The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans

DECEMBER 2014

BrightScope®

ICI INVESTMENT COMPANY INSTITUTE®

THE BRIGHTSCOPE/ICI DEFINED CONTRIBUTION PLAN PROFILE

The BrightScope/ICI Defined Contribution Plan Profile is a collaborative research effort between BrightScope and the Investment Company Institute that analyzes plan-level data gathered from audited Form 5500 filings of private-sector defined contribution (DC) plans, providing unique, new insights into private-sector DC plan design. The research draws from information collected in the BrightScope Defined Contribution Plan Database. The database is designed to shed light on DC plan design across many dimensions, including the number and type of investment options offered; the presence and design of employer contributions; features of automatic enrollment; the types of recordkeepers used by DC plans; and changes to plan design over time. In addition, industrywide fee information is matched to investments in DC plans allowing analysis of the cost of DC plans. *The BrightScope/ICI Defined Contribution Plan Profile* supplements existing plan sponsor surveys and research based on recordkept data, and it is designed to increase public understanding in this critical area of retirement savings.

The first report in the *BrightScope/ICI Defined Contribution Plan Profile* series focuses primarily on private-sector 401(k) plans. This report analyzes more than 35,000 DC plans (primarily 401(k) plans) that have between four and 100 investment options. Private-sector 403(b) plans have been excluded from this analysis, but will be the focus of the next report in this series.

Suggested citation: BrightScope and Investment Company Institute. 2014. *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans*. San Diego, CA: BrightScope and Washington, DC: Investment Company Institute. Available at www.ici.org/pdf/ppr_14_dcplan_profile_401k.pdf.

Contents

Exhibits

Introduction

Chapter 4: 401(k) Plan Fees

Appendix

The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans

Key Findings

- **401(k) plans offer employees a wide variety of investment options.** In 2012, the average 401(k) plan offered 25 investment options, of which about 13 were equity funds, three were bond funds, and six were target date funds. Nearly all plans offered at least one equity and bond fund, and about 70 percent of plans offered a suite of target date funds. *Funds* include mutual funds, collective investment trusts, separate accounts, and other pooled investment products.

- **Mutual funds were the most common investment vehicle in 401(k) plans.** Mutual funds held 46 percent of 401(k) plan assets in 2012. Collective investment trusts held 21 percent of assets, guaranteed investment contracts (GICs) held 12 percent, separate accounts held 3 percent, and the remaining 18 percent was invested in individual stocks (including company stock), bonds, brokerage, and other investments. Mutual funds accounted for more than half of the assets in all but the largest plans. Collective investment trusts accounted for a somewhat larger share of assets in the largest plans than mutual funds.

- **Equity funds accounted for the largest share of assets in 401(k) plans.** In 2012, about 40 percent of assets were held in equity funds, more than 15 percent was held in balanced funds (with most of that being held in target date funds), and about 10 percent was held in bond funds. GICs and money funds accounted for 15 percent of assets.

- **Target date funds have become more common in 401(k) plans since 2006.** In 2006, 29.1 percent of 401(k) plans offered target date funds; this had risen to 69.6 percent of plans by 2012. Similarly, the percentage of participants that were offered target date funds increased from 39.5 percent of participants to 69.8 percent between 2006 and 2012, and the percentage of assets invested in target date funds increased from 3.0 percent to 13.4 percent.

- **Index funds make up a significant component of 401(k) assets, holding nearly a quarter of 401(k) assets in 2012.** Index funds held a greater share of assets in larger 401(k) plans, rising from about 10 percent of assets in plans with $10 million or less in plan assets to more than 20 percent of assets in plans with more than $250 million. Index funds, which tend to be equity index funds, generally have lower expense ratios than actively managed equity funds.

- **Simple matching formulas, where the employer matches a certain percentage of employee contributions up to a maximum percentage of employee salary, were the most common type of employer contribution.** Forty percent of 401(k) plans had a simple match formula in 2012. Other types of employer matches accounted for less than 10 percent of plans, while employers made other types of contributions (such as percentage of salary and lump-sum contributions, contributed without regard to employee contributions) in 37 percent of plans. Seventeen percent of plans had no employer contributions. The most common simple matching formula in 2012 was matching 50 percent of contributions up to 6 percent of salary (in 17 percent of plans), followed closely by matching 100 percent of contributions up to 6 percent of salary (in 15 percent of plans).

- **Among 401(k) plans with auto-enrollment, the most common default initial contribution rate was 3 percent of employee salary.** Fifty-nine percent of plans with auto-enrollment defaulted auto-enrolled participants to a contribution rate of 3 percent of salary. Fourteen percent of plans had a default initial contribution rate of 2 percent, 11 percent had a default initial contribution rate of 4 percent, and 12 percent had a default initial contribution rate of 5 percent or more.

- » **Employers choose from a range of providers for 401(k) plan recordkeeping.** Insurance companies were the most common recordkeeper type for 401(k) plans, and were more likely to provide recordkeeping services for smaller 401(k) plans. Asset managers, which include mutual fund companies, were the second most common recordkeepers across plans, and they were more likely to provide recordkeeping services for larger plans. As a result, asset managers provided recordkeeping services for 31 percent of plans, but 45 percent of participants and 52 percent of plan assets.

- » **Most 401(k) plans offered investment options that included investment options proprietary to the plan's recordkeeper, but proprietary investments accounted for a smaller share of total 401(k) assets.** Plan sponsors choose a plan recordkeeper and select the investment lineup for the plan. More than three-fifths of 401(k) plans included investment options proprietary to the plan's recordkeeper in their investment lineups, and those investments accounted for about a quarter of total plan assets.

- » **The BrightScope measure of total 401(k) plan costs has decreased since 2009, looking at snapshots of 401(k) plan fees.** In 2012, the average total plan cost was 0.91 percent of assets, down from 1.00 percent in 2009. The average participant was in a lower-cost plan, with a total plan cost of 0.53 percent of assets in 2012 (down from 0.65 percent in 2009), while the average dollar was invested in a plan with a total plan cost of 0.39 percent in 2012 (down from 0.49 percent in 2009). BrightScope's *total plan cost* includes administrative, advice, and other fees from Form 5500 filings, as well as asset-based investment management fees.

- » **Mutual fund expenses in 401(k) plans tend to be lower in larger plans and have trended down over time.** For example, the average asset-weighted expense ratio for domestic equity mutual funds was 0.95 percent for plans with less than $1 million in plan assets, compared with 0.48 percent for plans with more than $1 billion in plan assets. Mutual fund expense ratios also have tended to decrease in 401(k) plans between 2009 and 2012. *Mutual fund fees* are the total expense ratio as a percentage of assets.

Introduction

The Role of 401(k) Plans in U.S. Retirement Planning

A 401(k) is an employer-sponsored defined contribution (DC) retirement plan that enables employees to make tax-deferred contributions from their salaries to the plan. Employers also may make contributions into employee accounts. Typically, plan participants direct the investment of their accounts, choosing from the lineup of options offered in the plan. With $4.4 trillion in assets at the end of the second quarter of 2014, 401(k) plans have become one of the largest components of U.S. retirement assets, accounting for nearly one-fifth of all retirement assets (Exhibit I.1). More than 52 million workers were actively participating in 401(k) plans in 2012, making them one of the most common sources of retirement assets.[1]

As the prevalence of private-sector defined benefit (DB) pension plans has declined, DC plans (such as 401(k) plans) have become a more important component of retirement savings for American workers. Because of the tax advantages they provide, and their importance for retirement, researchers and policymakers have an interest in understanding how workers are using 401(k) plans to prepare for retirement. Researchers and policymakers also are interested in how employers have structured their plans, including the number and types of investment offerings, incentives to participate such as employer contributions or automatic enrollment, and the fees paid to operate the plan.

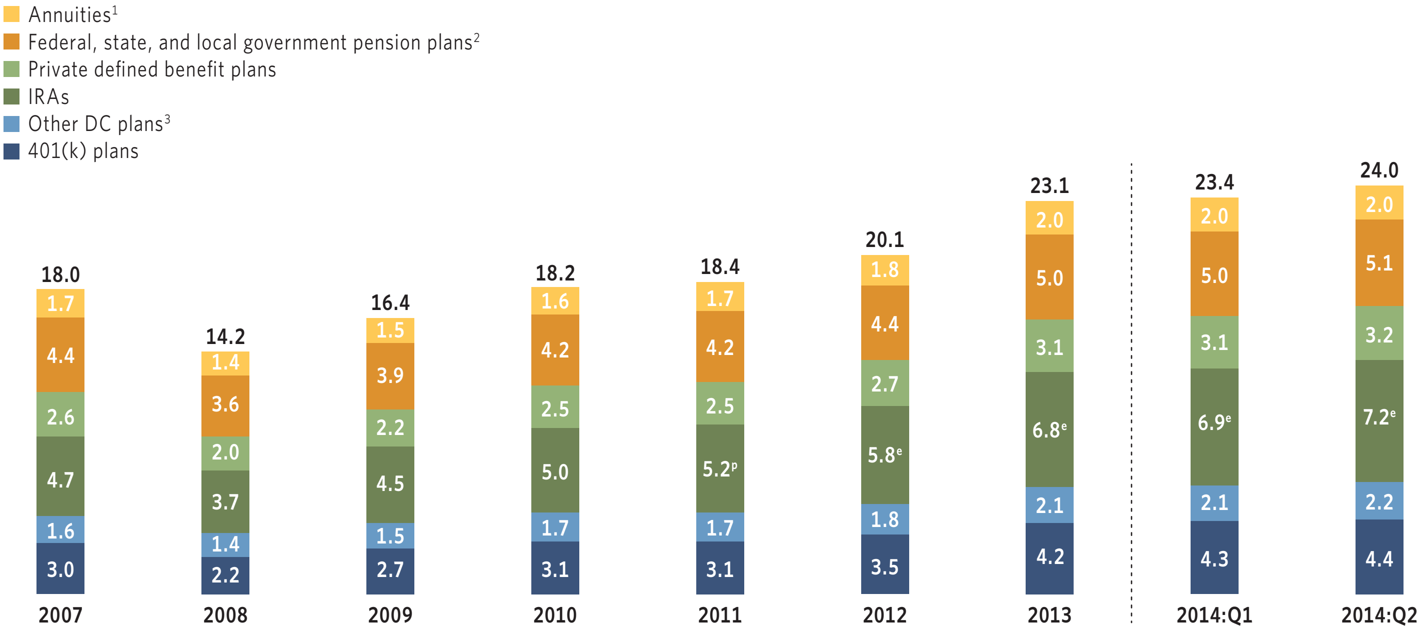
The BrightScope Defined Contribution Plan Database

In order to better understand DC retirement plans, BrightScope has created the BrightScope Defined Contribution Plan Database, which is compiled by extracting information from audited reports filed annually by larger private-sector DC plans with the Department of Labor (DOL). Generally, plans with 100 participants or more are required to file an audited report with the DOL.[2] These reports generally contain information on the investments offered by the plan, assets in these investments, employer contribution structures, and design of auto-enrollment features. BrightScope also has included existing information from the Form 5500, which private-sector sponsors of 401(k) plans (as well as other types of private-sector employer-sponsored pension plans) are required to file with the DOL annually.[3] These filings contain important information about the plans, including the number of participants covered, total plan assets, and total contributions to and distributions from the plan. In addition, BrightScope has combined the audited data with outside data sources to incorporate the fees paid by 401(k) and other DC participants associated with the investments in their plans. For this report, data for nearly 35,500 non-403(b) DC plans are analyzed (Exhibit I.2). However, more than 90 percent of both plans and assets in the audited sample are from 401(k) plans. For 2012, the BrightScope Defined Contribution Plan Database contains audited information on 6 percent of non-403(b) DC plans (i.e., 401(k) and other DC plans), covering 69 percent of non-403(b) DC plan participants and 75 percent of non-403(b) DC plan assets (Exhibit I.3).[4]

EXHIBIT I.1

401(k) Plans Hold $4.4 Trillion in Assets

Trillions of dollars; end-of-period, selected periods



[1] Annuities 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. The Federal Reserve Board financial accounts' annuities total includes annuities held in IRAs, 457 plans, and 403(b) plans. ICI reports these totals separately, thus this exhibit reports a lower annuities total than the financial accounts (see U.S. Federal Reserve Board 2014b).

[2] Federal 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.

[3] Other DC plans include 403(b) plans, 457 plans, private employer-sponsored DC plans without 401(k) features, and the Federal Employees Retirement System (FERS) Thrift Savings Plan (TSP).

[e] Data are estimated.

[p] Data are preliminary.

Note: Components may not add to the total because of rounding.

Sources: Investment Company Institute, Federal Reserve Board, Department of Labor, National Association of Government Defined Contribution Administrators, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division; see Investment Company Institute 2014

Because 401(k) plans with fewer than 100 participants are generally not required to file the audited reports required of larger plans, the BrightScope Defined Contribution Plan Database does not contain many small plans. While most 401(k) plans are small plans, most participants and assets are in larger plans. For example, although the sample analyzed contains information on 35,472, or 6 percent, of the 621,947 plans in the DOL 401(k) universe, it contains $2.9 trillion, or 75 percent, of the $3.8 trillion in assets (Exhibit I.2). Coverage rates in the database are higher for larger plans. While the database contains audited information on only 0.6 percent of plans with less than $1 million in plan assets, more than 90 percent of plans with more than $100 million are included (Exhibit I.3). Coverage rates of 401(k) plans in the database grouped by number of plan participants tell a similar story, with larger plans much more likely to be included than smaller plans (Exhibit I.4).

EXHIBIT I.2

Audited 401(k) Plans and the Universe of 401(k) Plans by Plan Assets

Distribution of 401(k) plans, participants, and assets by plan assets (2012)

	Audited 401(k) filings			Department of Labor 401(k) universe		
Plan assets	**Plans**	**Participants** *Thousands*	**Assets** *Billions of dollars*	**Plans**	**Participants** *Thousands*	**Assets** *Billions of dollars*
Less than $1M	2,185	530.6	$1.2	386,336	6,674.6	$129.9
$1M to $10M	16,399	4,492.3	74.6	207,929	13,984.8	575.4
>$10M to $50M	10,861	6,821.4	248.4	20,999	9,937.1	422.8
>$50M to $100M	2,544	4,368.2	177.9	2,876	4,862.3	201.4
>$100M to $250M	1,858	6,278.5	288.1	2,060	6,803.1	318.5
>$250M to $500M	762	4,552.2	268.6	827	4,815.6	291.1
>$500M to $1B	401	4,478.2	281.1	431	4,736.1	301.0
More than $1B	462	15,187.0	1,517.2	489	15,716.3	1,593.9
All plans	35,472	46,708.4	2,857.1	621,947	67,530.0	3,833.9

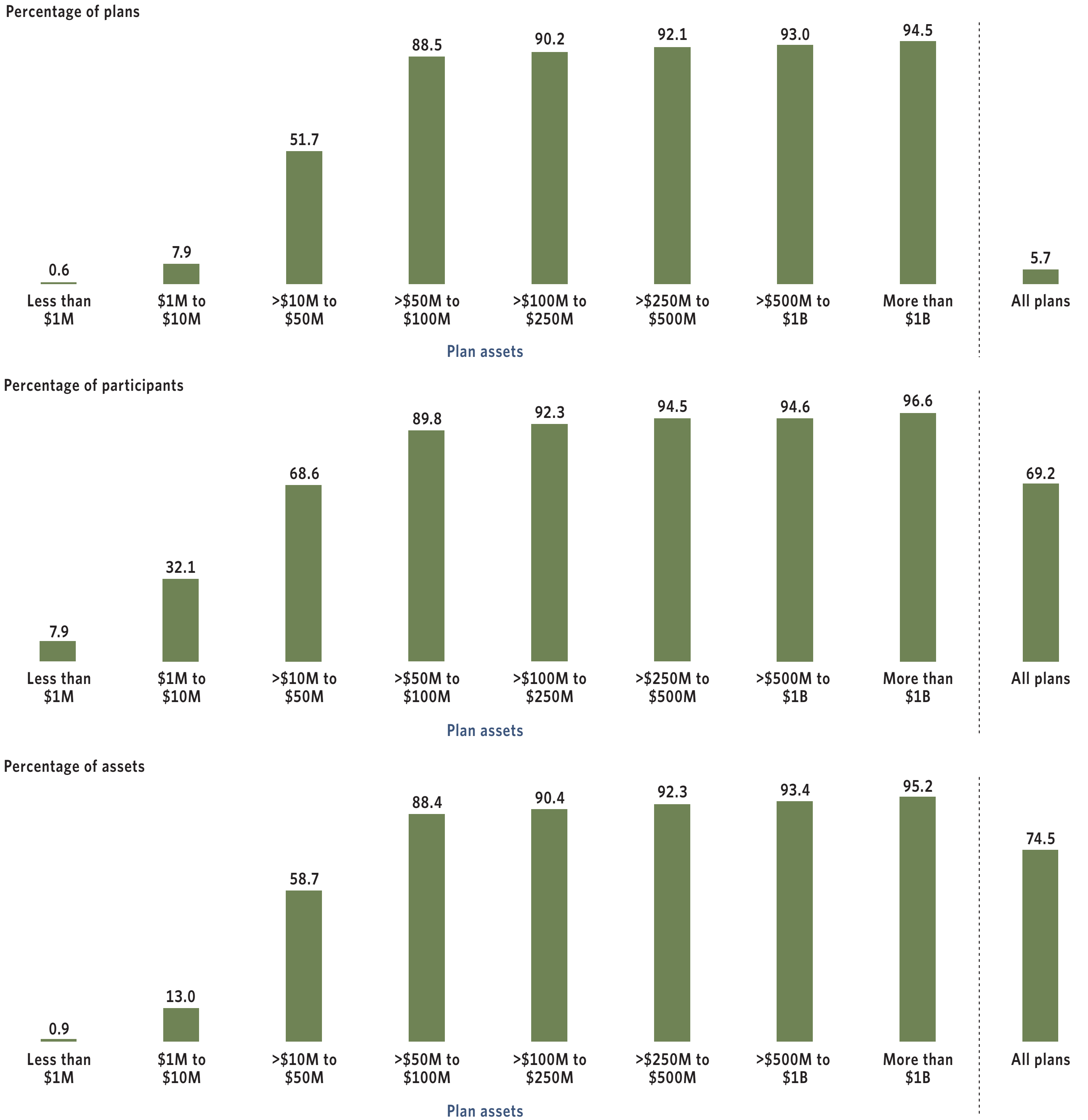
Note: Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Components may not add to the total because of rounding. Assets are fair market value at the year-end of the plan and include loans.

Source: BrightScope Defined Contribution Plan Database

EXHIBIT I.3

Audited 401(k) Plans' Share of the 401(k) Universe by Plan Assets

Share of Department of Labor 401(k) universe in audited 401(k) filings in the BrightScope database by plan assets, 2012



Note: The sample is 35,472 plans with $2.9 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

EXHIBIT I.4

Audited 401(k) Plans and the Universe of 401(k) Plans by Number of Plan Participants

Distribution of 401(k) plans, participants, and assets by number of plan participants (2012)

	Audited 401(k) filings		
Number of plan participants	**Plans**	**Participants** *Thousands*	**Assets** *Billions of dollars*
Fewer than 100	3,231	233.1	$23.6
100 to 499	21,937	4,872.5	264.9
500 to 999	4,244	2,971.7	168.4
1,000 to 4,999	4,573	9,875.2	591.1
5,000 to 9,999	738	5,112.7	363.8
10,000 or more	749	23,643.0	1,445.3
All plans	35,472	46,708.4	2,857.1

	Department of Labor 401(k) universe		
Number of plan participants	**Plans**	**Participants** *Thousands*	**Assets** *Billions of dollars*
Fewer than 100	560,480	10,936.1	$647.7
100 to 499	47,882	9,438.9	426.7
500 to 999	6,169	4,290.6	204.1
1,000 to 4,999	5,775	12,172.9	657.7
5,000 to 9,999	840	5,826.6	393.9
10,000 or more	801	24,865.0	1,503.8
All plans	621,947	67,530.0	3,833.9

	Audited 401(k) filings as a share of Department of Labor 401(k) universe		
Number of plan participants	**Plans** *Percent*	**Participants** *Percent*	**Assets** *Percent*
Fewer than 100	0.6%	2.1%	3.6%
100 to 499	45.8	51.6	62.1
500 to 999	68.8	69.3	82.5
1,000 to 4,999	79.2	81.1	89.9
5,000 to 9,999	87.9	87.7	92.4
10,000 or more	93.5	95.1	96.1
All plans	5.7	69.2	74.5

Note: Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Components may not add to the total because of rounding.

Source: BrightScope Defined Contribution Plan Database

The BrightScope database contributes to an existing body of information on 401(k) plans. Surveys of households and plan sponsors also have contributed to a better understanding of how 401(k) plans are used and structured. ICI conducts two annual household surveys that provide information about 401(k) and other DC plans and participants.[5] These surveys provide information about who participates in 401(k) plans, the assets they hold inside their plans, and their views about the features of their plans. In addition, other publicly available surveys provide important information to help researchers better understand how people use 401(k) plans to prepare for retirement.[6] These surveys can provide detailed information about the people who participate in 401(k) plans (such as age, income, and other demographic characteristics) and how they feel about their plans, but may be limited in their ability to provide accurate information on account balances and plan design features, which individuals may have difficulty recalling. By using audited plan-level data, the BrightScope database increases the quality of information about plan design and allows for improved understanding about how 401(k) plans are structured.

