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The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2018

KEY FINDINGS

- » **401(k) plan participants investing in mutual funds tend to hold lower-cost funds.** At year-end 2018, 401(k) plan assets totaled \$5.2 trillion, with 37 percent invested in equity mutual funds. In 2018, the average expense ratio for equity mutual funds offered in the United States was 1.26 percent. 401(k) plan participants who invested in equity mutual funds, however, paid about one-third of that amount—0.41 percent—on average.
- » **The expense ratios that 401(k) plan participants incur for investing in mutual funds have declined substantially since 2000.** In 2000, 401(k) plan participants incurred an average expense ratio of 0.77 percent for investing in equity mutual funds. By 2018, that figure had fallen to 0.41 percent, a 47 percent decline. The average expense ratios that 401(k) plan participants incurred for investing in hybrid and bond mutual funds also fell from 2000 to 2018, by 32 percent and 43 percent, respectively.
- » **The downward trend in the expense ratios that 401(k) plan participants incur for investing in equity and hybrid mutual funds continued in 2018.** The average expense ratio that 401(k) plan participants incurred for investing in equity mutual funds fell from 0.45 percent in 2017 to 0.41 percent in 2018. The average expense ratio that 401(k) plan participants incurred for investing in hybrid mutual funds fell from 0.51 percent in 2017 to 0.49 percent in 2018. And the average expense ratio that 401(k) plan participants incurred for investing in bond mutual funds remained stable between 2017 and 2018, at 0.34 percent.
- » **401(k) plans are a complex employee benefit to maintain and administer, and they are subject to an array of rules and regulations.** Employers offering 401(k) plans typically hire service providers to operate these plans, and these providers charge fees for their services.
- » **Employers and employees generally share the costs of operating 401(k) plans.** As with any employee benefit, the employer typically determines how the costs will be shared.

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For a complete set of data files for each figure in this report, see www.ici.org/info/per25-04_data.xls. Some of these data files include additional time series data not presented in this report.

The following methodology, unless otherwise specified, apply to all data in this report: (1) funds of funds are excluded from the data to avoid double counting, (2) mutual funds available as investment choices in variable annuities are excluded, and (3) dollars and percentages may not add to the totals presented because of rounding.

Why Employers Offer 401(k) Plans

401(k) plans—which allow workers the ability to defer income tax on the portion of their compensation that is set aside for retirement—have become an attractive workplace benefit.¹ 401(k) plans are also flexible, allowing employees to make elective deferrals and typically providing a choice of investments. Indeed, they have become the most common defined contribution (DC) plan, holding \$5.2 trillion in assets at year-end 2018 (Figure 1).² Mutual funds have become the primary vehicle for 401(k) plan investments, with the share of employer-sponsored 401(k) plan assets held in mutual funds rising from 9 percent at year-end 1990 to 63 percent at year-end 2018.

Employers that offer 401(k) plans, an optional employee benefit, face conflicting economic pressures: the need to attract and retain qualified workers with competitive compensation packages, and the need to keep their products and services competitively priced. As a firm increases overall compensation to its employees, it increases its ability to hire and retain workers but also increases the costs of producing its products and services.

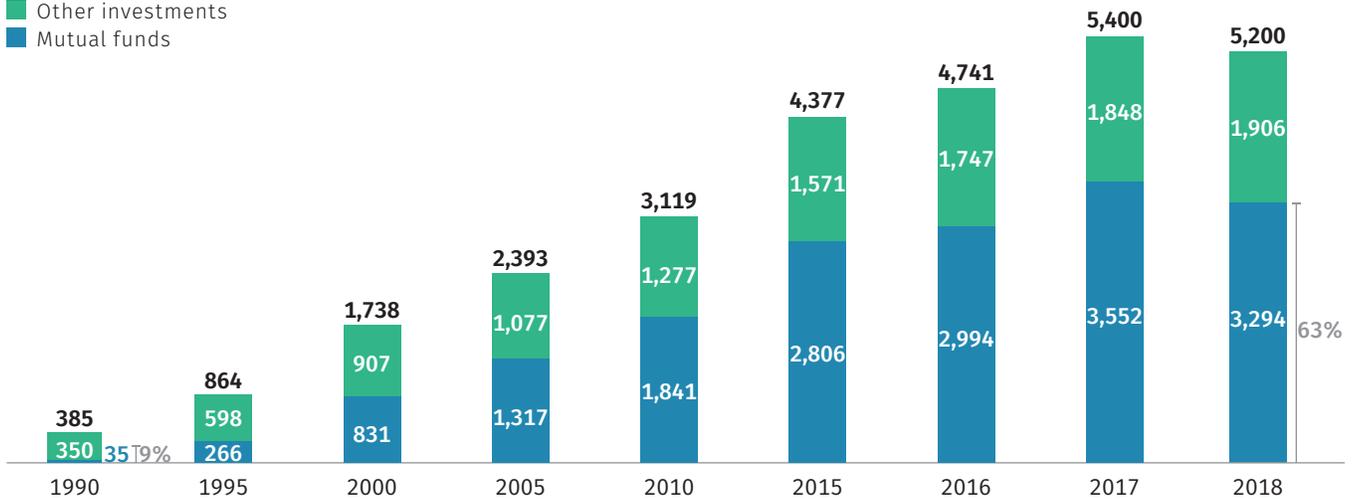
To provide and maintain 401(k) plans, employers are required to obtain a variety of administrative, participant-focused, regulatory, and compliance services. All of these services involve costs; generally, the plan sponsor and the plan participants share these costs.

FIGURE 1

401(k) Plan Assets

Billions of dollars

Other investments
Mutual funds



Note: Data include mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other funds. Sources: Investment Company Institute, Federal Reserve Board, and US Department of Labor; see Investment Company Institute 2019b

Paying for 401(k) Plan Services

401(k) Plan Services Are Strictly Regulated

401(k) plans are complex to maintain and administer, and they are subject to an array of rules and regulations that govern all qualified tax-deferred employee benefit plans, including Section 401(a) of the Internal Revenue Code (IRC), which stipulates the requirements that employee benefit plans must meet to qualify for the deferral of federal income tax.³ The Department of the Treasury and Internal Revenue Service (IRS) have issued numerous regulations to implement these tax code provisions and enforce the requirements that plans must satisfy to qualify for favorable tax treatment.⁴ Further, the plans must meet many statutory and

regulatory requirements under the Employee Retirement Income Security Act of 1974 (ERISA), enforced by the Department of Labor (DOL).

401(k) Plan Sponsors Provide a Variety of Services

When an employer offers a 401(k) plan to its employees, it selects an individual or group of individuals, known as plan fiduciaries,⁵ to oversee the administration of the 401(k) plan for the exclusive benefit of plan participants, consistent with ERISA and the terms of the plan. The plan fiduciaries must arrange for the provision of the many services required to create and maintain a 401(k) plan.

Administrative services maintain the framework of a 401(k) plan and include recordkeeping functions, such as maintaining plan and participant records and creating and delivering participant account statements (Figure 2). DOL regulations generally require plans to allow participants to change their investment elections at least quarterly,⁶ but most 401(k) plan participants

are permitted to make daily transactions in their plans.⁷ Administrative service providers process all participant transactions. In addition, plan fiduciaries must arrange for administrative services relating to setting up, converting, and terminating plans, as well as trustee services.⁸

FIGURE 2

Services Provided to 401(k) Plans

Administrative services

Recordkeeping, including maintaining plan records; processing employee enrollment; processing participants' investment elections, contributions, and distributions; and issuing account statements to participants

Transaction processing, including purchases and sales of participants' assets

Plan creation/conversion/termination, including associated administrative services

Trustee services, providing the safe holding of the plan's assets in a trust, as required by ERISA

Participant-focused services

Participant communication, including employee meetings, call centers, voice-response systems, web access, and preparation of summary plan description and other participant materials

Participant education and advice, including online calculators and face-to-face investment advice

Investment management, typically offered through a variety of professionally managed investment options

Brokerage window, if offered, allowing direct purchase of individual securities by plan participants

Maintenance of an employer stock fund, if offered, to facilitate the purchase of employer securities within the plan

Loan processing, if a loan feature is offered

Distribution services, if offered, facilitating installment payments or periodic withdrawals

Insurance and annuity services, if offered, including offering annuities as distribution options

Regulatory and compliance services

Plan document services, including off-the-rack "prototype" plans

Consulting, including assistance in selecting the investments offered to participants

Accounting and audit services, including preparation of annual report (Form 5500)

Legal advice, including advice regarding interpretation of plan terms, compliance with legal requirements, plan amendments, and resolution of benefit claims

Plan testing, to comply with Internal Revenue Code nondiscrimination rules

Processing of domestic relations orders, ensuring that the split of accounts pursuant to divorce orders complies with ERISA

Sources: Investment Company Institute, US Department of Labor, and Internal Revenue Service

Participant-focused services help employees fully achieve the benefits of their 401(k) plans. Plan sponsors provide a wide array of communications, educational resources, and advice services to help participants invest and plan for retirement (Figure 2).⁹ Plan fiduciaries select a menu of professionally managed investment options that typically covers a range of risk and return,¹⁰ sometimes including a brokerage window through which participants may select securities not in the plan's menu.¹¹ If a plan sponsor permits loans, the plan fiduciaries must arrange for loan processing services.¹² In addition, plans may opt to provide participants with access to installment payments or periodic distributions or annuity purchasing services at the time of retirement.¹³

Regulatory and compliance services ensure that a plan fulfills legal requirements imposed by statute, DOL and IRS regulations, and other guidance (Figure 2). Plans are subject to complicated restrictions on contributions,¹⁴ lengthy audited annual reports to the DOL,¹⁵ and tax reporting to the IRS, and may have additional compliance burdens under federal securities or state laws.¹⁶ Further, each investment option used in a plan has its own compliance requirements. For example, mutual funds must comply with the Investment Company Act of 1940 and other securities laws,¹⁷ bank collective trusts with banking regulations, and group annuity contracts with state insurance rules.

Plan Sponsors Must Ensure That Service Costs Are Reasonable

Federal law requires that plan sponsors “ensure that the services provided to their plan are necessary and that the cost of those services is reasonable.”¹⁸ In February 2012, the DOL released regulations concerning the fee and compensation information that plan sponsors must collect—and that service providers must disclose—to ensure that a contract or arrangement for services is considered “reasonable” under ERISA.¹⁹ With these regulations, which became effective in July 2012, the DOL aims to help ensure that plan sponsors can make informed decisions about plan services and their costs and to reveal any potential conflicts that a service provider might have.²⁰ Fees are only one factor that a plan sponsor must consider. Other factors include the extent and quality of service and the characteristics of the investment options chosen.²¹

The DOL also released a regulation in October 2010 that requires plans to give participants, when they become eligible for the plan and annually thereafter, key information about the plan's investments and fees.²² The goal of this regulation is to ensure that 401(k) participants have the information they need to make plan-related decisions, such as whether to participate and how to allocate the assets in their accounts among the investments available.

Plan Sponsors Select Service Providers and Investment Arrangements

Plan sponsors select the service providers for their 401(k) plans and choose the investment options offered in them.²³ The costs of running a 401(k) plan generally are shared by the plan sponsor and participants, and the arrangements vary across plans. The fees may be assessed at a plan level, a participant-account level, as a percentage of assets, or as a combination of arrangements.

