ICI RESEARCH PERSPECTIVE

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For a set of supplemental tables in Microsoft Excel format, see www.ici.org/info/per24-08_data.xls.

Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2018

KEY FINDINGS

- In 2018, 44.8 percent of US households owned shares of mutual funds or other US-registered investment companies—including exchange-traded funds, closedend funds, and unit investment trusts—representing an estimated 57.2 million households and 101.6 million investors. Mutual funds were the most common type of investment company owned, with 56.0 million US households, or 43.9 percent, owning mutual funds in 2018. The survey also found that 99.5 million individual investors owned mutual funds in 2018.
- » Many US mutual fund shareholders had moderate household incomes and were in their peak earning and saving years. About half of US households owning mutual funds had incomes less than \$100,000, and 62 percent were headed by individuals between the ages of 35 and 64 in 2018. More than three times as many US households owned mutual funds through tax-deferred accounts—employer-sponsored retirement plans, individual retirement accounts, and variable annuities—as owned mutual funds outside such accounts.
- Mutual fund owners reported that investment performance was the most influential of the many factors that shaped their opinions of the fund industry. In 2018, 65 percent of mutual fund shareholders indicated that fund performance was a "very" important factor influencing their views of the industry, and 44 percent cited fund performance as the most important factor.
- Shareholders' willingness to take investment risk in 2018 remained at about the same levels as in 2017. Thirty-five percent of mutual fund-owning households were willing to take substantial or above-average risk for financial gain in 2018, compared with 34 percent in 2017. As in previous years, households that do not own mutual funds are less willing to take investment risk than mutual fund shareholders.



- Mutual fund companies' favorability rating among shareholders remained about the same in 2018, with favorability at 67 percent. Fifteen percent of mutual fund-owning households reported having "very favorable" impressions in 2018, the same share as in 2017.
- Mutual fund-owning households used the internet extensively. Ninety-three percent of households owning mutual funds had internet access in 2018. The gaps in internet access between younger and older households and between higher- and lower-income households have narrowed, and in 2018, the vast majority of mutual fund-owning households had internet access across each age or income grouping.

US Household Ownership of Mutual Funds

In 2018, 56 Million US Households Owned Mutual Funds

Assets in US-registered investment companies—mutual funds, exchange-traded funds (ETFs), closed-end funds, and unit investment trusts (UITs)—totaled \$22.7 trillion as of mid-2018. Households held about 84 percent, or \$19.0 trillion, of all these fund assets; registered fund assets represented more than one-fifth of households' financial assets. In 2018, 44.8 percent of US households owned some type of registered fund, representing an estimated 57.2 million households and 101.6 million investors.

Though 7.9 million households owned ETFs and 3.6 million households owned closed-end funds in 2018, mutual funds were the most common type of fund owned by households. An estimated 56.0 million US households, or 43.9 percent, owned mutual funds in 2018 (Figure 1),² and more than eight in 10 households that owned ETFs or closed-end funds also owned mutual funds. The estimated number of individual investors owning mutual funds was 99.5 million in 2018 (Figure 2).³

About 44 Percent of US Households Owned Mutual Funds in 2018

Number and percentage of US households owning mutual funds, ¹ selected years²



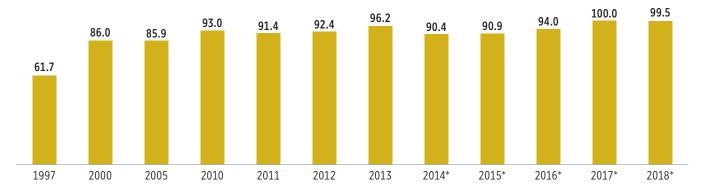
¹Households owning mutual funds in 1980 through 1986 were estimated by dividing the total number of household accounts by the number of accounts per household. Beginning in 1987, the incidence of mutual fund ownership is estimated through household surveys. Incidence estimates for 1987 through 1993 exclude households owning mutual funds only through employer-sponsored retirement plans; estimates for 1994 through 2018 include households owning mutual funds only through employer-sponsored retirement plans. Incidence estimates for 1998 through 2018 include fund ownership through variable annuities. Incidence estimates for 2000 through 2018 include fund ownership through Roth IRAs, Coverdell Education Savings Accounts, SAR-SEPs, SEP-IRAs, and SIMPLE IRAs.

Sources: Investment Company Institute and US Census Bureau

FIGURE 2

Nearly 100 Million Individual US Investors Owned Mutual Funds in 2018

Millions of individual US investors owning mutual funds, selected years



^{*}Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

Note: For the complete time series of data from 1997 through 2018, see Table 2 in the supplemental tables.

Sources: Investment Company Institute and US Census Bureau

² For the complete time series of data from 1980 through 2018, see Table 1 in the supplemental tables.

³ Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

About the Annual Mutual Fund Shareholder Tracking Survey

ICI conducts the Annual Mutual Fund Shareholder Tracking Survey each year to gather information on the demographic and financial characteristics of mutual fund–owning households in the United States. The most recent survey was conducted from May to July 2018 and was based on a dual frame telephone sample of 5,001 US households. Of these, 2,251 households were from a landline random digit dial (RDD) frame and 2,750 households were from a cell phone RDD frame. Of the households contacted, 2,196 households, or 43.9 percent, owned mutual funds. All interviews were conducted over the telephone with the member of the household who was either the sole or the co-decisionmaker most knowledgeable about the household's savings and investments. The standard error for the 2018 sample of households is ± 1.4 percentage points at the 95 percent confidence level.