Detailed information on plan design also is available through various surveys of plan sponsors.[7] These surveys provide information about plan design, including fees and expenses, but can suffer from small, nonrandom samples, which may limit their suitability for extrapolation to the entire 401(k) market. The BrightScope database's sample for this report of more than 35,000 401(k) plans allows for analysis of a much broader array of DC plans based on regulatory filings. In addition, the BrightScope database has nearly universal coverage of larger plans.

ICI collects data from mutual fund companies directly, as well as from other sources, to gain an understanding of the fees and expenses that 401(k) plan participants pay as a group, on average.[8] The BrightScope database allows for analysis of the variation in mutual fund fees across different 401(k) plan sizes, as well as the ability to track consistent 401(k) plans over time. In addition, by combining mutual fund expense data with expenses on other assets as well as other fees and expenses paid for the operation of 401(k) plans, BrightScope builds a total plan cost measure for many plans. This provides a comprehensive description of the range of fees and expenses incurred in 401(k) plans.

Researchers also have used administrative data to understand participant-level behavior in 401(k) plans.[9] These data can provide a rich understanding of how 401(k) account balances, asset allocation, and contributions and distributions vary across participants, but often lack detailed information about the design of the plan itself, which is included in the BrightScope database.

Research Agenda for This Report

This report focuses on plan year 2012, presenting data on how 401(k) plans are structured, the types of service providers that plan sponsors engage with, and the fees and expenses paid by 401(k) participants and plan sponsors for these services. Analysis of prior years also is included, both for all 401(k) plans in a given year as well as 401(k) plans that are consistently included in the database, to explore changes over time.

Chapter 1 focuses on the structure of the 401(k) plans, analyzing the number and types of investment options that participants have to choose from, as well as the investment options that the participants do choose. Because target date funds have continued to become more prevalent in 401(k) plans over the past several years, this chapter explores how often they are offered in plans, what portion of plan assets are dedicated to these funds, and how these measures have changed in recent years. This chapter also explores the rising role of index funds.

Chapter 2 reports information about employer contribution structures and automatic enrollment design features. In designing their 401(k) plans, employers decide if and how much they will contribute to participants' accounts. In addition, they may choose to automatically enroll participants.

Chapter 3 explores the types of recordkeepers that are engaged in servicing 401(k) plans. A wide variety of businesses provide recordkeeping services, such as asset managers (including mutual fund companies), insurance companies, banks, brokerage firms, and pure recordkeepers. Employers choose from a wide variety of investment options for their plan lineup, including in some cases funds that are sponsored by the plan's recordkeeper, known as *proprietary funds.* The percentage of plans offering at least one proprietary fund and the percentage of plan assets invested in proprietary funds are presented in this chapter.

Chapter 4 analyzes fees paid to operate 401(k) plans. BrightScope has built a total plan cost measure for plans with sufficiently complete information. Because participants and assets tend to be concentrated in larger plans, BrightScope's total plan cost measure is analyzed for the average participant and the average dollar, as well as for the average plan. Then, because investment fees tend to be a significant portion of plan expenses and extensive information on mutual fund fees is available, the expense ratios of mutual funds in 401(k) plans are presented, with a special focus on the variation in mutual fund fees across plan size and different investment objectives (e.g., equity funds, balanced funds, bond funds, money market funds, and other funds).

CHAPTER 1

401(k) Investment Menu Design

Employers choose whether or not to offer 401(k) plans to their employees, and if so, how to design their plans to attract and retain qualified workers.[10] These design choices include the number and types of investment options in the plan, whether to contribute to the plan and whether to incentivize employees to contribute by matching their contributions, and whether and how to automatically enroll new employees into the plan. This chapter explores the investment menus that employers have chosen for 401(k) plans in the BrightScope Defined Contribution Plan Database and how investments vary by plan size.

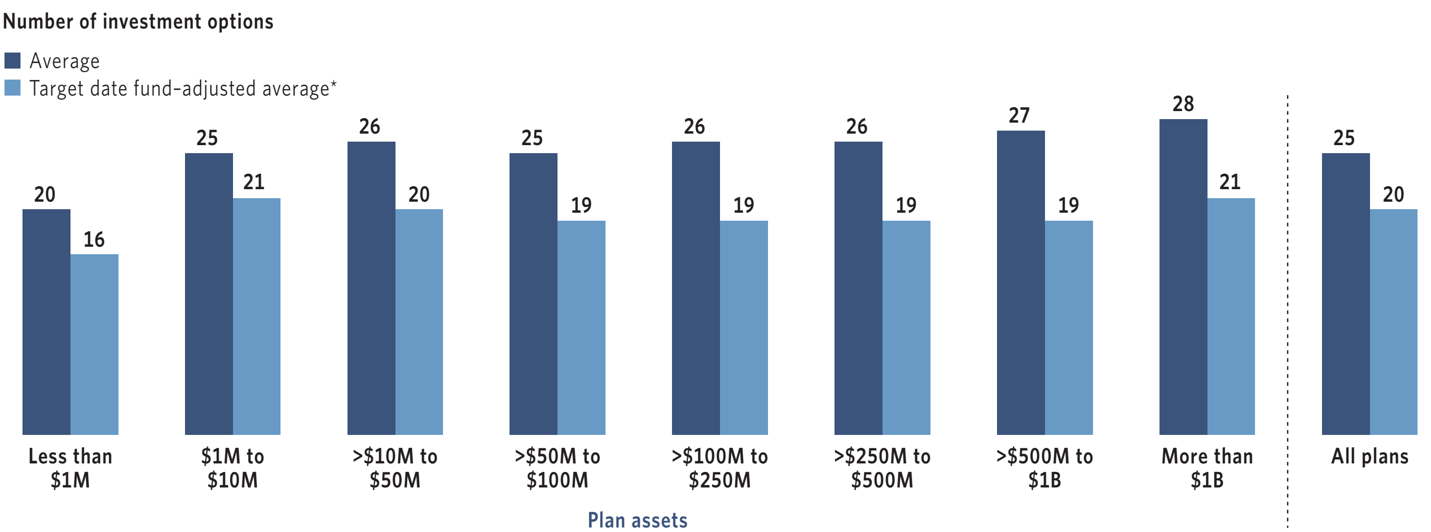
Number and Types of Investment Options

On average, 401(k) plans in the BrightScope Defined Contribution Plan Database offered participants 25 investment options in 2012 (Exhibit 1.1). Although there is little variation in the number of investment options offered across 401(k) plans with $1 million or more in plan assets (ranging from 25 options for plans with $1 million to $10 million in plan assets to 28 options for plans with more than $1 billion), plans with less than $1 million in plan assets offered 20 options, on average, significantly fewer than larger plans. Because plans

EXHIBIT 1.1

Number of Investment Options in 401(k) Plans

Average number of investment options among plans with audited 401(k) filings in the BrightScope database by plan assets, 2012



* This measure counts an entire suite of target date funds as one investment option for plans offering target date funds. A suite will cover a range of anticipated retirement dates.

Note: The sample is 35,472 plans with $2.9 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

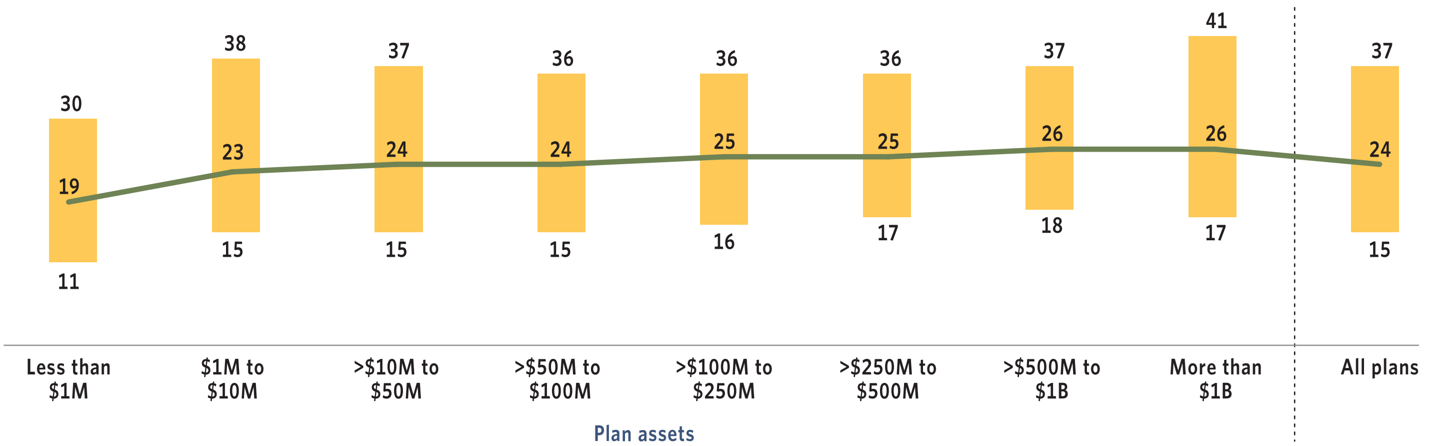
may offer suites of target date funds with options tailored to multiple anticipated retirement dates, an adjusted number that counts a suite of target date funds as one investment option also is presented. On average, 401(k) plans offer 20 options according to this target date fund–adjusted number, ranging from 16 investment options for plans with less than $1 million in plan assets to 21 investment options for plans with $1 million to $10 million or plans with more than $1 billion in plan assets.

Although the number of investment options varies little by plan size, there is considerable variation between plans. For example, 10 percent of plans offer 15 or fewer investment options and plans at the 90th percentile offer 37 options or more (Exhibit 1.2, upper panel). There is considerable variability even with a target date fund–adjusted measure, ranging from 12 options to 30 options at the 10th and 90th percentiles (Exhibit 1.2, lower panel).

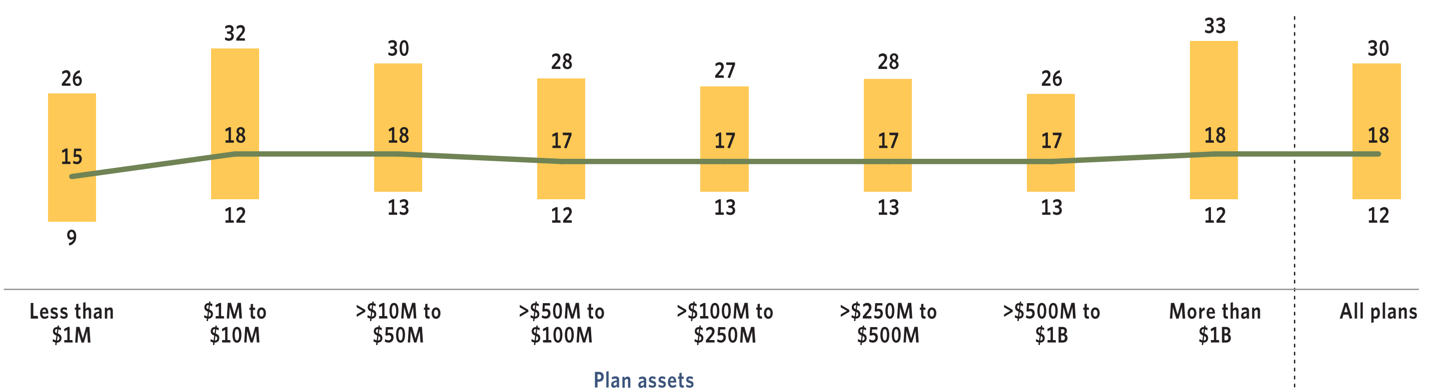
EXHIBIT 1.2

Distribution of Number of Investment Options in 401(k) Plans

10th percentile, median, and 90th percentile number of investment options among plans with audited 401(k) filings in the BrightScope database by plan assets (2012)



10th percentile, median, and 90th percentile number of target date fund–adjusted investment options among plans with audited 401(k) filings in the BrightScope database by plan assets (2012)*



* This measure counts an entire suite of target date funds as one investment option for plans offering target date funds. A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name. A suite will cover a range of anticipated retirement dates.

Note: The sample is 35,472 plans with $2.9 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

Between 2006 and 2012, 401(k) plans that were in the BrightScope database in every year (or consistent plans),[11] added an average of five investment options, on net, to their plan lineups, going from 20 investment options on average in 2006 to 25 in 2012 (Exhibit 1.3).[12] Other than consistent plans with more than $1 billion in plan assets (which added one investment option on average between 2006 and 2012), consistent plans in all plan size groups had net increases of between four and 10 investment options on average between 2006 and 2012. Target date funds accounted for much of the net increase in the number of investment options offered. If a target date fund suite is counted as a single investment option, then the number of investment options offered in consistent plans only increased from 18 options in 2006 to 19 options in 2012.[13]

EXHIBIT 1.3

Consistent 401(k) Plans Have Increased the Number of Investment Options Offered

Average number of investment options among plans with audited 401(k) filings in the BrightScope database in every year by plan assets, 2006–2012

	Average number of investment options						
Plan assets	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Less than $1M	17	20	N/A	22	24	23	23
$1M to $10M	20	21	N/A	23	24	25	25
>$10M to $50M	19	21	N/A	23	24	24	24
>$50M to $100M	19	21	N/A	23	24	25	25
>$100M to $250M	23	25	N/A	27	27	27	27
>$250M to $500M	22	25	N/A	27	28	29	30
>$500M to $1B	29	31	N/A	34	35	38	39
More than $1B	27	28	N/A	32	30	28	28
All plans	20	22	N/A	24	25	25	25

	Target date fund–adjusted average number of investment options*						
Plan assets	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Less than $1M	16	19	N/A	19	21	19	19
$1M to $10M	18	19	N/A	19	20	20	20
>$10M to $50M	17	18	N/A	18	19	19	18
>$50M to $100M	16	17	N/A	18	18	18	18
>$100M to $250M	19	20	N/A	21	20	20	19
>$250M to $500M	19	19	N/A	20	21	21	21
>$500M to $1B	25	26	N/A	27	26	29	30
More than $1B	24	24	N/A	26	23	22	22
All plans	18	19	N/A	20	20	20	19

* This measure counts an entire suite of target date funds as one investment option for plans offering target date funds. A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name. A suite will cover a range of anticipated retirement dates.

N/A = not available

Note: The sample is 3,889 plans in the BrightScope Defined Contribution Plan Database in each year available between 2006 and 2012 (data for 2008 are not available). Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Plans are allocated to the plan asset category based on plan assets in 2006.

Source: BrightScope Defined Contribution Plan Database

Domestic equity funds, international equity funds, and domestic bond funds were the most likely investment options to be offered in 401(k) plans in 2012. Nearly all plans offered these types of funds, which can be mutual funds, collective investment trusts, or separate accounts (Exhibit 1.4). About seven in 10 plans offered target date funds, and nearly two-thirds offered non–target date balanced funds. More than half of 401(k) plans offered money funds and more than six in 10 offered guaranteed investment contracts (GICs). Sixty percent of 401(k) plans had other investments, which include individual stocks (including company stock) and bonds. Just a little more than one-fifth of 401(k) plans had international bond funds in their investment lineups.

For most investment types, there was little variation in their availability by plan size. However, larger plans were more likely to offer other investments (which include company stock), money funds, or GICs. For example, 44.1 percent of the smallest plans offered other investments, compared with 92.2 percent of the largest plans.[14] Similarly, 43.0 percent of plans with less than $1 million in plan assets offered GICs in 2012, compared with more than 70 percent of plans with more than $50 million.

EXHIBIT 1.4

Equity and Bond Funds Are the Most Common Investment Options

Percentage of plans with audited 401(k) filings in the Brightscope database offering the specified investment option by plan assets, 2012

	Equity funds		Balanced funds		Bond funds					
Plan assets	Domestic	International	Target date funds[1]	Non–target date balanced funds	Domestic	International	Money funds	GICs	Other[2]	Memo: index funds
Less than $1M	98.6	94.5	62.0	65.1	93.2	18.5	50.1	43.0	44.1	66.1
$1M to $10M	99.2	97.7	68.7	70.0	97.7	24.2	53.1	59.4	56.6	79.1
>$10M to $50M	98.9	97.9	70.4	65.0	98.0	22.5	52.7	68.6	62.3	89.7
>$50M to $100M	98.5	97.0	70.1	60.6	97.1	17.3	54.6	73.0	65.4	94.3
>$100M to $250M	98.8	98.1	75.2	57.2	98.1	13.9	58.9	76.0	69.9	97.1
>$250M to $500M	98.7	98.2	78.7	55.4	98.6	11.7	66.1	76.5	75.2	97.4
>$500M to $1B	99.3	99.0	81.5	50.6	98.3	8.5	69.8	76.1	77.8	98.8
More than $1B	98.7	96.3	72.1	42.4	95.7	15.8	81.4	72.7	92.2	97.4
All plans	99.0	97.5	69.6	65.9	97.5	21.7	54.1	63.8	60.0	84.4

[1] A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

[2] *Other* includes commodity funds, real estate funds, and individual stocks (including company stock) and bonds.

Note: The sample is 35,472 plans with $2.9 trillion in assets. Participant loans are excluded. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

Equity funds were the most common investment option in 2012, with 401(k) plans offering 12.5 funds on average, of which 9.5 were domestic equity funds and 3.0 were international equity funds (Exhibit 1.5). Aside from plans with less than $1 million in plan assets, smaller plans tended to offer more equity funds, with plans with $1 million to $10 million in plan assets offering 13.2 equity funds compared with 10.2 offered by plans with more than $1 billion in plan assets.

The next most common category in 401(k) investment lineups in 2012 was balanced funds, with 7.2 funds offered on average, most of which (5.8 funds) were target date funds (Exhibit 1.5). Larger 401(k) plans tended to have more target date funds for two reasons. First, larger plans tended to be more likely to offer target date funds (Exhibit 1.4). Second, larger plans offered more funds as part of their target date fund suites on average. For example, among plans with more than $1 billion in plan assets, the average target date fund suite included around 11 funds (7.4 target date funds divided by 0.7 target date fund suites) (Exhibit 1.5). For plans with less than $1 million in plan assets, the average target date fund suite included around seven funds (3.9 target date funds divided by 0.6 target date fund suites). On average, there were about eight target date funds in a suite across all plans in the sample.

EXHIBIT 1.5

Average Number of Investment Options by Type of Investment

Average number of investment options among plans with audited 401(k) filings in the BrightScope database by plan assets, 2012

	Average number of investment options									Memo:	
	Equity funds		Balanced funds		Bond funds						
Plan assets	Domestic	International	Target date funds[1]	Non-target date balanced funds	Domestic	International	Money funds	GICs	Other[2]	Index funds	Adjusted target date funds[3]
Less than $1M	7.6	2.6	3.9	1.5	2.2	0.2	0.5	0.5	0.6	2.3	0.6
$1M to $10M	10.0	3.2	5.2	1.7	2.7	0.3	0.6	0.7	0.8	3.1	0.7
>$10M to $50M	9.7	3.0	6.3	1.3	2.7	0.3	0.6	0.8	1.1	4.0	0.7
>$50M to $100M	8.8	2.7	6.8	1.1	2.5	0.2	0.7	0.8	1.3	5.2	0.7
>$100M to $250M	8.6	2.7	7.6	0.9	2.5	0.2	0.7	0.9	1.4	5.6	0.8
>$250M to $500M	8.2	2.6	8.4	0.9	2.5	0.1	0.9	1.0	1.7	6.6	0.8
>$500M to $1B	8.0	2.7	8.8	0.8	2.6	0.1	1.0	1.2	1.7	7.2	0.8
More than $1B	7.3	2.9	7.4	0.7	3.0	0.2	1.2	1.9	3.1	8.7	0.7
All plans	9.5	3.0	5.8	1.4	2.6	0.3	0.6	0.7	1.0	3.8	0.7

[1] A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

[2] *Other* includes commodity funds, real estate funds, and individual stocks (including company stock) and bonds, but each separate option is counted as a unique investment option.

[3] This measure counts an entire suite of target date funds as one investment option for plans offering target date funds. A suite will cover a range of anticipated retirement dates.

Note: The sample is 35,472 plans with $2.9 trillion in assets. Participant loans are excluded. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Exhibit A.1 in the appendix shows the average number of a given investment option offered by plans that have at least one of that investment option.

Source: BrightScope Defined Contribution Plan Database

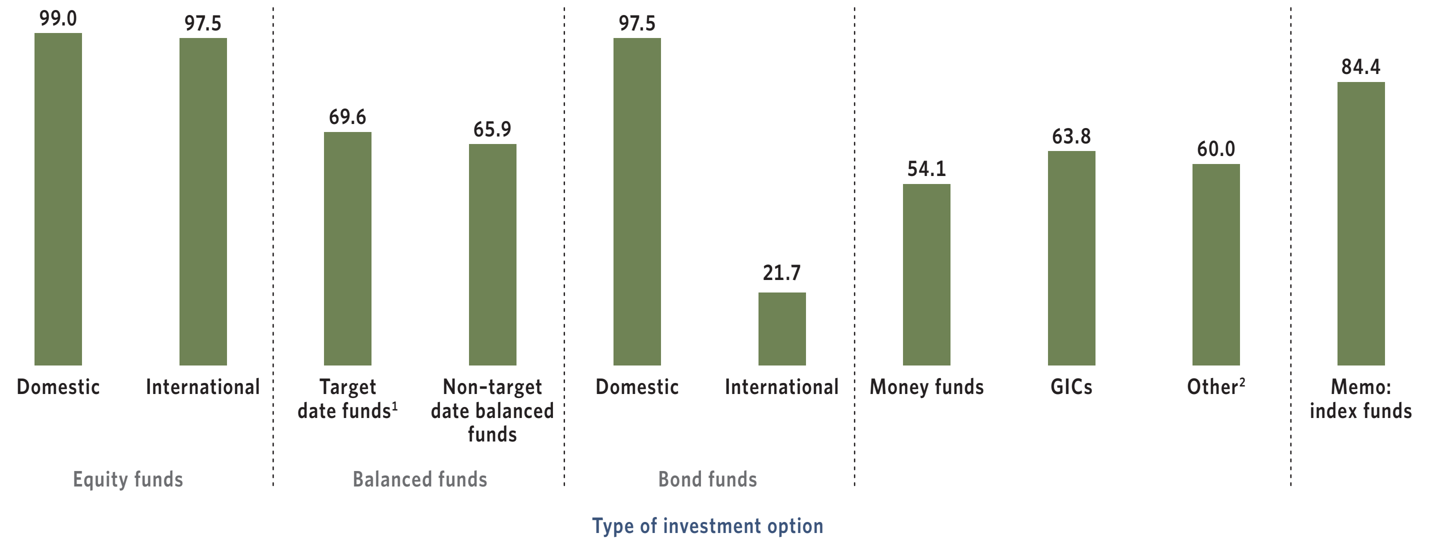
In 2012, 401(k) plans included 2.9 bond funds (mostly domestic) in their investment lineups, on average (Exhibit 1.5). Plans also offered money funds, GICs, and other options. These investments were not offered as widely (Exhibit 1.4) and were often included as the single choice in that investment type. Larger plans tended to be somewhat more likely to offer these options and offered more of these funds when including that investment category.