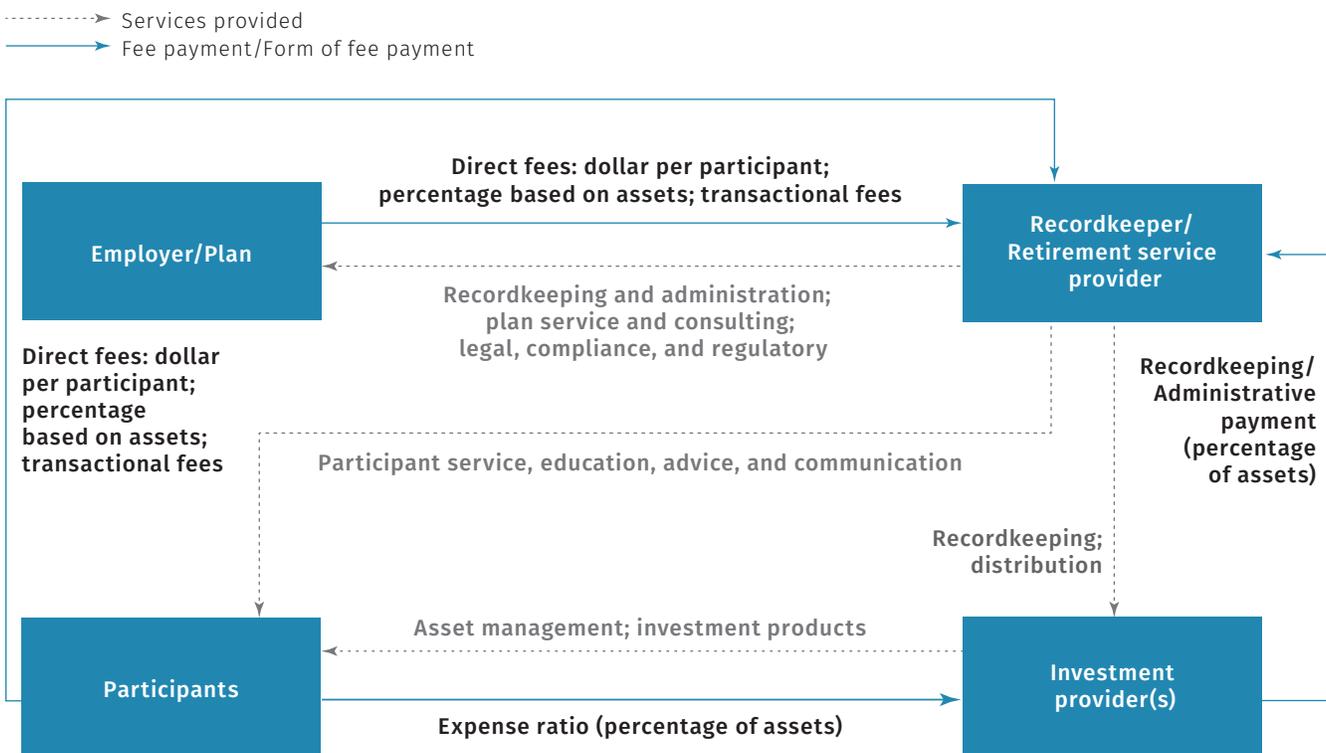
Figure 3 shows possible fee and service arrangements in 401(k) plans. The boxes on the left highlight employers, plans, and participants, all of which use

services in 401(k) plans. The boxes on the right highlight recordkeepers, other retirement service providers, and investment providers that deliver investment products, investment management services, or both.

The dashed arrows illustrate the services provided. For example, the investment provider offers investment products and asset management to participants, while the recordkeeper provides services to the plan and the participants. The solid arrows illustrate the payment of fees for products and services. Participants—or the plan or employer—may pay directly for recordkeeping services.

FIGURE 3

A Variety of Arrangements May Be Used to Compensate 401(k) Service Providers



Note: In selecting the service provider(s) and deciding the cost sharing for the 401(k) plan, the employer/plan sponsor will determine which combinations of these fee arrangements will be used in the plan.

Source: Investment Company Institute

In addition to paying for plan-level recordkeeping services directly from participant accounts, such services can be paid by participants indirectly (solid arrow from participants to investment providers) through the investment expenses they pay for investments held in their 401(k) accounts. In this respect, mutual funds, which are often used as investment options in 401(k) plans, also provide services for their shareholders, including keeping shareholder-level records and sending out prospectuses, shareholder reports, and other shareholder information (shareholder services).

Because the recordkeeping vendor hired by the plan is already engaged in plan recordkeeping, the fund often finds it efficient to pay the vendor (solid arrow at the far right) for carrying out some of the fund's shareholder services (many of which overlap with the vendor's own recordkeeping function). The fees the fund pays to recordkeepers and other intermediaries for taking care of the fund's shareholder services are identified in the fund prospectus and are included in the fund's expense ratio.

The fees that the fund has paid the vendor for fund shareholder services provided to the fund are often used by the vendor to offset the cost of recordkeeping for the plan (dashed arrow between recordkeeper and investment provider). The amount of offset can vary, depending on the size of the plan and the investment options provided, even to the point of covering the vendor's fees charged to the plan for plan-level recordkeeping. Importantly, not all plan-related expenses can be paid for by plan participants. For example, the DOL requires that the plan sponsor pay the costs associated with the initial design of the plan, as well as any design changes.²⁴

Beyond these design services, employers can share the costs of the plan services with their employees. However, many employers choose to cover some or all

plan-related costs that legally could be shouldered by the plan participants. Any costs not paid by the employer, which may include administrative, investment, legal, and compliance costs, effectively are paid by plan participants.²⁵

Looking at Fees and Expenses of Mutual Funds Held in 401(k) Accounts

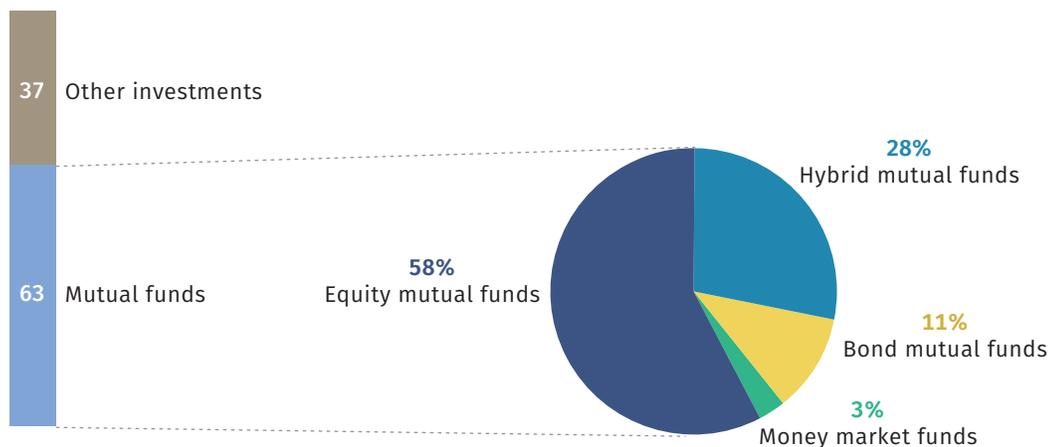
Virtually all participant-directed 401(k) plans offer a variety of pooled investment options (such as a selection of mutual funds, collective trusts, and/or separately managed accounts), and some also include guaranteed investment contracts (GICs),²⁶ company stock,²⁷ or a brokerage window that gives participants access to direct investment in stocks, bonds, and other securities.²⁸ All told, at year-end 2018, 63 percent of the \$5.2 trillion in 401(k) plan assets were invested in mutual funds (Figure 4).²⁹ Mutual funds are required by law to disclose their fees and expenses, and ICI studies trends in those fees and expenses.³⁰ In addition, ICI separately tracks 401(k) plan account holdings of mutual funds.³¹ This report combines the results of these analyses in order to examine the fees and expenses that investors incur on mutual funds held in 401(k) accounts.³² This analysis finds that:

- » 401(k) plan participants tend to be invested in lower-cost mutual funds.
- » The mutual fund expense ratios that 401(k) plan participants incur have declined substantially since 2000, and the downward trend continued for equity and hybrid mutual funds in 2018.
- » At year-end 2018, 93 percent of mutual fund assets in 401(k) plans were held in institutional and retail no-load share classes, while the remaining assets were held in load share classes, predominantly in share classes that do not charge retirement plan participants a front-end load.

FIGURE 4

63 Percent of 401(k) Plan Assets Are Invested in Mutual Funds

Percentage of assets, 2018



Total 401(k) assets: \$5.2 trillion

Total mutual fund 401(k) assets: \$3.3 trillion

Note: Data include mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other funds.

Sources: Investment Company Institute, Federal Reserve Board, and US Department of Labor; see Investment Company Institute 2019b

Investors Pay Two Types of Mutual Fund Fees and Expenses

Investors in mutual funds can incur two primary types of fees and expenses when purchasing and holding mutual fund shares: sales loads and mutual fund expenses. Sales loads are one-time fees paid either at the time of purchase (front-end loads) or when shares held for less than a specified number of years are redeemed (back-end loads, also known as contingent deferred sales loads, or CDSLs). Mutual fund expenses include ongoing charges for portfolio management, fund administration, and shareholder services, as well as fund distribution charges (known as 12b-1 fees).³³

Sales loads often are waived for mutual funds purchased through 401(k) plans, but 401(k) investors

do incur the fund expenses of the mutual funds in their 401(k) accounts. Ongoing expenses are paid from fund assets, so investors pay these expenses indirectly. The average expense ratio, which reflects both the operating expense ratio—including portfolio management, fund administration and compliance, shareholder services, and other miscellaneous costs—and 12b-1 fees, is measured in this report as an asset-weighted average. Using the asset-weighted average to measure costs provides an aggregate estimate of what 401(k) participants actually pay to invest in mutual funds through their 401(k) plans. Mutual funds with larger shares of assets in 401(k) plans contribute proportionately more to the asset-weighted average than do less widely held funds.

Trends in Funds and Share Classes Used in 401(k) Plans

No-load shares. Altogether, 93 percent of 401(k) plan mutual fund assets were invested in no-load shares at year-end 2018 (Figure 5).³⁴ Retail no-load shares held 42 percent of total 401(k) mutual fund assets, and institutional no-load shares held 50 percent. Over the past decade, institutional no-load shares have grown as a segment of 401(k) mutual fund assets, while the roles of retail no-load shares and load shares have fallen.

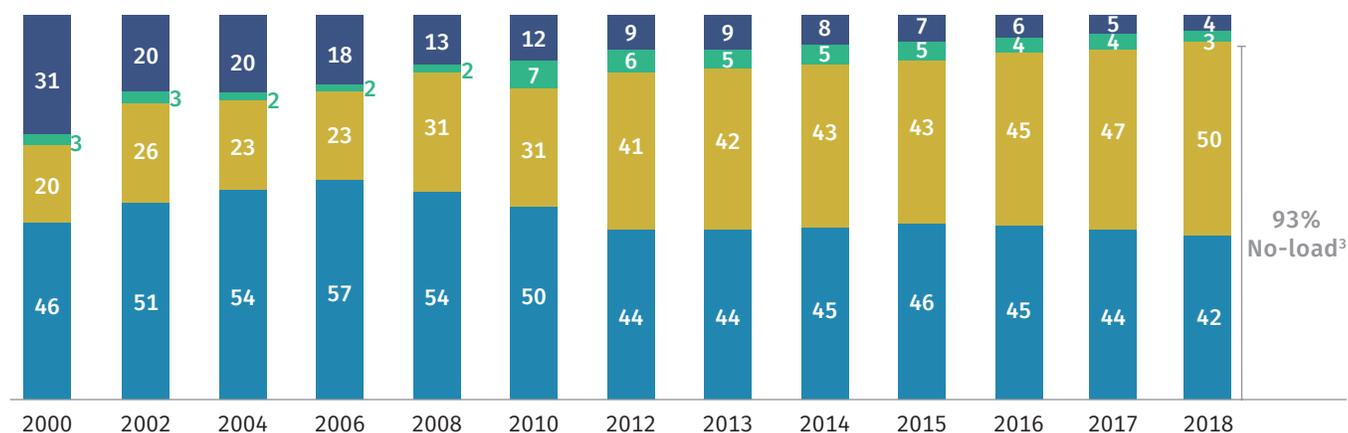
Load shares. Load shares accounted for the remainder of 401(k) mutual fund assets at year-end 2018 (Figure 5). Four percent of 401(k) mutual fund investments were held through front-end load shares.³⁵ Most funds waive front-end loads for retirement plans, so 401(k) plan participants generally are not charged a front-end load on shares purchased through their plans.³⁶ The remaining 3 percent of 401(k) mutual fund assets were invested in back-end load share classes,³⁷ level load share classes,³⁸ other load share classes,³⁹ and load share classes that are unable to be classified.