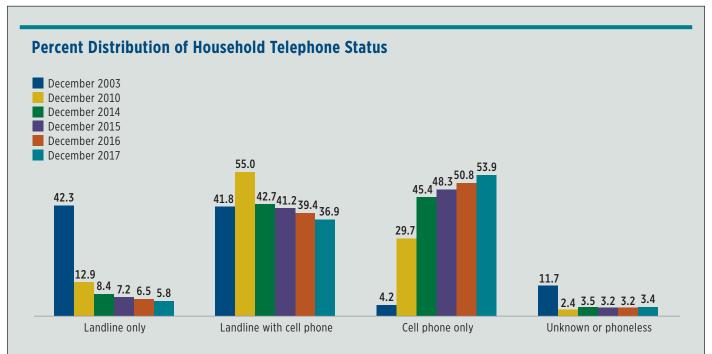
Revisions to ICI's Annual Mutual Fund Shareholder Tracking Survey

The Annual Mutual Fund Shareholder Tracking Survey interviews a random sample of US households to determine their ownership of a variety of financial assets and accounts, including mutual funds, individual stocks, individual bonds, defined contribution (DC) plan accounts, individual retirement accounts (IRAs), and education savings accounts. In the usual course of household survey work, researchers periodically reexamine sampling and weighting methods to ensure that the results published are representative of the millions of households in the United States. ICI reexamined its Annual Mutual Fund Shareholder Tracking Survey in 2014, and the figures presented in this paper for the 2018 survey reflect the revised sampling and weighting methodology that was adopted in 2014. To achieve a representative sample of US households, the 2014, 2015, 2016, and 2017 Annual Mutual Fund Shareholder Tracking Surveys were based on dual frame samples of landline (about half) and cell phone numbers (about half). The combined sample for 2018 includes about 45 percent of households reached on a landline and about 55 percent of households reached on a cell phone. Before 2014, the Annual Mutual Fund Shareholder Tracking Surveys were based on samples of landline phone numbers. If ICI had used the same sampling and weighting method used before 2014, the landline sample would have found that 46.4 percent of US households owned mutual funds in 2014 (compared with 43.3 percent in 2014 with the new survey design). The change to a combined sample of landline and cell phone numbers improves the representativeness of the sample.

Survey Sample

Survey researchers have reconsidered the representativeness of surveys based on RDD samples using only landline telephone numbers.⁵ The portion of US households that primarily use cell phones for telephone service has been steadily increasing, while landline use has been steadily falling. At year-end 2017, 53.9 percent of US households only had cell phones, compared with 4.2 percent at year-end 2003 (see figure on page 5).⁶ In contrast, 5.8 percent of households only had landline telephone service at year-end 2017, compared with 42.3 percent at year-end 2003.

The increase in the portion of US households that rely on cell phones for telephone service creates a potential coverage error for surveys based on a landline RDD sample. Because increasing use of cell phones is not distributed evenly across demographic characteristics such as age, income, and education, surveys that are based on a landline RDD sample may underrepresent groups with a higher incidence of cell phone use.⁷ For example, at the end of 2017, 76 percent of adults aged 25 to 29 lived in households with only cell phones.⁸ Older age groups have lower rates of reliance on cell phones. Cell phone incidence also is unevenly distributed across income and education levels. Applying a dual frame sampling method improves both the coverage and the representativeness of a survey.⁹ This dual frame design has become the standard in modern telephone survey research.¹⁰



Source: Center for Disease Control/National Center for Health Statistics, National Health Interview Survey; December 2003, December 2010, December 2014, December 2015, December 2016, and December 2017

Survey Weights

When a survey sample is drawn from a population, the proportions of segments within the sample (by age, income, or other key variables) may not match the distribution of those segments within the population. The sample's distribution may be different due to sampling techniques, varying degrees of nonresponse from segments of the population, or a survey design that was not able to cover the entire population. It is possible to improve the relation between the sample and the population from which it was drawn by applying weights to the sample that match the proportions present in the population. This process is known as sample-balancing, or raking.¹¹

Because the sample methodology for the Annual Mutual Fund Shareholder Tracking Survey was changed to a dual frame RDD survey to include cell phones starting in 2014, it was necessary to adjust the weighting methodology for the survey. To combine the landline and cell phone samples, an initial base weight was created to adjust for households that could have been in both the landline and cell phone sample frames. A second stage of weighting included the standard raking to control totals based on census region, householder age, household income, and educational attainment of the head of household from the most recent version of the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS). In the 2014, 2015, 2016, 2017, and 2018 survey, the second stage of weighting also included raking to control totals based on household telephone status from the most recent version of the National Health Interview Survey (NHIS). The weighting adjusts for differences among the households sampled in the ICI survey and the population of US households.

Most Mutual Fund Shareholders Are in Their **Peak Earning and Saving Years**

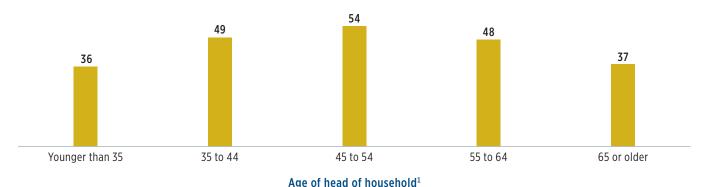
People of all ages own mutual funds, but ownership is concentrated among individuals in their prime earning and saving years. For most of the past decade, the incidence of mutual fund ownership has been greatest among households headed by individuals between the ages of 35 and 64.14 In the most recent survey, a majority of households aged 45 to 54, about half of households aged 35 to 44, and nearly half of households aged 55 to 64

owned mutual funds (Figure 3). In addition, 36 percent of households younger than 35 and 37 percent of households aged 65 or older owned mutual funds. As a result, the majority (62 percent) of households owning mutual funds were headed by individuals between the ages of 35 and 64 in 2018 (Figure 4), the age range in which saving and investing traditionally is greatest. 15 By comparison, among all US households, 53 percent were headed by individuals in this age group.