It is instructive to consider availability and then the number of investment options by investment category contingent on that investment category being offered in the 401(k) plan. For example, domestic equity funds are not only widely available, with 99 percent of 401(k) plans including them in their investment lineups in 2012 (Exhibit 1.6, upper panel), but also, when they are an option, multiple domestic equity funds—9.6 on average—are offered (Exhibit 1.6, lower panel).

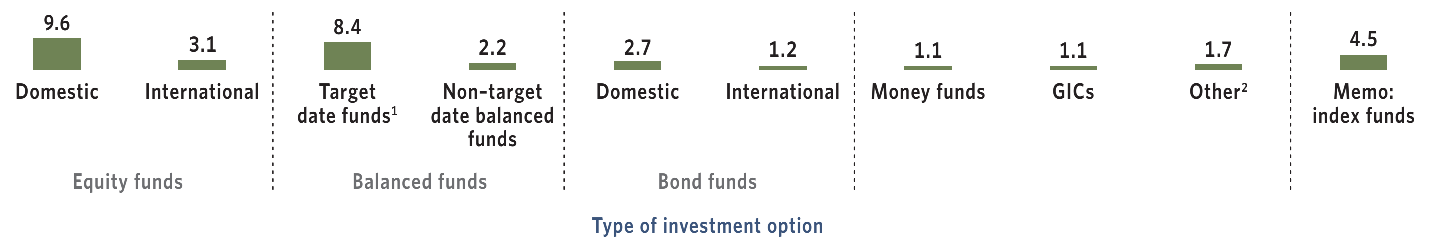
EXHIBIT 1.6

Incidence and Number of Investment Options Offered by Type of Investment

Percentage of plans with audited 401(k) filings in the BrightScope database offering the specified investment option, 2012



Average number of investment options among plans offering a given investment option, 2012



[1] A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

[2] *Other* includes commodity funds, real estate funds, and individual stocks (including company stock) and bonds, but each separate option is counted as a unique investment option.

Note: The sample is 35,472 plans with $2.9 trillion in assets. Participant loans are excluded. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Exhibit A.1 in the appendix shows the average number of a given investment option offered by plans offering at least one of that investment option.

Source: BrightScope Defined Contribution Plan Database

International equity funds are widely available, offered in 97.5 percent of 401(k) plans in 2012, but on average, 3.1 international equity funds are offered in 401(k) plans including that investment type (Exhibit 1.6). Similarly, domestic bond funds are widely available, offered in 97.5 percent of 401(k) plans in 2012, but on average, 2.7 domestic bond funds are offered in 401(k) plans including that investment type. A little more than half of 401(k) plans offer one money fund on average, and more than six in 10 401(k) plans offer one GIC on average. Nearly 85 percent of 401(k) plans in 2012 had index funds in their investment lineups, offering 4.5 funds on average.

For consistent 401(k) plans (plans that were in the BrightScope database from 2006 to 2012), investment offerings remained relatively stable between 2006 and 2012. The largest net change was in target date fund offerings, which increased from 2.6 funds per plan on average in 2006 to 6.5 funds per plan in 2012 (Exhibit 1.7). This corresponded to a net increase from 0.4 target date fund suites on average in 2006 to 0.7 suites in 2012. The number of international equity and domestic bond funds offered also increased, on average, between 2006 and 2012. On average, international equity funds offered in consistent 401(k) plans increased, on net, from 2.3 funds in 2006 to 2.8 funds in 2012. Similarly, the number of domestic bond funds offered increased from 2.1 funds to 2.6 funds between 2006 and 2012. In addition, index fund investing rose in popularity: in 2006, consistent 401(k) plans offered 2.1 index funds, on average, which more than doubled to 4.3 index funds on average in 2012.

Investment Vehicles

When choosing which investment options to offer, employers also choose the investment vehicles (for example, mutual funds, collective investment trusts, or separate accounts) for these options. Mutual funds were the most common investment vehicle in 401(k) plans in the BrightScope database, representing 46 percent of assets in 2012 (Exhibit 1.8). Mutual funds were a smaller share of assets in the largest 401(k) plans, accounting for between 60 percent and 69 percent of assets in plans with between $1 million and $1 billion in plan assets, but only 29 percent of assets in plans with more than $1 billion. Collective investment trusts accounted for an additional 21 percent of assets, overall, followed by GICs at 12 percent, and separate accounts with 3 percent of assets. Both collective investment trusts and GICs accounted for a larger share of assets in larger plans, while separate accounts were responsible for a larger share of assets in smaller plans. For example, collective investment trusts held 3 percent of assets in plans with less than $1 million in plan assets, compared with 32 percent in plans with more than $1 billion. Conversely, separate accounts held 30 percent of assets in plans with less than $1 million in plan assets, compared with 1 percent of assets in plans with more than $1 billion. Other investment vehicles, including individual stocks (including company stock) and individual bonds, accounted for the remaining assets. The largest plans had the highest allocation to other investment vehicles, partially reflecting company stock investing.[15]

EXHIBIT 1.7

Average Number of Investment Options in Consistent 401(k) Plans

Average number of investment options among plans with audited 401(k) filings in the BrightScope database in every year by plan assets, 2006 and 2012

Average number of investment options, 2006

	Equity funds		Balanced funds		Bond funds					Memo:	
Plan assets	Domestic	International	Target date funds[1]	Non-target date balanced funds	Domestic	International	Money funds	GICs	Other[2]	Index funds	Adjusted target date funds[3]
Less than $1M	8.7	2.1	0.6	1.8	1.8	0.1	0.8	0.5	0.2	1.6	0.1
$1M to $10M	9.6	2.3	1.7	1.8	2.1	0.1	0.8	0.6	0.4	1.7	0.3
>$10M to $50M	8.9	2.2	2.7	1.5	1.9	0.1	0.7	0.7	0.6	2.0	0.4
>$50M to $100M	8.4	2.0	3.5	1.4	1.8	0.1	0.7	0.8	0.7	2.2	0.4
>$100M to $250M	10.1	2.3	4.2	1.4	2.2	0.1	0.9	0.8	1.0	2.7	0.5
>$250M to $500M	9.4	2.2	4.3	1.6	2.2	0.1	0.7	0.8	1.1	3.4	0.5
>$500M to $1B	12.5	2.9	4.5	1.9	3.0	0.2	1.2	1.3	1.3	4.3	0.5
More than $1B	10.4	3.1	3.0	1.8	3.1	0.2	1.4	2.0	1.7	4.2	0.4
All plans	9.4	2.3	2.6	1.6	2.1	0.1	0.8	0.8	0.6	2.1	0.4

Average number of investment options, 2012

	Equity funds		Balanced funds		Bond funds					Memo:	
Plan assets	Domestic	International	Target date funds[1]	Non-target date balanced funds	Domestic	International	Money funds	GICs	Other[2]	Index funds	Adjusted target date funds[3]
Less than $1M	9.4	2.8	4.2	1.8	2.4	0.2	0.8	0.6	0.4	3.1	0.5
$1M to $10M	9.7	3.0	5.7	1.5	2.6	0.2	0.8	0.7	0.6	3.2	0.7
>$10M to $50M	8.9	2.6	6.4	1.1	2.5	0.2	0.8	0.7	0.8	3.9	0.7
>$50M to $100M	8.8	2.6	7.3	0.9	2.5	0.2	0.8	0.8	0.9	5.0	0.7
>$100M to $250M	9.0	2.6	8.7	0.9	2.5	0.1	1.0	0.8	1.1	6.0	0.7
>$250M to $500M	10.1	3.0	9.3	1.4	2.9	0.1	0.9	0.9	1.2	8.1	0.8
>$500M to $1B	13.8	4.4	9.8	1.6	4.2	0.3	1.6	1.3	1.6	9.0	0.9
More than $1B	7.9	2.9	7.3	0.8	3.4	0.2	1.7	2.0	2.0	8.7	0.6
All plans	9.3	2.8	6.5	1.3	2.6	0.2	0.9	0.8	0.8	4.3	0.7

[1] A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

[2] *Other* includes commodity funds, real estate funds, and individual stocks (including company stock) and bonds, but each separate option is counted as a unique investment option.

[3] This measure counts an entire suite of target date funds as one investment option for plans offering target date funds. A suite will cover a range of anticipated retirement dates.

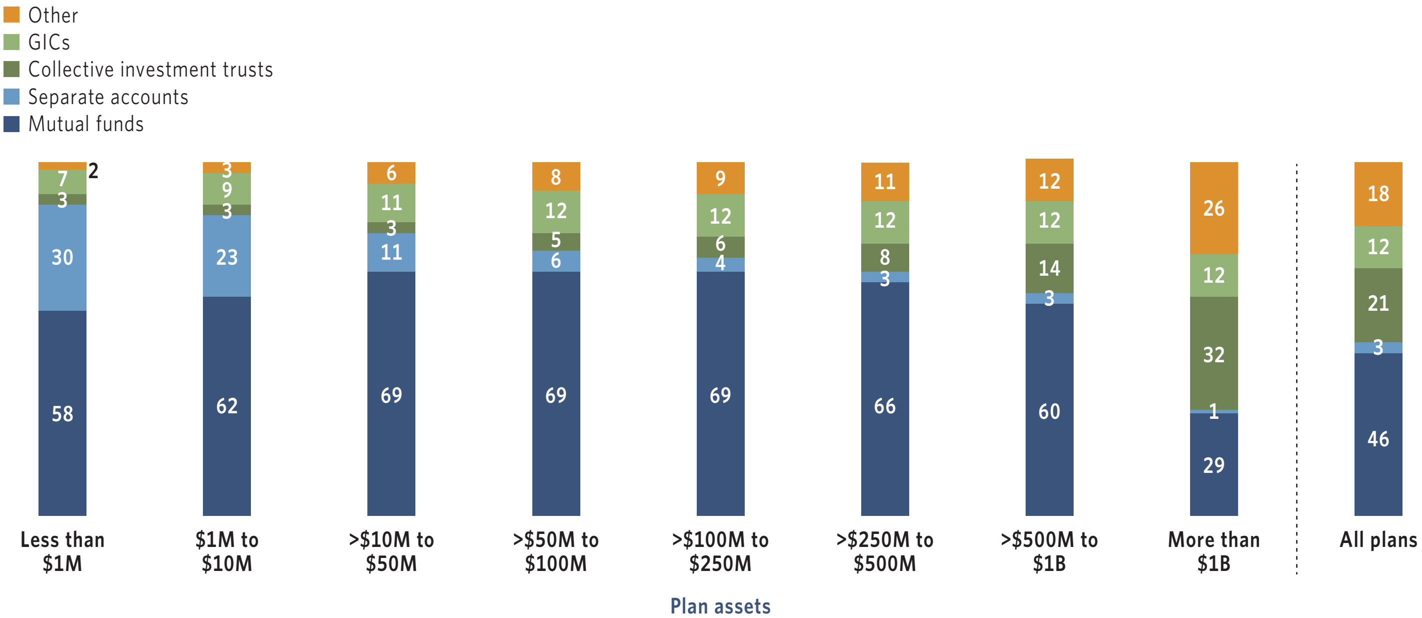
Note: The sample is 3,889 plans in the BrightScope Defined Contribution Plan Database in each year available between 2006 and 2012. Participant loans are excluded. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Plans are allocated to the plan asset category based on plan assets in 2006.

Source: BrightScope Defined Contribution Plan Database

EXHIBIT 1.8

Types of Investment Vehicles in 401(k) Plans

Percentage of total assets among plans with audited 401(k) filings in the BrightScope database by plan assets, 2012



* *Other* includes individual stocks (including company stock), bonds, brokerage, and other investments. Participant loans are excluded.

Note: The sample is 35,472 plans with $2.9 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Components may not add to 100 percent because of rounding.

Source: BrightScope Defined Contribution Plan Database

Aggregate Asset Allocation

Although employers choose the investment options offered in 401(k) plans, participants generally choose where to allocate the money in their accounts among such options.[16] In 2012, equity funds held the largest share (38.8 percent) of 401(k) assets in the BrightScope database, with the bulk invested in domestic equity funds (Exhibit 1.9). Other investments (which include company stock) held the next largest share with 18.5 percent of 401(k) plan assets. Balanced funds followed, with 17.2 percent of assets—which was divided between target date funds (13.4 percent of assets) and non–target date balanced funds (3.8 percent of assets)—followed by GICs (11.9 percent of assets). Bond funds (mostly domestic) held 10.3 percent of assets and money funds held 3.1 percent.[17]

Participants in larger plans (as measured by plan assets) tended to have less of their assets invested in target date funds, non–target date balanced funds, and money funds. For example, participants in 401(k) plans with less than $1 million in plan assets had 36.6 percent of their assets invested in balanced funds and 5.4 percent in money funds, on average, compared with 12.6 percent and 3.1 percent, respectively, for participants in plans with more than $1 billion in plan assets (Exhibit 1.9). However, participants in these larger 401(k) plans tended to have more of their money invested in GICs and other investments. This pattern reflects, in part, the pattern of company stock offering in 401(k) plans.[18] For example, in 2012, participants in plans with less than $1 million in plan assets invested 6.7 percent of their assets in GICs and 2.9 percent in other investments, compared with 12.0 percent in GICs and 26.5 percent in other investments for plans with more than $1 billion in plan assets.

Since 2006 (the earliest data in the BrightScope database), 401(k) plans have become more likely to offer target date funds.[19] In 2012, 69.6 percent of 401(k) plans offered target date funds, compared with 29.1 percent in 2006 (Exhibit 1.10, upper panel).[20] The share of plan assets invested in these funds also increased, rising from 3.0 percent in 2006 to 13.4 percent in 2012 (Exhibit 1.10, lower panel).[21] Smaller plans experienced the largest increase in plan assets invested in target date funds.

Index Funds

Index funds, which are funds that track a market index (e.g., S&P 500 funds) generally claimed a greater share of assets in larger 401(k) plans than in smaller plans. On average, 23.1 percent of 401(k) assets in the BrightScope database were invested in index funds, but this fraction ranged from 9.7 percent of assets in plans with less than $1 million in plan assets to 27.6 percent in plans with more than $1 billion (Exhibit 1.9, upper panel). Similarly, 12.5 percent of assets in plans with fewer than 100 participants were invested in index funds, compared with 27.5 percent of assets in plans with 10,000 or more participants (Exhibit 1.9, lower panel).

EXHIBIT 1.9

The Largest Share of 401(k) Assets Is Invested in Equity Funds

Percentage of total assets among plans with audited 401(k) filings in the BrightScope database by plan assets or number of plan participants, 2012

	Equity funds		Balanced funds		Bond funds					
Plan assets	Domestic	International	Target date funds[1]	Non-target date balanced funds	Domestic	International	Money funds	GICs	Other[2]	Memo: index funds
Less than $1M	28.6	10.3	22.8	13.8	8.9	0.5	5.4	6.7	2.9	9.7
$1M to $10M	33.2	9.7	18.6	10.8	10.0	0.5	4.1	9.5	3.6	10.8
>$10M to $50M	35.0	9.2	16.2	6.8	10.7	0.4	3.3	11.2	7.1	13.7
>$50M to $100M	35.1	8.6	15.6	5.8	10.7	0.3	3.0	12.2	8.7	16.3
>$100M to $250M	34.7	8.1	16.7	4.9	10.7	0.3	3.0	12.3	9.4	17.7
>$250M to $500M	33.0	7.8	17.5	4.9	10.2	0.2	3.2	12.1	11.3	20.2
>$500M to $1B	32.6	7.8	17.4	4.2	10.7	0.1	3.1	12.0	12.1	22.5
More than $1B	28.3	7.5	10.3	2.3	9.4	0.5	3.1	12.0	26.5	27.6
All plans	30.9	7.9	13.4	3.8	9.9	0.4	3.1	11.9	18.5	23.1

	Equity funds		Balanced funds		Bond funds					
Number of plan participants	Domestic	International	Target date funds[1]	Non-target date balanced funds	Domestic	International	Money funds	GICs	Other[2]	Memo: index funds
Fewer than 100	34.6	9.3	12.9	7.3	10.2	0.3	3.9	10.9	10.8	12.5
100 to 499	34.5	9.4	14.0	7.4	10.9	0.4	3.6	10.1	9.7	14.2
500 to 999	35.2	8.6	15.9	5.9	10.8	0.3	3.2	11.3	8.8	16.2
1,000 to 4,999	33.8	8.1	16.0	5.0	10.6	0.2	3.2	12.5	10.6	19.0
5,000 to 9,999	30.3	7.6	15.0	4.1	10.2	0.2	2.8	13.0	16.7	22.6
10,000 or more	28.7	7.5	11.5	2.3	9.3	0.5	3.1	11.8	25.1	27.5
All plans	30.9	7.9	13.4	3.8	9.9	0.4	3.1	11.9	18.5	23.1

[1] A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

[2] *Other* includes commodity funds, real estate funds, and individual stocks (including company stock) and bonds.

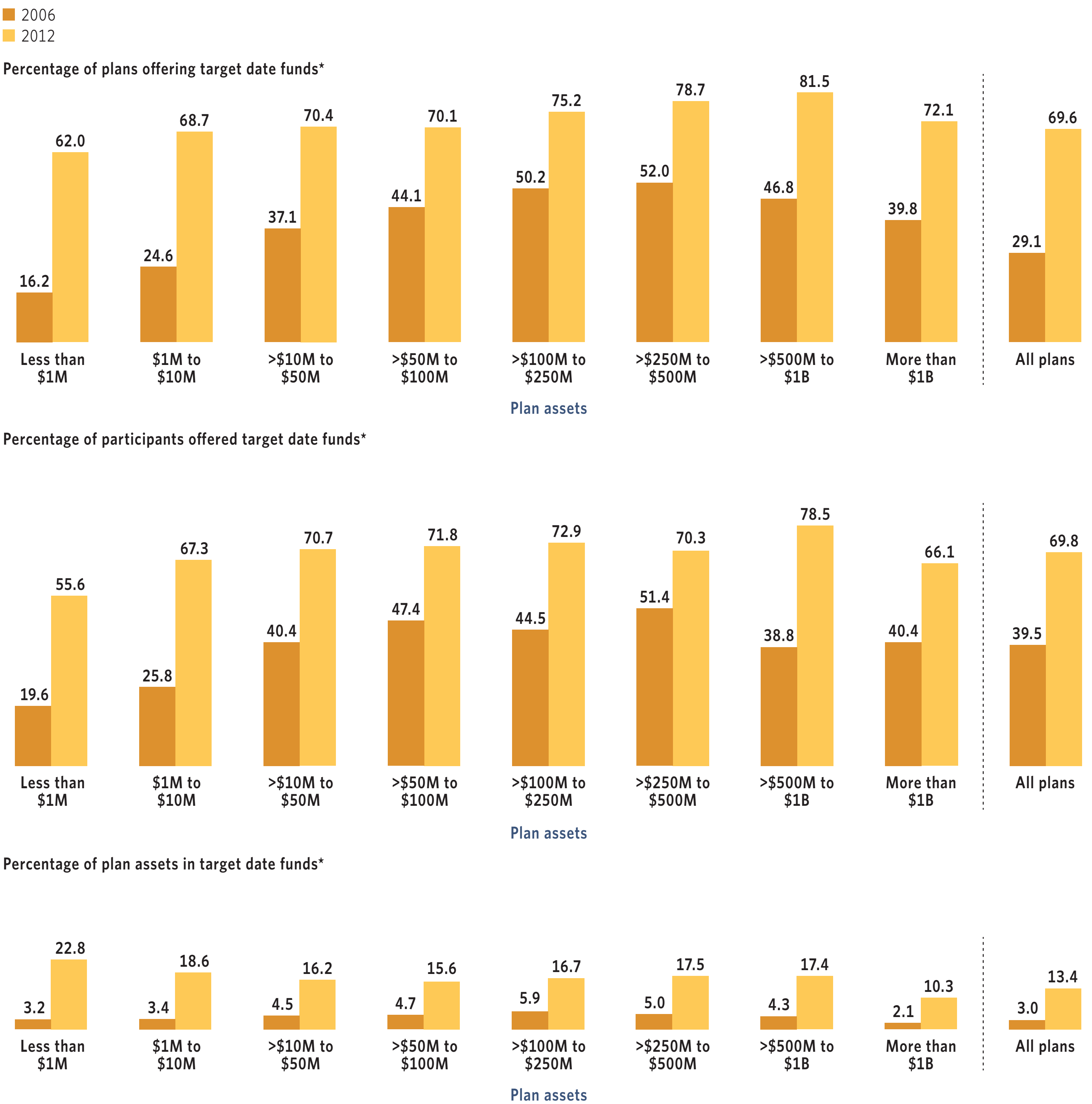
Note: The sample is 35,472 plans with $2.9 trillion in assets. Participant loans are excluded. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

EXHIBIT 1.10

Target Date Fund Use Has Risen over Time

Percentage of plans offering, participants offered, and plan assets in target date funds among plans with audited 401(k) filings in the BrightScope database by plan assets (2006 and 2012)*



* A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: The samples are 18,041 plans in 2006 and 35,472 plans in 2012. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

Index funds also have grown in popularity since 2006 (the earliest data in the BrightScope database).[22] In 2006, 77.1 percent of 401(k) plans in the BrightScope database offered index funds and 16.9 percent of plan assets were invested in such products (Exhibit 1.11). The use of index funds increased to 84.2 percent of plans and 23.1 percent of assets in 2012. Although the percentage of 401(k) plans offering index funds increased for all plan asset groups, larger plans were more likely to offer index funds in 2012 compared with smaller plans. For example, 97.4 percent of 401(k) plans with more than $1 billion in plan assets offered index funds in their plan lineups in 2012, compared with 66.1 percent of 401(k) plans with less than $1 million.