FIGURE 5

401(k) Mutual Fund Assets by Share Class

Percentage of assets

- Front-end load¹
- Back-end load, level load, other load, and unclassified load²
- Institutional no-load³
- Retail no-load³



¹ Front-end load > 1 percent. Primarily includes Class A shares; includes assets where front-end loads are waived.

² See Figure A2 in the appendix for more detail.

³ No-load shares have front-end load = 0 percent, contingent deferred sales load = 0 percent, and 12b-1 fee ≤ 0.25 percent.

Note: Data exclude tax-exempt mutual funds.

Sources: Investment Company Institute, Lipper, and Morningstar

Understanding Fund Share Class Categories

Many mutual funds offer several different share classes, all of which invest in the same portfolio (fund) while offering different services tailored to the needs of different investors or, in the case of 401(k) plans, the group of participants in the plan. The combination of sales loads and 12b-1 fees that an individual investor might pay depends on the share class. ICI categorizes funds or fund share classes as either load or no-load, and also identifies “R” shares.

Load Share Classes

Load share classes include a sales load, a 12b-1 fee of more than 0.25 percent, or both. Sales loads and 12b-1 fees are used to compensate brokers and other financial professionals for their services. Load share classes can be further classified as either *front-end load*, *back-end load*, *level load*, or *other load*. Front-end load shares carry an up-front sales charge and may have a 12b-1 fee, typically between 0.25 percent and 0.35 percent of the fund’s net assets. Front-end load shares are sometimes used in employer-sponsored retirement plans, but fund sponsors typically waive the sales load for purchases made through such retirement plans. Back-end load shares and other load shares are offered for sale at net asset value without a front-end load, but use combinations of 12b-1 fees and CDSLs. Level load shares typically have an annual 12b-1 fee of 1.0 percent to compensate financial professionals for assisting investors. The figures on load funds in this report include load funds that waive sales loads for retirement plan investors (see Figure 5, as well as Figures A2 and A3 in the appendix).

No-Load Share Classes

No-load share classes have no front-end load or CDSL, and have a 12b-1 fee of 0.25 percent or less. Originally, no-load share classes were sold directly by mutual fund sponsors to investors. Now, investors can purchase no-load shares through employer-sponsored retirement plans, mutual fund supermarkets, discount brokerage firms, and

bank trust departments, as well as directly from mutual fund sponsors. No-load share classes are further classified as either *institutional* or *retail*. The figures in this report classify a no-load share class as institutional if the fund’s prospectus states that the fund or fund share class is designed to be sold primarily to institutional investors or institutional accounts. This classification includes investments by individuals in 401(k) accounts that are purchased by or through an institution such as an employer, trustee, or fiduciary on behalf of its employees, owners, or clients. The figures label the remaining no-load shares as retail (see Figure 5, as well as Figures A2 and A3 in the appendix).

“R” Shares

“R” shares are those from any share class that ICI designates as a “retirement share class.” These share classes are sold predominantly to employer-sponsored retirement plans. However, other share classes—including retail and institutional share classes—also contain investments made through 401(k) plans or individual retirement accounts (IRAs). “R” shares can be load or no-load (see Figures A2 and A3 in the appendix).

Similar designations have long been used in the mutual fund industry. But as the industry has evolved, their original connotations have become less meaningful, including when applied to 401(k) plans. Participant-directed 401(k) plans have characteristics associated with both retail investors (because plans often have many individual accounts that must be maintained and investors that must be served) and institutional investors (when the plan brings larger total investments). Nevertheless, these definitions are useful for research purposes such as illustrating trends in 401(k) plan assets held in mutual funds—for example, highlighting the fact that 401(k) plans may purchase shares through a range of funds and fund share classes.

Over the past decade and a half, some mutual fund companies have created fund shares specifically for sale in the retirement market. These “retirement share classes,” or “R” shares, include no-load and load structures and are sold predominantly to employer-sponsored retirement plans. At year-end 2018, “R” shares were 18 percent of mutual fund assets held in 401(k) plans (see Figures A2 and A3 in the appendix).

401(k) Participants Hold Lower-Cost Mutual Funds

Equity mutual funds. Fifty-eight percent of 401(k) plan assets invested in mutual funds were invested in equity mutual funds at year-end 2018 (Figure 4). Consistent with the general industry trend, average equity mutual fund expense ratios incurred by 401(k) investors continued to decline in 2018, falling to 0.41 percent (Figure 6).⁴⁰ In 2018, 401(k) investors continued to concentrate their equity mutual fund assets in lower-cost funds. In 2018, the simple average expense ratio for equity mutual funds was 1.26 percent. However, taking into account both the funds offered in 401(k) plans and the distribution of assets in those funds, 401(k) plan participants who invested in equity mutual funds paid about one-third of that amount—0.41 percent on

average—lower than the industrywide asset-weighted average of 0.55 percent. 401(k) mutual fund investors incur lower average expense ratios not only for equity mutual funds overall but also when disaggregated into domestic equity mutual funds and world equity mutual funds (Figure 7).

Several factors contribute to the relatively low average expense ratios incurred by 401(k) plan participants investing in mutual funds. Both inside and outside the 401(k) plan market, mutual funds compete among themselves and with other financial products to offer shareholders service and performance.⁴¹ In addition, shareholders are sensitive to the fees and expenses that funds charge.⁴² Indeed, new sales and assets tend to be concentrated in lower-cost funds, providing a market incentive for funds to offer their services at competitive prices.⁴³ In the 401(k) plan market, performance- and cost-conscious plan sponsors also impose market discipline. Plan sponsors regularly evaluate the performance of the plans’ investments,⁴⁴ and performance reflects fees. In a survey conducted in 2015, 52 percent of plan sponsors indicated that they had replaced a fund in the last year because of poor performance.⁴⁵

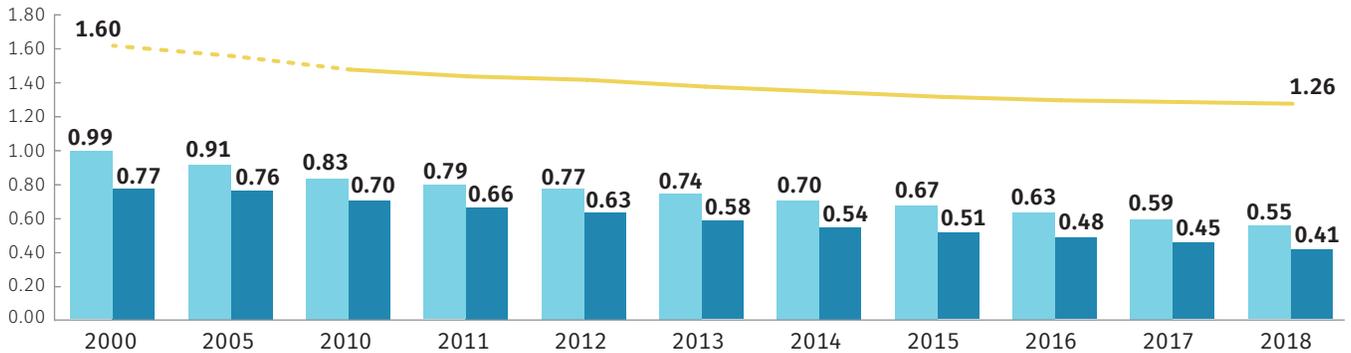
FIGURE 6

401(k) Mutual Fund Investors Tend to Pay Lower-Than-Average Expense Ratios

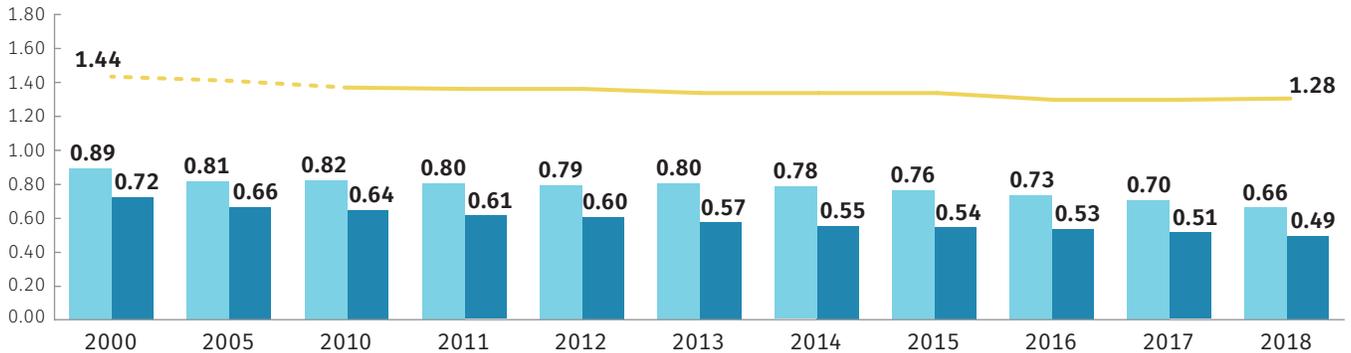
Percent

- Industry simple average expense ratio
- Industry asset-weighted average expense ratio
- 401(k) asset-weighted average expense ratio

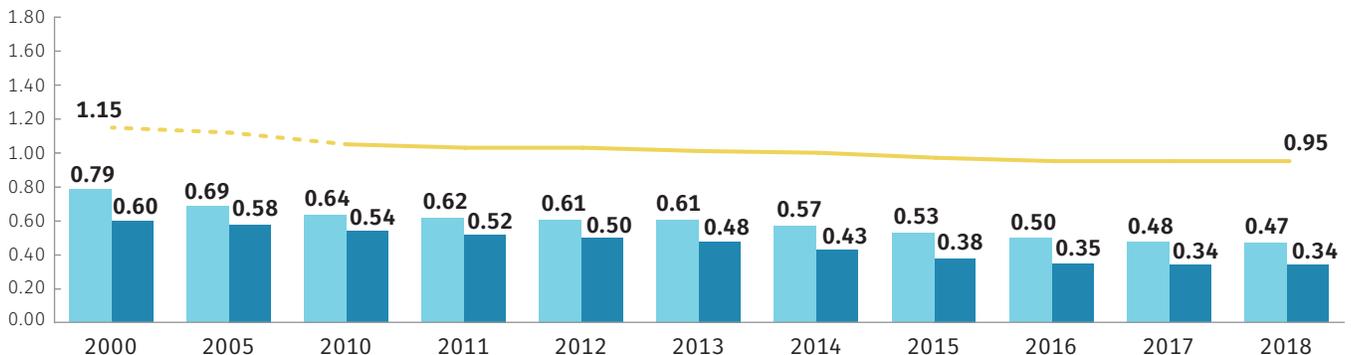
Equity mutual funds



Hybrid mutual funds



Bond mutual funds*



* Data exclude tax-exempt mutual funds.

Sources: Investment Company Institute, Lipper, and Morningstar

FIGURE 7

Average Mutual Fund Expense Ratios

Percent

	2016		2017		2018	
	Industry ¹	401(k) ²	Industry ¹	401(k) ²	Industry ¹	401(k) ²
Equity mutual funds	0.63	0.48	0.59	0.45	0.55	0.41
Domestic	0.58	0.45	0.54	0.42	0.51	0.39
World	0.78	0.58	0.73	0.54	0.68	0.48
Hybrid mutual funds	0.73	0.53	0.70	0.51	0.66	0.49
Bond mutual funds³	0.50	0.35	0.48	0.34	0.47	0.34
Investment grade	0.37	0.29	0.35	0.28	0.34	0.27
World	0.65	0.42	0.64	0.40	0.60	0.37
Other taxable	0.65	0.53	0.62	0.52	0.63	0.57
Money market funds	0.20	0.22	0.25	0.28	0.25	0.30

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.

