2022 INVESTMENT COMPANY FACT BOOK

A Review of Trends and Activities
in the Investment Company Industry

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2021 Facts at a Glance

Total worldwide assets invested in regulated open-end funds:* $71.1 trillion			
United States **$34.2 trillion**	Europe **$23.3 trillion**	Asia-Pacific **$10.0 trillion**	Rest of the world **$3.6 trillion**

US-registered investment company total net assets: $34.6 trillion			
Mutual funds **$27.0 trillion**	Exchange-traded funds **$7.2 trillion**	Closed-end funds **$309 billion**	Unit investment trusts **$95 billion**

US-registered investment companies' share of:				
US corporate equity **32%**	US and foreign corporate bonds **24%**	US Treasury and government agency securities **12%**	US municipal securities **29%**	Commercial paper **17%**

US household ownership of US-registered funds				
Number of households owning funds **62.2 million**	Number of individuals owning funds **108.1 million**	Percentage of households owning funds **47.9%**	Median mutual fund assets of mutual fund–owning households **$200,000**	Median number of mutual funds owned **4**

US retirement market		
Total retirement market assets **$39.4 trillion**	Percentage of households with tax-advantaged retirement savings **63%**	DC plan and IRA assets invested in mutual funds **$12.6 trillion**

* Regulated open-end funds include mutual funds, exchange-traded funds (ETFs), and institutional funds.

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in the Investment Company Industry

The Investment Company Institute (ICI) is the leading association representing regulated investment funds. ICI's mission is to strengthen the foundation of the asset management industry for the ultimate benefit of the long-term individual investor. Its members include mutual funds, exchange-traded funds (ETFs), closed-end funds, and unit investment trusts (UITs) in the United States, and UCITS and similar funds offered to investors in Europe, Asia, and other jurisdictions. ICI has offices in Washington, DC, Brussels, London, and Hong Kong and carries out its international work through ICI Global.

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Contents

Letter from the Chief Economist

If information is the fabric of the modern world, then the *2022 Investment Company Fact Book* is an intricately woven tapestry highlighting the work and expertise of ICI's Research Department. This year's *Fact Book* offers a wealth of information on our industry, with nearly 70 data tables providing a long history of the number and types of mutual funds, ETFs, closed-end funds, and unit investment trusts; their assets and flows; and a wide array of other statistics, many of which are broken down by the fund's investment objective and other fund categories. This work is led by Judy Steenstra and her staff. You will also find detailed discussions of recent industry trends—both in the United States and around the globe—from Shelly Antoniewicz and her staff, as well as in-depth analyses of current developments in investor behavior and retirement savings from Sarah Holden and her staff. And for those who want to dig deeper, the underlying data for all charts and tables are available on ICI's website.

Weaving together the diverse materials that go into the *Fact Book* takes nearly a full year, and is just a glimpse at the more than 300 statistical reports, papers, and *ICI Viewpoints* posts that ICI Research released throughout 2021. It takes the combined efforts of ICI's entire Research Department with substantial contributions from other departments at ICI, notably our Strategic Communications group. But perhaps the most important, and yet rather unsung, factor in our ability to produce the *Fact Book* is our members' strong belief that data are central to helping ICI carry out its mission and, consequently, their continued commitment to providing the foundational data for so many of our endeavors, including the *Fact Book*.

I hope you will find the *2022 Investment Company Fact Book* as useful as ever.

Sean Collins
Chief Economist

ICI Research Publications

ICI is the primary source of analysis and statistical information on the investment company industry. In addition to the annual *Investment Company Fact Book*, the Institute's Research Department released more than 300 papers, statistical reports, and *ICI Viewpoints* posts in 2021. You can find all of this content at www.icifactbook.org/21-research.

ICI Senior Research Staff

Chief Economist

Sean Collins leads the Institute's Research Department. He oversees statistical collections and research on US and global funds, financial markets, the US retirement market, financial stability, and investor demographics. Before joining ICI in 2000, Collins worked at the US Federal Reserve Board of Governors and the Reserve Bank of New Zealand. He is a member of the Group of Economic Advisers (GEA) to the European Securities and Markets Authority (ESMA). He has a PhD in economics from the University of California, Santa Barbara, and a BA in economics from Claremont McKenna College.

Senior Director of Industry and Financial Analysis

Rochelle (Shelly) Antoniewicz leads the Institute's research efforts on the structure and trends of the exchange-traded fund and mutual fund industries and on the financial markets in the United States and globally. Before joining ICI, Antoniewicz spent 13 years at the Federal Reserve Board of Governors. She earned a BA in management science from the University of California, San Diego, and an MS and PhD in economics from the University of Wisconsin–Madison.

Senior Director of Retirement and Investor Research

Sarah Holden leads the Institute's research efforts on retirement and tax policy and investor demographics and behavior. 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. 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 from Smith College.

Senior Director of Statistical Research

Judy Steenstra oversees the collection and publication of weekly, monthly, quarterly, and annual data on open-end mutual funds, as well as data on closed-end funds, exchange-traded funds, unit investment trusts, and the worldwide fund industry. Steenstra joined ICI in 1987 and was appointed director of statistical research in 2000. She has a BS in marketing from The Pennsylvania State University.

Acknowledgments

Publication of the *2022 Investment Company Fact Book* was directed by James Duvall, economist, and Judy Steenstra, senior director of statistical research, working with Candice Gullett, editor, and Janet Zavistovich, senior creative director. Contributors from ICI's research team who developed and edited analysis, text, and data are Irina Atamanchuk, Steven Bass, Mike Bogdan, Alex Johnson, Sheila McDonald, Hammad Qureshi, Doug Richardson, Casey Rybak, and Dan Schrass.

PART 1

Analysis and Statistics

Methods and Assumptions

The following methods, unless otherwise specified, apply to all data in this book:

- Data for US-registered investment companies only include those that report statistical information to the Investment Company Institute. Assets of these companies are at least 98 percent of industry assets.
- Funds of funds are excluded from the data to avoid double counting.
- Dollars and percentages may not add to the totals presented because of rounding.
- Data for US-registered investment companies include exchange-traded funds that are not registered under the Investment Company Act of 1940.
- Long-term funds include equity funds, hybrid funds, and bond funds.