EXHIBIT 1.11

Index Fund Use Has Increased over Time

Percentage of plans offering, and plan assets in, index funds among plans with audited 401(k) filings in the BrightScope database, 2006 and 2012

	Percentage of plans offering index funds*	
Plan assets	**2006**	**2012**
Less than $1M	64.3	66.1
$1M to $10M	73.4	79.1
>$10M to $50M	83.5	89.4
>$50M to $100M	92.2	94.6
>$100M to $250M	94.6	97.1
>$250M to $500M	95.9	97.4
>$500M to $1B	96.4	98.8
More than $1B	97.2	97.4
All plans	77.1	84.2

	Percentage of plan assets in index funds*	
Plan assets	**2006**	**2012**
Less than $1M	8.2	9.7
$1M to $10M	8.1	10.8
>$10M to $50M	9.9	13.7
>$50M to $100M	12.3	16.3
>$100M to $250M	12.8	17.7
>$250M to $500M	14.7	20.2
>$500M to $1B	15.1	22.5
More than $1B	19.4	27.6
All plans	16.9	23.1

* An index fund is designed to track the performance of a market index. The fund's portfolio of securities is either a replicate or a representative sample of the designated market index. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products.

Note: Samples are 18,041 plans in 2006 and 35,472 plans in 2012. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

CHAPTER 2

401(k) Plan Employer Contribution and Enrollment Design

When designing their 401(k) plans, in addition to choosing investment options, employers also decide how contributions to the plan will be structured. Employers can make contributions to 401(k) plans either without regard to employee contributions or by using a matching structure that incentivizes employees to contribute to the plan. Employers also can automatically enroll employees into the plan at a given contribution rate to encourage participation.

The Role of Employer Contributions

Employers choose whether, how, and how much to contribute to their employees' 401(k) accounts. They could make a fixed contribution (whether a fixed dollar amount or a fixed percentage of salary) to each employee's account regardless of the employee's contributions (nonelective contributions); they could match some percentage of employee contributions up to a fixed dollar amount or up to a fixed percentage of salary; they could implement a more complicated tiered matching formula in which employee contributions are matched at different rates depending on how much the employee contributes; or they could choose not to contribute money to the plan at all. Plans are subject to nondiscrimination rules to ensure that the contributions do not disportionately accrue to highly compensated employees, but otherwise employers can choose how to structure their contributions, within contribution limits set by the Internal Revenue Code.[23]

DOL Form 5500 data indicate that in 2012 employers made contributions to their employees' accounts in about four-fifths of 401(k) plans with 100 participants or more (Exhibit 2.1).[24]

Larger plans were more likely to have employer contributions. In fact, more than nine in 10 plans with more than $10 million in plan assets had employer contributions in 2012. Employer contribution rates have remained relatively stable since 2006 for larger 401(k) plans, but smaller plan sponsors have become slightly less likely to contribute.

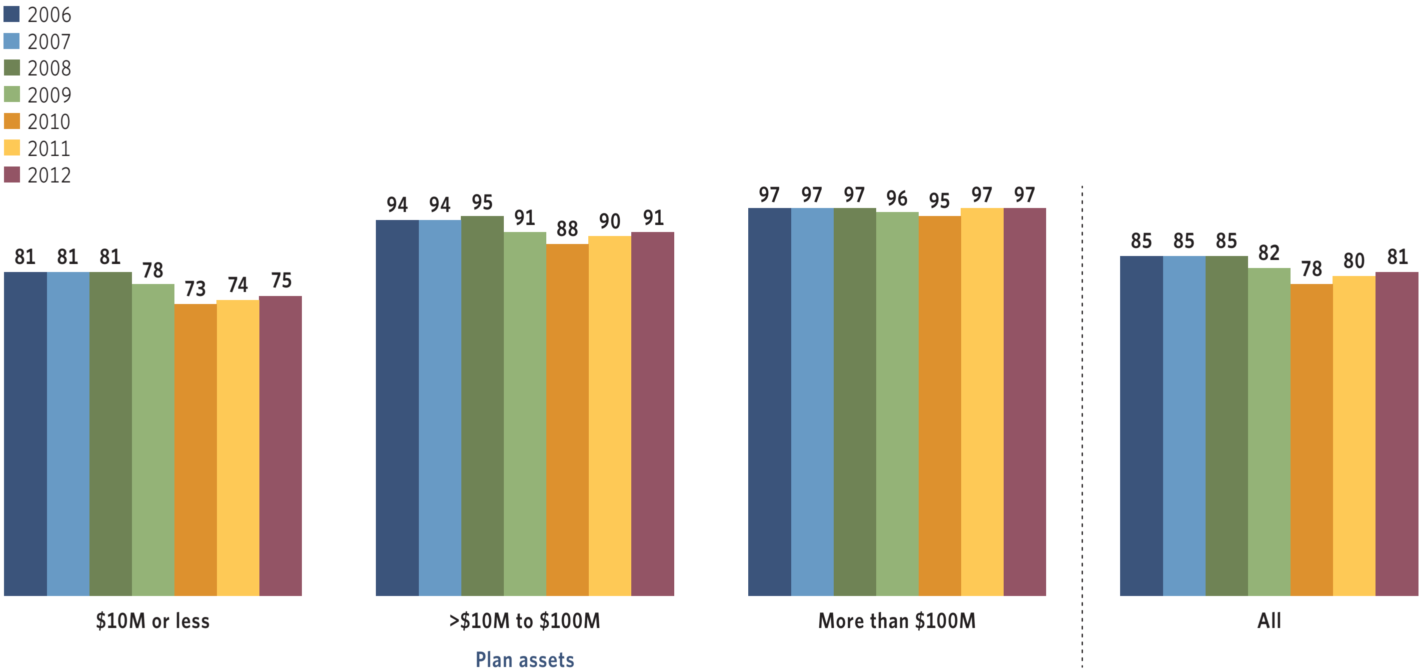
Types of Employer Contributions

Employers choosing to make contributions to their employees' 401(k) plan accounts can choose either to match contributions made by the employees or to make contributions regardless of employee contributions. If the employer chooses to match employee contributions, the employer can choose a simple match formula, a tiered match formula, or a maximum dollar match formula. With a simple match formula, employee contributions are matched up to a fixed percentage of salary (for example, the employer matches 50 percent of employee contributions for the first 6 percent of the employee's salary, for a maximum employer contribution of 3 percent of the employee's salary). With a tiered match formula, different levels of employee contributions are matched at different rates (for example, matching 100 percent of the first 4 percent of salary contributed and 50 percent of the next 2 percent, for a maximum employer contribution of 5 percent of the employee's salary). With a maximum dollar match formula, employee contributions are matched up to a given dollar threshold (for example, matching 50 percent of the first $2,000 in contributions, for a maximum employer contribution of $1,000).

EXHIBIT 2.1

Employers Make Contributions in Most 401(k) Plans

Percentage of 401(k) plans with 100 participants or more with employer contributions (by plan assets, plan year 2006–2012)



Note: The sample includes 401(k) plans with 100 participants or more. See Exhibit A.2 in the appendix for additional detail.

Source: ICI tabulations of U.S. Department of Labor Form 5500 Research File

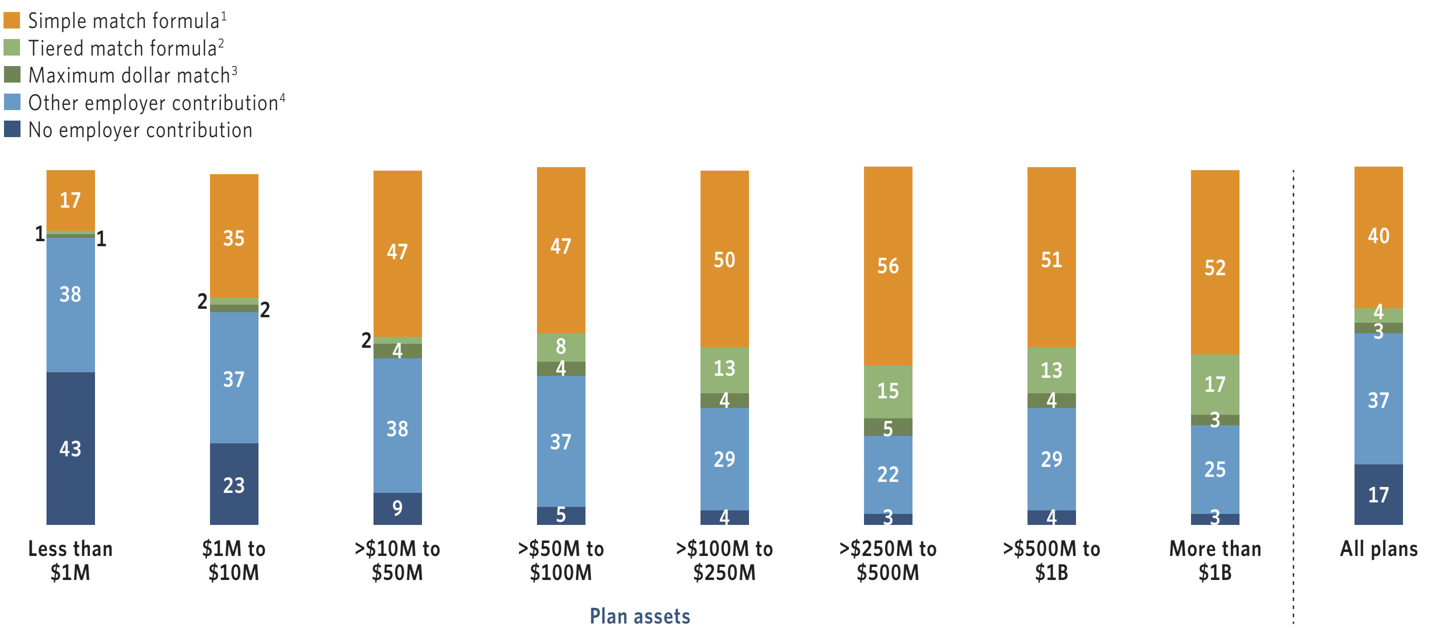
In 2012, 40 percent of 401(k) plans in the BrightScope database had a simple match formula, 4 percent had a tiered match formula, and 3 percent of 401(k) plans matched employee contributions up to a maximum dollar amount (Exhibit 2.2). Thirty-seven percent of 401(k) plans contributed money to the plan without regard to how much the employee contributed.[25] Participants in the final 17 percent of 401(k) plans did not receive any employer contributions in 2012.

Simple match formulas were more common in midsize and larger plans. Although only 17 percent of 401(k) plans with less than $1 million in plan assets offered a simple match, about 50 percent of plans with more than $10 million in plan assets did so (Exhibit 2.2). Tiered match formulas were also more common in larger plans. Although they were only offered in 1 percent of 401(k) plans with less than $1 million in plan assets, 17 percent of plans with more than $1 billion had these formulas. The smallest plans were significantly less likely to have employer contributions: 43 percent of plans with less than $1 million in plan assets and 23 percent of plans with $1 million to $10 million offered no employer contribution in 2012. This fell to less than 10 percent of plans with $10 million to $50 million in plan assets and less than 5 percent for plans with more than $50 million.

EXHIBIT 2.2

Design of 401(k) Employer Contributions

Percentage of plans among plans with audited 401(k) filings in the BrightScope database by plan assets, 2012



[1] Simple match formulas are employer contributions of a specified percentage of employee contributions up to a fixed percentage of employee salary (for example, matching 50 percent of employee contributions up to 6 percent of the employee's salary).

[2] Tiered match formulas match employee contributions at different rates for different levels of employee contributions (for example, matching 100 percent of the first 4 percent of salary contributed and 50 percent of the next 2 percent).

[3] Maximum dollar match formulas are employer contributions of some percentage of employee contributions up to a fixed dollar amount (for example, matching 50 percent of the first $2,000 of employee contributions).

[4] Other employer contributions include nonelective contributions and lump-sum contributions without an additional matching formula. Plans with employer matches but missing descriptions of the employer match data may be included in this category.

Note: The sample is 35,472 plans with $2.9 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Components may not add to 100 percent because of rounding.

Source: BrightScope Defined Contribution Plan Database

Simple Match Formulas

For simple match formulas, the employer chooses the percentage of employee contributions to match, as well as the maximum contribution percentage to match. Among the 40 percent of 401(k) plans with simple match formulas in the BrightScope database, the most common formula was matching 50 percent of contributions up to 6 percent of employee salary, with 16.5 percent of 401(k) plans using this formula (Exhibit 2.3, upper panel). The next most common simple match formula was a 100 percent match of contributions up to 6 percent of employee salary, in 14.9 percent of 401(k) plans. Altogether, 45.8 percent of plans with simple match formulas matched 100 percent of employee contributions (with various limits on the maximum employee contribution matched), and 40.8 percent matched employee contributions up to 6 percent of salary (with a variety of limits on the percentage of the contribution matched). The distribution of 401(k) participants across the match formulas is relatively similar to the distribution of 401(k) plans with each matching formula. For example, 17.1 percent of participants in plans with simple matching formulas were in plans that matched 50 percent of contributions up to 6 percent of salary, while 17.2 percent were in plans that matched 100 percent of contributions up to 6 percent of salary (Exhibit 2.3, lower panel).

EXHIBIT 2.3

Employers with Simple Matches Use a Variety of Matching Formulas

Percentage of plans or participants among plans with simple match formulas from audited 401(k) filings in the BrightScope database, 2012

Percentage of plans

	Maximum deferral percentage matched								
Percentage of deferral matched	**<3%**	**3%**	**4%**	**5%**	**6%**	**7%, 8%, or 9%**	**10% or more**	**Other**	**Total**
25%	0.6	0.4	1.7	0.8	3.6	0.5	0.2	0.2	8.1
50%	4.6	4.5	4.2	2.6	16.5	1.2	0.6	0.2	34.5
75%	0.1	0.1	0.2	0.1	1.0	0.2	(*)	0.3	1.8
100%	2.7	8.2	8.7	7.7	14.9	0.9	0.4	2.2	45.8
Other	0.7	0.6	0.5	1.2	4.7	0.6	1.1	0.3	9.7
Total	8.7	13.7	15.4	12.4	40.8	3.5	2.4	3.3	100.0

Percentage of participants

	Maximum deferral percentage matched								
Percentage of deferral matched	**<3%**	**3%**	**4%**	**5%**	**6%**	**7%, 8%, or 9%**	**10% or more**	**Other**	**Total**
25%	0.7	0.4	1.5	0.7	3.3	0.5	0.2	(*)	7.3
50%	4.9	4.1	3.9	2.4	17.1	1.6	0.6	0.1	34.7
75%	0.1	0.1	0.2	0.1	0.9	0.2	(*)	0.2	1.9
100%	3.0	8.8	8.5	7.0	17.2	0.7	0.4	1.5	47.2
Other	0.9	0.6	0.5	1.2	4.3	0.6	0.9	(*)	8.9
Total	9.6	14.0	14.7	11.4	42.8	3.5	2.1	1.9	100.0

(*) = less than 0.05 percent

Note: Plans with no employer contribution, maximum dollar contributions, tiered match formulas, or only a nonmatching contribution were excluded. The sample is the 40 percent of plans with simple match formulas (see Exhibit 2.2). Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Row and column percentages may not add to the total because of rounding.

Source: BrightScope Defined Contribution Plan Database

The Role of Automatic Enrollment

Employers also can choose to automatically enroll employees in 401(k) plans, choosing a default initial contribution rate and a default investment, unless the employee indicates otherwise. The employee can then choose to opt out of the plan entirely, adjust the contribution rate or investment allocation, or leave the default options unchanged. In 2012, 21.6 percent of 401(k) plans in the BrightScope database auto-enrolled participants (Exhibit 2.4).[26] These plans covered 30.0 percent of participants and 37.9 percent of assets. Auto-enrollment rates varied by plan size, with larger 401(k) plans being more likely to auto-enroll participants. For example, while 10.5 percent of plans with less than $1 million in plan assets auto-enrolled participants, 43.7 percent of plans with more than $1 billion had auto-enrollment. Similarly, 12.9 percent of plans with fewer than 100 participants included an auto-enrollment feature, which rose to 35.8 percent of plans with 5,000 to 9,999 participants, and fell slightly to 31.3 percent among plans with 10,000 or more participants (Exhibit 2.5).

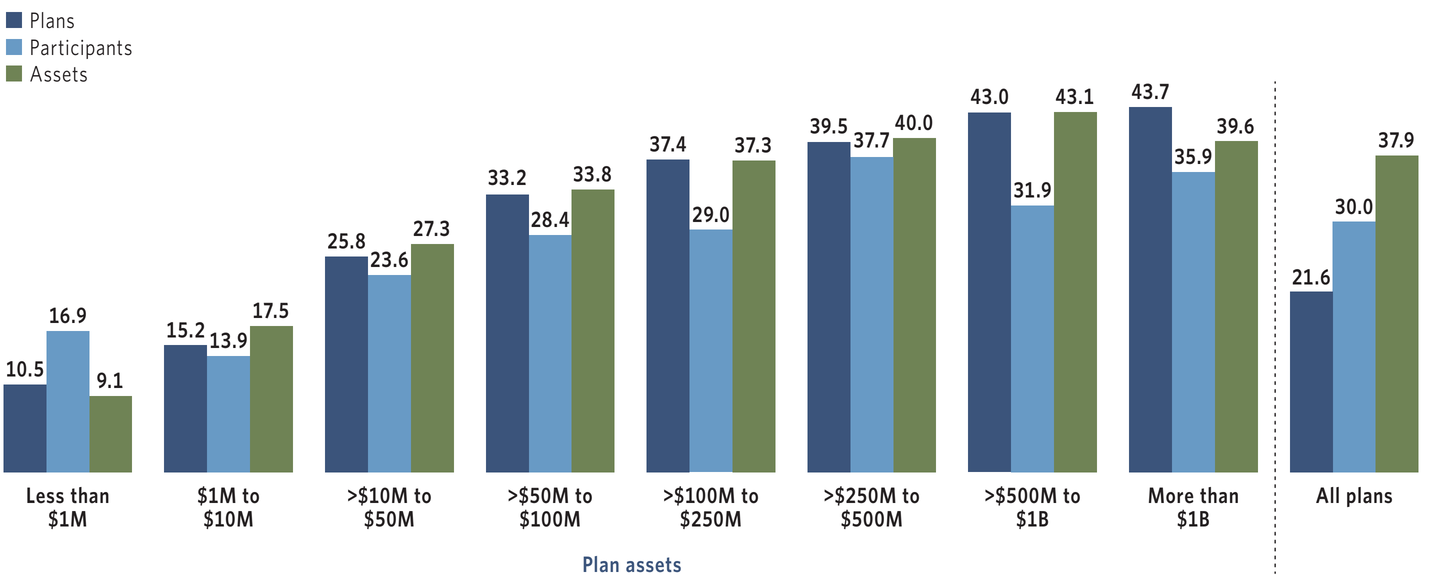
Default Contribution Rates

Among 401(k) plans with auto-enrollment in 2012, the most popular default initial contribution rate was 3 percent of participant salary, with 59 percent of plans with an auto-enrollment feature defaulting participants' contributions at that rate (Exhibit 2.6). The next most common default rates were 2 percent and 4 percent, used in 14 percent and 11 percent of plans, respectively. Another 12 percent of plans with auto-enrollment implemented a default initial contribution rate of at least 5 percent. Plans' auto-enrollment design also may have an auto-increase or auto-escalation feature. Unfortunately, the audited Form 5500 filings do not have complete information on auto-increase design.