³ Data exclude tax-exempt mutual funds.

Sources: Investment Company Institute and Morningstar

The lower average expense ratios incurred by 401(k) participants also reflect other factors. Some plan sponsors choose to cover a portion of 401(k) plan administrative costs or pay such costs directly from participant accounts. This allows them to select funds or fund share classes with lower expense ratios because the fund or fund share class pays little or no shareholder servicing fees to recordkeepers or other intermediaries. Further, many 401(k) plans have large average account balances, and economies of scale help reduce the fees and expenses of the funds offered in these plans.⁴⁶ Finally, in contrast with investments made outside of 401(k) plans, where shareholders

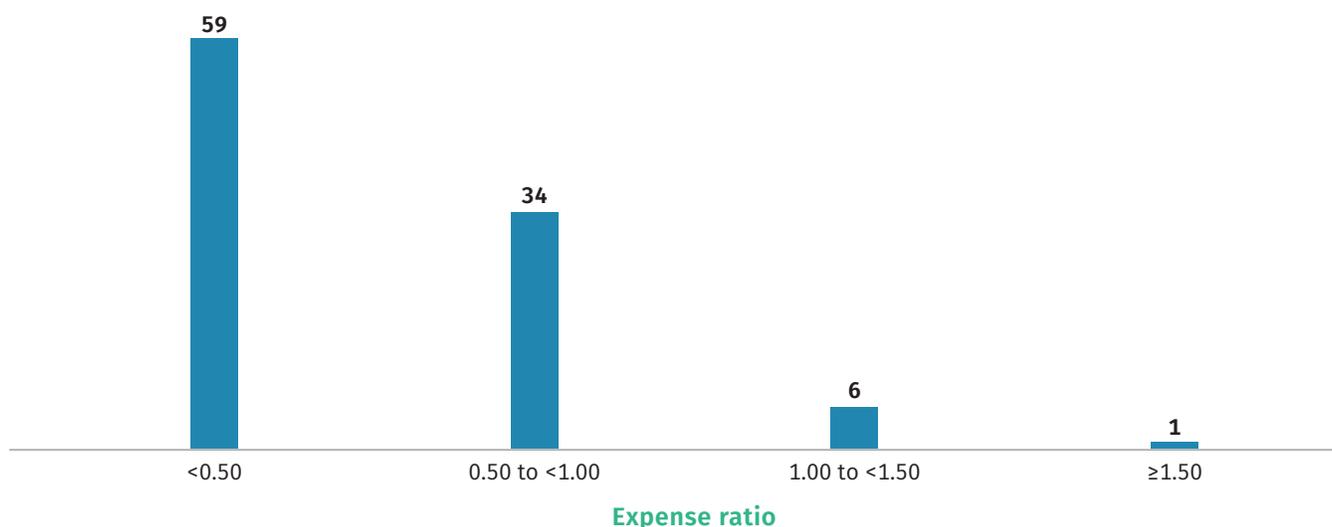
typically pay for the assistance of a financial adviser when investing in mutual funds,⁴⁷ there is a more limited role for financial adviser services inside these plans.⁴⁸

Expense ratios vary among the mutual funds that 401(k) participants hold. At year-end 2018, 93 percent of 401(k) plan equity mutual fund assets were invested in equity mutual funds with expense ratios of less than 1.00 percent, with 59 percent invested in equity mutual funds with expense ratios of less than 0.50 percent (Figure 8).⁴⁹

FIGURE 8

401(k) Equity Mutual Fund Assets Are Concentrated in Lower-Cost Funds

Percentage of 401(k) equity mutual fund assets, 2018



Sources: Investment Company Institute and Morningstar

Hybrid mutual funds. Twenty-eight percent of 401(k) mutual fund assets were invested in hybrid mutual funds, which invest in a mix of equities and bonds, at year-end 2018 (Figure 4). At year-end 2018, 401(k) hybrid mutual fund investors paid an asset-weighted average expense ratio of 0.49 percent, less than half the industrywide simple average (1.28 percent) and 26 percent less than the industrywide asset-weighted average of 0.66 percent (Figure 6).⁵⁰

Bond mutual funds. Eleven percent of 401(k) mutual fund assets were invested in bond mutual funds at year-end 2018 (Figure 4). The asset-weighted average expense ratio paid by 401(k) investors on bond mutual funds remained stable in 2018 (Figure 6). As with investors in equity and hybrid mutual funds, 401(k) bond mutual fund investors have concentrated their assets in lower-cost bond mutual funds. At year-end 2018, 401(k) bond mutual fund investors paid an asset-weighted average expense ratio of 0.34 percent, about one-third of the industrywide simple average (0.95 percent) and 28 percent less than the industrywide asset-weighted average of 0.47 percent. The average expense ratio paid by 401(k) investors in bond mutual funds also is lower than the industry average when disaggregated into investment grade and world bond mutual funds (Figure 7).⁵¹

Money market funds. Only 3 percent of 401(k) mutual fund assets were invested in money market funds at year-end 2018 (Figure 4). 401(k) participants holding money market funds had an asset-weighted average expense ratio of 0.30 percent in 2018, higher than in 2017 (Figure 7). Industrywide, the average expense ratio investors incurred on money market funds remained the same between 2017 and 2018. The behavior in

money market fund expense ratios in 2018 is largely reflective of the continued changes in the current interest rate environment. During the period of ultralow interest rates after the financial crisis, money market funds had adopted expense waivers⁵² to ensure that net yields did not fall below zero. The Federal Reserve began periodically raising interest rates in December 2015. Consequently, advisers have pared back the expense waivers they had provided to their funds, which has caused the expense ratios of money market funds to rise somewhat.⁵³

Mutual Fund Fees Vary Across 401(k) Plans

In addition to the impact of the range and quality of services provided, many factors affect the fees of 401(k) plans. Further, as with any other employee benefit, the costs associated with 401(k) plans are typically shared between the employer and plan participants.

Participants who work for employers that do not heavily subsidize their plans will incur higher fees on average. Plans that charge account-level fees will tend to have lower-cost investment options than plans without direct account-level charges. Because of the relatively fixed costs that all plans incur, participants in plans with a small amount of assets tend to pay higher fees per dollar invested than plans with a larger amount.⁵⁴ Participants in plans that have many small accounts typically pay higher fees per dollar invested than plans with larger accounts. Plans with more service features tend to be more costly than plans with fewer service features. All of these factors affect the costs of the plan and the plan's investment options, so they must all be considered when evaluating the reasonableness of a plan's costs.

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 DC plans, providing 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, 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.

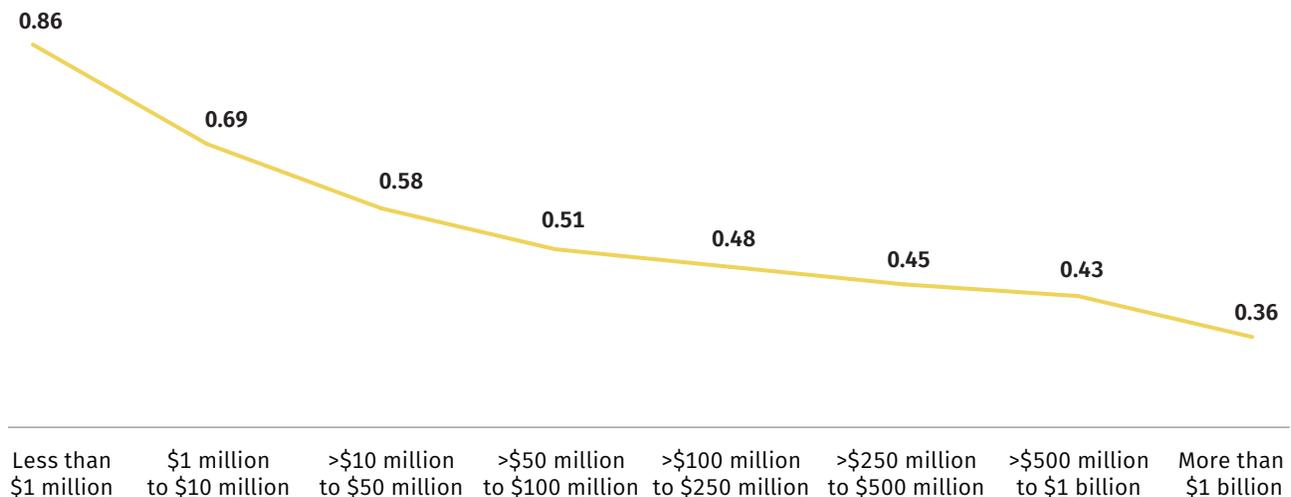
The analysis of 2016 401(k) mutual fund holdings in the database combined with mutual fund fee information from Morningstar finds that asset-weighted average mutual fund expense ratios paid by 401(k) plan participants tend to fall as 401(k) plan assets increase. For example, the asset-weighted average expense ratio for domestic equity mutual funds held in 401(k) plans in 2016 ranged from 0.86 percent in plans with less than \$1 million in plan assets to 0.36 percent in plans with more than \$1 billion (Figure 9).

The 2016 401(k) mutual fund fee analysis results are reported in *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2016*, available at www.ici.org/pdf/19_ppr_dcplan_profile_401k.pdf.

FIGURE 9

Domestic Equity Mutual Fund Fees Paid Tend to Fall as 401(k) Plan Size Increases

Asset-weighted average expense ratio as a percentage of plan assets in domestic equity mutual funds, 2016



Note: The sample is nearly 42,000 401(k) plans with audited Form 5500 reports (generally plans with 100 participants or more) and between four and 100 investment options. The asset-weighted average domestic equity mutual fund expense ratio among all plans in the sample was 0.46 percent.

Sources: BrightScope Defined Contribution Plan Database and Morningstar; see Exhibit 4.5 in BrightScope and Investment Company Institute 2019

Other Costs Incurred by Mutual Fund Investors

Mutual funds also incur costs when buying and selling securities. These costs are not included in the fund's expense ratio but are reflected in the calculation of net return to the investor. To help shareholders evaluate the trading activity of a mutual fund, the Securities and Exchange Commission (SEC) requires each mutual fund to report its turnover rate in its annual shareholder report and its prospectus.⁵⁵

Broadly speaking, the turnover rate is a measure of how rapidly a fund is trading the securities in its portfolio relative to total fund assets.⁵⁶ All pooled investments incur trading costs while managing their portfolios.

Equity mutual fund turnover rates. Participants in 401(k) plans tend to own equity mutual funds with lower-than-average turnover rates. The industrywide simple average turnover rate in equity mutual funds was 63 percent in 2018 (Figure 10).⁵⁷ However, mutual fund

shareholders tend to invest in equity mutual funds with much lower turnover rates, as reflected in the lower industrywide asset-weighted average turnover rate of 32 percent. The average turnover rate for equity mutual funds selected by 401(k) plan participants in 2018 was lower still: 28 percent on an asset-weighted basis.