Data are subject to revision. Although information or data provided by independent sources is believed to be reliable, the Investment Company Institute is not responsible for its accuracy, completeness, or timeliness. Opinions expressed by independent sources are not necessarily those of the Institute. If you have questions or comments about this material, please contact the source directly.

CHAPTER

1

Worldwide Regulated Open-End Funds

Investors around the world have demonstrated strong demand for regulated open-end funds (referred to in this chapter as *regulated funds*). In the past decade, worldwide net sales of regulated funds have totaled $20.1 trillion. This demand has been influenced by several long-term and cyclical economic factors. Fund providers have responded to the increasing interest in funds by offering more than 131,000 regulated funds, which provide a vast array of choices to investors. In many countries, markets for regulated funds are well-developed and highly competitive. At year-end 2021, regulated funds had $71.1 trillion in total net assets.

IN THIS CHAPTER

What Are Regulated Funds?

The International Investment Funds Association (IIFA) defines regulated funds as collective investment pools that are substantively regulated, open-end investment funds.* Open-end funds generally are defined as those that issue new fund shares (or units) and redeem existing shares (or units) on demand. Such funds are typically regulated with respect to disclosure; the form of organization (for example, as either corporations or trusts); custody of fund assets; minimum capital; valuation of fund assets; and restrictions on fund investments, such as limits on leverage, types of eligible investments, and diversification of portfolio investments.

In the United States, however, regulated funds include not only open-end funds (mutual funds and exchange-traded funds [ETFs]), but also unit investment trusts and closed-end funds.†
In Europe, regulated funds include Undertakings for Collective Investment in Transferable Securities (UCITS)—ETFs, money market funds, and other categories of similarly regulated funds—and alternative investment funds, commonly known as AIFs.

In many countries, regulated funds may also include institutional funds (funds that are restricted to being sold to a limited number of non-retail investors), funds that offer guarantees or protection of principal (those that offer a formal, legally binding guarantee of income or capital), and open-end real estate funds (funds that invest directly in real estate to a substantive degree).

Number of Worldwide Regulated Funds

At year-end 2021, fund providers globally offered 131,808 regulated funds (Figure 1.1). In 2021, 45 percent of these funds were domiciled in Europe. The Asia-Pacific region accounted for 29 percent of regulated funds, the United States for 8 percent, and the rest of the world for 19 percent. In 2021, 47 percent of regulated funds were mixed/other funds, 35 percent were equity funds, 17 percent were bond funds, and 2 percent were money market funds.

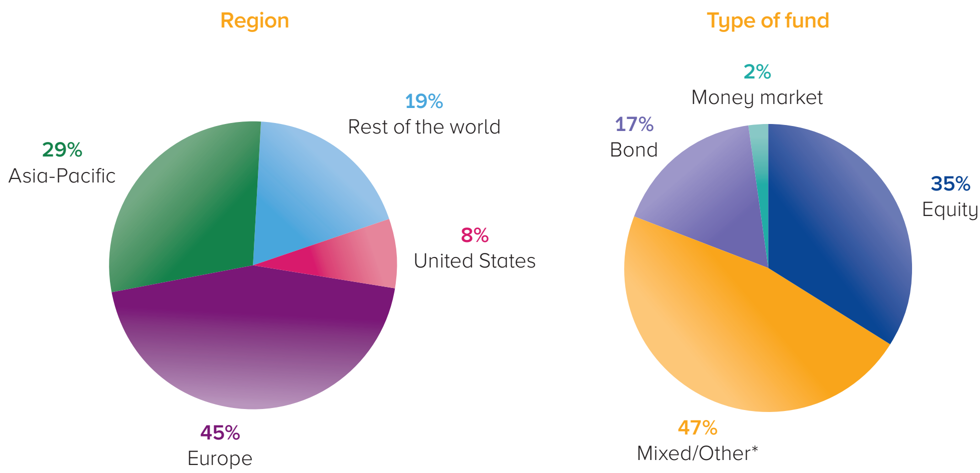
* The primary data source for worldwide regulated funds is the IIFA. In 2021, the IIFA collected data on worldwide regulated funds from 46 jurisdictions. For information on individual jurisdictions, see the data tables on pages 230–235. For more details about the IIFA data collection, see Worldwide Definitions of Terms and Classifications at www.ici.org/info/ww_q3_18_definitions.xls.

† Data for unit investment trusts and closed-end funds are not included in this chapter; these funds are discussed in chapter 2 and chapter 5, respectively.

FIGURE 1.1

Number of Worldwide Regulated Open-End Funds

Percentage of funds by region or type of fund, year-end 2021



Number of worldwide regulated open-end funds: 131,808

* Mixed/other funds include balanced/mixed funds, guaranteed/protected funds, real estate funds, and other funds.
Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.
Source: International Investment Funds Association

Worldwide Total Net Assets of Regulated Funds

Worldwide total net assets of regulated funds have seen robust growth over the past decade across the world. The increase in worldwide total net assets reflects a substantial increase in the value of the underlying securities held by the funds. However, over the same period, worldwide demand for regulated funds as measured by net sales—total sales minus total redemptions plus net exchanges—has also been significant. Demand for regulated funds has been driven by multiple factors, including investors' demand for professionally managed and well-diversified products offering access to capital markets, as well as by the increasing depth and liquidity of global capital markets.

Total Net Assets of Worldwide Regulated Funds by Type and Region

Financial markets around the world experienced strong growth in 2021, which contributed to a 12.7 percent increase in total net assets of worldwide regulated funds, from $63.0 trillion at year-end 2020 to $71.1 trillion at year-end 2021 (Figure 1.2).*