FIGURE 3

Incidence of Mutual Fund Ownership Is Greatest Among 35- to 64-Year-Olds

Percentage of US households within each age group, 20182



¹ Age is based on the age of the sole or co-decisionmaker for household saving and investing.

FIGURE 4

Most Mutual Fund Shareholders Are Between Ages 35 and 64

Percent distribution of households owning mutual funds and all US households by age, 1 2018²



All US households3

² For the complete time series of data from 1994 through 2018, see Table 3 in the supplemental tables. Sources: Investment Company Institute and US Census Bureau

¹ Age is based on the age of the sole or co-decisionmaker for household saving and investing.

² For the complete time series of data from 1994 through 2018, see Table 4 in the supplemental tables.

³ The percentage of all households in each age group is based on ICI survey data and is weighted to match the US Census Bureau's Current Population Survey. Sources: Investment Company Institute and US Census Bureau

Mutual Fund Shareholders Represent a Full Range of Household Incomes

About half of US households owning mutual funds in 2018 had moderate or lower incomes; that is, incomes less than \$100,000 (Figure 5). 16 Nevertheless, incomes among mutual fund-owning households tended to be somewhat

higher than that of the typical US household. Eight percent of US households owning mutual funds had incomes of less than \$35,000, while 29 percent of all US households earned less than \$35,000. Fifty-one percent of households owning mutual funds reported incomes of \$100,000 or more, compared with 30 percent of US households overall.

FIGURE 5

About Half of Households Owning Mutual Funds Have Moderate or Lower Incomes

Percent distribution of households owning mutual funds and all US households by household income, ¹ 2018²



Median: \$100,000 Mean: \$128,000

Median: \$60,000 Mean: \$88,900

¹ Total reported is household income before taxes in 2017.

² For the complete time series of data from 1998 through 2018, see Table 5 in the supplemental tables.

³ The percentage of all households in each income group is based on ICI survey data and is weighted to match the US Census Bureau's Current Population Survey (CPS). For 2017, the estimated median and mean income for all US households from the CPS is \$61,372 and \$86,220, respectively. Sources: Investment Company Institute and US Census Bureau

The range of incomes among mutual fund-owning households reflects the fact that individuals across all income groups own mutual funds, but it also shows that households with higher incomes are more likely to own mutual funds than are lower-income households. In 2018, 63 percent of all US households with incomes of \$50,000 or more owned mutual funds, compared with 17 percent of

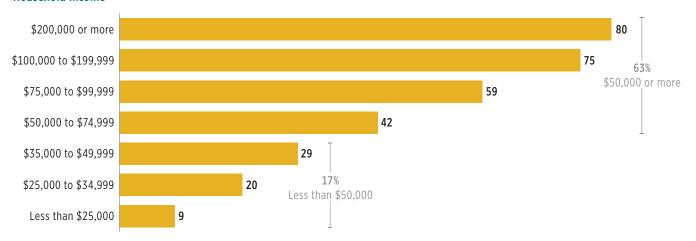
households with incomes of less than \$50,000 (Figure 6).¹⁷ In fact, lower-income households are less likely to have any type of savings. The typical household with income less than \$50,000 had \$10,000 in savings and investments, while the typical household with income of \$50,000 or more held \$200,000 in savings and investments.¹⁸

FIGURE 6

Ownership of Mutual Funds Increases with Household Income

Percentage of US households within each income group, 2018²

Household income¹



¹ Total reported is household income before taxes in 2017.

Sources: Investment Company Institute and US Census Bureau

² For the complete time series of data from 1994 to 2018, see Table 6 in the supplemental tables.

Fund Ownership Inside Tax-Deferred Accounts Is Significant

More households own mutual funds inside tax-deferred accounts—such as 401(k) and other defined contribution (DC) plans, individual retirement accounts (IRAs), and variable annuities—than outside these accounts.¹⁹ In 2018, an estimated 52.7 million households owned mutual funds inside tax-deferred accounts, compared with 16.0 million households owning funds outside tax-deferred accounts (Figure 7). Among households that owned funds outside tax-deferred accounts, nearly eight out of 10, or 12.6 million, households also held funds in tax-deferred accounts. The number of households owning mutual

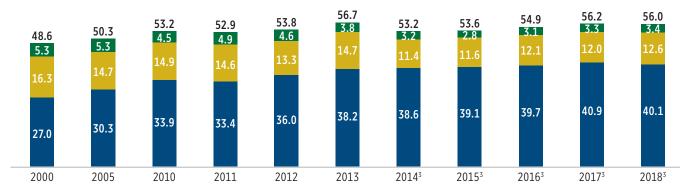
funds only through tax-deferred accounts has grown by 13.1 million since 2000, while the number of households owning mutual funds outside tax-deferred accounts has declined.²⁰ Indeed, households owning mutual funds only through tax-deferred accounts constitute much of the growth in household mutual fund ownership. Of the 52.7 million US households owning mutual funds through tax-deferred accounts in 2018, 40.1 million households owned mutual funds only through such accounts, up from 27.0 million in 2000. The number of households holding mutual funds only in taxable accounts has declined since 2000.