Conclusion

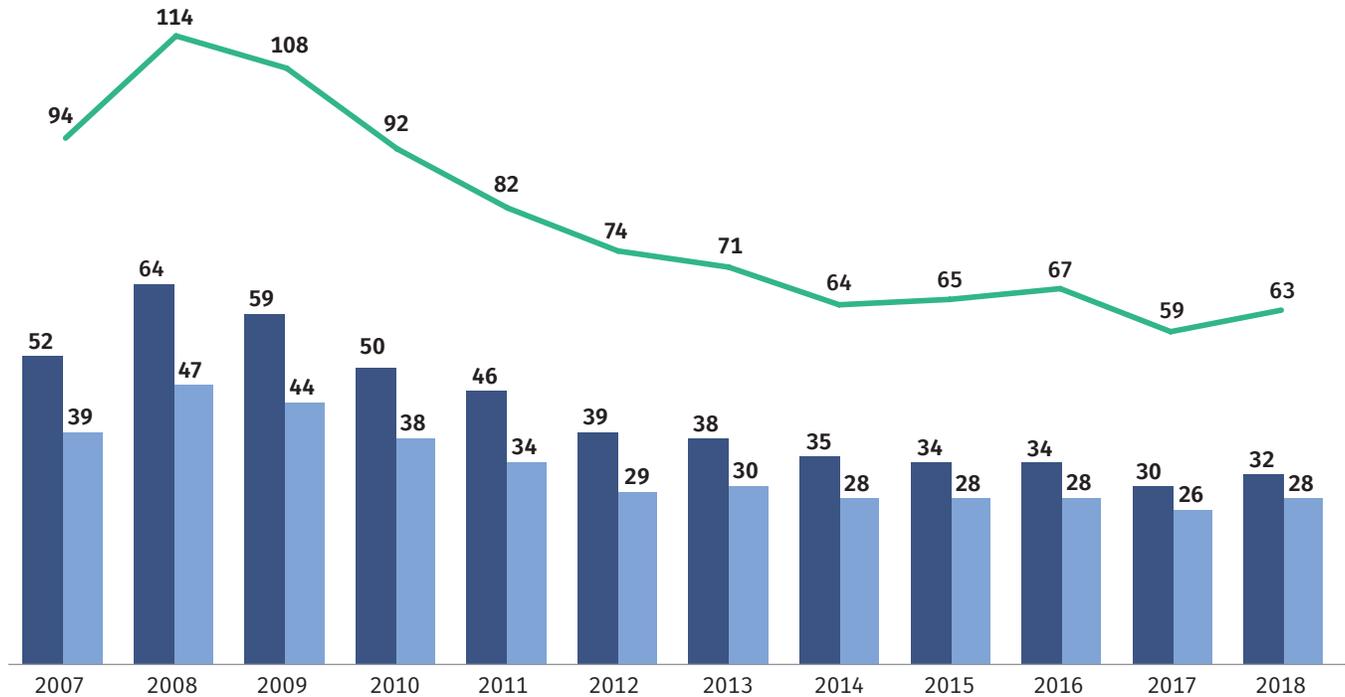
401(k) plans are now the most common private-sector employer-sponsored retirement plan in the United States, holding \$5.2 trillion in assets at year-end 2018. Employers choose whether to offer these plans to employees as part of their total compensation packages; if a plan is offered, employees choose whether to participate. Maintaining a 401(k) plan involves a variety of services, and the costs of these services are generally shared by the plan sponsor and the plan participants.

FIGURE 10

Average Portfolio Turnover Rates for Equity Mutual Funds

Percentage of assets

- Simple average portfolio turnover rate
- Industry asset-weighted average portfolio turnover rate
- 401(k) asset-weighted average portfolio turnover rate



Note: The turnover rate is the lesser of a fund's purchases or sales of portfolio securities for the year divided by the fund's average total net assets for the year.

Source: Investment Company Institute

401(k) plans provide many American workers with the opportunity for cost-effective investment in mutual funds. Plan participants invest primarily in equity mutual funds, and the bulk of these equity mutual fund assets is held in lower-cost mutual funds with lower-than-average portfolio turnover. Numerous factors contribute to the relatively low expense ratios incurred by 401(k) plan participants investing in mutual funds. Among them are: (1) competition among mutual funds

and other investment products to offer shareholders service and performance; (2) plan sponsor decisions to cover a portion of 401(k) plan costs, which allow them to select lower-cost funds or fund share classes; (3) economies of scale, which large investors such as 401(k) plans can achieve; (4) cost- and performance-conscious decisionmaking by plan sponsors and plan participants; and (5) the limited role of professional financial advisers in these plans.

Additional Reading

» **Trends in the Expenses and Fees of Funds, 2018**

www.ici.org/pdf/per25-01.pdf

» **The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2016**

www.ici.org/pdf/19_ppr_dcplan_profile_401k.pdf

» **The US Retirement Market, First Quarter 2019**

www.ici.org/research/stats/retirement

» **ICI Resources on 401(k) Plans**

www.ici.org/401k

» **ICI Resources on 12b-1 Fees**

www.ici.org/rule12b1fees

Notes

- ¹ Tax-deferred contributions to a plan are not included in a worker's taxable income, but distributions from the plan are included in income and subject to tax. Since 2006, employers have been allowed to offer employees the option to make Roth 401(k) contributions. Like a Roth IRA, contributions to a Roth 401(k) are included in income and subject to tax, but qualified distributions are not included in taxable income. Utkus and Young 2019, analyzing the DC plans in the Vanguard Group's recordkeeping system, reports that 71 percent of plans covering 86 percent of participants have a Roth option. In plans with a Roth option, 11 percent of participants have used it.
- ² See Investment Company Institute 2019b.
- ³ Section 401(a) of the IRC contains rules that govern qualified pension plans, profit-sharing plans, stock bonus plans, and other employee benefit plans. Section 401(k) of the IRC stipulates that a profit-sharing or stock bonus plan, a pre-ERISA money purchase plan, or a rural cooperative would not be considered to be in violation of the qualification rules simply because it included a qualified cash or deferred arrangement. A qualified cash or deferred arrangement provides employees the option to defer a portion of their compensation or to receive the compensation in cash. Plans with a qualified cash or deferred arrangement must meet the requirements of Section 401(a) and other sections of the IRC that pertain to their plan type, as well as the additional requirements included in Section 401(k) of the IRC. Congress added Section 401(k) of the IRC in 1978, to become effective in 1980 (see Revenue Act of 1978, Public Law 95-600). However, companies generally did not begin to adopt 401(k) plans until the Department of the Treasury and the IRS issued proposed regulations clarifying the scope of Section 401(k) on November 10, 1981 (see 46 Fed. Reg. 55544, November 10, 1981; and Holden, Brady, and Hadley 2006a).
- ⁴ All tax-deferred compensation provides the same tax benefits to employees, whether it is provided as part of a defined benefit (DB) plan or a DC plan and whether it is in the form of an employer contribution or an employee contribution. (For a detailed explanation of the tax benefits of deferral, see Brady 2012.) Unless part of a tax-qualified employee benefit plan, all compensation would be included in a worker's taxable wages and would be subject to tax in the year it is earned, and all income generated by investments would be taxable in the year it was received. In contrast, compensation deferred through a tax-qualified employee benefit plan is not subject to income tax in the year it is earned, and investment income earned by the plan is not subject to income tax in the year it is received. Instead, employees defer taxation on both compensation and investment income until distributions are taken from the plan. These plans generally provide no direct tax benefit to employers, who are allowed to deduct both cash compensation expenses and retirement plan contribution expenses from revenue when calculating taxable business income. Instead, the benefits to employers generally are indirect, allowing employers to offer more valuable compensation packages to their employees. An employee benefit plan must meet many requirements to be tax qualified, including nondiscrimination rules, which are designed to ensure that the plan benefits do not disproportionately accrue to highly compensated employees. This is accomplished by linking the benefits received by high-paid workers to the benefits received by low-paid workers within a given plan. For a further discussion of nondiscrimination rules, see pages 11–14 of Holden, Brady, and Hadley 2006a and Holden, Brady, and Hadley 2006b.
- ⁵ ERISA requires that every plan identify at least one fiduciary (a person or an entity) named in the written plan document—the “named” fiduciary or fiduciaries—as having control over the plan's operation (see ERISA Section 402). A plan sponsor may, and often does, identify itself as the named fiduciary. In its role as named fiduciary, the employer assumes fiduciary responsibility to, among other things, select and monitor service providers and investment options for the plan. Most employers appoint a retirement committee consisting of senior human resource or other employees to oversee the administration of the plan. In their role acting for the employer as plan administrator, the members of the committee assume fiduciary responsibility to administer the plan solely in the interest of plan participants and beneficiaries. For convenience, this report often uses *employer* and *plan sponsor* to mean the fiduciary or fiduciaries appointed to administer the plan.
- ⁶ See Department of Labor Reg. Section 2550.404c-1. For an explanation of this regulation, see note 10.
- ⁷ Plan Sponsor Council of America 2018 reports that 75.0 percent of the 605 profit-sharing and 401(k) plans in its survey allowed participants to initiate daily fund transfers in plan year 2017.
- ⁸ To protect 401(k) plan assets, ERISA Section 403 requires that pension plan assets be held in a trust or invested in insurance contracts.
- ⁹ Plan sponsors use an array of educational resources, including email, in-person seminars/workshops, enrollment kits, webinars, internet/intranet sites, newsletters, individually targeted communication, fund performance sheets, slides/PowerPoint, retirement income projections, retirement gap calculators, mobile apps, posters, videos, and social media (see Plan Sponsor Council of America 2018). The most commonly cited primary purposes for plan education are increasing participation (24.9 percent of plans), retirement planning (21.5 percent of plans), and increasing appreciation for the plan (19.7 percent of plans).

- ¹⁰ Where participants are given control of the investments in their accounts, which is common in 401(k) plans, the selection of investment options available is usually designed to meet the requirements of ERISA Section 404(c). This section provides liability relief for plan sponsors and other plan fiduciaries from losses resulting from employees' exercise of investment control. The DOL regulations under ERISA Section 404(c) are designed to ensure that participants have control over their assets and have adequate opportunity to diversify their holdings. Plans must offer at least three diversified investment options with materially different risk and return characteristics. (Although 401(k) plans can offer company stock or any individual stock, neither would qualify as one of the three core options.) Plans generally must allow transfers among the diversified investment options at least quarterly. Plan Sponsor Council of America 2018 indicates that in 2017, the average number of investment fund options available for participant contributions was 20 among the 605 plans surveyed. Deloitte Consulting LLP 2017a reports that the average number of funds offered by the nearly 240 401(k) and 403(b) plan sponsors surveyed was a little less than 20 in 2017. BrightScope and Investment Company Institute 2019 reports an average of 27 investment options in 2016, and an average of 21 investment options when a target date fund suite is counted as a single investment option (in 401(k) plans generally with 100 participants or more).
- ¹¹ Plan Sponsor Council of America 2018 reports that 20.7 percent of plans in its survey offered a self-directed brokerage window in 2017. These windows hold a very small amount of assets, with just 1.5 percent of total plan assets invested through the brokerage window. Utkus and Young 2019 similarly reports limited use of brokerage windows: in 2018, 19 percent of DC plans recordkept by Vanguard offered brokerage windows, covering 29 percent of participants. In plans offering a self-directed brokerage window, only 1 percent of those plan participants used it, and about 2 percent of those plan assets were invested through the window.
- ¹² The EBRI/ICI 401(k) database indicates that 54 percent of plans offered a loan feature at year-end 2016, covering 86 percent of 401(k) plan participants. Also at year-end 2016, 19 percent of 401(k) plan participants in plans allowing loans had loans outstanding. See Holden et al. 2018.
- ¹³ Deloitte Consulting LLP 2017b reports that 4 percent of responding plans in its survey have an annuity purchase option and/or annuity selection software, with an additional 13 percent of plans indicating that they are looking into adding this feature. Plan Sponsor Council of America 2018 reports for plan year 2017 that 13.3 percent of plans in its survey provide annuities as a distribution option at the time of retirement, 58.5 percent provide installments as a retirement distribution option, and 63.8 percent provide access to periodic/partial withdrawals. Utkus and Young 2019 reports distribution options in the DC plans in Vanguard's recordkeeping system in 2018 and finds that 63 percent of plans provided installments other than required minimum distributions (RMDs); 27 percent offered ad hoc partial distributions; 8 percent offered an annuity; and 12 percent of plans had a grandfathered annuity option.
- ¹⁴ The IRC includes a number of flat annual dollar contribution limits. In addition, several sections of the IRC provide a framework for nondiscrimination testing, which limits contributions to 401(k) plans to ensure that employees in all income ranges benefit from the plan. For example, the actual deferral percentage (ADP) nondiscrimination test essentially requires that the before-tax contributions of highly compensated employees (as a percentage of their eligible compensation) do not exceed those of non-highly compensated employees (as a percentage of their eligible compensation) by more than a specified amount.
- ¹⁵ Plans file their annual reports on Form 5500, a form issued jointly by the DOL, the IRS, and the Pension Benefit Guaranty Corporation (PBGC). The DOL publishes summary annual reports tabulating the Form 5500 data (see US Department of Labor, Employee Benefits Security Administration 2018a and 2018b). In addition, private-sector plans, typically those with 100 participants or more, file an audited Form 5500 report. Those data are analyzed in BrightScope and Investment Company Institute 2018 and 2019.
- ¹⁶ For example, plans can incur costs responding to requests for information pursuant to SEC Rule 22c-2, under which mutual funds may obtain trading information necessary to ensure compliance with the fund's short-term trading policies. In addition, 401(k) plans that allow participants to invest in the employer's stock must register with the SEC on Form S-8. ERISA preempts most state laws that relate to employee benefit plans, but plans might still need to comply with state tax laws relating to withholding and information filing. The Consumer Financial Protection Bureau, created by the Wall Street Reform and Consumer Protection Act of 2010, potentially has the ability to regulate service providers to 401(k) plans, but only with respect to specific regulatory areas approved by the DOL and the Department of the Treasury.
- ¹⁷ For a discussion of regulations governing mutual funds, see Investment Company Institute 2019a.
- ¹⁸ See US Department of the Treasury and US Department of Labor 2012. See also US Department of Labor, Employee Benefits Security Administration, "A Look at 401(k) Plan Fees," "Understanding Retirement Plan Fees and Expenses," "Selecting and Monitoring Pension Consultants—Tips for Plan Fiduciaries," and "Tips for Selecting and Monitoring Service Providers for Your Employee Benefit Plan." Some commentators have argued that the core standard under ERISA that governs plan fiduciaries—the duty of prudence—requires that fiduciaries engage in a prudent process in evaluating a plan's investments and services and does not require a particular result. See Vine 2010.