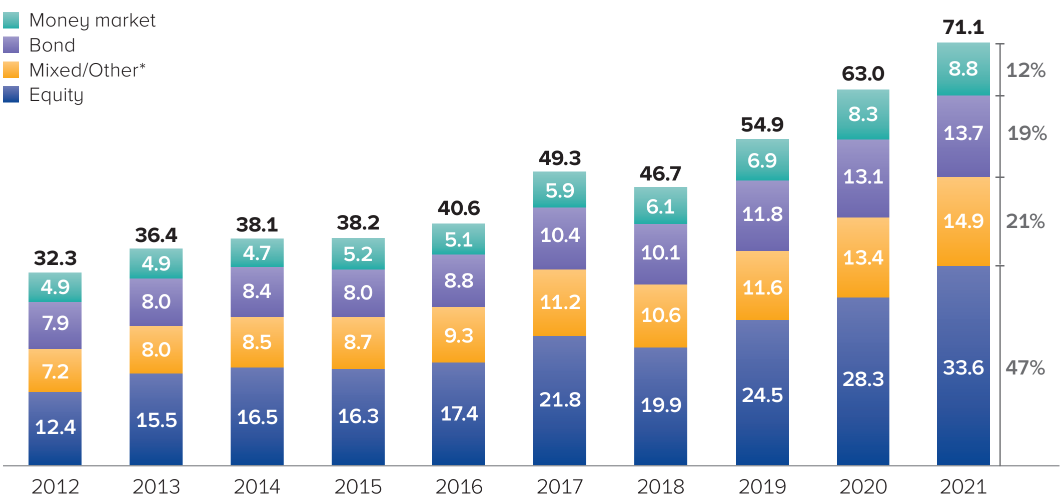
* In this chapter, unless otherwise noted, data for total net assets and net sales are denominated in US dollars.

Worldwide total net assets of equity funds—which invest primarily in publicly traded stocks—increased by 18.8 percent, from $28.3 trillion at year-end 2020 to $33.6 trillion at year-end 2021. Bond funds—which invest primarily in fixed-income securities—saw their total net assets increase from $13.1 trillion to $13.7 trillion (5.1 percent) over the same period, and total net assets of mixed/other funds rose 11.3 percent, from $13.4 trillion to $14.9 trillion. Finally, money market funds—which are generally defined throughout the world as regulated funds that are restricted to holding short-term, high-quality debt instruments—saw their total net assets increase from $8.3 trillion to $8.8 trillion (6.2 percent). At year-end 2021, equity funds remained the largest category of worldwide regulated funds, accounting for 47 percent of net assets. Bond funds accounted for 19 percent of net assets, mixed/other funds for 21 percent, and money market funds for 12 percent.

FIGURE 1.2

Total Net Assets of Worldwide Regulated Open-End Funds Rose to $71.1 Trillion in 2021

Trillions of US dollars by type of fund, year-end



Total number of worldwide regulated open-end funds

93,833	**97,377**	**101,100**	**106,060**	**110,120**	**113,227**	**118,271**	**122,551**	**125,703**	**131,808**

* Mixed/other funds include balanced/mixed funds, guaranteed/protected funds, real estate funds, and other funds.
Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.
Source: International Investment Funds Association

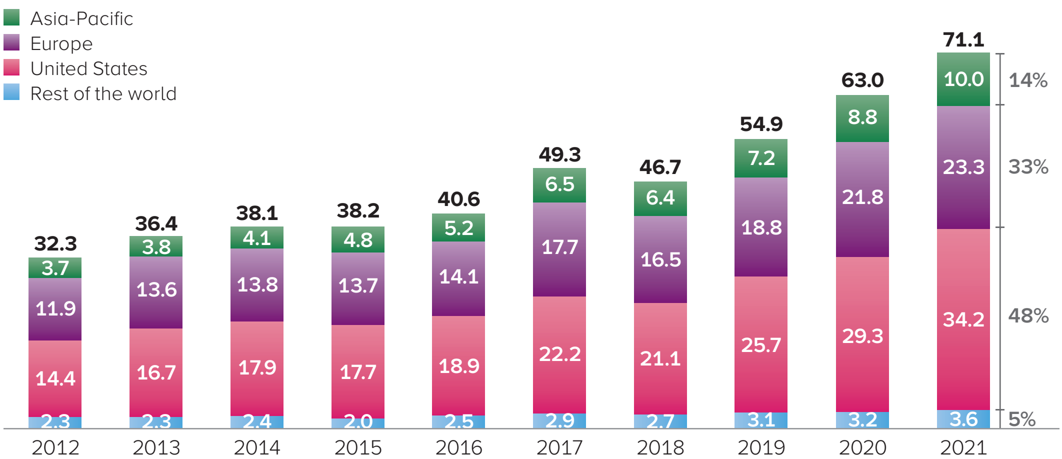
Total net assets of worldwide regulated funds also vary widely by geographic region. At year-end 2021, total net assets in regulated funds continued to be predominantly held in the United States and Europe, with 48 percent and 33 percent of the worldwide total, respectively (Figure 1.3). Regulated funds in the Asia-Pacific region held another 14 percent of worldwide total net assets, and funds in the rest of the world held the remaining 5 percent.

Total net assets of regulated funds in the United States increased by 16.4 percent from $29.3 trillion at year-end 2020 to $34.2 trillion at year-end 2021. Over the same period, total net assets in Europe increased by 7.2 percent to $23.3 trillion, total net assets in the Asia-Pacific region increased by 13.9 percent to $10.0 trillion, and total net assets in the rest of the world increased by 12.9 percent to $3.6 trillion.

FIGURE 1.3

The United States Has the Largest Share of Total Net Assets of Worldwide Regulated Open-End Funds

Trillions of US dollars by region, year-end



Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.
Source: International Investment Funds Association

In 2021, the majority of the growth in worldwide total net assets of regulated funds reflected an increase in the value of the underlying assets of equity funds. US stock markets returned 26.7 percent in 2021, and European stock markets returned 17.0 percent (Figure 1.4). Stock markets in the Asia-Pacific region, however, were down 1.2 percent. Bond market returns were negative in the United States and in Europe (falling 1.6 percent and 2.1 percent, respectively); by contrast, bond markets returned 5.9 percent in the Asia-Pacific region.*