FIGURE 7

Tax-Deferred Accounts Are a Popular Way to Hold Mutual Funds

Millions of US households owning mutual funds by account type indicated, ¹ selected years

- Outside tax-deferred accounts only
- Both inside and outside tax-deferred accounts²
- Inside tax-deferred accounts only²



¹For the incidence (percentage of US households) of mutual fund ownership by account type, see Tables 7 and 8 in the supplemental tables.

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

Sources: Investment Company Institute and US Census Bureau

² Mutual funds held in employer-sponsored retirement plans, IRAs, and variable annuities are included.

³ Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

Shareholder Sentiment About the Mutual Fund Industry

Positive Shareholder Opinion of the Mutual Fund Industry Remained Steady in 2018

The percentage of fund shareholders with positive opinions about the mutual fund industry remained steady in 2018. Sixty-seven percent of mutual fund-owning households familiar with mutual fund companies had "very" or

"somewhat" favorable impressions of fund companies, compared with 66 percent in 2017 (Figure 8). In 2018, 15 percent of fund investors had a "very" favorable view of the industry, the same as in 2017. Narrowing the analysis to mutual fund shareholders familiar with mutual fund companies and with an opinion about fund companies, 89 percent had "very" or "somewhat" favorable impressions of fund companies (Figure 9), slightly higher than in 2017.²¹

FIGURE 8

Most Shareholders View Mutual Fund Industry Favorably

Percentage of mutual fund-owning households familiar with mutual fund companies, selected years

Impression of mutual fund industry

- Very favorable
- Somewhat favorable
- Somewhat unfavorable
- Very unfavorable
- No opinion

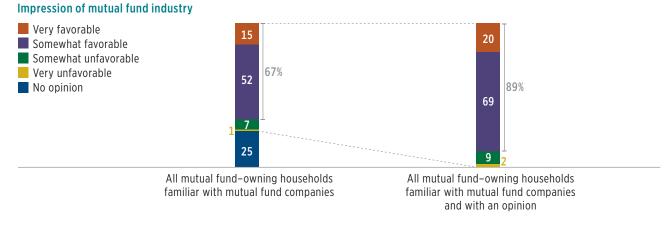


^{*}Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

Note: For the complete time series of data from 1997 through 2018, see Table 9 in the supplemental tables.

Most Shareholders with an Opinion View Mutual Fund Industry Favorably

Percentage of mutual fund-owning households familiar with mutual fund companies, 2018



Source: Investment Company Institute

Fund Performance Influences Investor Opinion of the Fund Industry

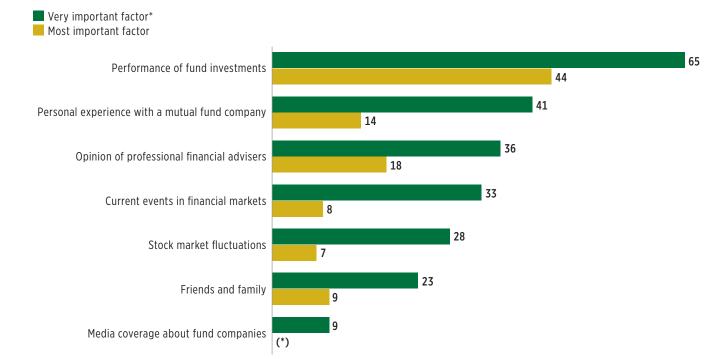
Although many factors influence shareholders' overall opinion of the mutual fund industry, investors said fund performance was the primary factor that shaped sentiment. In 2018, 65 percent of all mutual fund–owning households familiar with mutual fund companies cited fund performance as a "very" important factor in forming their opinions of the industry, and 44 percent said it was the most important factor (Figure 10). Other important factors that influence shareholder views of mutual fund companies include personal experience with a mutual fund company, the opinion of professional financial advisers, current events in financial markets, stock market fluctuations, and friends and family.

Risk Tolerance and Investing

Risk tolerance can be measured using survey data in various ways—ICI's Annual Mutual Fund Shareholder Tracking Survey asks respondents to choose from a range that describes how much risk they are willing to take to get higher investment returns. Willingness to take financial risk is strongly affected by age, but also has varied within age groups at different times.

Fund Performance Is the Most Important Factor Shaping Opinions of the Fund Industry

Percentage of mutual fund-owning households familiar with mutual fund companies, 2018



^{*}Multiple responses are included.

(*) = less than 0.5 percent

Note: For the complete time series of data from 1998 through 2018, see Table 10 in the supplemental tables.

Source: Investment Company Institute

US households became less willing to take investment risk after the 2007–2009 financial crisis, reflecting the reduced risk tolerance of households owning mutual funds (Figure 11). Willingness to take financial risk among households not owning mutual funds remained nearly the same from 2008 through 2018. In May 2008, 36 percent of US households owning mutual funds were willing to take above-average or substantial risk with their investments; this number fell to about three in 10 mutual fund–owning households in the wake of the financial market crisis. In 2018, 35 percent of US households owning mutual funds were willing to take above-average or substantial risk with their investments.

Risk tolerance varies with the age of the head of household, and younger households tend to be more willing to take investment risk than older households (Figure 12). In 2018, 34 percent of mutual fund-owning households younger than 35 were willing to take above-average or substantial

financial risk, while only 22 percent of mutual fund-owning households aged 65 or older were willing to do so. Mutual fund-owning households of all age groups are more willing to take investment risk than the same age groups among all US households.²²

Shareholders who indicated that they have a higher tolerance for financial risk when investing were more favorable toward the mutual fund industry than shareholders who indicated less tolerance for financial risk (Figure 13). For example, among shareholders familiar with mutual funds who indicated they take little (below-average) or no investment risk when investing, 62 percent had favorable views of the mutual fund industry in 2018. This fraction increased to 66 percent for those shareholders who were willing to take average investment risk, and to 70 percent for those willing to take at least above-average investment risk.