EXHIBIT 2.4

Plans with Greater Assets Are More Likely to Automatically Enroll Participants

Percentage of plans, participants, or assets with auto-enrollment feature among plans with audited 401(k) filings in the BrightScope database by plan assets (2012)



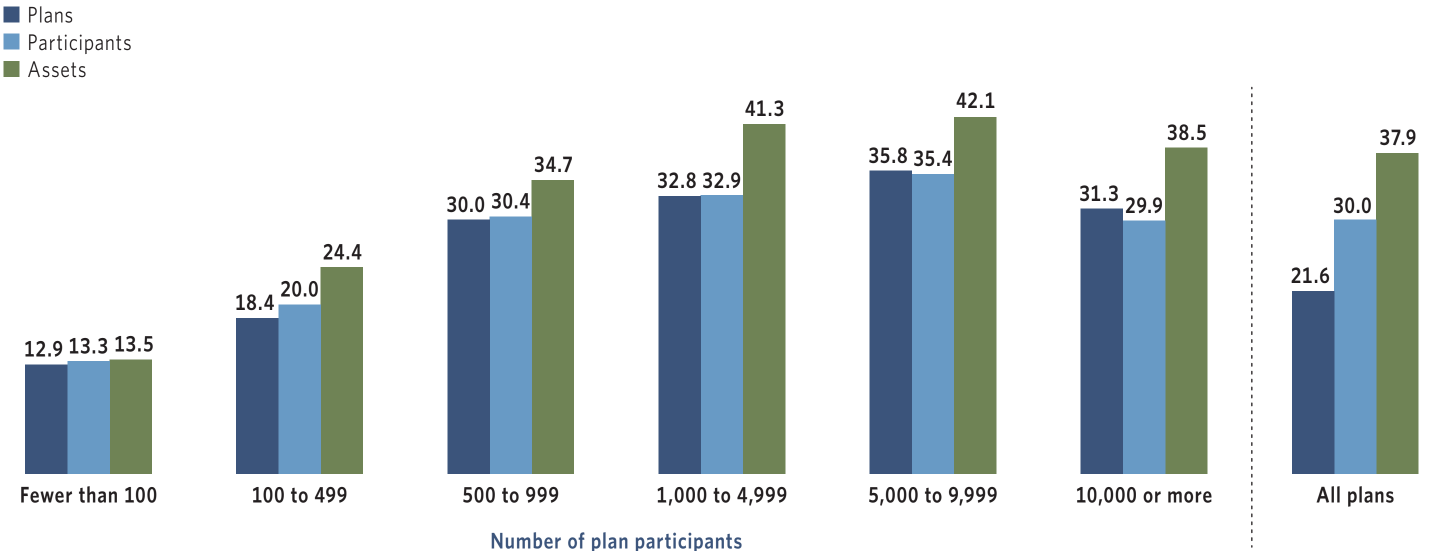
Note: The sample is 35,472 plans with $2.9 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. A plan was determined to have automatic enrollment if it was specified in the audited report; this may undercount the number of plans with automatic enrollment.

Source: BrightScope Defined Contribution Plan Database

EXHIBIT 2.5

Plans with More Participants Are More Likely to Automatically Enroll Participants

Percentage of plans, participants, or assets with auto-enrollment feature among plans with audited 401(k) filings in the BrightScope database by number of plan participants (2012)



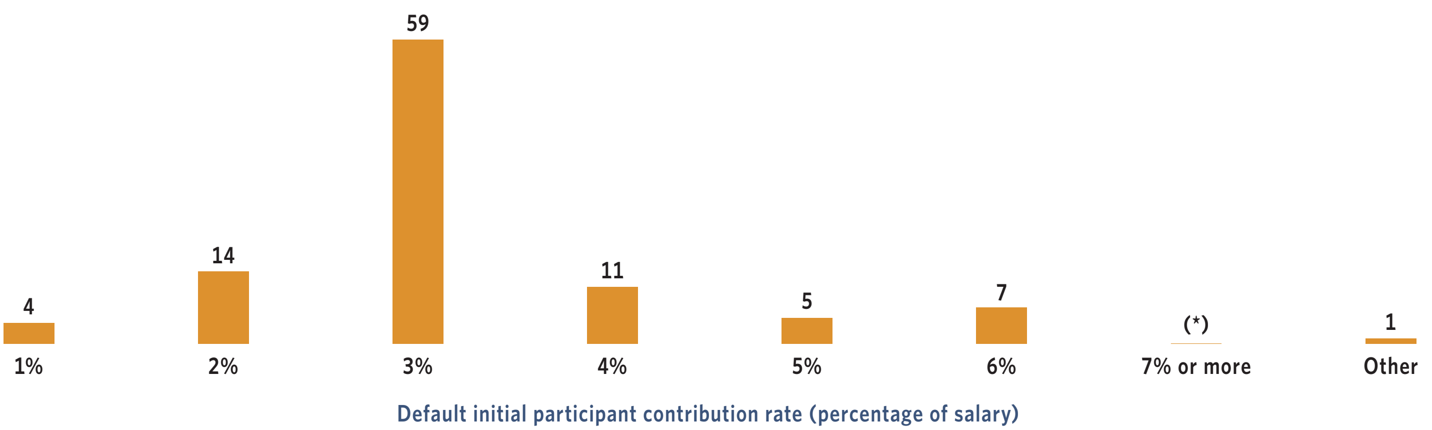
Note: The sample is 35,472 plans with $2.9 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. A plan was determined to have automatic enrollment if it was specified in the audited report; this may undercount the number of plans with automatic enrollment.

Source: BrightScope Defined Contribution Plan Database

EXHIBIT 2.6

Default Initial Contribution Rate Among Plans with Auto-Enrollment

Percentage of plans with auto-enrollment among plans with audited 401(k) filings in the BrightScope database, 2012



(*) = less than 0.5 percent

Note: The sample is 4,296 plans with detailed auto-enrollment information. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Components do not add to 100 percent because of rounding.

Source: BrightScope Defined Contribution Plan Database

CHAPTER 3

401(k) Plans Engage a Variety of Service Providers

When employers offer a 401(k) plan to their employees, they also engage service providers to help manage the operation of the plan. This chapter focuses on the service providers engaged to provide recordkeeping to the plan, including maintaining plan records, processing employee contributions and distributions, and issuing account statements to employees. Employers can choose from a large number of service providers to provide recordkeeping services for their plans. Asset managers, insurance companies, brokerage firms, banks, or pure recordkeepers can provide these services.[27]

Types of Recordkeepers

In 2012, insurance companies were the most common recordkeeper, providing recordkeeping services for 41.2 percent of 401(k) plans in the BrightScope database (Exhibit 3.1, upper panel).[28] Insurance companies were significantly more likely to provide recordkeeping services for smaller plans, doing so for about half of plans with $10 million or less in plan assets, but only 7.9 percent of plans with more than $1 billion. Asset managers—which include mutual fund companies—serving as recordkeepers were more likely to provide services to larger plans. In 2012, asset managers provided recordkeeping services for 8.8 percent of plans with less than $1 million in plan assets, 58.4 percent of plans with $500 million to $1 billion, and 52.1 percent of plans with more than $1 billion. Overall, asset managers provided recordkeeping for 31.2 percent of 401(k) plans. Banks, which provided recordkeeping for 7.9 percent of plans, tended to be more likely to do so for midsize plans. Although banks provided recordkeeping services for only 2.7 percent of plans with less than $1 million in plan assets and 6.8 percent of plans with more than $1 billion in 2012, banks' recordkeeping activity rose to more than 10 percent of plans with $10 million to $500 million in plan assets.

Pure recordkeepers (firms that only offer recordkeeping services) were more likely to provide recordkeeping services for small or large 401(k) plans, but less likely to do so for midsize plans in 2012. Overall, pure recordkeepers provided recordkeeping for 13.3 percent of plans, but that ranged from 34.9 percent of plans with less than $1 million in plan assets to 3.8 percent of plans with $50 million to $100 million (Exhibit 3.1, upper panel). This figure rose for larger 401(k) plans, to 22.5 percent of plans with more than $1 billion in plan assets. Brokerage firms, which include discount and full-service brokerage firms, tended to be more likely to provide recordkeeping services for larger plans, providing recordkeeping for only 3.8 percent of plans with less than $1 million in plan assets, rising to around 10 percent of plans with more than $50 million.

Because asset managers were more likely to provide recordkeeping services for large plans, their share of 401(k) assets is greater than their share of 401(k) plans. In 2012, asset managers provided recordkeeping services for 31.2 percent of plans (Exhibit 3.1, upper panel), but 51.8 percent of assets (Exhibit 3.1, lower panel) and 45.4 percent of participants (Exhibit 3.1, middle panel). Insurance companies, because they were more likely to provide recordkeeping for smaller plans, represented a smaller share of assets and participants than plans (13.2 percent of assets and 22.9 percent of participants versus 41.2 percent of plans). Brokerage firms (10.1 percent of assets), banks (8.1 percent), and pure recordkeepers (16.7 percent) provided the remaining recordkeeping services.

EXHIBIT 3.1

Types of Recordkeepers

Percentage of plans among plans with audited 401(k) filings in the BrightScope database by type of recordkeeper, 2012

	Type of recordkeeper				
Plan assets	**Asset manager**	**Insurance company**	**Brokerage firm**	**Bank**	**Pure recordkeeper**
Less than $1M	8.8	49.8	3.8	2.7	34.9
$1M to $10M	21.1	50.5	4.8	4.9	18.8
>$10M to $50M	37.9	39.2	6.0	10.5	6.4
>$50M to $100M	43.9	28.2	10.8	13.3	3.8
>$100M to $250M	49.3	21.8	12.4	12.1	4.4
>$250M to $500M	57.4	14.5	9.8	10.9	7.4
>$500M to $1B	58.4	10.0	12.9	7.9	10.9
More than $1B	52.1	7.9	10.7	6.8	22.5
All plans	31.2	41.2	6.4	7.9	13.3

Percentage of participants among plans with audited 401(k) filings in the BrightScope database by type of recordkeeper, 2012

	Type of recordkeeper				
Plan assets	**Asset manager**	**Insurance company**	**Brokerage firm**	**Bank**	**Pure recordkeeper**
Less than $1M	20.5	39.7	3.5	8.6	27.8
$1M to $10M	21.6	55.4	3.2	3.9	15.9
>$10M to $50M	37.8	42.1	4.3	9.7	6.1
>$50M to $100M	40.8	30.0	6.0	20.7	2.5
>$100M to $250M	46.0	25.2	7.5	15.5	5.8
>$250M to $500M	51.6	16.5	6.7	21.8	3.3
>$500M to $1B	57.8	11.1	10.1	13.5	7.6
More than $1B	50.3	8.9	13.0	15.5	12.3
All plans	45.4	22.9	8.5	14.6	8.6

Percentage of plan assets among plans with audited 401(k) filings in the BrightScope database by type of recordkeeper, 2012

	Type of recordkeeper				
Plan assets	**Asset manager**	**Insurance company**	**Brokerage firm**	**Bank**	**Pure recordkeeper**
Less than $1M	8.8	52.1	4.5	2.9	31.7
$1M to $10M	23.9	49.0	5.0	5.6	16.4
>$10M to $50M	39.7	37.2	6.4	11.0	5.7
>$50M to $100M	44.4	27.6	10.8	13.4	3.8
>$100M to $250M	50.0	20.5	12.7	12.2	4.7
>$250M to $500M	57.0	14.3	9.9	11.2	7.6
>$500M to $1B	58.3	9.8	12.9	8.1	10.9
More than $1B	53.5	6.1	9.8	6.0	24.6
All plans	51.8	13.2	10.1	8.1	16.7

Note: The sample is 23,155 plans with $2.2 trillion in assets. The top 40 recordkeepers among audited DC/401(k) plans in the BrightScope database were classified according to their primary business, and only plans recordkept by those recordkeepers are included in this analysis. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. Row percentages may not add to 100 percent because of rounding.

Source: BrightScope Defined Contribution Plan Database

Proprietary Funds

When deciding on a recordkeeper, employers may simultaneously consider the recordkeepers' proprietary funds. That is, the employer may choose the XYZ asset manager for recordkeeping and also choose to include one or more XYZ mutual funds, XYZ collective investment trusts, or XYZ separate accounts in the investment lineup. In 2012, 62.4 percent of 401(k) plans included proprietary funds in their investment lineups, and proprietary fund assets accounted for 27.1 percent of plan assets (Exhibit 3.2). Larger plans tended to be more likely to include proprietary funds, although plans with more than $1 billion in plan assets were an exception. For example, 54.0 percent of plans with less than $1 million in plan assets, 74.5 percent of plans with $500 million to $1 billion in plan assets, and 57.7 percent of plans with more than $1 billion included proprietary funds. However, even though plans with $500 million to $1 billion in plan assets were significantly more likely to offer proprietary funds than the smallest plans, participant investment in proprietary funds was similar. For all plan size groups with less than $1 billion in plan assets, proprietary funds accounted for between 35 and 40 percent of plan assets. Participants in plans with more than $1 billion in plan assets held less of their assets (17.6 percent) in proprietary funds.

EXHIBIT 3.2

Proprietary Fund Use by Plan Assets

Percentage of plan assets invested in proprietary funds and percentage of plans offering proprietary funds among plans with audited 401(k) filings in the BrightScope database by plan assets, 2012*

* Proprietary funds are the investment products of the recordkeeping financial services firm. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products.

Note: The sample is 28,762 plans with $2.4 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

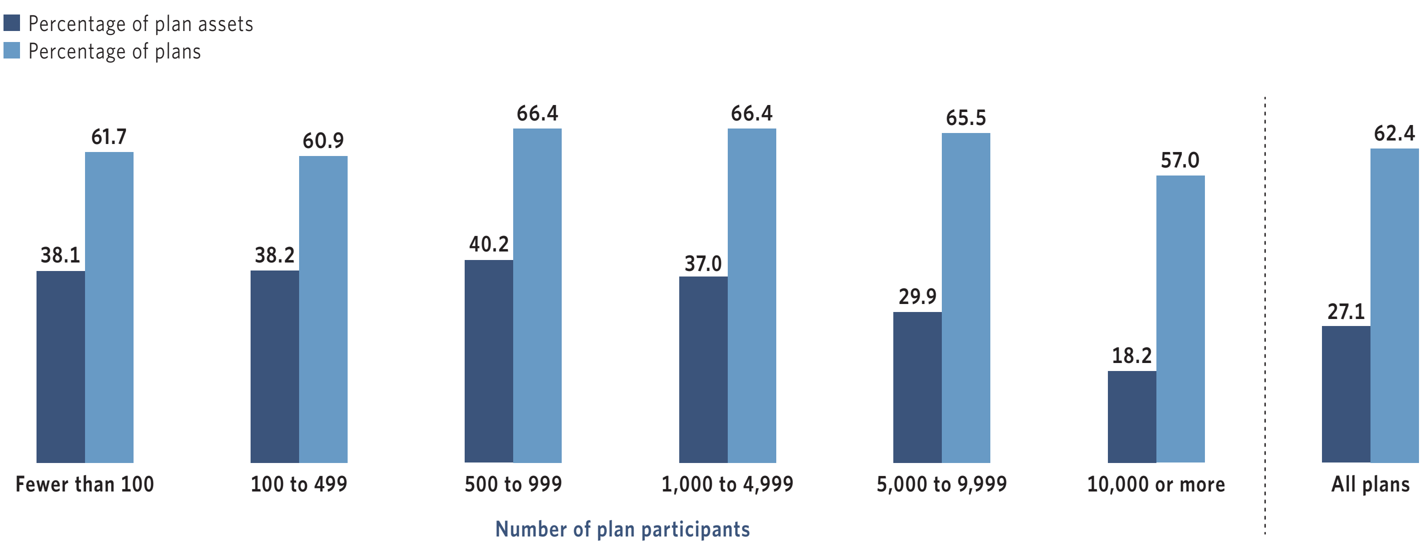
Source: BrightScope Defined Contribution Plan Database

Proprietary fund use tended to increase slightly with the number of plan participants, rising from about 61 percent of 401(k) plans with fewer than 500 participants including proprietary funds in their plan lineups to about 66 percent of plans with 500 to 9,999 participants, and falling to 57.0 percent for plans with 10,000 or more participants (Exhibit 3.3). Proprietary funds held nearly 40 percent of assets in plans with fewer than 5,000 participants, compared with 29.9 percent in plans with 5,000 to 9,999 participants and 18.2 percent in plans with 10,000 participants or more.

EXHIBIT 3.3

Proprietary Fund Use by Number of Plan Participants

Percentage of plan assets invested in proprietary funds and percentage of plans offering proprietary funds among plans with audited 401(k) filings in the BrightScope database by number of plan participants, 2012*



* Proprietary funds are the investment products of the recordkeeping financial services firm. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products.

Note: The sample is 28,762 plans with $2.4 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

CHAPTER 4

401(k) Plan Fees

Employers offering 401(k) plans typically hire service providers to assist in operating the plans, and those service providers charge fees for their services. Many types of services are required to operate a 401(k) plan, including administrative services (e.g., recordkeeping and transaction processing), participant-focused services (e.g., participant communication, education, or advice), regulatory and compliance services (e.g., plan document services; consulting, accounting, and audit services; and legal advice), and investment management. As with any other employee benefit, the employer typically decides how the costs will be shared. In order to cover the expenses of providing a 401(k) plan, fees are paid by the plan itself, the employer, and/or the plan participants. These fees can be levied based on the number of participants, the amount of assets, or as a fixed dollar amount for the plan as a whole. In order to better understand the impact of fees, BrightScope has developed a *total plan cost* measure that includes all fees on the audited Form 5500 reports as well as fees paid through investment expense ratios (see the callout box below).

Total Plan Cost

When looking at overall 401(k) plan fees, it is important to consider the sample to be analyzed. Fees can be calculated at the plan level (where each plan is treated equally), at the participant level (where each participant is treated equally), or at the asset level (where each dollar is treated equally). Because the average plan tends to be small, and the average participant and average dollar are in larger plans, the particular focus of the fee analysis can produce different answers. For this reason, total plan cost is presented on a plan-weighted, participant-weighted, and asset-weighted basis.

In 2012, the average 401(k) plan in the BrightScope sample had a total plan cost of 0.91 percent of assets, while the average participant was in a plan with a total plan cost of 0.53 percent of assets, and the average dollar was in a plan with a total plan cost of 0.39 percent of assets (Exhibit 4.1; upper, middle, and lower panels). This pattern occurs for a couple of reasons. First, participants and assets tend to be concentrated in larger plans. For example, although only 1 percent of audited 401(k) plans in the BrightScope Defined Contribution Plan Database have more than $1 billion in plan assets, about one-third of participants are in these plans, and they hold more than half of all 401(k) assets (see Exhibit I.2). A similar pattern occurs in the DOL 401(k) universe.

ABOUT BRIGHTSCOPE'S TOTAL PLAN COST

Total plan cost includes asset-based investment management fees, asset-based administrative and advice fees, and other fees (including insurance charges) from the Form 5500 and audited financial statements of ERISA-compliant 401(k) plans. When plans use products registered under the Investment Company Act of 1940—such as mutual funds—expense data from Lipper are used to calculate fees. When plans use non-1940 Act products such as collective investment trusts and pooled separate accounts, BrightScope uses an algorithm to estimate investment management fees.

Another reason that participant-weighted and asset-weighted total plan costs are lower than plan-weighted total plan cost is because larger plans tend to have a lower total plan cost when measured as a percentage of plan assets. For example, 401(k) plans with less than $1 million in plan assets had an average total plan cost of 1.60 percent of plan assets in 2012, compared with 0.54 percent of plan assets for plans with $100 million to $250 million and 0.33 percent of plan assets for plans with more than $1 billion (Exhibit 4.1, upper panel). Similar patterns occur for both the participant-weighted and asset-weighted numbers. One reason that larger plans tend to have lower fees is related to the greater share of their assets invested in index funds (Exhibit 1.11), which tend to have lower expenses than other types of investments (Exhibit 4.5). In addition, there are fixed costs associated with offering a 401(k) plan. As a plan grows in size, those fixed costs can be spread over more participants and a larger asset base, lowering the total plan cost as a percentage of assets.

Since 2009, total plan cost has decreased on average by around 10 basis points whether measured on a plan, participant, or asset–weighted basis (Exhibit 4.1). For example, total plan cost decreased from 1.00 percent in 2009 to 0.91 percent in 2012 on a plan-weighted basis, from 0.65 percent to 0.53 percent on a participant-weighted basis, and from 0.49 percent to 0.39 percent on an asset-weighted basis. Most plan size groups saw declines in total plan cost between 2009 and 2012, but the largest declines occurred for plans with less than $1 million in plan assets.

Total 401(k) plan costs varied around the plan-weighted average of 0.91 percent in 2012. For example, 10 percent of plans had a total plan cost of 0.37 percent or less, while another 10 percent had a total plan cost of 1.55 percent or more (Exhibit 4.2). Although there is significant diversity in total plan cost, the difference between the 10th percentile and 90th percentile plans tends to decrease as plan size increases. For example, in 401(k) plans with less than $1 million in plan assets, total plan cost for 80 percent of plans ranged between 0.68 percent and 2.66 percent of assets. For plans with more than $1 billion in plan assets, that range was significantly narrower, varying from 0.16 percent of assets to 0.52 percent.

Mutual Fund Expenses

Some of the main costs of a 401(k) plan are the expenses associated with the investments in the plan.[29] Therefore, it is important to understand factors associated with these expenses (such as plan size or investment objective). ICI has analyzed mutual fund expenses for both the entire industry[30] as well as 401(k) plans specifically. ICI combines Lipper fee information with ICI mutual fund asset data at a share class level (see the callout box below).[31] The ICI analysis has found, both for mutual funds industrywide and mutual funds in 401(k) plans, that fund expenses have declined significantly since 2000. For example, the simple average expense ratio for equity mutual funds was 1.60 percent in 2000, and declined to 1.37 percent by 2013 (Exhibit 4.3). However, mutual fund investors tend to concentrate their assets into lower-cost funds. The 0.74 percent asset-weighted industry average expense ratio in 2013, which gives greater weight to funds with higher assets, was a little more than half of the 1.37 percent industry simple average, and the asset-weighted average 401(k) expense ratio was even lower at 0.58 percent.