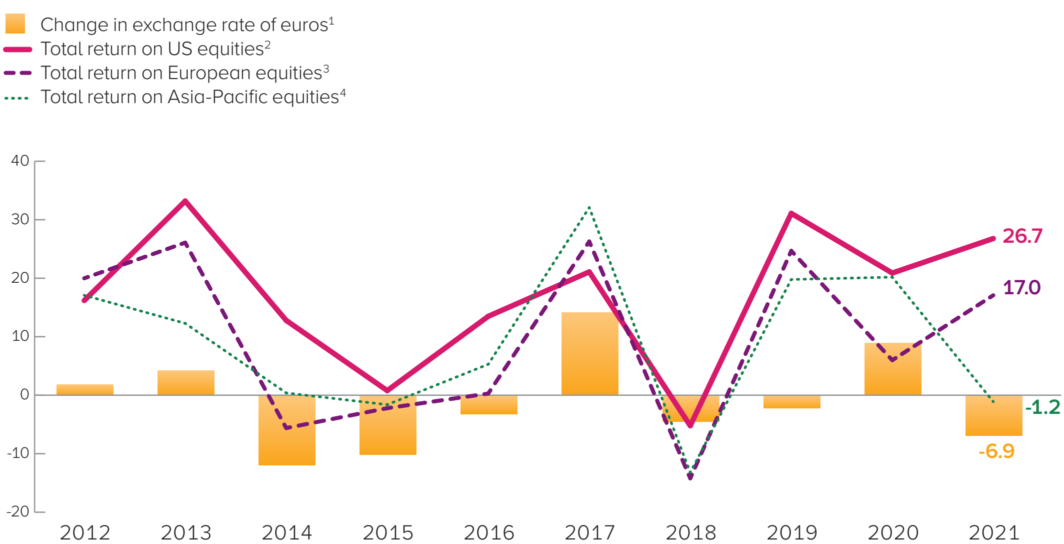
* As measured by the FTSE US Broad Investment Grade Bond Index, the Bloomberg Pan-European Aggregate Index (expressed in euros), and the Bloomberg Asian-Pacific Aggregate Index (expressed in Japanese yen), which all cover investment grade securities.

Asset values of worldwide regulated funds were also affected by changes in exchange rates in 2021. In particular, several major currencies depreciated against the US dollar in 2021, which decreased the value of total net assets in other regions when measured in US dollars. For example, the euro depreciated against the US dollar by 6.9 percent, which would have reduced the value of total net assets in Europe measured in US dollars by about $1.7 trillion when compared with a scenario in which year-over-year exchange rates remained unchanged in 2021. Elsewhere around the world, the Japanese yen depreciated against the US dollar by 10.2 percent, the Australian dollar by 5.6 percent, and the British pound sterling by 1.0 percent. By contrast, the Chinese renminbi appreciated against the US dollar by 2.7 percent (see page 8 for more information on how exchange rates can influence measurement of total net assets).

FIGURE 1.4

Stock Market Returns Around the World

Percent



[1] The change in the exchange rate of euros is measured as the year-over-year percent change in the exchange rate of US dollars per euro.
[2] The total return on US equities is measured as the year-over-year percent change in the Wilshire 5000 Total Market Index.
[3] The total return on European equities is measured as the year-over-year percent change in the MSCI Daily Total Return Gross Europe Index (expressed in US dollars).
[4] The total return on Asia-Pacific equities is measured as the year-over-year percent change in the MSCI Daily Total Return Gross AC Asia-Pacific Index (expressed in US dollars).
Sources: Bloomberg, MSCI, and Wilshire Associates

LEARN MORE

Worldwide Regulated Open-End Fund Assets and Flows
www.ici.org/research/stats/worldwide

How Exchange Rates Can Influence Measurement of Total Net Assets Held by Worldwide Regulated Funds

For worldwide regulated funds holding assets denominated in currencies other than US dollars, fluctuations in US dollar exchange rates can significantly affect the value of these assets when they are expressed or measured in US dollars. For example, when foreign currencies depreciate against the dollar (or, equivalently, the US dollar appreciates against foreign currencies), the value of assets not denominated in US dollars will decrease when those assets are measured in US dollars. Figure 1.5 illustrates this effect using two hypothetical scenarios.

FIGURE 1.5

Impact of Changes in the Exchange Rate on the US Dollar Value of a European Stock

Scenario 1: No change in exchange rate between euros and US dollars

	Year 1	Year 2	Percent change
1. Market value of European stock expressed in euros	€100	€120	20%
2. Exchange rate of euros (US dollars per euro)	1.00	1.00	0%
3. Market value of European stock expressed in US dollars	$100	$120	20%

Scenario 2: Market value if euro depreciates (US dollar appreciates)

	Year 1	Year 2	Percent change
4. Market value of European stock expressed in euros	€100	€120	20%
5. Exchange rate of euros (US dollars per euro)	1.00	0.90	-10%
6. Market value of European stock expressed in US dollars	$100	$108	8%

In the first scenario, the market value of a European stock, measured in euros, rises from €100 in year 1 to €120 in year 2, an increase of 20 percent. The exchange rate between US dollars and euros, in this scenario, remains unchanged at 1.00 in both years. In other words, one euro is worth one US dollar in both years. To convert the euro-denominated value of the European stock into US dollars, multiply by the exchange value of the euro (US dollars per euro). Because this value is 1.00 in both years, the value of the European stock expressed in US dollars is the same as when expressed in euros: $100 in year 1 and $120 in year 2. When the US dollar exchange rate with another country is unchanged between two years, any gain or loss in assets denominated in that country's currency translates into an identical percent gain or loss when the value of those assets is expressed in US dollars.

Exchange rates, however, rarely remain unchanged. In the second scenario, a European stock experiences the same 20 percent gain as in the first scenario (€100 in year 1 to €120 in year 2); at the same time, the euro depreciates 10 percent against the US dollar. As in the first scenario, in year 1 the market value of a European stock expressed in US dollars is $100. In year 2, however, one euro is now worth 0.90 US dollars. To find the US dollar value of the European stock in year 2, multiply €120 by 0.90 (US dollars per euro) to get $108. The US dollar return on the European stock is now 8 percent—lower than in the first scenario because it accounts for the depreciation of the euro relative to the US dollar.