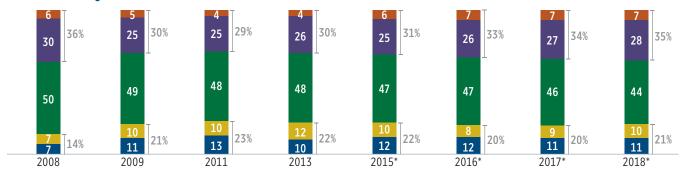
Households' Willingness to Take Investment Risk

Percentage of US households by mutual fund ownership status, selected years

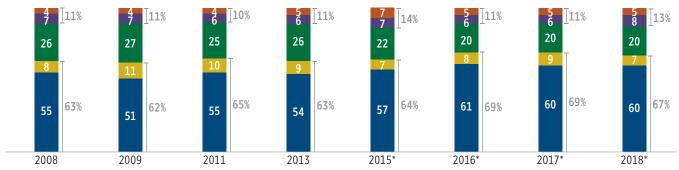
Level of risk willing to take with financial investments

- Substantial risk for substantial gain
- Above-average risk for above-average gain
- Average risk for average gain
- Below-average risk for below-average gain
- Unwilling to take any risk

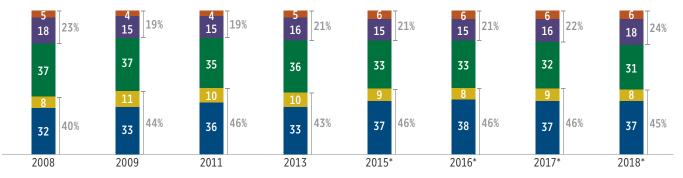
Households owning mutual funds



Households not owning mutual funds



All US households



^{*}Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

Note: For the complete time series of data from 2008 through 2018, see Table 11 in the supplemental tables.

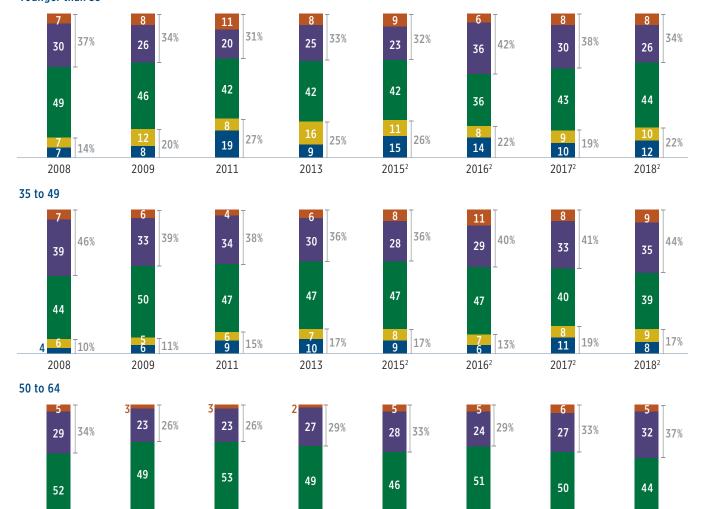
Mutual Fund Shareholders' Willingness to Take Investment Risk Varies with Age

Percentage of mutual fund-owning households within each age group, ¹ selected years

Level of risk willing to take with financial investments

- Substantial risk for substantial gain
- Above-average risk for above-average gain
- Average risk for average gain
- Below-average risk for below-average gain
- Unwilling to take any risk

Younger than 35



22%

10

2013

21%

10

2011

Continued on next page

2008

14%

25%

12

2009

17%

2017²

19%

10

2018²

20%

13

2016²

21%

11

2015²

FIGURE 12 CONTINUED

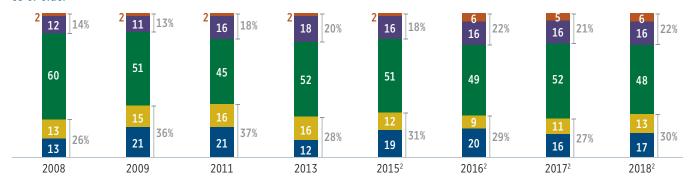
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Percentage of mutual fund-owning households within each age group, ¹ selected years

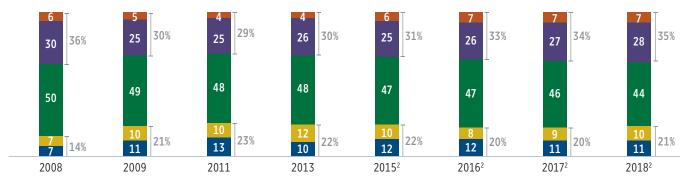
Level of risk willing to take with financial investments

- Substantial risk for substantial gain
- Above-average risk for above-average gain
- Average risk for average gain
- Below-average risk for below-average gain
- Unwilling to take any risk

65 or older



All mutual fund-owning households



¹ Age is based on the age of the sole or co-decisionmaker for household saving and investing.

Note: For the complete time series of data from 2008 through 2018, see Table 12 in the supplemental tables.

² Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

Favorability Rises with Shareholders' Risk Tolerance

Percentage of mutual fund-owning households familiar with mutual fund companies by willingness to take financial risk, selected years

Impression of mutual fund industry

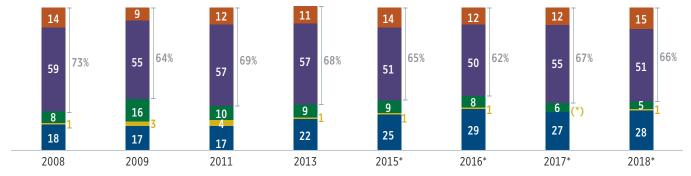


- Somewhat favorable
- Somewhat unfavorable
- Very unfavorable
- No opinion

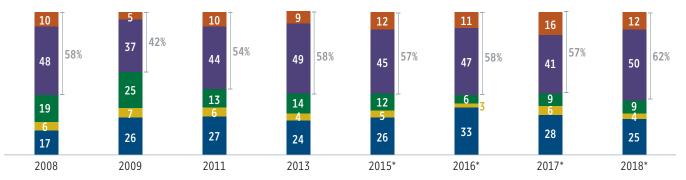
Above-average or substantial risk



Average risk



Below-average or no risk



^{*}Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

Note: For the complete time series of data from 2008 through 2018, see Table 13 in the supplemental tables.

^{(*) =} less than 0.5 percent

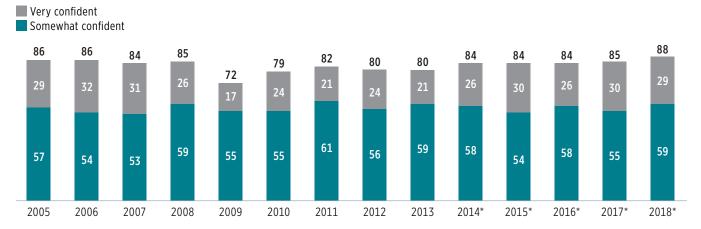
Fund Owners Are Confident About Achieving Investment Goals

ICI's Annual Mutual Fund Shareholder Tracking Survey finds that investors were confident that mutual funds could help them reach their financial goals. In 2018, 88 percent of all mutual fund-owning households said they were confident in mutual funds' ability to help them achieve their financial goals (Figure 14). Indeed, nearly three in 10 mutual fundowning households were "very" confident that mutual funds could help them meet their financial goals.

FIGURF 14

Nearly Nine in 10 Mutual Fund-Owning Households Have Confidence in Mutual Funds

Percentage of all mutual fund-owning households by level of confidence that mutual funds can help them meet their investment goals, 2005–2018



^{*}Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

Note: This question was not included in the survey prior to 2005. The question has four choices; the other two possible responses were "not very confident" and "not at all confident."

Mutual Fund Owners and Internet Access

Nearly All Mutual Fund-Owning Households Have Access to the Internet

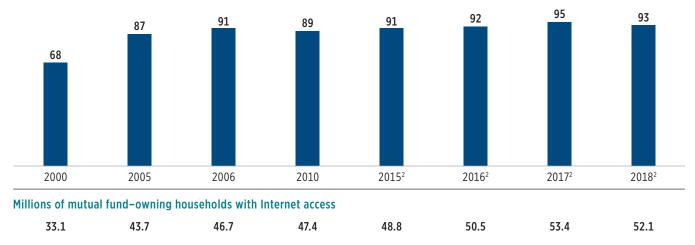
The number of mutual fund investors with internet access has grown considerably since 2000.²³ In 2018, 93 percent of households owning mutual funds had internet access, up from about two-thirds in 2000, the first year in which ICI measured shareholders' access to the internet (Figure 15). Altogether, 52.1 million mutual fund-owning households had internet access in 2018.

Although younger households were more likely to report internet access, 85 percent of mutual fund-owning households with a household head aged 65 or older had internet access in 2018 (Figure 16). Internet access among mutual fund-owning household heads younger than 65 was essentially universal, with 94 to 98 percent reporting internet access. The majority of mutual fund-owning households in each income group had internet access in 2018. Eighty-three percent of households with annual incomes less than \$50,000 had internet access in 2018, up substantially from 47 percent in 2000. Households with incomes of more than \$50,000 had nearly universal internet access in 2018.

FIGURE 15

93 Percent of Households Owning Mutual Funds Have Internet Access

Number and percentage of all mutual fund-owning households with internet access, 1 selected years



¹ In 2000, shareholders not using the internet in the past 12 months or solely using the internet for email were not counted as having internet access.

Note: Internet access includes access to the internet at home, work, or some other location. For the complete time series of data from 2008 through 2018, see Table 14 in the supplemental tables.

² Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

FIGURE 16

Internet Access Is Nearly Universal Among Mutual Fund-Owning Households

Percentage of mutual fund-owning households with internet access, selected years

	Household had internet access							
-	2000 ¹	2005	2006	2010	2015 ²	2016 ²	2017 ²	2018 ²
Respondent age								
Younger than 35	83	94	97	96	93	96	99	95
35 to 49	75	91	95	95	95	97	97	98
50 to 64	60	90	91	90	92	92	97	94
65 or older	30	60	75	70	84	83	86	85
Respondent education								
High school diploma or less	39	75	80	77	82	84	87	86
Some college or associate's degree	68	87	93	90	92	93	96	93
College or postgraduate degree	81	94	97	96	95	95	98	96
Household income ³								
Less than \$50,000	47	74	80	75	79	80	88	83
\$50,000 to \$99,999	77	90	93	90	93	91	95	93
\$100,000 to \$149,999	92	97	99	97	95	98	96	97
\$150,000 or more	94	96	97	97	96	97	99	97
Generation of head of househol	d ⁴							
Millennial Generation (head of household born between 1981 and 2004) ⁵	(*)	84	100	98	93	96	99	95
Generation X (head of household born between 1965 and 1980)	81	95	97	95	95	97	96	98
Baby Boom Generation (head of household born between 1946 and 1964)	71	91	92	91	92	91	96	93
Silent and GI Generations (head of household born between 1904 and 1945)	48	68	80	70	79	78	78	78
Total	68	87	91	89	91	92	95	93

¹ In 2000, shareholders not using the internet in the past 12 months or solely using the internet for email were not counted as having internet access.