¹⁹ See 77 Fed. Reg. 5632 (February 3, 2012).

²⁰ See US Department of the Treasury and US Department of Labor 2012.

²¹ See US Department of Labor, Employee Benefits Security Administration, “Understanding Retirement Plan Fees and Expenses” and “A Look at 401(k) Plan Fees.” See also US Securities and Exchange Commission, “Calculating Mutual Fund Fees and Expenses” and “Mutual Fund Fees and Expenses.”

²² See 75 Fed. Reg. 64910 (October 20, 2010). Under this regulation, participants must receive general plan information and investment-related information before making an initial investment decision, and annually thereafter. This includes information on how to give investment instructions and what, if any, account fees or fees for individual services (e.g., loans, investment advice) participants pay. The regulation requires that participants be given a chart comparing each investment in the plan’s investment lineup; the investment’s name and type; sales charges and any restrictions on withdrawal; the expense ratio; the annual dollar cost of the expense ratio for each \$1,000 invested (assuming no returns); 1-, 5-, and 10-year performance; and performance of a benchmark index over the same periods. Participants are referred to a website for more information on the investment’s objectives, principal strategies and risks, portfolio turnover rate, and quarterly performance data. Although there are some differences, the information required under this regulation is similar to the information that mutual fund investors receive as part of a fund’s prospectus. The DOL provides information to help employees learn about fees associated with their 401(k) plans. See US Department of Labor, Employee Benefits Security Administration, “A Look at 401(k) Plan Fees.” The SEC also provides investor education at www.sec.gov/investor.shtml.

²³ Plan sponsors use a variety of arrangements to obtain services for their 401(k) plans. When multiple service providers are used (an “unbundled” arrangement), the expenses of each provider (e.g., trustee, recordkeeper, communications firm, investment manager) are charged separately to the plan. When one provider is used to perform a number of services (a “bundled” arrangement), the single provider interacts with the plan and then pays for the other bundled services out of the fees it collects from the plan. Some plans use a combination of these approaches—for example, by selecting a single provider for administrative participant services and one or more providers for investment options. In this case, the costs of administering the plan may be defrayed through fees paid by the investment product, which are reflected in the investment product’s expense ratio rather than through a direct charge paid by plan participants or the plan sponsor. For mutual funds, service provider fees can be paid from fund assets. The 2012 DOL regulations cited in note 19 require service providers that provide recordkeeping as part of a bundle to give the plan a reasonable and good faith estimate of how much the

recordkeeping services will cost the plan. BrightScope and Investment Company Institute 2019, analyzing 2016 Form 5500 audited reports, finds that 401(k) plans use a variety of recordkeepers and that the types of recordkeepers used varied with plan size. Overall, in 2016, 48.0 percent of 401(k) plans in the BrightScope Defined Contribution Plan Database used insurance companies for recordkeeping; 29.7 percent of plans used asset managers, 10.9 percent used pure recordkeepers, 6.8 percent used banks, and 4.7 percent used brokerage firms.

²⁴ US Department of Labor Opinion Letters 97-03A (January 23, 1997) and 2001-01A (January 18, 2001).

²⁵ For the most part, 401(k) plan assets are held in individual accounts established for each participant. However, the costs of running a 401(k) plan also may be partly defrayed through employee “forfeitures.” Employees who terminate employment without fully vesting (that is, earning full ownership of account assets) forfeit matching or other employer contributions. (Participants always are fully vested in their own contributions.) These forfeitures typically are used to offset fees or pay for additional employer contributions. Plan Sponsor Council of America 2018 reports that 50.2 percent of 401(k) plans with forfeitures allocate forfeitures to reduce company contributions; 32.2 percent allocate the forfeitures among participants (based on account balances, 11.1 percent; based on participant contributions, 13.4 percent; or based on the participant’s share of company contributions, 7.7 percent); and 39.8 percent used the forfeitures to reduce plan expenses (data are for 2017). The IRC and ERISA determine the maximum vesting schedule for 401(k) plans and require that employer contributions made to the 401(k) plan not be removed from the plan. In addition, plans may charge fees for some transactions, such as taking a loan or making a withdrawal, and participants typically pay those fees in full when making the transaction.

²⁶ Guaranteed investment contracts (GICs) are insurance company products that promise a specific rate of return on invested capital over the life of a contract. A similar investment option is a synthetic GIC, which consists of a portfolio of fixed-income securities “wrapped” with a guarantee (typically by an insurance company or bank) to provide benefit payments according to the terms of the plan. For additional discussion of these investment options and 401(k) plan participants’ asset allocations, see Holden et al. 2018.

²⁷ Company stock is the stock of the plan sponsor (employer). See Holden et al. 2018 for additional discussion of 401(k) participant investment in company stock in 401(k) plans.

²⁸ See discussion of availability and use of self-directed brokerage windows in note 11.

²⁹ For additional information on mutual funds and the US retirement market, see Investment Company Institute 2019a and 2019b.

- ³⁰ See Investment Company Institute 2019a and Duvall 2019 for analysis of mutual fund fees and expenses industrywide. For an analysis of mutual fund fees paid by individual retirement account (IRA) investors on their mutual funds held in their IRAs, see Duvall 2018.
- ³¹ See Investment Company Institute 2019b.
- ³² Additional servicing fees not reflected in average mutual fund expense ratios are not captured in this analysis, nor is the cost of holding other types of investments in 401(k) plans.
- ³³ Financial advisers, retirement plan recordkeepers, discount brokerages, and other financial intermediaries provide an array of important and valuable services to mutual fund shareholders. For 401(k) plans, these services can include recordkeeping, transaction processing, participant communication, education and advice, and regulatory and compliance services (see Figure 2). Mutual funds and their investment advisers use a variety of arrangements to compensate plan service providers for these services. Under one arrangement, a mutual fund's board of directors may adopt a plan pursuant to Rule 12b-1 under the Investment Company Act of 1940. As explained in US Securities and Exchange Commission, "Mutual Fund Fees and Expenses," Rule 12b-1 allows mutual funds to use fund assets to cover distribution expenses and shareholder service expenses. "Distribution" fees include fees paid for marketing and selling fund shares, such as compensating brokers and others who sell fund shares as well as paying for advertising, printing, and mailing prospectuses to new investors, and printing and mailing sales literature. Under Financial Industry Regulatory Authority (FINRA, formerly the National Association of Securities Dealers [NASD]) rules, 12b-1 fees (also referred to as fees for subaccounting services or administrative services) used to pay marketing and distribution expenses (as opposed to shareholder services) cannot exceed 75 basis points (NASD Conduct Rule 2830(d)). "Shareholder service" fees are paid to respond to investor inquiries and provide investors with information on their investments. A mutual fund also may pay shareholder service fees without adopting a 12b-1 plan. This is reflected in the fund's prospectus in the "other expenses" category of the fee table. FINRA imposes an annual cap of 25 basis points on shareholder service fees (regardless of whether these fees are authorized as part of a 12b-1 plan). For further discussion of 12b-1 fees and how funds use them, see "ICI Resources on 12b-1 Fees," available at www.ici.org/rule12b1fees. At year-end 2018, 90 percent of equity mutual fund assets held in 401(k) plans were invested in mutual funds that had no 12b-1 fee, and another 7 percent were invested in mutual funds with 12b-1 fees of 0.25 percent or less (see Figure A6 in the appendix). The fund's adviser (or a related entity) also may compensate the service provider(s) out of the profits earned from the advisory fee collected from the fund.
- ³⁴ See Figure A2 in the appendix for more detail. In addition, see Figure A3 in the appendix for mutual fund assets by share class and type of mutual fund (equity mutual funds, hybrid mutual funds, and bond mutual funds).
- ³⁵ Front-end load shares, which are primarily Class A shares, have a front-end load of greater than 1 percent. Analysis for front-end load shares include data where front-end loads are waived. For additional details, see Investment Company Institute 2019a and Duvall 2019.
- ³⁶ See Reid and Rea 2003.
- ³⁷ Back-end load shares, which are primarily Class B shares, typically have an annual 12b-1 fee of 1 percent and a CDSL set at 5 percent in the first year the shares are held. Then, the CDSL falls 1 percentage point per year, reaching 0 percent in the sixth or seventh year that the shares are held. Back-end load shares that are transferred or exchanged within a fund family are not subject to the CDSL. Generally, after six to eight years, Class B shares convert to Class A shares, which lowers the 12b-1 fee from 1 percent to that of Class A shares. For additional details, see Investment Company Institute 2019a and Duvall 2019.
- ³⁸ Level load shares, which include Class C shares, typically have an annual 12b-1 fee of 1 percent and a CDSL set at 1 percent in the first year that the shares are held. After the first year, no CDSL is charged on redemptions. These shares usually do not convert to Class A shares. For additional details, see Investment Company Institute 2019a and Duvall 2019.
- ³⁹ See Figure A2 in the appendix for additional data.
- ⁴⁰ For additional discussion of industrywide mutual fund fee trends, see Investment Company Institute 2019a and Duvall 2019.
- ⁴¹ For a more-detailed discussion of competition in the mutual fund industry, see Coates and Hubbard 2007, Reid 2006, and Investment Company Institute 2019a.
- ⁴² The ICI Mutual Fund Shareholder Tracking Survey finds that about nine out of 10 mutual fund-owning households consider fees and expenses when selecting a mutual fund, including nearly four in 10 who indicate that fees and expenses are "very important" when selecting a mutual fund. See Holden, Bogdan, and Schrass 2019. Analysis of industry mutual fund asset and fee and expense data finds that mutual fund investors tend to concentrate their assets in lower-cost funds. See Duvall 2019.
- ⁴³ For example, see Investment Company Institute 2019a and Duvall 2019.