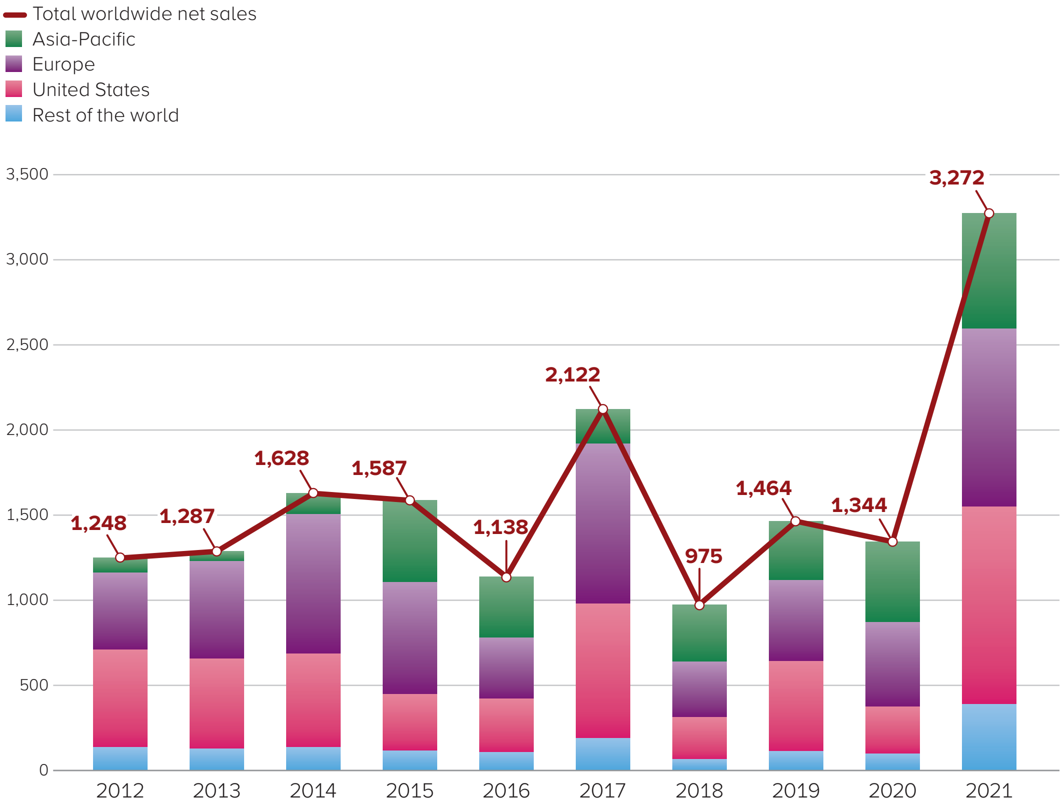
Worldwide Net Sales of Regulated Long-Term Funds

Worldwide demand for regulated long-term funds (equity, bond, and mixed/other) increased sharply in 2021, from $1.3 trillion in 2020 to $3.3 trillion in 2021, primarily driven by strong demand for regulated funds in the United States and Europe (Figure 1.6). Net sales of long-term funds increased from $276 billion in 2020 to $1.2 trillion in 2021 in the United States, from $496 billion to $1.0 trillion in Europe, from $469 billion to $676 billion in the Asia-Pacific region, and from $102 billion to $393 billion for the rest of the world.

FIGURE 1.6

Net Sales of Regulated Open-End Long-Term Funds Surged in 2021

Billions of US dollars by region, annual



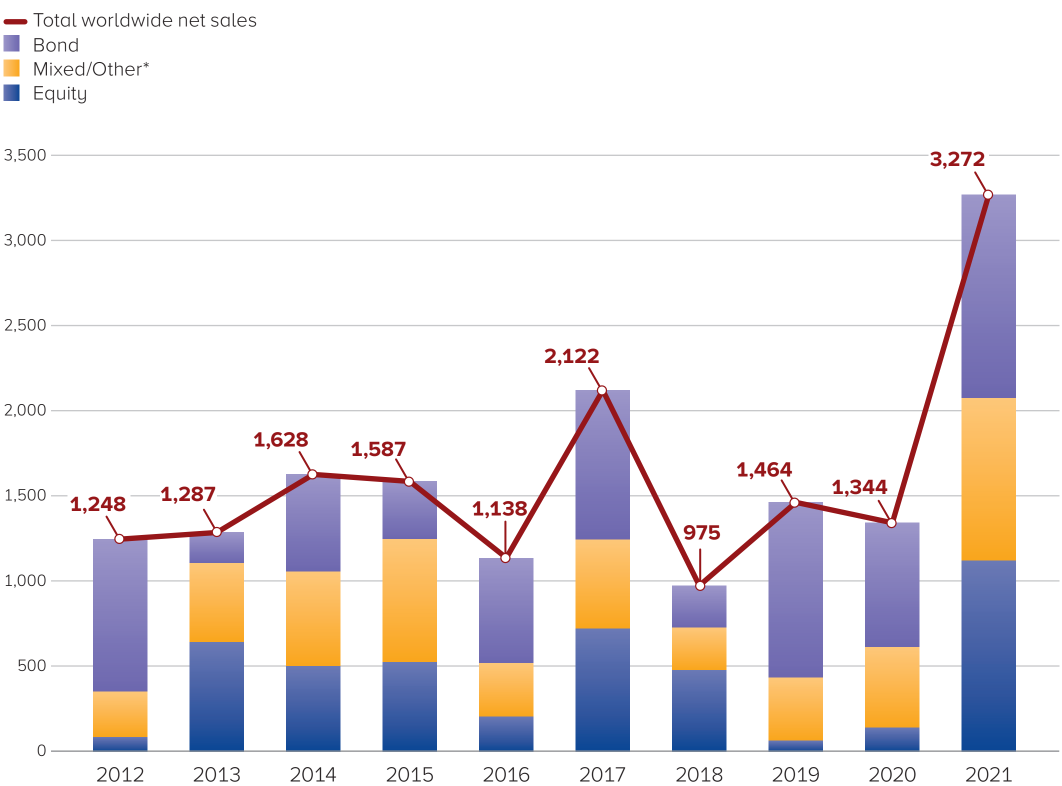
Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds. Long-term funds include equity funds, mixed/other funds (balanced/mixed, guaranteed/protected, real estate, and other funds), and bond funds, but exclude money market funds.
Source: International Investment Funds Association

Worldwide net sales of equity funds increased from $142 billion in 2020 to $1.1 trillion in 2021 (Figure 1.7). The United States and Europe contributed to most of this increase, with combined net inflows of $816 billion in 2021 following net outflows of $79 billion in 2020. These large inflows were likely associated with strong returns on US and European stocks, as net flows to equity funds have historically been related to world equity returns (Figure 3.7). In the Asia-Pacific region, equity funds experienced net inflows of $208 billion in 2021, up from $165 billion in 2020, and the rest of the world received $100 billion in net inflows in 2021, up from $56 billion in 2020.