Note: Internet access includes access to the internet at home, work, or some other location. For the complete time series of data, see Table 15 in the supplemental tables.

² Starting in 2014, the Annual Mutual Fund Shareholder Tracking Survey was revised to include a dual frame random digit dial (RDD) sample design. In prior years, the survey used a landline RDD sampling frame. Please see pages 4–5 for a discussion of the revision to the survey methodology and the effect of that revision on the results.

³ Total reported is household income before taxes in prior year.

⁴ Generation is based on the age of the household sole or co-decisionmaker for saving and investing.

⁵The Millennial Generation is aged 14 to 37 in 2018; however, survey respondents must be 18 or older.

^{(*) =} The sample size is too small to analyze.

Notes

- Households' total financial assets were \$87.8 trillion as of June 2018. See US Federal Reserve Board 2018.
- ² Ownership includes mutual funds held in variable annuities. See Table 1 in the supplemental tables for the complete time series of mutual fund ownership. Starting in 2013, the survey questionnaire was refined in several ways. First, the order of the account type choices in the question regarding ownership of retirement and other savings accounts was changed in 2013. This change was made to avoid possible confusion between individual accounts in 401(k) and other employer-sponsored DC plan accounts versus IRAs. Starting in 2013, respondents were asked if they own a 401(k) and other employer-sponsored DC retirement plans, then respondents were asked if they own a traditional IRA or a Roth IRA, then if they own an employer-sponsored IRA, and finally, if they own a 529 plan or Coverdell Education Savings Account (ESA). In prior years, respondents were asked first if they own a traditional IRA or Roth IRA, then if they own a Coverdell ESA, then if they own an employer-sponsored IRA, and finally, if they own a 401(k) or other employer-sponsored plan account (529 plan ownership was a separate question).

In previous years, respondents were asked separately if they have an employer-sponsored IRA and about the size of their employer. Starting in 2013, the questions were not asked separately. When asked what type of employer-sponsored IRA they own, respondents were told that a SIMPLE IRA is offered by businesses with less than 100 employees and has employer and employee contributions, a SAR-SEP includes only employee contributions, and a SEP IRA includes only employer contributions.

Respondents who owned any type of account were asked about the mutual funds in that account. Starting in 2013, the list of possible mutual funds was refined to include more types of mutual funds and names most commonly used for different mutual fund types. This change was made to keep up to date with new types of investments and the names used for them. For example, "stock funds, such as equity income or growth funds" was not familiar to some respondents, but the phrases "large-, mid-, or small-cap stock funds" and "stock index funds including the S&P 500 index fund" triggered respondent recollection of their holdings of such funds. Respondents also were asked if they hold "money market funds that pay a money market rate of interest, are not federally insured, and may be taxable or tax-exempt," if they hold "international or global stock funds," if they hold "bond funds including corporate, municipal, or government bond funds," if they hold "balanced funds including hybrid, lifestyle, or asset allocation funds," or if they hold "target date funds." Starting in 2014, a category for "lifecycle funds" was added. Finally, respondents were asked if they hold "any other funds."

- The survey data include the number of mutual fund owners per household, which is applied to the number of US households owning mutual funds. The average number of mutual fund owners per household is reported in Table 2 in the supplemental tables.
- ⁴ See note 2 for additional detail on changes to the survey.
- See Ehlen and Ehlen 2007; Blumberg and Luke 2007; Kennedy 2007; Keeter et al. 2007; and Link et al. 2007.
- In addition to the 53.9 percent of households that use only cell phones, 15.1 percent of households have both landline and cell phones and received all or almost all of their calls on cell phones. See Blumberg and Luke 2018.
- See Ehlen and Ehlen 2007; Blumberg and Luke 2007; Kennedy 2007; Keeter et al. 2007; and Link et al. 2007.
- ⁸ See Blumberg and Luke 2018.
- ⁹ See Pew Research Center 2017 and Gallup 2017.
- ¹⁰ See Fahimi 2014.
- ¹¹ See Izrael, Hoaglin, and Battaglia 2004.
- ¹² See US Census Bureau 2018.
- Responses were weighted to five telephone status categories: cell phone only; both, cell phone mostly; both, equally; both, landline mostly; and landline only. See Blumberg and Luke 2018.
- ¹⁴ See Table 3 in the supplemental tables for the complete time series showing incidence of mutual fund ownership by age.
- The life-cycle pattern of savings suggests that older individuals are able to save at higher rates because they no longer face the expenses of buying a home and/or putting children through college and/or paying for their own education. An augmented version of the life-cycle theory predicts that the optimal savings pattern increases with age. For a summary discussion of life-cycle models, see Browning and Crossley 2001. In addition, see discussion in Brady and Bass 2018 and Brady and Bogdan 2014. See Table 4 in the supplemental tables for the complete time series showing the age composition of mutual fund-owning households. For additional information on the characteristics of mutual fund-owning households, see Holden, Schrass, and Bogdan 2018 and Schrass and Bogdan, forthcoming.
- See Table 5 in the supplemental tables for the complete time series showing the income composition of mutual fund-owning households. For additional information on the characteristics of mutual fund-owning households, see Holden, Schrass, and Bogdan 2018 and Schrass and Bogdan, forthcoming.
- ¹⁷ See Table 6 in the supplemental tables for the complete time series showing incidence of mutual fund ownership by household income.