FEES PAID ON MUTUAL FUNDS HELD IN 401(k) PLANS

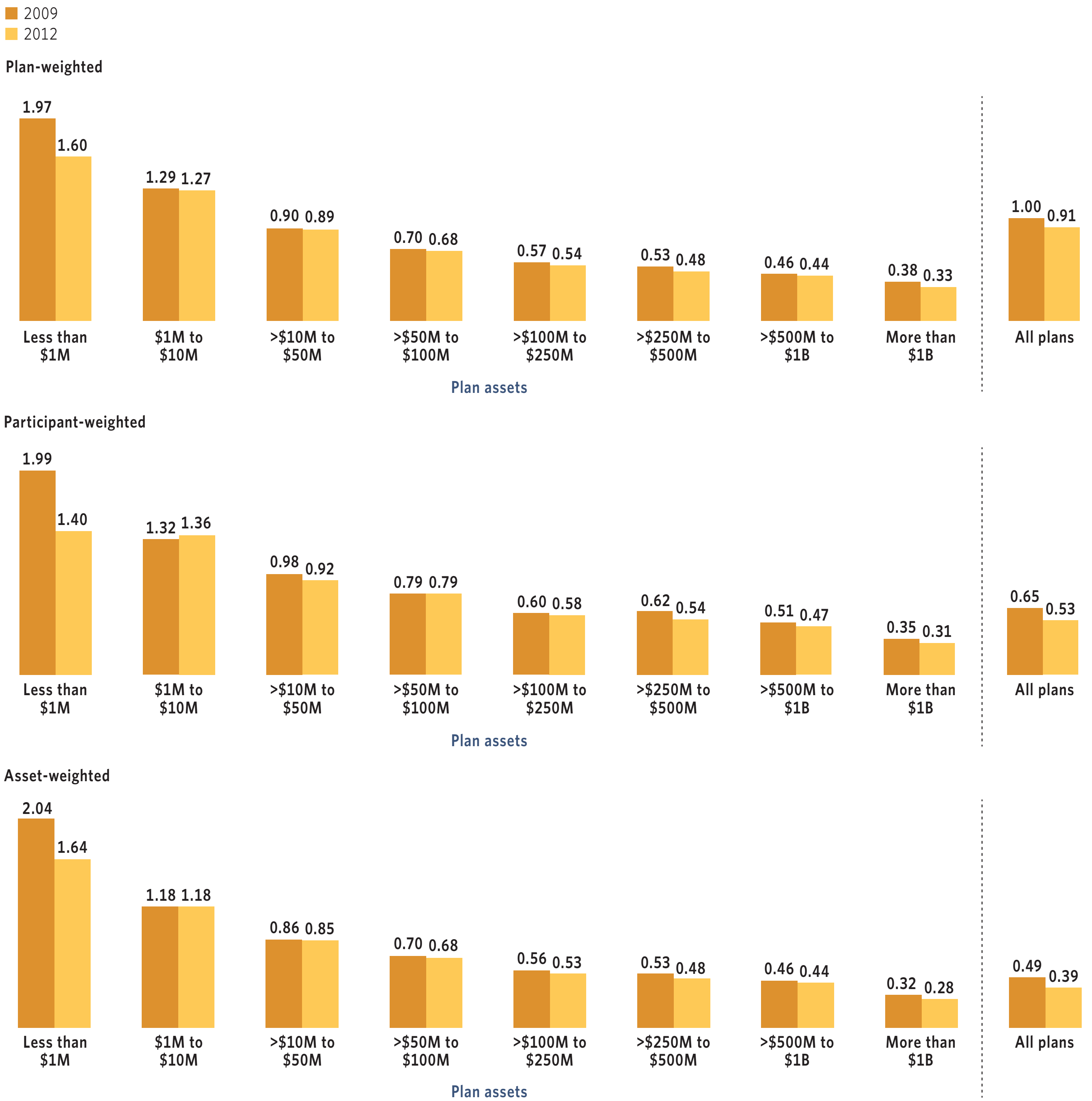
Each year ICI updates its analysis of the fees paid by 401(k) investors in mutual funds on the funds held in their 401(k) plans (see Collins et al. 2014). ICI combines Lipper fee information with ICI information on 401(k) plan investments in mutual funds, share class by share class. Unfortunately, mutual fund company recordkeeping systems cannot see through to the underlying 401(k) plans, and thus it is not possible to analyze how mutual fund fees vary by plan size using the ICI mutual fund share class and Lipper fee data. The resulting asset-weighted measure of fees paid on 401(k) plan mutual fund investments reflects where the assets are invested and what 401(k) investors as a group paid on average for their 401(k) plan mutual fund investments.

BrightScope's database of DC/401(k) audited Form 5500 filings contains reporting of mutual fund holdings by share class in DC plans for about 50 percent of the plans in the database. In the remaining cases where the mutual fund is known, but not the specific share class, BrightScope assigns a share class to the mutual fund holdings in a given DC plan based on the size of the plan's investment in the mutual fund. If the DC plan has less than $1 million invested in the mutual fund, a retail-type share class is assigned to the holding. If the DC plan has $1 million or more invested in the mutual fund, then an institutional-type share class is assigned. BrightScope matches Lipper fee information by mutual fund share class to estimate the fees paid by DC plan participants on their mutual fund holdings in their DC plans. Because BrightScope has DC plan–level information, it is possible to report how mutual fund fees vary across plan size and in aggregate.

EXHIBIT 4.1

Total Plan Cost by Plan Assets

Total plan cost as a percentage of assets among plans with audited 401(k) filings in the BrightScope database (by plan assets, 2009 and 2012)*



* *Total plan cost* is BrightScope's measure of the total cost of operating the 401(k) plan and includes asset-based investment management fees, asset-based administrative and advice fees, and other fees (including insurance charges) from the Form 5500 and audited financial statements of ERISA-compliant 401(k) plans. Total plan cost is computed only for plans with sufficiently complete information.

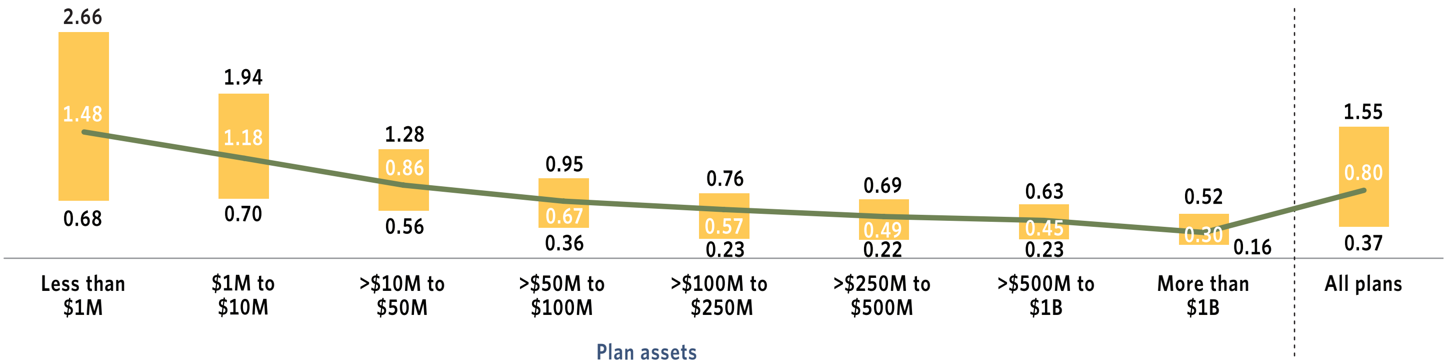
Note: The samples are 25,002 plans with $2.1 trillion in assets in 2009 and 14,020 plans with $2.5 trillion in assets in 2012. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Sources: BrightScope Defined Contribution Plan Database and Lipper

EXHIBIT 4.2

Distribution of Total Plan Cost by Plan Assets

10th percentile, median, and 90th percentile plan-weighted total plan cost as a percentage of assets among plans with audited 401(k) filings in the BrightScope database by plan assets (2012)*



* *Total plan cost* is BrightScope's measure of the total cost of operating the 401(k) plan and includes asset-based investment management fees, asset-based administrative and advice fees, and other fees (including insurance charges) from the Form 5500 and audited financial statements of ERISA-compliant 401(k) plans. Total plan cost is computed only for plans with sufficiently complete information.

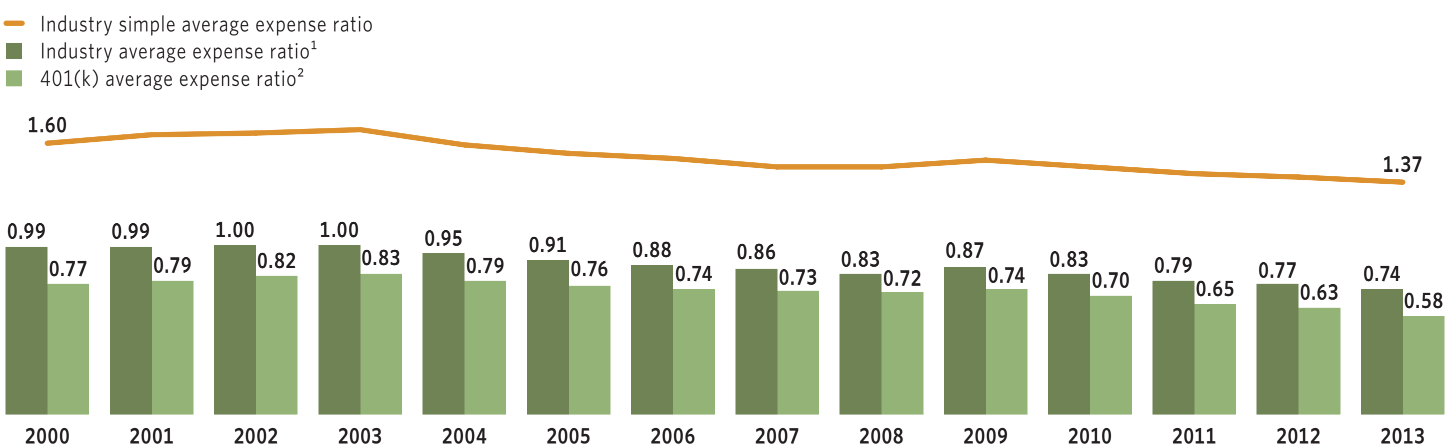
Note: The sample is 14,020 plans with $2.5 trillion in assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Sources: BrightScope Defined Contribution Plan Database and Lipper

EXHIBIT 4.3

401(k) Mutual Fund Investors Tend to Pay Lower-Than-Average Expenses for Equity Mutual Funds

Percentage of assets, 2000–2013



[1] The industry average expense ratio is measured as an asset-weighted average.

[2] The 401(k) average expense ratio is measured as a 401(k) asset-weighted average.

Note: Data exclude mutual funds available as investment choices in variable annuities.

Sources: Investment Company Institute and Lipper; see Collins et al. 2014

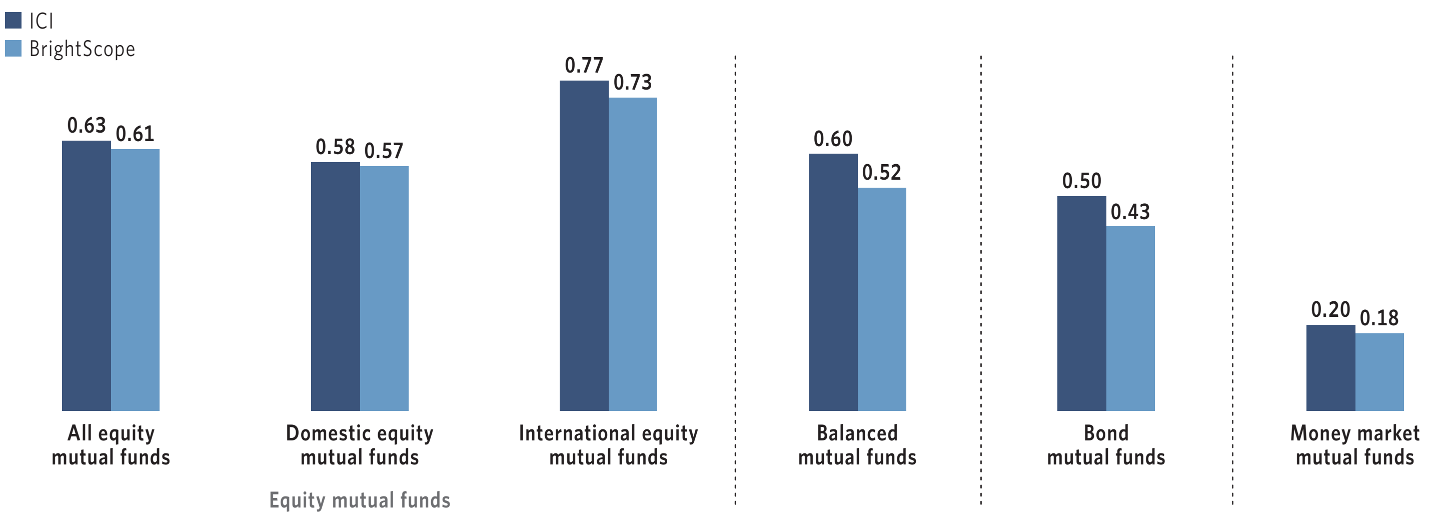
Comparison of ICI and BrightScope Mutual Fund Expense Analyses

The asset-weighted mutual fund expense ratios in 401(k) plans in the BrightScope database tend to be slightly lower than in the ICI data analysis. For example, the asset-weighted total expense ratio paid by 401(k) participants for domestic equity mutual funds in the BrightScope database was 0.57 percent of assets in 2012, compared with 0.58 percent in the ICI database, while the expense ratio for international equity mutual funds in the BrightScope database was 0.73 percent of assets, compared with 0.77 percent in the ICI database (Exhibit 4.4). Similarly, the average expense ratio for bond mutual funds in the BrightScope database was 0.43 percent, compared with 0.50 percent in the ICI database. This pattern can be partially explained by the underrepresentation of smaller 401(k) plans in the BrightScope database (due to DOL rules that generally only require audited filings from plans with 100 participants or more), which tend to be invested in funds with higher expense ratios than larger plans.[32]

EXHIBIT 4.4

ICI and BrightScope 401(k) Mutual Fund Expenses

Asset-weighted average expense ratio as a percentage of assets by mutual fund investment objective, 2012



Note: The 401(k) average expense ratio is measured as a 401(k) asset-weighted average. See the callout box on page 40 for a description of the fee analysis.

Sources: Investment Company Institute, BrightScope Defined Contribution Plan Database, and Lipper

Mutual Fund Expenses by 401(k) Plan Size

In 2012, the asset-weighted average expense ratios of mutual funds in 401(k) plans in the BrightScope Defined Contribution Plan Database varied both with the size of the plan (with larger plans, measured by assets or participants, tending to have concentrated assets in mutual funds with lower expense ratios) and the type of investment (with domestic investment mutual funds tending to have lower expense ratios than international mutual funds, and money market mutual funds tending to have lower expense ratios than equity or bond mutual funds) (Exhibit 4.5).

The asset-weighted average expense ratio for domestic equity mutual funds held in 401(k) plans in 2012 was 0.57 percent of assets, ranging from 0.95 percent in 401(k) plans with less than $1 million in plan assets to 0.48 percent in plans with more than $1 billion (Exhibit 4.5, upper panel).[33] Expense ratios for international equity mutual funds held in 401(k) plans were higher compared with domestic equity mutual funds, with an asset-weighted average of 0.73 percent of assets, ranging from 1.10 percent of assets in 401(k) plans with less than $1 million in plan assets to 0.64 percent in plans with more than $1 billion. Plans with more participants also tended to have equity mutual funds with lower expense ratios. For example, domestic equity mutual funds ranged from an asset-weighted average expense ratio of 0.72 percent of assets in plans with fewer than 100 participants to 0.51 percent in plans with 5,000 or more participants, and international equity mutual fund asset-weighted average expense ratios ranged from 0.91 percent to 0.66 percent for the same groups (Exhibit 4.5, lower panel).

The average expense ratios for domestic bond mutual funds were lower than equity mutual fund expense ratios (0.42 percent of assets for domestic bond mutual funds, compared with 0.57 percent of assets for domestic equity mutual funds), but expense ratios for international bond and equity mutual funds were similar (0.76 percent of assets for international bond and 0.73 percent of assets for international equity mutual funds) (Exhibit 4.5, upper and lower panels). Balanced mutual funds, which invest in a mix of equity and fixed-income securities, tend to have expense ratios that reflect the share of their investments in the different asset categories. For example, both target date mutual funds (asset-weighted average expense ratio of 0.53 percent of assets) and non–target date balanced mutual funds (average expense ratio of 0.47 percent) fell between the average expense ratios for domestic equity and bond mutual funds. Money market mutual funds had the lowest expense ratio of any of the asset classes, with an asset-weighted average expense ratio of 0.18 percent of assets in 2012 for money market mutual funds in 401(k) plans.

Index mutual funds, which tend to be domestic equity index mutual funds,[34] tended to have lower expense ratios than other fund types.[35] For example, the asset-weighted average expense ratio for index mutual funds in 401(k) plans was 0.13 percent of assets in 2012, compared with 0.57 percent of assets for domestic equity mutual funds (including both index and actively managed funds) (Exhibit 4.5, upper and lower panels). Like other mutual fund types, index mutual funds also tend to have lower expense ratios in larger plans. For example, index mutual funds in plans with less than $1 million in plan assets had an average expense ratio of 0.33 percent of assets, compared with 0.11 percent in plans with more than $1 billion in plan assets. Similarly, index mutual funds in plans with fewer than 100 participants had an asset-weighted average expense ratio of 0.19 percent of assets, compared with 0.12 percent in plans with 10,000 participants or more.

EXHIBIT 4.5

Average Expense Ratios of Mutual Funds in 401(k) Plans, 2012

Asset-weighted average expense ratio as a percentage of plan assets among plans with audited 401(k) filings in the BrightScope database by mutual fund investment objective

	Equity mutual funds		Balanced mutual funds		Bond mutual funds				
Plan assets	Domestic	International	Target date mutual funds*	Non-target date balanced mutual funds	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Less than $1M	0.95	1.10	0.82	0.95	0.78	1.00	0.22	1.12	0.33
$1M to $10M	0.85	1.03	0.77	0.87	0.70	0.89	0.24	1.05	0.29
>$10M to $50M	0.73	0.89	0.67	0.69	0.56	0.82	0.25	0.97	0.22
>$50M to $100M	0.65	0.81	0.59	0.54	0.48	0.76	0.23	0.85	0.17
>$100M to $250M	0.60	0.76	0.55	0.51	0.44	0.75	0.22	0.83	0.15
>$250M to $500M	0.57	0.72	0.51	0.45	0.41	0.74	0.20	0.79	0.13
>$500M to $1B	0.53	0.70	0.47	0.45	0.38	0.74	0.16	0.78	0.11
More than $1B	0.48	0.64	0.41	0.32	0.35	0.74	0.15	0.72	0.11
All plans	0.57	0.73	0.53	0.47	0.42	0.76	0.18	0.82	0.13

	Equity mutual funds		Balanced mutual funds		Bond mutual funds				
Number of plan participants	Domestic	International	Target date mutual funds*	Non-target date balanced mutual funds	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Fewer than 100	0.72	0.91	0.69	0.95	0.57	0.80	0.24	0.96	0.19
100 to 499	0.72	0.89	0.65	0.87	0.55	0.82	0.23	0.95	0.21
500 to 999	0.65	0.81	0.59	0.69	0.48	0.80	0.24	0.87	0.16
1,000 to 4,999	0.59	0.74	0.53	0.50	0.43	0.77	0.19	0.83	0.14
5,000 to 9,999	0.51	0.66	0.49	0.40	0.38	0.73	0.17	0.66	0.12
10,000 or more	0.51	0.66	0.49	0.36	0.37	0.73	0.15	0.77	0.12
All plans	0.57	0.73	0.53	0.47	0.42	0.76	0.18	0.82	0.13

* A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: The sample is 29,521 plans with $1.3 trillion in mutual fund assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. See the callout box on page 40 for a description of the fee analysis.