- ⁴⁴ Deloitte Consulting LLP, the International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists 2015 reports that 66 percent of the plans in its survey evaluated and benchmarked the performance of plan investments on a quarterly basis; 13 percent did so semiannually; 13 percent annually; and 8 percent at some other frequency (data are for 2015).
- ⁴⁵ Deloitte Consulting LLP, the International Foundation of Employee Benefit Plans, and the International Society of Certified Employee Benefit Specialists 2015 finds that 52 percent of plans had replaced a fund due to poor performance within the last year; 19 percent had replaced a fund one year to less than two years ago; 16 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 2015).
- ⁴⁶ The size of the plan—in terms of assets, participants, and average account balance—is key in pricing services. However, many factors influence plan fees, and they all must be considered when evaluating the reasonableness of a plan’s cost. In addition, the reasonableness of fees paid by a plan is different from the question of whether a plan fiduciary engaged in a prudent process under ERISA in selecting and monitoring plan services and investments (see note 19).
- ⁴⁷ Holden, Schrass, and Bogdan 2018 reports that among mutual fund–owning households holding funds outside employer-sponsored retirement plans in 2018, 78 percent owned fund shares through investment professionals. Schrass 2013 found that owning a DC account decreased the probability of a mutual fund–owning household having an ongoing advisory relationship and that owning an IRA increased the probability. In the regression analysis, these variables were highly significant, and their interaction with ongoing advisory relationships makes sense: financial advice is more readily available outside employer-sponsored retirement plans, and rollover activity, which is common throughout people’s working lives, often generates traditional IRAs, which are considered to be outside employer-sponsored plans. Financial advisers provide a range of services to investors: they help investors identify financial goals and recommend funds to meet those goals; conduct transactions; maintain financial records; and coordinate the distribution of prospectuses, financial reports, and proxy statements (see Leonard-Chambers and Bogdan 2007).
- ⁴⁸ Plan Sponsor Council of America 2018 reports that 34.4 percent of 401(k) plans in their survey offered investment advice and only 24.6 percent of participants used advice when offered. Plan Sponsor Council of America 2018 also reports that the cost of this advice was covered by the employer in 56.4 percent of plans, by the participants in 30.2 percent of plans, and by both in 13.4 percent of plans. Utkus and Young 2019 finds that 43 percent of DC plans recordkept by Vanguard in 2018 offered online advice, covering 66 percent of participants. Among participants in plans offering online advice, 6 percent accessed it. They also report that 32 percent of plans offered managed account advice, covering 57 percent of participants. Among participants in DC plans offering managed account advice, 8 percent used it. Finally, 64 percent of plans offered financial planning services, covering 68 percent of participants; only 2 percent of participants used it.
- ⁴⁹ For the distribution of expense ratios of mutual funds held in 401(k) plans disaggregated by more detailed investment objectives, see Figure A4 in the appendix.
- ⁵⁰ For more information, see Duvall 2019.
- ⁵¹ For more information, see Duvall 2019.
- ⁵² See Figure 7 in Duvall 2019.
- ⁵³ For a discussion of expense waivers and their impact on the average expense ratios of money market funds industrywide, see Duvall 2019.
- ⁵⁴ For analysis of the variation in mutual fund fees across 401(k) plans by plan size, see the box on page 16 and BrightScope and Investment Company Institute 2019. For an analysis of the variation in mutual fund fees across ERISA 403(b) plans, see BrightScope and Investment Company Institute 2018.
- ⁵⁵ The SEC has modified its prospectus rules to make the turnover rate more prominent—by moving it to the summary section at the beginning of the prospectus. See 74 Fed. Reg. 4546 (January 26, 2009). The 2010 DOL rules described in note 22 require that participants have access to a website showing, among other information, the portfolio turnover rate for each investment in the plan’s menu.
- ⁵⁶ The SEC requires that a fund’s turnover rate be calculated by dividing the lesser of its purchases or sales of portfolio securities for a reporting period by the monthly average of the value of its portfolio securities during the same reporting period.
- ⁵⁷ For a brief discussion of portfolio turnover rates, see Investment Company Institute 2019a.

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Appendix

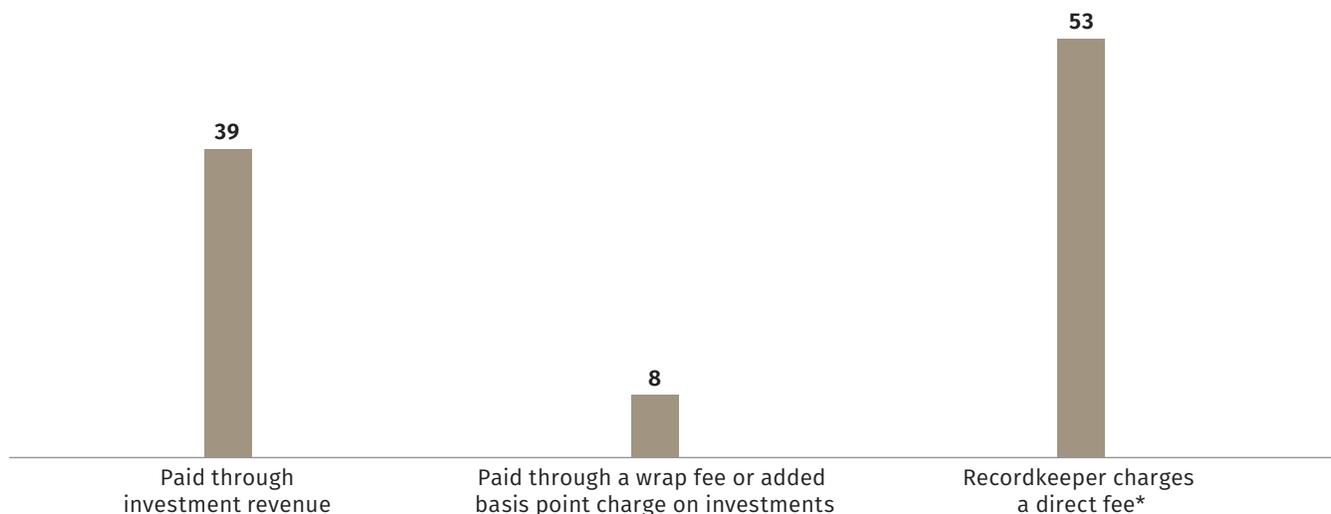
This appendix contains additional detail on fees paid in 401(k) plans. Figure A1 focuses on how annual 401(k) recordkeeping/administrative fees are paid. Figures A2 and A3 report 401(k) mutual fund assets by share class, first across all 401(k) mutual funds (Figure A2) and then

within equity mutual funds, hybrid mutual funds, and bond mutual funds separately (Figure A3). Figure A4 reports the distribution of 401(k) mutual fund assets by investment objective and expense ratio. Finally, Figures A5 through A7 show information on 12b-1 fees paid by 401(k) investors in mutual funds.

FIGURE A1

How Are Plan Recordkeeping and Administrative Fees Paid?

Percentage of 401(k) and 403(b) plans surveyed, 2017



* Among plans with a direct recordkeeping fee, 25 percent report that the plan sponsor pays the fee, 17 percent report that both the plan sponsor and the participants pay the fee, 43 percent allocate the fee to participants as an equal flat dollar amount, and 15 percent allocate the fee to participants pro rata based on account balances.

Source: Deloitte Consulting LLP 2017a

FIGURE A2

401(k) Mutual Fund Assets by Share Class

Percentage of assets

	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018
Load	34	22	23	20	16	19	15	13	10	7
Front-end ¹	31	20	20	18	13	12	9	8	6	4
Back-end, ² level, ³ other, ⁴ and unclassified ⁵	3	3	2	2	2	7	6	5	4	3
No-load⁶	66	78	77	80	84	81	85	87	90	93
Institutional	20	26	23	23	31	31	41	43	45	50
Retail	46	51	54	57	54	50	44	45	45	42
<i>Memo:</i>										
"R" share classes⁷	1	1	4	9	13	19	19	20	18	18
Load ⁸	(*)	(*)	(*)	1	1	6	5	4	4	3
No-load ⁹	(*)	1	4	8	13	13	14	15	14	16

¹ Front-end load > 1 percent. Primarily includes Class A shares; includes assets where front-end loads are waived.

² Front-end load = 0 percent and contingent deferred sales load (CDSL) > 2 percent. Primarily includes Class B shares.

³ Front-end load ≤ 1 percent, CDSL ≤ 2 percent, and 12b-1 fee > 0.25 percent. Primarily includes Class C shares; excludes institutional share classes.

⁴ This category contains all other load share classes not classified as front-end load, back-end load, or level load.

⁵ This category contains load share classes with missing load fee data.

⁶ Front-end load = 0 percent, CDSL = 0 percent, and 12b-1 fee ≤ 0.25 percent.

⁷ "R" shares include assets in any share class that ICI designates as a "retirement share class." These share classes are sold predominantly to employer-sponsored retirement plans. However, other share classes—including retail and institutional share classes—also contain investments made through 401(k) plans or IRAs. "R" shares include both load and no-load funds.

⁸ Load "R" shares are included in level load fund shares above.

⁹ No-load "R" shares are included in retail no-load fund shares above.

(*) = less than 0.5 percent

Note: Data exclude tax-exempt mutual funds.

Sources: Investment Company Institute, Lipper, and Morningstar

FIGURE A3

401(k) Mutual Fund Assets by Share Class and Type of Mutual Fund

Percentage of assets

Equity mutual funds	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018
Load	39	27	25	22	19	21	17	13	10	7
Front-end ¹	37	24	23	20	16	13	10	8	6	4
Back-end, ² level, ³ other, ⁴ and unclassified ⁵	3	2	2	2	2	8	7	6	4	3
No-load⁶	61	73	75	78	81	79	83	87	90	93
Institutional	16	16	16	17	20	23	33	39	44	51
Retail	45	57	59	61	61	56	50	48	46	42
<i>Memo:</i>										
"R" share classes⁷	(*)	1	5	10	17	23	24	21	21	21
Load ⁸	(*)	(*)	(*)	1	1	7	6	5	4	3
No-load ⁹	(*)	(*)	4	9	16	16	18	17	16	17
Hybrid mutual funds	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018
Load	25	25	24	21	18	20	18	15	14	11
Front-end ¹	22	22	22	18	15	13	10	8	8	6
Back-end, ² level, ³ other, ⁴ and unclassified ⁵	3	3	3	3	3	7	7	7	6	5
No-load⁶	75	75	76	79	82	80	82	85	86	89
Institutional	10	11	9	10	14	21	25	16	18	17
Retail	66	64	66	69	68	59	58	69	68	72
<i>Memo:</i>										
"R" share classes⁷	1	1	5	9	15	19	23	34	34	34
Load ⁸	(*)	(*)	(*)	(*)	1	5	6	5	5	4
No-load ⁹	1	1	5	9	14	14	17	29	27	30

Continued on next page

FIGURE A3 CONTINUED

401(k) Mutual Fund Assets by Share Class and Type of Mutual Fund

Percentage of assets

Bond mutual funds ¹⁰	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018
Load	20	19	18	15	13	14	13	12	9	7
Front-end ¹	17	16	16	13	12	11	10	9	6	5
Back-end, ² level, ³ other, ⁴ and unclassified ⁵	4	3	2	2	2	3	3	3	2	2
No-load⁶	80	81	82	85	87	86	87	88	91	93
Institutional	51	53	54	56	58	58	64	65	64	71
Retail	29	29	28	29	29	28	23	24	27	23
<i>Memo:</i>										
"R" share classes⁷	1	1	2	3	4	5	5	5	5	6
Load ⁸	(*)	(*)	(*)	(*)	(*)	2	2	2	2	1
No-load ⁹	1	1	1	3	4	3	3	3	4	5

¹ Front-end load > 1 percent. Primarily includes Class A shares; includes assets where front-end loads are waived.