FIGURE 1.7

Worldwide Net Sales of Regulated Open-End Long-Term Funds Increased Across All Asset Classes in 2021

Billions of US dollars by type of fund, annual



* Mixed/other funds include balanced/mixed funds, guaranteed/protected funds, real estate funds, and other funds.
Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.
Source: International Investment Funds Association

In 2021, demand for bond funds increased across all regions. In the United States, net sales of bond funds were $700 billion in 2021, up from $552 billion in 2020; in Europe, net sales were $172 billion in 2021, up from $122 billion in 2020; and in the Asia-Pacific region, net sales were $207 billion in 2021, up from $58 billion in 2020. Bond funds for the rest of the world received net inflows of $115 billion in 2021 following net outflows of $4 billion in 2020.

Combined net sales of bond funds and mixed/other funds have generally been strong over the past decade, usually outpacing net sales of equity funds. This trend can partially be explained by the aging global population. In 2021, individuals aged 50 or older were estimated to represent 25 percent of the world's population, up from 21 percent in 2011.* As investors near retirement reassess their tolerance for investment risk, they might elect to weight their purchases more toward regulated funds with less-variable returns. Because returns on bonds tend to be less variable than those on stocks, returns on bond funds and some mixed/other funds that hold substantial proportions of their total net assets in bonds also tend to be less variable than those of equity funds.

Ongoing Charges for UCITS in the European Union

The UCITS Directive has become a global success story since its adoption in 1985, with net assets of €10.9 trillion in EU-domiciled UCITS by year-end 2020. Investments in these funds are held by investors in Europe and other jurisdictions worldwide.

UCITS provide many important advantages to European investors, including professional management services, access to global markets, the benefit of regulation and supervisory oversight, and access to a wide array of investment options via "passporting"—meaning that a UCITS established in one country can be sold cross-border into one or more other countries. For example, investors in equity UCITS had access to more than 110 different investment objectives with €4.4 trillion in net assets at year-end 2020.

UCITS investors incur ongoing charges that cover a host of services, including portfolio management, administration, compliance costs, accounting services, legal costs, and payments to distributors. The total cost of these charges is disclosed to investors through either the total expense ratio (TER), often found in a UCITS' annual report and other marketing documents, or the ongoing charges figure (OCF), found in the Key Investor Information Document (KIID). Ongoing charges among UCITS vary, and these differences depend on a variety of factors. Because ongoing charges are paid from fund assets, investors pay for these investment-related services indirectly.

CONTINUED ON THE NEXT PAGE

* United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects* (2019 Revision). Available at https://population.un.org/wpp.

CONTINUED FROM THE PREVIOUS PAGE

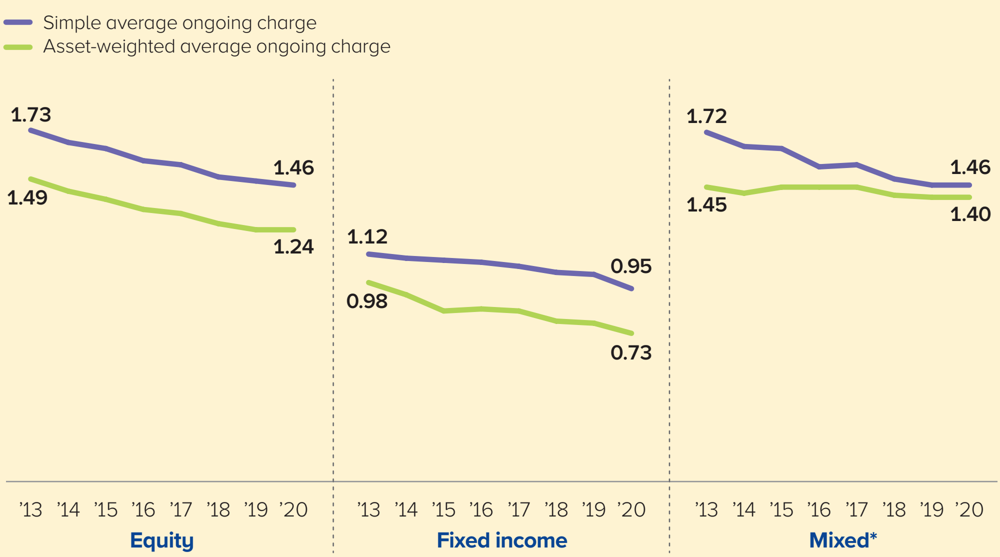
On an asset-weighted basis, average ongoing charges paid by investors in equity and fixed-income UCITS have decreased since 2013, while ongoing charges for mixed funds have remained relatively stable (Figure 1.8). In 2013, asset-weighted average ongoing charges for equity funds were 1.49 percent, or €1.49 for every €100 in assets. By 2020, the asset-weighted average had fallen to 1.24 percent. Asset-weighted average ongoing charges also declined for fixed-income funds, from 0.98 percent in 2013 to 0.73 percent in 2020. Asset-weighted average ongoing charges for mixed funds, which invest in a combination of equity and fixed-income securities, remained relatively stable during this period—1.45 percent in 2013 compared with 1.40 percent in 2020.

In each year from 2013 to 2020, the asset-weighted average ongoing charges for equity, fixed-income, and mixed funds were below their respective simple averages, indicating that investors tend to concentrate their assets in lower-cost funds. For example, the simple average ongoing charge for equity funds was 1.46 percent in 2020 compared with an asset-weighted average of 1.24 percent. For fixed-income funds, the simple average was 0.95 percent compared with an asset-weighted average of 0.73 percent; and for mixed funds, the simple average was 1.46 percent compared with an asset-weighted average of 1.40 percent.

FIGURE 1.8

Investors in UCITS Pay Below-Average Ongoing Charges

Percent



* Mixed funds invest in a combination of equity and fixed-income securities.
Note: Data exclude ETFs.
Source: Investment Company Institute tabulations of Morningstar Direct data. See *ICI Research Perspective*, "Ongoing Charges for UCITS in the European Union, 2020."

Worldwide Net Sales of Money Market Funds

Worldwide net sales of money market funds totaled $673 billion in 2021, a decrease from $1.3 trillion in 2020 (Figure 1.9). The decline in worldwide demand for money market funds was largely driven by a decrease in net sales in the United States and Europe. Investor demand for money market funds in the United States decreased from $700 billion in 2020 to $424 billion in 2021. Money market funds in Europe experienced net outflows of $20 billion in 2021 after experiencing $250 billion in net inflows in 2020. In the Asia-Pacific region, money market funds experienced net inflows of $254 billion in 2021, down from $302 billion in 2020, and money market funds in the rest of the world received $15 billion in net inflows in 2021, down from $43 billion in 2020.

