute, 2008b. *ICI Fundamentals* 17. http://www.ici.org/pdf/fm-v17n3_appendix.pdf
- Bryant, Victoria L. Accumulation and Distribution of Individual Retirement Arrangements, 2004. *SOI Bulletin*. Washington, D.C.: IRS Statistics of Income Division, 2008. <http://www.irs.gov/pub/irs-soi/04inretirebul.pdf>
- Federal Reserve Board. Flow of Funds Accounts of the United States, Flows and Outstandings, Third Quarter 2008." *Z.1 Release*. Washington, D.C.: Federal Reserve Board, 2008. <http://www.federalreserve.gov/releases/z1/>
- Federal Thrift Savings Plan. Financial Statements of the Thrift Savings Fund -- 2007 and 2006. McLean, VA: Deloitte and Touche, 2008. <http://www.tsp.gov>
- Holden, Sarah and Michael Bogdan. The Role of IRAs in U.S. Households' Saving for Retirement. Washington, D.C.: Investment Company Institute, 2008. *ICI Fundamentals* 17, no. 1. <http://www.ici.org/pdf/fm-v17n1.pdf> <<http://www.ici.org/pdf/fm-v17n1.pdf>>
- Holden, Sarah and Michael Hadley. The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2007. Washington, D.C.: Investment Company Institute, 2008. *ICI Fundamentals* 17, no. 5. <http://www.ici.org/pdf/fm-v17n5.pdf> <<http://www.ici.org/pdf/fm-v17n5.pdf>>
- Holden, Sarah, Jack VanDerhei, Luis Alonso, and Craig Copeland. 401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2007. Washington, D.C.: Investment Company Institute and Employee Benefit Research Institute, 2008. *ICI Perspective* 14 and EBRI Issue Brief 324. <http://www.ici.org/pdf/per14-03.pdf>
- Investment Company Institute.
Defined Contribution Plan Distribution Choices at Retirement: A Survey of Employees Retiring Between 1995 and 2000. Washington, D.C.: Investment Company Institute, 2000. http://www.ici.org/pdf/rpt_distribution_choices.pdf
2008 Investment Company Fact Book, 48th Edition. Washington, D.C.: Investment Company Institute, 2008a. http://www.ici.org/pdf/2008_factbook.pdf <http://www.ici.org/pdf/2008_factbook.pdf>
The U.S. Retirement Market, Second Quarter 2008. Washington, D.C.: Investment Company Institute, 2008b. *ICI Fundamentals* 17, no. 3.
- National Railroad Retirement Investment Trust. NRRIT, National Railroad Retirement Investment Trust: Annual Management Report for Fiscal Year 2007, Required by Public Law 107-90, The Railroad Retirement and Survivors' Improvement Act of 2001. Washington, DC: NRRIT, 2007. <http://www.rrb.gov/pdf/nrrit/reportFY2007.pdf>
- Profit Sharing/401k Council of America. 51st Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2007 Plan Experience. Chicago, IL: Profit Sharing /401k Council of America, 2008. <http://www.pscs.org/>
- Sabelhaus, John, Michael Bogdan, and Sarah Holden. Defined Contribution Plan Distribution Choices at Retirement: A Survey of Employees Retiring Between 2002 and 2007. Washington, DC: Investment Company Institute, 2008. http://www.ici.org/pdf/rpt_08_dcedd.pdf <http://www.ici.org/pdf/rpt_08_dcedd.pdf>
- Shoff, Rick. Survey of DC Plan Sponsors. Doylestown, PA: CAPTRUST Financial Advisors, September 2008.
- U.S. Bureau of Labor Statistics and U.S. Census Bureau. Current Population Survey. Washington, D.C.: U.S. Census Bureau. <http://www.census.gov/cps/>
- U.S. Census Bureau. Population Estimates Data Files. Washington, D.C.: U.S. Census Bureau. <http://www.census.gov/popest/national/asrh/files/NC-EST2006-ALLDATA-R-File22.dat>
- U. S. Department of Labor, Employee Benefits Security Administration.
Private Pension Plan Bulletin Historical Tables. Washington, D.C.: U.S. Department of Labor, 2008 a. <http://www.dol.gov/ebsa/pdf/privatepensionplanbulletinhistoricaltables.pdf>
Private Pension Plan Bulletin, Abstract of 2005 Form 5500 Annual Reports. Washington, D.C.: U.S. Department of Labor, 2008b. <http://www.dol.gov/ebsa/pdf/2005pensionplanbulletin.pdf>
Private Pension Plan Bulletin, Abstract of 2006 Form 5500 Annual Reports. Washington, D.C.: U.S. Department of Labor, 2008c. <http://www.dol.gov/ebsa/PDF/2006pensionplanbulletin.PDF>

U.S. Government Accountability Office. BABY BOOM GENERATION: Retirement of Baby Boomers Is Unlikely to Precipitate Dramatic Decline in Market Returns, but Broader Risks Threaten Retirement Security. GAO Report to Congressional Committees, GAO-06-718. Washington, D.C.: U.S. Government Accountability Office, 2006. <http://www.gao.gov/new.items/d06718.pdf>

The Vanguard Group, Inc. How America Saves 2008: A Report on Vanguard 2007 Defined Contribution Plan Data. Valley Forge, PA: The Vanguard Group,

Inc., 2008. <https://institutional.vanguard.com/iwe/pdf/HAS08.pdf>

Wray, David L. Testimony Before the ERISA Advisory Council Working Group on Spend Down of Defined Contribution Plan Assets at Retirement. Chicago, IL: Profit Sharing /401k Council of America, July 16, 2008. <http://www.pasca.org/Portals/0/pdf/July%2016%202008%20testimony.pdf>