Sources: BrightScope Defined Contribution Plan Database and Lipper

Mutual fund expenses decreased between 2009 and 2012 in 401(k) plans across all asset classes, looking at cross-sectional data. For example, domestic equity mutual funds had an asset-weighted average expense ratio of 0.57 percent in 2012, down from 0.65 percent in 2009 (Exhibits 4.5 and 4.6). Money market mutual funds experienced the largest decline in expenses, falling from 0.31 percent of assets in 2009 to 0.18 percent in 2012. This decline in money market mutual fund expenses was concentrated in smaller 401(k) plans, which tended to have higher expenses to begin with. For example, in 401(k) plans with less than $1 million in plan assets, expenses on money market mutual funds decreased by more than half between 2009 and 2012, falling from 0.51 percent to 0.22 percent of assets. However, plans in all size categories experienced decreases in their money market mutual fund expenses on average. For example, in 401(k) plans with more than $1 billion in plan assets, money market mutual fund expenses declined by 9 basis points between 2009 and 2012, falling from 0.24 percent of assets to 0.15 percent. Some of the decline in money market mutual fund asset-weighted average expenses may be attributable to fee waivers, which increased substantially in money market funds due to the low interest rate environment following the market turmoil of 2008.[36]

EXHIBIT 4.6

Average Expense Ratios of Mutual Funds in 401(k) Plans, 2009

Asset-weighted average expense ratio as a percentage of plan assets among plans with audited 401(k) filings in the BrightScope database by mutual fund investment objective

	Equity mutual funds		Balanced mutual funds		Bond mutual funds				
Plan assets	Domestic	International	Target date mutual funds*	Non-target date balanced mutual funds	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Less than $1M	0.99	1.11	0.88	0.95	0.78	0.97	0.51	1.10	0.39
$1M to $10M	0.91	1.07	0.84	0.87	0.72	0.86	0.48	1.10	0.33
>$10M to $50M	0.79	0.96	0.74	0.69	0.58	0.82	0.41	1.01	0.24
>$50M to $100M	0.70	0.88	0.65	0.61	0.48	0.84	0.37	0.91	0.19
>$100M to $250M	0.64	0.83	0.63	0.58	0.45	0.81	0.35	0.86	0.16
>$250M to $500M	0.62	0.81	0.62	0.49	0.43	0.77	0.32	0.78	0.15
>$500M to $1B	0.60	0.81	0.62	0.53	0.41	0.78	0.26	0.85	0.13
More than $1B	0.56	0.77	0.49	0.44	0.38	0.79	0.24	0.83	0.14
All plans	0.65	0.84	0.62	0.56	0.45	0.80	0.31	0.89	0.16

	Equity mutual funds		Balanced mutual funds		Bond mutual funds				
Number of plan participants	Domestic	International	Target date mutual funds*	Non-target date balanced mutual funds	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Fewer than 100	0.77	0.91	0.74	0.95	0.59	0.79	0.38	1.10	0.20
100 to 499	0.79	0.97	0.74	0.87	0.59	0.81	0.41	1.01	0.24
500 to 999	0.71	0.90	0.66	0.69	0.51	0.81	0.35	0.96	0.19
1,000 to 4,999	0.65	0.84	0.63	0.56	0.46	0.81	0.33	0.88	0.16
5,000 to 9,999	0.60	0.80	0.60	0.51	0.42	0.78	0.28	0.69	0.14
10,000 or more	0.58	0.78	0.56	0.47	0.39	0.79	0.25	0.86	0.15
All plans	0.65	0.84	0.62	0.56	0.45	0.80	0.31	0.89	0.16

* A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: The sample is 28,337 plans with $1.0 trillion in mutual fund assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. See the callout box on page 40 for a description of the fee analysis.

Sources: BrightScope Defined Contribution Plan Database and Lipper

Variation in Mutual Fund Expenses

In addition to the average expense ratio, it is important to examine different points in the distribution of expenses to understand the range of mutual fund expenses paid in 401(k) plans. For example, while the asset-weighted average expense ratio on equity mutual funds held in 401(k) plans was 0.61 percent in 2012 (Exhibit 4.4), 10 percent of assets were invested in funds with expense ratios of 0.05 percent or less, while 10 percent of assets were invested in funds with expense ratios of 1.06 percent or more (see Exhibits 4.7 and A.3). Similar patterns were observed for both domestic and international equity mutual funds.

Although 401(k) equity mutual fund expenses tend to decrease as total assets in a 401(k) plan increase, mutual fund expenses vary in plans of all sizes. For example, expenses for equity mutual funds ranged from 0.52 percent at the asset-weighted 10th percentile to 1.43 percent at the asset-weighted 90th percentile in 401(k) plans with less than $1 million in plan assets (see Exhibits 4.7 and A.3). Similarly, equity mutual fund expenses in 401(k) plans with more than $1 billion in plan assets ranged between 0.04 percent of assets at the asset-weighted 10th percentile to 0.97 percent at the asset-weighted 90th percentile.

The range in expenses is at least partly attributable to differences in fee arrangements. For example, while some or all costs associated with plan recordkeeping can be paid by fees associated with the mutual fund investment, other costs may be paid as a per-participant charge by participants or the employer. Expenses also may be paid through a combination of these methods.[37] In addition, the expense ratios applicable to funds vary within a given investment category.[38] For example, actively managed mutual funds can offer investors the chance to earn superior returns, access specialized sectors, or take advantage of alternative investment strategies, all of which can make a fund more expensive to manage. Similarly, equity mutual funds may be priced differently depending on the extent to which they invest in small-cap, mid-cap, or emerging market stocks (which tend to be more expensive to manage) instead of large-cap or developed market stocks (which tend to be less expensive to manage).

EXHIBIT 4.7

Distribution of Mutual Fund Expense Ratios Paid by 401(k) Plan Participants

10th percentile, median, and 90th percentile asset-weighted mutual fund expense ratios as a percentage of plan assets among plans with audited 401(k) filings in the BrightScope database by investment objective and plan size (2012)

Note: The sample is 29,521 plans with $1.3 trillion in mutual fund assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. For detailed expense information, see Exhibit A.3 in the appendix. See the callout box on page 40 for a description of the fee analysis.

Sources: BrightScope Defined Contribution Plan Database and Lipper

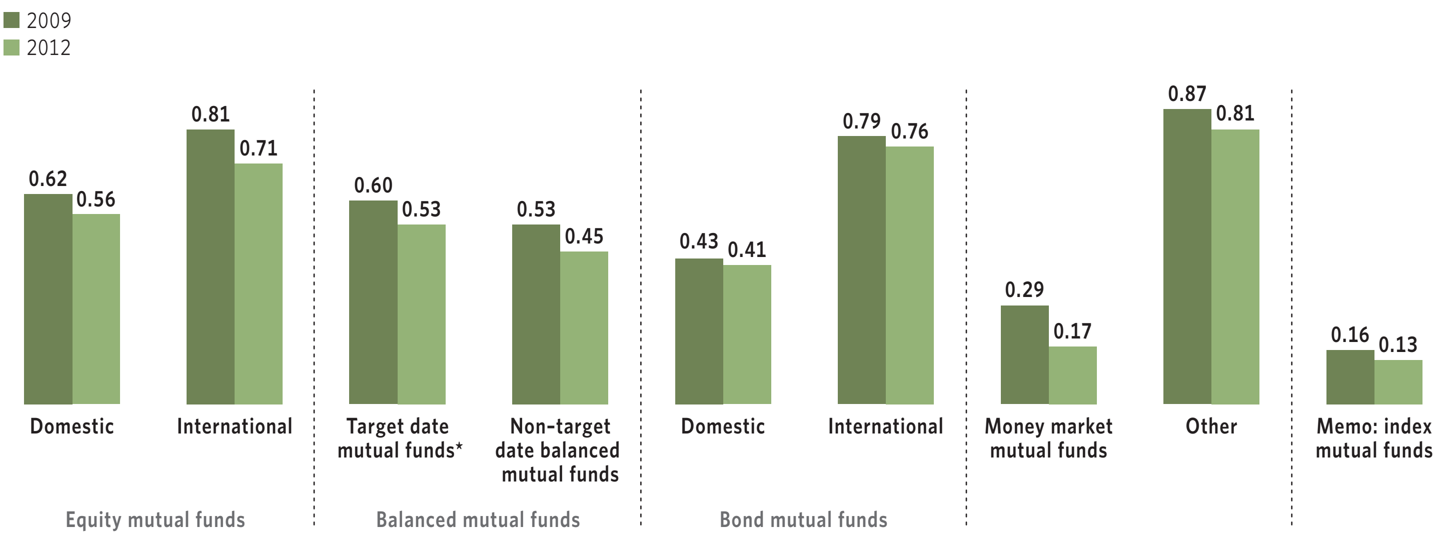
Changes in Mutual Fund Expenses in Consistent 401(k) Plans, 2009–2012

The BrightScope Defined Contribution Plan Database permits the tracking of the same plans over time, and a large sample of nearly 18,000 401(k) plans with mutual fund assets were followed from 2009 through 2012. Asset-weighted average mutual fund expenses tended to decrease for the consistent 401(k) plans as a group and across nearly all plan size asset and mutual fund investment categories. This is similar to the analysis of snapshots of 401(k) plans over time. For example, the asset-weighted average expense ratio for domestic equity mutual funds decreased from 0.62 percent of assets in 2009 to 0.56 percent of assets in 2012, a decline of 6 basis points, among 401(k) plans in the database every year between 2009 and 2012 (Exhibit 4.8). The asset-weighted average expense ratio for international equity mutual funds fell 10 basis points, from 0.81 percent in 2009 to 0.71 percent in 2012, and money market mutual fund expenses fell by 12 basis points, from 0.29 percent in 2009 to 0.17 percent in 2012. The asset-weighted average expense ratio for target date mutual funds decreased from 0.60 percent in 2009 to 0.53 percent in 2012 in these consistent 401(k) plans. Even index mutual fund fees fell for these consistent 401(k) plans, from 0.16 percent in 2009 to 0.13 percent in 2012.

EXHIBIT 4.8

Mutual Fund Fees in Consistent 401(k) Plans Tended to Decrease Between 2009 and 2012

Asset-weighted average expense ratio as a percentage of plan assets among plans with audited 401(k) filings in the BrightScope database in every year between 2009 and 2012 by mutual fund investment objective



* A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: The sample is 17,773 plans in the BrightScope Defined Contribution Plan Database in each year between 2009 and 2012 with $0.7 trillion in mutual fund assets in 2009 and $1.0 trillion in mutual fund assets in 2012. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. See the callout box on page 40 for a description of the fee analysis.

Sources: BrightScope Defined Contribution Plan Database and Lipper

The asset-weighted average mutual fund expenses tended to decrease across nearly all plan sizes and mutual fund investment categories.[39] For example, among plans with less than $1 million in plan assets in 2009 and consistently in the database through 2012, the asset-weighted average expense ratio of domestic equity mutual funds fell from 0.98 percent in 2009 to 0.81 percent in 2012, a decline of 17 basis points (Exhibit 4.9). Among plans with more than $1 billion in plan assets in 2009 and consistently in the database through 2012, the asset-weighted average expense ratio of domestic equity mutual funds fell from 0.54 percent in 2009 to 0.46 percent in 2012, a decline of 8 basis points.

EXHIBIT 4.9

Average Expense Ratios of Mutual Funds in Consistent 401(k) Plans by Plan Assets, 2009 and 2012

Asset-weighted average expense ratio by mutual fund investment objective, 2009 and 2012

2009

	Equity mutual funds		Balanced mutual funds		Bond mutual funds				
Plan assets	Domestic	International	Target date mutual funds*	Non-target date balanced mutual funds	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Less than $1M	0.98	1.09	0.85	0.95	0.78	1.00	0.45	0.99	0.36
$1M to $10M	0.89	1.06	0.83	0.87	0.72	0.85	0.47	1.11	0.32
>$10M to $50M	0.77	0.94	0.73	0.69	0.57	0.81	0.40	1.00	0.24
>$50M to $100M	0.70	0.88	0.64	0.61	0.48	0.85	0.37	0.92	0.19
>$100M to $250M	0.64	0.82	0.62	0.57	0.44	0.76	0.35	0.89	0.16
>$250M to $500M	0.61	0.80	0.61	0.47	0.43	0.73	0.30	0.76	0.15
>$500M to $1B	0.58	0.79	0.62	0.51	0.40	0.80	0.27	0.84	0.12
More than $1B	0.54	0.75	0.47	0.44	0.37	0.78	0.22	0.80	0.14
All plans	0.62	0.81	0.60	0.53	0.43	0.79	0.29	0.87	0.16

2012

	Equity mutual funds		Balanced mutual funds		Bond mutual funds				
Plan assets	Domestic	International	Target date mutual funds*	Non-target date balanced mutual funds	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Less than $1M	0.81	1.02	0.71	0.75	0.66	0.99	0.21	1.03	0.22
$1M to $10M	0.80	0.97	0.73	0.74	0.64	0.86	0.25	1.02	0.26
>$10M to $50M	0.71	0.86	0.65	0.60	0.54	0.78	0.24	0.95	0.21
>$50M to $100M	0.63	0.79	0.58	0.52	0.46	0.75	0.23	0.81	0.16
>$100M to $250M	0.58	0.74	0.52	0.49	0.42	0.77	0.20	0.85	0.14
>$250M to $500M	0.54	0.70	0.48	0.43	0.39	0.71	0.18	0.74	0.12
>$500M to $1B	0.52	0.68	0.49	0.43	0.37	0.79	0.15	0.79	0.10
More than $1B	0.46	0.63	0.42	0.30	0.34	0.73	0.14	0.67	0.11
All plans	0.56	0.71	0.53	0.45	0.41	0.76	0.17	0.81	0.13

* A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: The sample is 17,773 plans in the BrightScope Defined Contribution Plan Database in each year between 2009 and 2012 with $0.7 trillion in mutual fund assets in 2009 and $1.0 trillion in mutual fund assets in 2012. BrightScope audited 401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. See the callout box on page 40 for a description of the fee analysis. Plans are allocated to the plan asset category based on plan assets in 2009.

Sources: BrightScope Defined Contribution Plan Database and Lipper

Appendix

EXHIBIT A.1

Conditional Average Number of Investment Options by Type of Investment

Average number of investment options among plans with audited 401(k) filings in the BrightScope database offering a given investment option (by plan assets, 2012)

	Equity funds		Balanced funds		Bond funds					
Plan assets	Domestic	International	Target date funds[1]	Non-target date balanced funds	Domestic	International	Money funds	GICs	Other[2]	Memo: index funds
Less than $1M	7.8	2.7	6.3	2.3	2.4	1.1	1.0	1.1	1.3	3.5
$1M to $10M	10.1	3.3	7.6	2.4	2.8	1.2	1.1	1.1	1.5	4.0
>$10M to $50M	9.8	3.1	8.9	2.0	2.7	1.2	1.2	1.1	1.8	4.5
>$50M to $100M	9.0	2.8	9.7	1.8	2.6	1.2	1.2	1.1	2.0	5.5
>$100M to $250M	8.8	2.7	10.2	1.6	2.5	1.2	1.2	1.1	2.0	5.7
>$250M to $500M	8.3	2.6	10.7	1.6	2.5	1.2	1.3	1.3	2.2	6.7
>$500M to $1B	8.1	2.7	10.8	1.6	2.6	1.4	1.4	1.6	2.2	7.3
More than $1B	7.4	3.0	10.3	1.6	3.1	1.5	1.5	2.6	3.4	8.9
All plans	9.6	3.1	8.4	2.2	2.7	1.2	1.1	1.1	1.7	4.5

[1] A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

[2] *Other* includes commodity funds, real estate funds, and individual stocks (including company stock) and bonds, but each separate option is counted as a unique investment option.

Note: The sample is 35,472 plans with $2.9 trillion in assets. Participant loans are excluded. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

Source: BrightScope Defined Contribution Plan Database

EXHIBIT A.2

Employer Contribution Activity

Percentage of 401(k) plans with 100 participants or more with employer contributions (by plan assets, plan year 2006–2012)

	2006	2007	2008	2009	2010	2011	2012
Less than $1M	63	63	66	63	58	57	56
$1M to $10M	85	85	86	81	75	77	79
>$10M to $50M	93	94	94	91	87	90	90
>$50M to $100M	95	95	96	93	92	95	95
>$100M to $250M	97	97	97	95	94	96	97
>$250M to $500M	97	97	98	97	96	96	97
>$500M to $1B	97	98	97	96	96	97	97
More than $1B	95	96	96	96	96	97	97
All	85	85	85	82	78	80	81

Note: The sample includes 401(k) plans with 100 participants or more.

Source: ICI tabulations of U.S. Department of Labor Form 5500 Research File

EXHIBIT A.3

Detailed Distribution of Mutual Fund Expense Ratios

10th percentile, median, and 90th percentile asset-weighted mutual fund expense ratios among plans with audited 401(k) filings in the BrightScope database by investment objective and plan assets (2012)

10th percentile

	Equity mutual funds			Balanced mutual funds			Bond mutual funds					
	All	Domestic	International	All	Target date mutual funds*	Non-target date balanced mutual funds	All	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Less than $1M	0.52	0.34	0.67	0.25	0.18	0.52	0.43	0.41	0.88	0.08	0.24	0.08
$1M to $10M	0.31	0.24	0.63	0.18	0.18	0.25	0.22	0.22	0.57	0.08	0.24	0.09
>$10M to $50M	0.17	0.17	0.46	0.17	0.17	0.17	0.20	0.20	0.50	0.08	0.24	0.05
>$50M to $100M	0.09	0.07	0.40	0.17	0.17	0.17	0.10	0.10	0.50	0.09	0.24	0.05
>$100M to $250M	0.05	0.05	0.40	0.17	0.17	0.17	0.07	0.07	0.55	0.09	0.24	0.04
>$250M to $500M	0.05	0.05	0.22	0.16	0.16	0.15	0.07	0.07	0.55	0.09	0.10	0.04
>$500M to $1B	0.05	0.04	0.12	0.16	0.16	0.17	0.07	0.07	0.58	0.09	0.10	0.04
More than $1B	0.04	0.04	0.12	0.16	0.16	0.15	0.07	0.07	0.55	0.09	0.08	0.04
All plans	0.05	0.05	0.22	0.16	0.16	0.16	0.07	0.07	0.55	0.09	0.10	0.04

Median

	Equity mutual funds			Balanced mutual funds			Bond mutual funds					
	All	Domestic	International	All	Target date mutual funds*	Non-target date balanced mutual funds	All	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Less than $1M	1.03	1.00	1.07	0.78	0.78	0.98	0.85	0.85	0.90	0.26	1.26	0.18
$1M to $10M	0.94	0.90	1.07	0.77	0.76	0.78	0.83	0.81	0.89	0.27	1.19	0.18
>$10M to $50M	0.80	0.78	0.88	0.70	0.71	0.61	0.46	0.46	0.89	0.26	1.01	0.17
>$50M to $100M	0.73	0.72	0.84	0.64	0.69	0.59	0.46	0.46	0.81	0.21	0.89	0.16
>$100M to $250M	0.71	0.70	0.80	0.60	0.62	0.54	0.46	0.46	0.72	0.20	0.86	0.10
>$250M to $500M	0.69	0.68	0.77	0.58	0.59	0.47	0.46	0.46	0.67	0.14	0.84	0.09
>$500M to $1B	0.64	0.62	0.77	0.54	0.58	0.47	0.46	0.46	0.72	0.14	0.84	0.08
More than $1B	0.54	0.52	0.64	0.25	0.45	0.25	0.46	0.46	0.79	0.14	0.84	0.08
All plans	0.68	0.66	0.77	0.59	0.61	0.47	0.46	0.46	0.83	0.14	0.86	0.08

Continued on next page

EXHIBIT A.3 CONTINUED

Detailed Distribution of Mutual Fund Expense Ratios

10th percentile, median, and 90th percentile asset-weighted mutual fund expense ratios among plans with audited 401(k) filings in the BrightScope database by investment objective and plan assets (2012)

90th percentile

	Equity mutual funds			Balanced mutual funds			Bond mutual funds					
	All	Domestic	International	All	Target date mutual funds*	Non-target date balanced mutual funds	All	Domestic	International	Money market mutual funds	Other	Memo: index mutual funds
Less than $1M	1.43	1.40	1.55	1.36	1.22	1.45	1.11	1.11	1.41	0.38	1.50	0.76
$1M to $10M	1.33	1.29	1.42	1.20	1.10	1.38	0.98	0.98	1.14	0.38	1.41	0.65
>$10M to $50M	1.24	1.23	1.34	1.02	1.02	1.09	0.90	0.90	1.02	0.38	1.37	0.50
>$50M to $100M	1.14	1.11	1.22	0.87	0.85	0.95	0.85	0.85	1.02	0.38	1.30	0.33
>$100M to $250M	1.05	1.03	1.14	0.78	0.78	0.82	0.72	0.72	1.01	0.38	1.16	0.24
>$250M to $500M	1.02	1.00	1.08	0.78	0.77	0.78	0.72	0.72	1.02	0.38	1.13	0.19
>$500M to $1B	1.00	0.98	1.08	0.76	0.76	0.78	0.58	0.56	0.90	0.38	1.07	0.18
More than $1B	0.97	0.91	1.02	0.75	0.76	0.61	0.62	0.55	0.84	0.29	1.09	0.18
All plans	1.06	1.05	1.15	0.78	0.78	0.83	0.75	0.74	1.01	0.38	1.27	0.22

* A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: The sample is 29,521 plans with $1.3 trillion in mutual fund assets. Audited DC/401(k) filings generally include plans with 100 or more participants. Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis. See the callout box on page 40 for a description of the fee analysis.

Sources: BrightScope Defined Contribution Plan Database and Lipper

Notes

[1] This estimate is based on U.S. Department of Labor 2014b.

[2] For more information on filing requirements, see U.S. Department of Labor 2012d.

[3] See U.S. Department of Labor 2014c.

[4] Plans with fewer than four investment options or more than 100 investment options are excluded from this analysis.

[5] ICI conducts the Annual Mutual Fund Shareholder Tracking Survey each year to gather information on the demographic and financial characteristics of U.S. households. The most recent survey was conducted from May to July 2014 and was based on a dual frame sample of 6,003 U.S. households. Of these, 3,000 households were from a landline random digit dial (RDD) frame and 3,003 households were from a cell phone RDD frame. Of the households contacted, 2,260 (37.7 percent) had 401(k) plans. All interviews were conducted over the telephone with the member of the household who was the sole or co-decisionmaker most knowledgeable about the household's savings and investments. The standard error for the 2013 sample of households is ± 1.3 percentage points at the 95 percent confidence level. For the 2014 survey results, see Burham, Bogdan, and Schrass 2014b.

In addition, ICI conducts an annual survey to gather information about respondents' views on DC account saving and their confidence in 401(k) and other DC plan accounts. The most recent survey was conducted from November 2013 to December 2013 with a sample of 3,021 adults, of which approximately one-quarter were contacted on a cell phone, and the remaining three-quarters were contacted on a landline phone. For the 2013 survey results, see Burham, Bogdan, and Schrass 2014a.