Investors use money market funds because they are professionally managed, tightly regulated vehicles with holdings limited to high-quality, short-term debt instruments. As such, they are highly liquid, attractive, cash-like alternatives to bank deposits. Generally, the demand for money market funds depends on their performance and interest rate risk exposure. As the difference between yields on short-term fixed-income securities and yields on long-term fixed-income securities narrows (i.e., the "yield curve" flattens), money market funds tend to experience inflows because investors can reduce interest rate risk without sacrificing much yield by using a fund with a short duration. By contrast, steeper yield curves tend to be associated with a weaker demand for money market funds.

In 2021, demand for money market funds weakened as yield curves worldwide generally became steeper, and demand for high-quality, short-term investments—brought on by the COVID-19 public health crisis—abated. Despite the intermittent spikes in COVID-19 cases and the emergence of the Omicron variant, economic growth was projected to be strong—at the same time, inflation was expected to rise, which contributed to higher long-term yields and steeper yield curves.

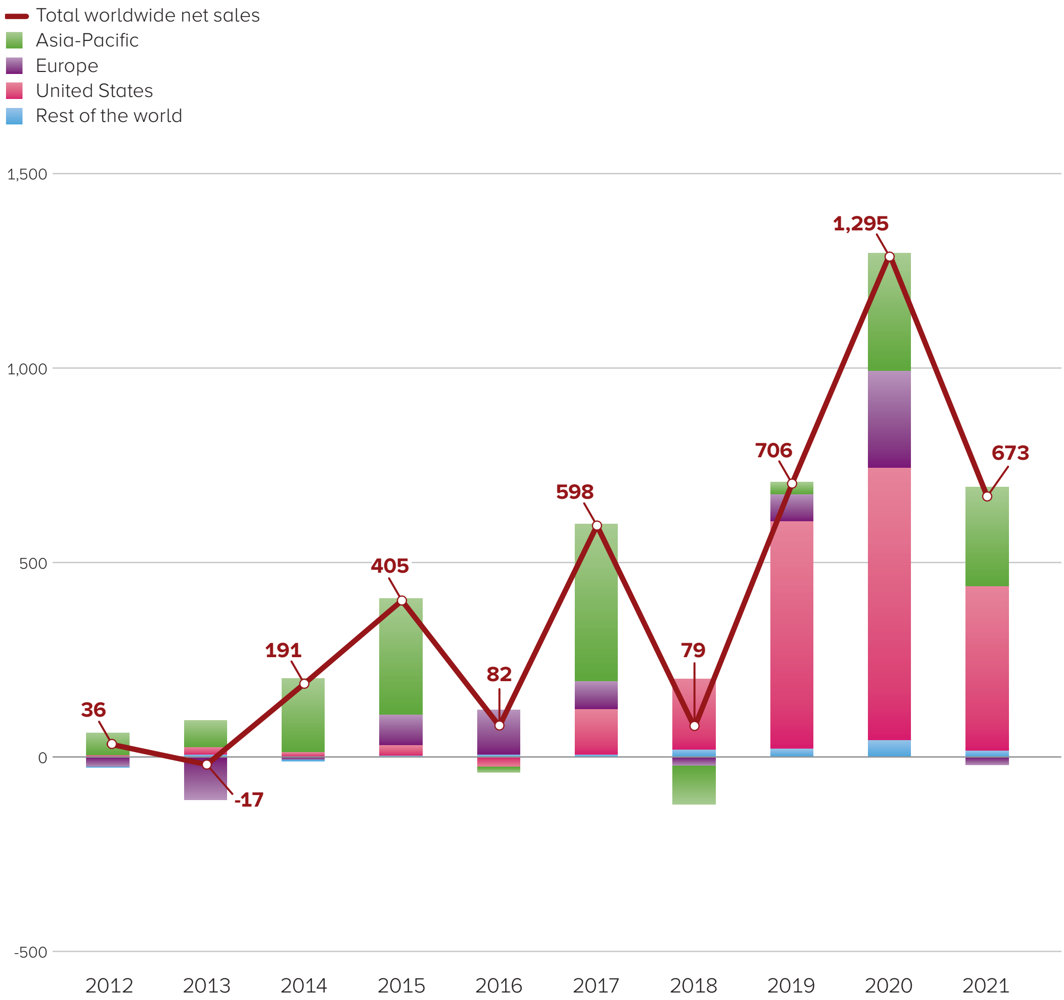
LEARN MORE

Ongoing Charges for UCITS in the European Union, 2020
www.ici.org/files/2021/per27-09.pdf

FIGURE 1.9

Worldwide Net Sales of Money Market Funds Decreased in 2021

Billions of US dollars by region, annual



Source: International Investment Funds Association

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Trends in the European Investment Fund Industry

www.efama.org/node/501

Factors Influencing Demand for Worldwide Regulated Funds

Research indicates that the size of the regulated fund market in a country or region is a reflection of a broad range of factors, including access to well-developed capital markets, household demand for well-diversified investments, strong and appropriate regulation of funds and financial markets, availability of distribution structures that facilitate access to regulated funds, returns and costs of regulated funds relative to other available investment products, demographics (see page 11), and high or improving levels of economic development.

Strong Regulatory Framework

The United States and Europe are home to the world's largest regulated fund industries (Figure 1.3). The relatively large size of the US market is the result of several factors. One is that US-regulated funds have been available for around 100 years—for example, mutual funds have been available to US investors since the 1920s. Another factor is the strong regulatory framework for securities markets and regulated funds in the United States that was established in the wake of the stock market crash of 1929 and the Great Depression—most notably, the Securities Act of 1933 and the Investment Company Act of 1940. Grounded in this sound framework, investor confidence in securities markets and regulated funds led to steady growth in US-regulated funds' assets.

In recent decades, US demand has also been fueled by the availability of regulated funds as investment options in tax-advantaged accounts (for example, 401(k) plans), and by a broad and growing availability of fund types that help investors meet their investment goals (for example, ETFs and target date funds). Also, assets of regulated funds in the past decade have been boosted by stock and bond market appreciations and by reinvestment of dividends into funds.