- ¹⁸ These results are from the 2018 ICI Annual Mutual Fund Shareholder Tracking Survey.
- ¹⁹ Mutual fund ownership inside tax-deferred accounts includes ownership of funds held inside employer-sponsored retirement plans, any type of IRA, educational savings accounts, and mutual funds held in variable annuities. For additional information on mutual funds in DC plans and IRAs, see Investment Company Institute 2018.
- ²⁰ See Table 7 in the supplemental tables.
- ²¹ See Holden, Schrass, and Bogdan 2017.
- ²² See Table 12 in the supplemental tables for the risk tolerance of all US households and households owning mutual funds from 2008 to 2018.
- ²³ To shorten the survey, the questions about how mutual fundowning households use the internet were dropped in 2014, 2015, 2016, 2017, and 2018. For 2013 results, see Burham, Bogdan, and Schrass 2013.

References

Blumberg, Stephen J., and Julian V. Luke. 2007. "Coverage Bias in Traditional Telephone Surveys of Low-Income and Young Adults." *Public Opinion Quarterly* 71, no. 5: 734–749.

Blumberg, Stephen J., and Julian V. Luke. 2018. "Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July–December 2017." *National Health Interview Survey Early Release Program*. Available at www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201806.pdf.

Brady, Peter J., and Steven Bass. 2018. "Who Participates in Retirement Plans, 2014." *ICI Research Perspective* 24, no. 1 (April). Available at www.ici.org/pdf/per24-01.pdf.

Brady, Peter, and Michael Bogdan. 2014. "Who Gets Retirement Plans and Why, 2013." *ICI Research Perspective* 20, no. 6 (October). Available at www.ici.org/pdf/per20-06.pdf.

Browning, Martin, and Thomas F. Crossley. 2001. "The Life-Cycle Model of Consumption and Saving." *Journal of Economic Perspectives* 15, no. 3: 3–22 (Summer).

Burham, Kimberly, Michael Bogdan, and Daniel Schrass. 2013. "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2013." *ICI Research Perspective* 19, no. 9 (October). Available at www.ici.org/pdf/per19-09.pdf.

Ehlen, John, and Patrick Ehlen. 2007. "Cellular-Only Substitution in the United States as Lifestyle Adoption: Implications for Telephone Survey Coverage." *Public Opinion Quarterly* 71, no. 5: 717–733.

Fahimi, Mansour. 2014. "Practical Guidelines for Dual-Frame RDD Survey Methodology (Now That the Dust Is Settling)." *Survey Practice* 7, no. 2 (May). Available at www.surveypractice.org/article/2866-practical-guidelinesfor-dual-frame-rdd-survey-methodology-now-that-the-dust-is-settling.

Gallup. 2017. "How Does Gallup Daily Tracking Work?" Available at www.gallup.com/174155/gallup-dailytrackingmethodology.aspx.

Holden, Sarah, Daniel Schrass, and Michael Bogdan. 2017. "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2017." *ICI Research Perspective* 23, no. 7 (October). Available at www.ici.org/pdf/per23-07.pdf.

Holden, Sarah, Daniel Schrass, and Michael Bogdan. 2018. "Characteristics of Mutual Fund Investors, 2018." *ICI Research Perspective* 24, no. 9 (November). Available at www.ici.org/pdf/per24-09.pdf.

Investment Company Institute. 2018. "The US Retirement Market, Second Quarter 2018" (September). Available at www.ici.org/research/stats/retirement.

Izrael, David, David C. Hoaglin, and Michael P. Battaglia. 2004. "To Rake or Not to Rake Is Not the Question Anymore with the Enhanced Raking Macro." May 2004 SUGI Conference, Montreal, Canada. Available at www2.sas.com/proceedings/sugi29/207-29.pdf.

Keeter, Scott, Courtney Kennedy, April Clark, Trevor Tompson, and Mike Mokrzycki. 2007. "What's Missing from National Landline RDD Surveys? The Impact of the Growing Cell-Only Population." *Public Opinion Quarterly* 71, no. 5: 772–792.

Kennedy, Courtney. 2007. "Evaluating the Effects of Screening for Telephone Service in Dual Frame RDD Surveys." *Public Opinion Quarterly* 71, no. 5: 750–771.

Link, Michael W., Michael P. Battaglia, Martin R. Frankel, Michael Link, Larry Osborn, and Ali H. Mokdad. 2007. "Reaching the US Cell Phone Generation: Comparison of Cell Phone Survey Results with an Ongoing Landline Telephone Survey." *Public Opinion Quarterly* 71, no. 5: 814–839.

Pew Research Center. 2017. "Random Digit Dialing." Available at www.pewresearch.org/methodology/u-s-survey-research/sampling/#random-digit-dialing.

Schrass, Daniel, and Michael Bogdan. Forthcoming. "Profile of Mutual Fund Shareholders, 2018." *ICI Research Report*.

US Census Bureau. 2018. "Income and Poverty in the United States: 2017." *Current Population Reports*, P60-263 (September). Washington, DC: US Government Printing Office. Available at www.census.gov/content/dam/Census/library/publications/2018/demo/p60-263.pdf.

US Federal Reserve Board. 2018. Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts, Second Quarter 2018, Z.1 Release (September 20). Washington, DC: Federal Reserve Board. Available at www.federalreserve.gov/releases/z1/Current.

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