[6] One of the frequently analyzed household surveys is the Survey of Consumer Finances (SCF), which is administered by the Federal Reserve Board. The SCF is a triennial interview survey of U.S. families sponsored by the Board of Governors of the Federal Reserve System and the U.S. Department of Treasury. The sample design of the survey aims to measure a broad range of financial characteristics. The sample has two parts: a standard geographically based random sample and a specially constructed oversampling of wealthy families. Weights are used to combine the two samples to represent the full population of U.S. families. The 2013 SCF interviewed 6,026 families, representing 122.5 million families. Data available on the Federal Reserve Board's website are altered to protect the privacy of individual respondents and include weights. For an overview of the 2013 SCF results, see Bricker et al. 2014. For a full description of the SCF and recent SCF data, see U.S. Federal Reserve Board 2014a. For a special panel analysis that resurveyed households from the 2007 SCF in 2009, see Bricker et al. 2011. For an overview of the 2010 SCF results, see Bricker et al. 2012.

Researchers interested in the behavior of older households use another publicly available household survey, the Health and Retirement Study (HRS), which is administered by the University of Michigan. For an extensive bibliography of papers using HRS data, see www.umich.edu/~hrswww/pubs/biblio.html.

The Survey of Income and Program Participation (SIPP), which is administered by the U.S. Census Bureau, is another commonly used household survey. For a complete description, see www.census.gov/sipp/intro.html.

[7] Deloitte Consulting LLP and ICI have conducted surveys of DC plan sponsors, focusing on fees paid to provide the plan. The most recent survey, conducted in 2013, found that DC plan "all-in" fees tended to be lower for larger plans and higher for plans with larger allocation to diversified equity holdings. For more information, see Deloitte Consulting LLP and Investment Company Institute 2014.

Deloitte Consulting LLP, the International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists conduct an annual survey of DC plan sponsors. For results from the most recent survey, see Deloitte Consulting LLP, the International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists 2014.

Plan Sponsor Council of America also conducts an annual survey of profit sharing and 401(k) plans. For results from the most recent survey, see Plan Sponsor Council of America 2013.

[8] See Collins et al. 2014.

[9] ICI conducts a quarterly survey of DC plan recordkeepers, collecting information on changes in contributions and asset allocation, loans, and distributions. For results from the most recent survey, see Holden and Schrass 2014.

The Employee Benefit Research Institute and ICI keep a database of active 401(k) participants, including information on asset allocation, account balances, and loan activity. The EBRI/ICI 401(k) database has data on 401(k) participants from 1996 to 2012. The year-end 2012 database covered 24.0 million participants in 64,619 plans with $1.536 trillion in assets; see Holden et al. 2013. For the most recent set of results, exploring consistent participants who were in the database every year between 2007 and 2012, see Holden et al. 2014.

[10] See Collins et al. 2014 for a discussion of the services and expenses of offering 401(k) plans.

[11] Data for 2008 were not provided to BrightScope, and thus consistent plans are those in the database in 2006, 2007, 2009, 2010, 2011, and 2012.

[12] In cross sections of all 401(k) plans in the BrightScope Defined Contribution Plan Database, the average number of investment options offered rose from 20 in 2006 to 25 in 2012. Adjusted to count target date fund suites as one investment option, the average number of investment options for all plans rose from 19 to 20 over the same period. This represents the net change in the number of investment options offered, and does not represent all changes to fund lineups. Deloitte Consulting LLP, the International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists 2014 finds that 42 percent of plans had replaced a fund due to poor performance within the last year; 26 percent had replaced a fund one year to less than two years ago; 19 percent had replaced a fund two years to less than five years ago; 6 percent had last replaced a fund five or more years ago; and 7 percent had never replaced a fund (data are for 2013).

[13] Plans may offer multiple target date fund suites; however, the vast majority of plans that offered a target date fund suite offered one. In 2012, 98 percent of 401(k) plans in the BrightScope database that offered a target date fund suite offered one suite, while 2 percent offered two suites, and less than one-half of 1 percent offered more than two suites.

[14] Other investments include company stock, which cannot consistently be identified in the BrightScope database. Research from the EBRI/ICI 401(k) database finds that less than 1 percent of participants in small plans (100 participants or fewer) were offered company stock as an investment option, while 55 percent of participants in plans with more than 5,000 participants were offered company stock as an investment option in 2012. See Holden et al. 2013.

[15] Other investments include company stock, which cannot consistently be identified in the BrightScope database. The EBRI/ICI 401(k) database finds that company stock was 10.3 percent of 401(k) assets in plans with more than 5,000 participants, compared with 2 percent of 401(k) plan assets in plans with 501 to 1,000 participants. See Holden et al. 2013.

[16] Participants in 88 percent of 401(k) plans direct all of their 401(k) investments. See U.S. Department of Labor 2014c.

[17] Asset allocation in the BrightScope DC plan database is broadly similar to the EBRI/ICI 401(k) database. At year-end 2012, the EBRI/ICI 401(k) database shows equity funds held 39.2 percent of assets, balanced funds held 22.1 percent, bond funds held 11.8 percent, money funds held 4.1 percent, GICs and other stable value funds held 9.6 percent, and company stock, other, and unknown assets accounted for the remaining 13.1 percent of assets. See Holden et al. 2013.

[18] See notes 14 and 15.

[19] Investment Company Institute 2014b reports target date mutual fund assets from 1996 through the second quarter of 2014. Target date mutual fund assets have grown from $1 billion at year-end 1996 to $115 billion at year-end 2006 to $678 billion at the end of the second quarter of 2014. At the end of the second quarter of 2014, DC plans held 68 percent of target date mutual fund assets, individual retirement accounts (IRAs) held 20 percent, and other investors held 12 percent.

[20] The EBRI/ICI 401(k) database reports 72 percent of 401(k) plans in 2012 offered target date funds, compared with 57 percent in 2006. See Holden et al. 2013 and Investment Company Institute 2014a.

[21] Similarly, research from the EBRI/ICI 401(k) database finds that target date fund assets accounted for 15 percent of total assets at year-end 2012, compared with 5 percent at year-end 2006. See Holden et al. 2013 and Investment Company Institute 2014a.

[22] Investment Company Institute 2014 reports index mutual fund assets from 1996 through the second quarter of 2014. Index mutual fund assets have grown from $98 billion at year-end 1996 to $747 billion at year-end 2006 to $1,916 billion at the end of the second quarter of 2014.

[23] In 2012, employee deferrals were capped at $17,000, while the combination of employee and employer deferrals was capped at $50,000. Employees aged 50 or older in 2012 could make an additional catch-up contribution of $5,500.

[24] The sample is limited to 401(k) plans with 100 or more participants in order to match the BrightScope audited sample of plans. In 2006, 78 percent of all 401(k) plans had employer contributions, falling to 72 percent in 2010, before rising slightly to 74 percent in 2012.

[25] Plans with employer matches but missing descriptions of the employer match may be included in this category.

[26] A plan was determined to have automatic enrollment if it was specified in the audited report; this may undercount the number of plans with automatic enrollment. Plan Sponsor Council of America 2013 reports that the 47.2 percent of plans in their survey automatically enrolled participants in 2012. The Vanguard Group 2014 reports that 34 percent of DC plans in their recordkeeping system automatically enrolled participants in 2013.

[27] Because recordkeepers can be engaged in one or more of these business categories, they were classified according to their primary business line.

[28] The top 40 recordkeepers among BrightScope audited DC/401(k) plans were classified according to their primary business, and only plans recordkept by those recordkeepers are included in this analysis.

[29] The 2013 Deloitte/ICI 401(k) Fee Study found that investment fees accounted for 82 percent of total fees (on a participant-weighted basis). See Deloitte Consulting LLP and Investment Company Institute 2014.

[30] See Gallagher 2014.

[31] See Collins et al. 2014.

[32] Deloitte Consulting LLP and Investment Company Institute 2014 finds that larger plans tend to have lower fees as a percentage of assets, and the majority of plan costs are related to investment expenses.

[33] Funds for which fee data were not available have been excluded. In addition, the audited Form 5500 reports contain share class data for approximately half of funds in the BrightScope database. For the remainder, if a plan's investment in a fund was less than $1 million in assets, it was assumed that the plan was invested in retail-type shares (A shares or their equivalents), while a plan's investment of $1 million or more in a fund was assumed to be invested in institutional-type shares (institutional shares or their equivalents). The impact of this assumption was tested by assigning to each fund the simple average expense ratio of all of its share classes. This tends to increase the average expense ratios presented, but does not significantly alter the remaining analysis (whether comparing across asset categories or across number of plan participants).

[34] At year-end 2013, 70 percent of index mutual fund assets were invested in domestic equity indexes, 12 percent were in world equity indexes, and the remaining 18 percent were in bond and hybrid indexes. See Investment Company Institute 2014a.

[35] The patterns of 401(k) expenses are similar to industrywide mutual fund expense patterns. See Gallagher 2014 and Collins et al. 2014.

[36] In 2012, money market funds waived $4.8 billion in expenses, up from $3.6 billion in 2009 and $1.8 billion in 2008. For more information, see Gallagher 2014.

[37] For more information about the services offered in 401(k) plans and fees charged for these services, see Collins et al. 2014 and Deloitte Consulting LLP and Investment Company Institute 2014.

[38] For a discussion of the range of services offered in S&P 500 index funds, see Collins 2005.

[39] There were three cases where the asset-weighted average mutual fund expense ratio edged up. The asset-weighted average expense ratio fell for every plan asset size category and every mutual fund investment category with the exception of: (1) the other mutual fund investment category for the consistent 401(k) plans with less than $1 million in plan assets in 2009, (2) the international bond mutual fund category for consistent 401(k) plans with $1 million to $10 million in plan assets in 2009, and (3) the international bond mutual fund category for consistent 401(k) plans with more than $100 million to $250 million in plan assets in 2009 (see Exhibit 4.9). Plans held a very small share of their assets in these investment categories.

Glossary

automatic enrollment
The practice of enrolling eligible employees in a plan and initiating participant deferrals unless the employee opts out.

automatic increase
A provision found in some 401(k) plans in which an employee's contribution rate is automatically increased at a preestablished point in time, unless the employee chooses otherwise.

collective investment trust
An investment vehicle in which assets are combined from several sources (such as various retirement plans) and managed under a common strategy.

defined contribution (DC) plan
An employer-sponsored retirement plan, such as a 401(k) plan or a 403(b) plan, in which contributions are made to individual participant accounts. Depending on the type of DC plan, contributions may be made by the employee, the employer, or both. The employee's benefits at retirement or termination of employment are based on the employee and employer contributions and earnings and losses on those contributions. See also **401(k) plan**.

eligible plan participant
Any employee who is eligible to participate in and receive benefits from a plan.

employer contribution
A contribution made by the company to the account of the participant (often in the form of a company match based on a ratio to contributions made by the participant).

expense ratio
A measure of what it costs to operate a fund—disclosed in the prospectus and shareholder reports—expressed as a percentage of its assets.

Form 5500
An annual disclosure submitted to the U.S. Department of Labor by ERISA-compliant employer-sponsored retirement plans, including 401(k) plans.

Form 5500 audited filing
An independently audited report generally required by federal law for plans with 100 participants or more.

401(k) plan
An employer-sponsored retirement plan that enables employees to make tax-deferred contributions from their salaries to the plan. See also **defined contribution (DC) plan**.

403(b) plan
An employer-sponsored retirement plan that enables employees of universities, public schools, and nonprofit organizations to make tax-deferred contributions from their salaries to the plan.

fund
A pooled investment product. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products.

guaranteed investment contract (GIC)
Accounts with an insurance company that guarantee a fixed rate of interest over the length of the contract.

index fund
A fund designed to track the performance of a market index. The fund's portfolio of securities is either a replicate or a representative sample of the designated market index. Often referred to as *passively managed portfolios.*

mutual fund
An investment company registered with the SEC that buys a portfolio of securities selected by a professional investment adviser to meet a specified financial goal (investment objective). Mutual funds can have actively managed portfolios, in which a professional investment adviser creates a unique mix of investments to meet a particular investment objective, or passively managed portfolios, in which the adviser seeks to track the performance of a selected benchmark or index. One hallmark of mutual funds is that they issue redeemable securities, meaning that the fund stands ready to buy back its shares at their current net asset value (NAV).

plan assets
The total assets held among all participants within the plan.

proprietary fund
Fund of a plan's recordkeeper. For example, for plans using XYZ asset manager as a recordkeeper, XYZ mutual funds, XYZ collective investment trusts, or XYZ separate accounts would be proprietary funds.

recordkeeper
A recordkeeper maintains plan records; processes employee enrollment; processes participants' investment elections, contributions, and distributions; and issues account statements to participants.

separate account
An insurance company account that is segregated or separate from the insurance company's general assets. Also refers to a fund managed by an investment adviser for a single plan.

stable value fund
An investment fund that seeks to preserve principal and to provide consistent returns and liquidity. Stable value funds include collective investment funds sponsored by banks or trust companies or contracts issued by insurance companies. See also guaranteed investment contract (GIC).

target date fund
A balanced fund that follows a predetermined reallocation of risk over a working career and into retirement for a person expecting to retire at the target date of the fund (which is usually included in the fund's name). These funds invest in a mix of asset classes and typically rebalance their portfolios over time to become less focused on growth and more focused on income as the fund approaches and passes the target date. Also known as a *lifecycle fund*.

total plan cost
BrightScope's measure of the total cost of operating the 401(k) plan, which includes asset-based investment management fees, asset-based administrative and advice fees, and other fees (including insurance charges) from the Form 5500 and audited financial statements of ERISA-compliant 401(k) plans.

References

Bricker, Jesse, Brian Bucks, Arthur Kennickell, Traci Mach, and Kevin Moore. 2011. "Surveying the Aftermath of the Storm: Changes in Family Finances from 2007 to 2009." *FEDS Working Paper*, No. 2011-17. Washington, DC: Federal Reserve Board (March). Available at www.federalreserve.gov/pubs/feds/2011/201117/201117pap.pdf.

Bricker, Jesse, Lisa J. Dettling, Alice Henriques, Joanne W. Hsu, Kevin B. Moore, John Sabelhaus, Jeffrey Thompson, and Richard A. Windle. 2014. "Changes in U.S. Family Finances from 2010 to 2013: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin* (September): 1–40. Available at www.federalreserve.gov/pubs/bulletin/2014/pdf/scf14.pdf.

Bricker, Jesse, Arthur B. Kennickell, Kevin B. Moore, and John Sabelhaus. 2012. "Changes in U.S. Family Finances from 2007 to 2010: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin* (June): 1–80. Available at www.federalreserve.gov/pubs/bulletin/2012/pdf/scf12.pdf.

Burham, Kimberly, Michael Bogdan, and Daniel Schrass. 2014a. *Americans' Views on Defined Contribution Plan Saving*. Washington, DC: Investment Company Institute (January). Available at www.ici.org/pdf/ppr_14_dc_plan_saving.pdf.

Burham, Kimberly, Michael Bogdan, and Daniel Schrass. 2014b. "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2014." *ICI Research Perspective* 20, no. 8 (November). Available at www.ici.org/pdf/per20-08.pdf.

Collins, Sean. 2005. "Are S&P 500 Index Mutual Funds Commodities?" *Investment Company Institute Perspective* 11, no. 3 (August). Available at www.ici.org/pdf/per11-03.pdf.

Collins, Sean, Sarah Holden, Elena Barone Chism, and James Duvall. 2014. "The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2013." *ICI Research Perspective* 20, no. 3 (July). Available at www.ici.org/pdf/per20-03.pdf.

Deloitte Consulting LLP, the International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists. 2014. *Annual Defined Contribution Benchmarking Survey: 2013–2014 Edition*. New York, NY: Deloitte Consulting LLP. Available at www.iscebs.org/Documents/PDF/Annual%20Defined%20Contribution%20Benchmarking%20Survey%20(2013%20Edition).pdf.

Deloitte Consulting LLP and Investment Company Institute. 2014. *Inside the Structure of Defined Contribution/401(k) Plan Fees, 2013: A Study Assessing the Mechanics of the "All-In" Fee*. Washington, DC: Investment Company Institute. Available at www.ici.org/pdf/rpt_14_dc_401k_fee_study.pdf.

Gallagher, Emily. 2014. "Trends in the Expenses and Fees of Mutual Funds, 2013." *ICI Research Perspective* 20, no. 2 (May). Available at www.ici.org/pdf/per20-02.pdf.

Holden, Sarah, and Daniel Schrass. 2014. "Defined Contribution Plan Participants' Activities, First Half 2014." *ICI Research Report* (November). Available at www.ici.org/pdf/ppr_14_rec_survey_q2.pdf.

Holden, Sarah, Jack VanDerhei, Luis Alonso, and Steven Bass. 2013. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2012." *ICI Research Perspective* 19, no. 12, and *EBRI Issue Brief*, no. 394 (December). Available at www.ici.org/pdf/per19-12.pdf and www.ebri.org/pdf/briefspdf/EBRI_IB_012-13.No394.401k-Update-2012.pdf.

Holden, Sarah, Jack VanDerhei, Luis Alonso, and Steven Bass. 2014. "What Does Consistent Participation in 401(k) Plans Generate? Changes in 401(k) Account Balances, 2007–2012." *ICI Research Perspective* 20, no. 4, and *EBRI Issue Brief*, no. 402 (July). Available at www.ici.org/pdf/per20-04.pdf and www.ebri.org/pdf/briefspdf/EBRI_IB_402_July14.K-Longit.pdf.

Investment Company Institute. 2014a. *2014 Investment Company Fact Book: A Review of Trends and Activity in the Investment Company Industry*. Washington, DC: Investment Company Institute. Available at www.icifactbook.org.

Investment Company Institute. 2014b. "The U.S. Retirement Market, Second Quarter 2014" (September). Available at www.ici.org/info/ret_14_q2_data.xls and www.ici.org/research/stats/retirement/ret_14_q2.

Plan Sponsor Council of America. 2013. *56th Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2012 Plan Experience*. Chicago, IL: Plan Sponsor Council of America.

U.S. Department of Labor, Employee Benefits Security Administration. 2011. *Private Pension Plan Bulletin, Abstract of 2009 Form 5500 Annual Reports* (Version 1.0). Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (December). Available at www.dol.gov/ebsa/PDF/2009pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2012a. *Private Pension Plan Bulletin, Abstract of 2006 Form 5500 Annual Reports* (Version 1.1). Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (March). Available at www.dol.gov/ebsa/pdf/2006pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2012b. *Private Pension Plan Bulletin, Abstract of 2007 Form 5500 Annual Reports* (Version 1.5). Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (March). Available at www.dol.gov/ebsa/PDF/2007pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2012c. *Private Pension Plan Bulletin, Abstract of 2008 Form 5500 Annual Reports* (Version 1.2). Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (March). Available at www.dol.gov/ebsa/PDF/2008pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2012d. "Rules and Regulations for Reporting and Disclosure." 29 C.F.R. § 2520.104-46. Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (July). Available at www.gpo.gov/fdsys/pkg/CFR-2012-title29-vol9/pdf/CFR-2012-title29-vol9-sec2520-104-46.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2012e. *Private Pension Plan Bulletin, Abstract of 2010 Form 5500 Annual Reports* (Version 1.0). Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (November). Available at www.dol.gov/ebsa/PDF/2010pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2014a. *Private Pension Plan Bulletin, Abstract of 2011 Form 5500 Annual Reports* (Version 1.1). Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (September). Available at www.dol.gov/ebsa/PDF/2011pensionplanbulletin.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2014b. *Private Pension Plan Bulletin Historical Tables and Graphs* (2012 Data Release Version 1.0). Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (September). Available at www.dol.gov/ebsa/pdf/historicaltables.pdf.

U.S. Department of Labor, Employee Benefits Security Administration. 2014c. *Private Pension Plan Bulletin, Abstract of 2012 Form 5500 Annual Reports* (Version 1.0). Washington, DC: U.S. Department of Labor, Employee Benefits Security Administration (October). Available at www.dol.gov/ebsa/PDF/2012pensionplanbulletin.pdf.

U.S. Federal Reserve Board. 2014a. *2013 Survey of Consumer Finances*. Available at www.federalreserve.gov/econresdata/scf/scfindex.htm.

U.S. Federal Reserve Board. 2014b. *Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts, Second Quarter 2014*, Z.1 Release (September). Washington, DC: Federal Reserve Board. www.federalreserve.gov/releases/z1/current/default.htm.

The Vanguard Group. 2014. *How America Saves 2014: A Report on Vanguard 2013 Defined Contribution Plan Data*. Valley Forge, PA: The Vanguard Group, Vanguard Center for Retirement Research. Available at https://institutional.vanguard.com/iam/pdf/HAS14.pdf.

BrightScope is a San Diego–based data, analytics, and software company driving the growth of data-driven decisionmaking at leading financial services firms. BrightScope builds best-in-class software solutions that drive more effective sales and retention strategies for top financial institutions, working with eight of the top 10 asset managers by U.S. open-end assets, and eight of the top 10 defined contribution plan recordkeepers. BrightScope maintains a database with information on more than 60,000 defined contribution plans, largely gathered from Department of Labor Form 5500 audited filings.

The Investment Company Institute (ICI) is the national association of U.S. investment companies. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of $17.4 trillion and serve more than 90 million shareholders.

INVESTMENT COMPANY INSTITUTE®

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

BrightScope®

PO Box 910776
San Diego, CA 92191
858-452-7500
www.brightscope.com