² Front-end load = 0 percent and contingent deferred sales load (CDSL) > 2 percent. Primarily includes Class B shares.

³ Front-end load ≤ 1 percent, CDSL ≤ 2 percent, and 12b-1 fee > 0.25 percent. Primarily includes Class C shares; excludes institutional share classes.

⁴ This category contains all other load share classes not classified as front-end load, back-end load, or level load.

⁵ This category contains load share classes with missing load fee data.

⁶ Front-end load = 0 percent, CDSL = 0 percent, and 12b-1 fee ≤ 0.25 percent.

⁷ "R" shares include assets in any share class that ICI designates as a "retirement share class." These share classes are sold predominantly to employer-sponsored retirement plans. However, other share classes—including retail and institutional share classes—also contain investments made through 401(k) plans or IRAs. "R" shares include both load and no-load funds.

⁸ Load "R" shares are included in level load fund shares above.

⁹ No-load "R" shares are included in retail no-load fund shares above.

¹⁰ Data exclude tax-exempt mutual funds.

(*) = less than 0.5 percent

Sources: Investment Company Institute, Lipper, and Morningstar

FIGURE A4

401(k) Mutual Fund Assets by Investment Objective and Expense Ratio

Percentage of assets, 2018

	Expense ratio			
	<0.50	0.50 to <1.00	1.00 to <1.50	≥1.50
Total	59	33	6	1
Equity mutual funds	59	34	6	1
Domestic	59	36	5	1
World	60	29	10	1
Hybrid mutual funds	57	34	8	1
Bond mutual funds[†]	49	44	6	1
Investment grade	84	13	2	(*)
World	62	32	4	1
Other taxable	39	52	8	1
Money market funds	86	13	1	(*)

[†] Data exclude tax-exempt mutual funds.

(*) = less than 0.5 percent

Sources: Investment Company Institute and Morningstar

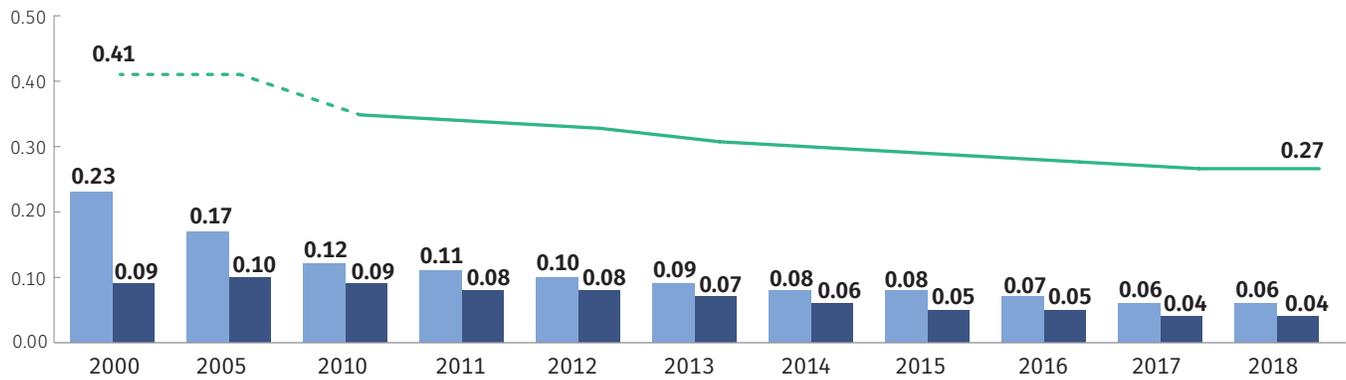
FIGURE A5

401(k) Mutual Fund Investors Tend to Pay Lower-Than-Average 12b-1 Fees

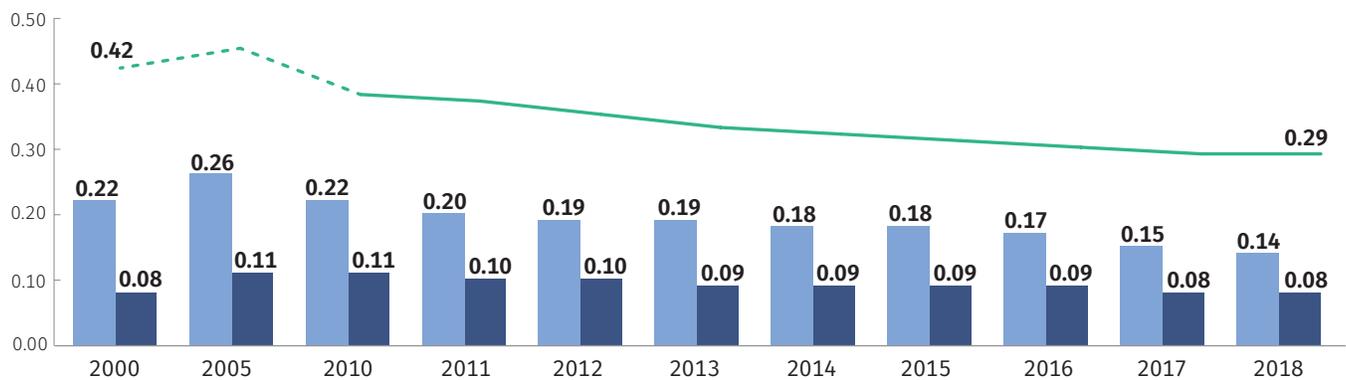
Percent

- Industry simple average 12b-1 fee
- Industry asset-weighted average 12b-1 fee
- 401(k) asset-weighted average 12b-1 fee

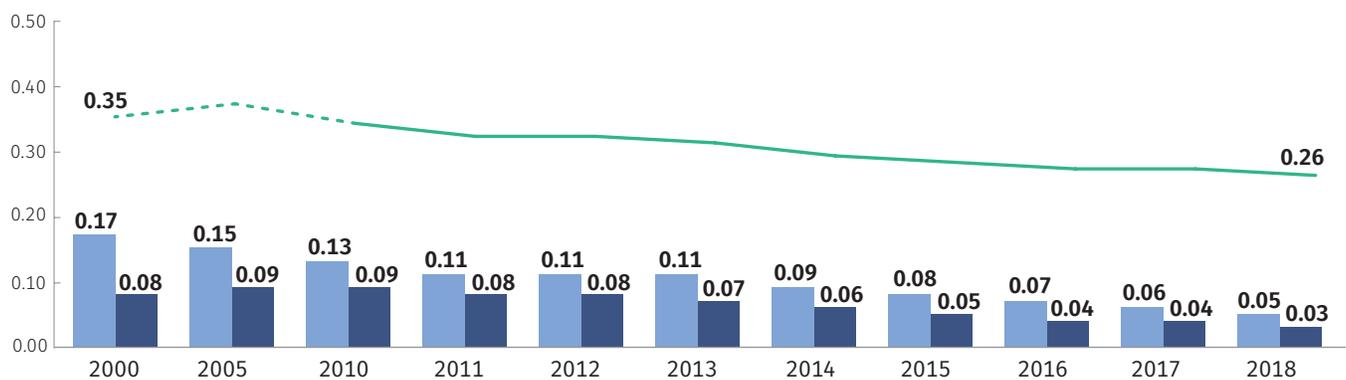
Equity mutual funds



Hybrid mutual funds



Bond mutual funds*



* Data exclude tax-exempt mutual funds.

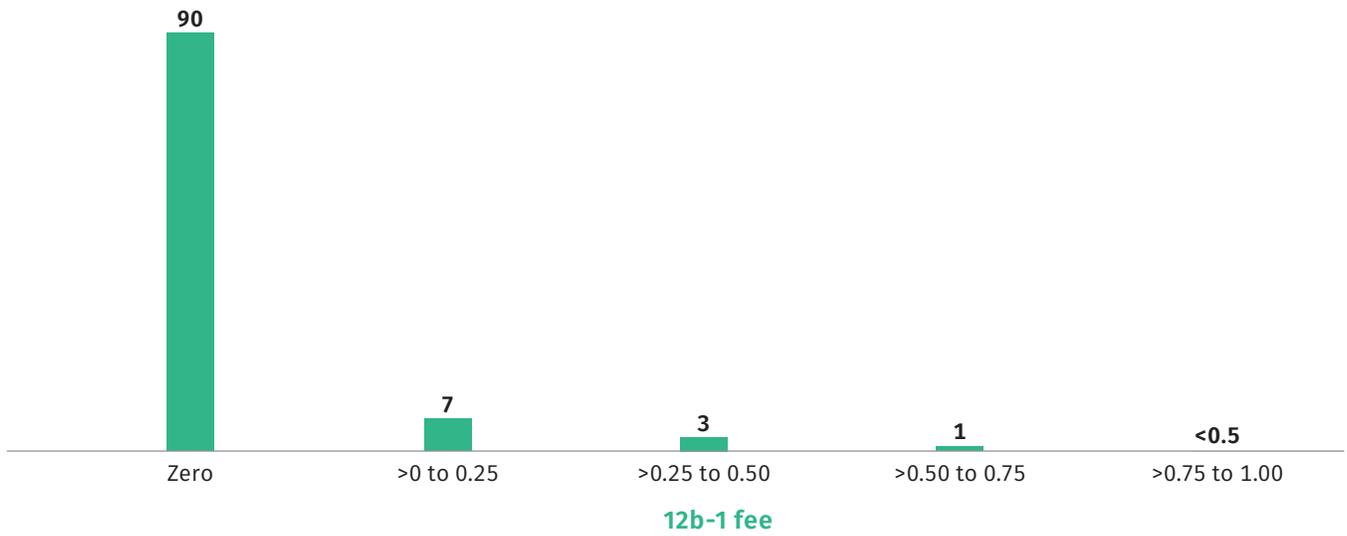
Note: Data include mutual funds without 12b-1 fees.

Sources: Investment Company Institute, Lipper, and Morningstar

FIGURE A6

401(k) Equity Mutual Fund Assets by 12b-1 Fee

Percentage of 401(k) equity mutual fund assets, 2018



Sources: Investment Company Institute and Morningstar

FIGURE A7

401(k) Mutual Fund Assets by Investment Objective and 12b-1 Fee

Percentage of assets, 2018

	12b-1 fee				
	Zero	>0 to 0.25	>0.25 to 0.50	>0.50 to 0.75	>0.75 to 1.00
Total	89	8	3	1	(*)
Equity mutual funds	90	7	3	1	(*)
Domestic	90	7	3	1	(*)
World	88	8	3	1	(*)
Hybrid mutual funds	81	11	6	2	1
Bond mutual funds[†]	85	11	3	1	(*)
Investment grade	93	6	1	(*)	(*)
World	89	8	2	(*)	(*)
Other taxable	82	13	4	1	1
Money market funds	87	10	2	1	(*)

[†] Data exclude tax-exempt mutual funds.

(*) = less than 0.5 percent

Sources: Investment Company Institute and Morningstar



Sarah Holden

Sarah Holden, ICI senior director of retirement and investor research, leads the Institute's research efforts on investor demographics and behavior and retirement and tax policy. Holden, who joined ICI in 1999, heads efforts to track trends in household retirement saving activity and ownership of funds as well as other investments inside and outside retirement accounts. She is responsible for analysis of 401(k) plan participant activity using data collected in a collaborative effort with the Employee Benefit Research Institute (EBRI), known as the EBRI/ICI Participant-Directed Retirement Plan Data Collection Project. In addition, she oversees The IRA Investor Database™, which contains data on more than 17 million IRA investors and allows analysis of IRA investors' contribution, rollover, conversion, and withdrawal activity, and asset allocation. Before joining ICI, Holden served as an economist at the Federal Reserve Board of Governors. She has a PhD in economics from the University of Michigan and a BA in mathematics and economics, *cum laude*, from Smith College.



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