Europe's regulated fund market has also grown rapidly over the past few decades. One important factor helping to drive this growth is the UCITS regulatory framework, which includes passporting—the ability for funds domiciled in one EU country to be offered for sale and purchased by investors in another EU country. Additionally, many countries outside of Europe, such as in the Asia-Pacific region, allow UCITS to be offered for sale to their citizens. The pooling of assets from investors in a range of countries allows for economies of scale that help to lower the costs of funds to individual investors. The UCITS framework further promotes asset pooling across countries by allowing an individual fund to offer share classes that are denominated in a range of different currencies (for example, euros, US dollars, British pounds sterling) and that are adapted to different tax structures across jurisdictions.

Finally, while the Asia-Pacific region had only 14 percent of the worldwide total net assets of regulated funds at year-end 2021 (Figure 1.3), the market has been growing. And given the size of the population and the rapidly increasing economic development and wealth in many countries there, the region's regulated fund market has potential for continued growth.

Well-Developed Capital Markets

Demand for regulated funds in a country is positively associated with its level of equity capital market development—that is, its stock market capitalization relative to its gross domestic product (GDP). Residents of countries with more highly developed equity capital markets (higher ratios of stock market capitalization to GDP), such as the United States and members of the European Union, tend to hold a larger share of their household financial wealth in regulated funds.

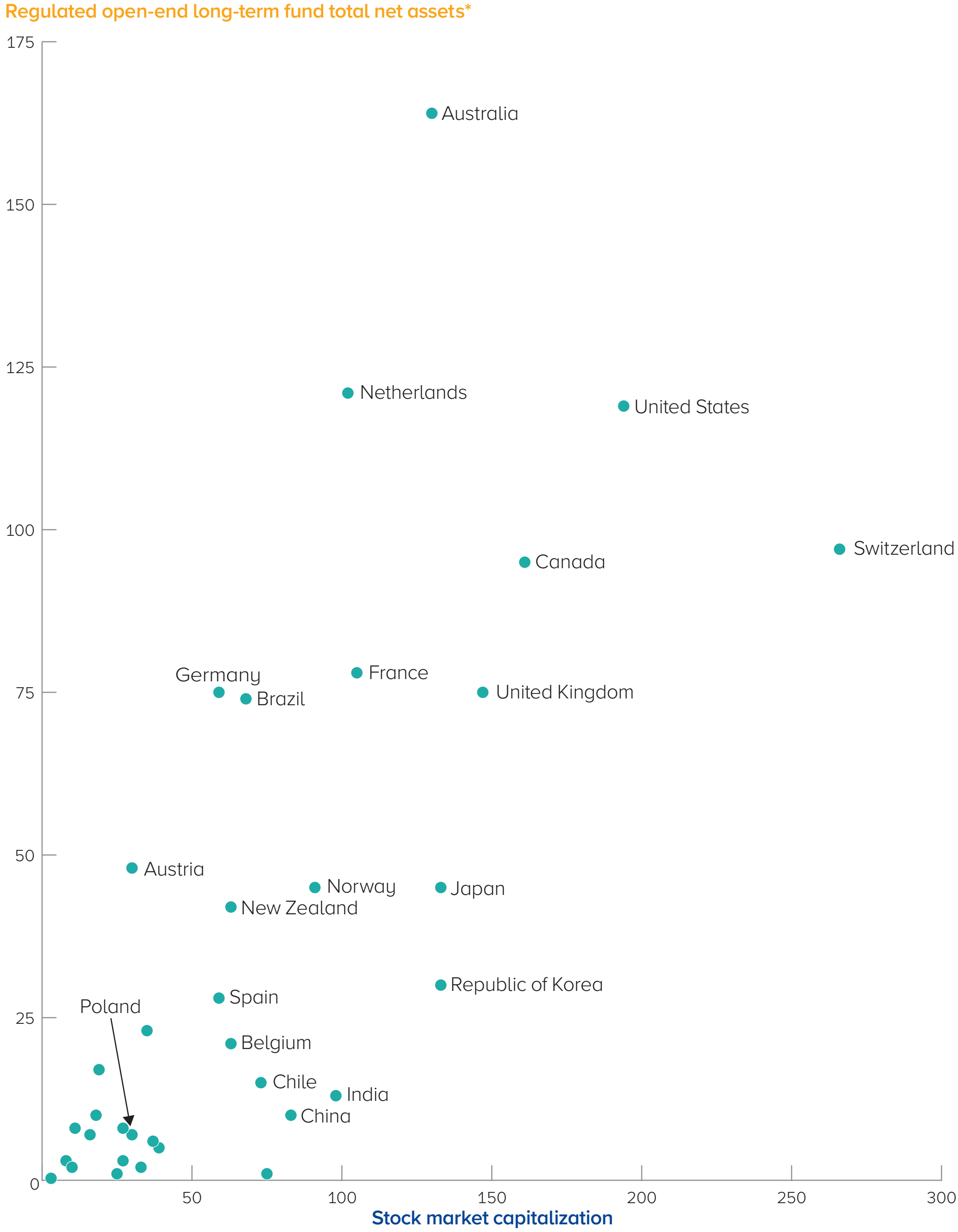
Figure 1.10 illustrates the relationship between equity capital market development and the size of the regulated fund market (total net assets in regulated long-term funds in a country relative to its GDP) across countries. The horizontal axis measures a country's equity capital market development; the vertical axis plots the size of the regulated fund market in a given country.

Generally, as stock market capitalization rises relative to GDP, so do total net assets in regulated funds (Figure 1.10). Countries with more-developed equity capital markets—such as the United States, the United Kingdom, the Netherlands, or Switzerland—also tend to have a higher ratio of regulated long-term fund assets to GDP. For example, the Netherlands' stock market capitalization is close to its GDP (102 percent on the horizontal axis), indicating a highly developed equity capital market, while total net assets in regulated long-term funds are also high relative to its GDP (121 percent on the vertical axis), indicating a well-developed fund industry. In contrast, countries with less-developed equity capital markets, such as Poland, tend to also have lower total net assets in regulated long-term funds relative to GDP.

FIGURE 1.10

Countries with More-Developed Equity Capital Markets Tend to Have More-Developed Fund Industries

Percentage of gross domestic product, 2020



* Regulated open-end funds include mutual funds, ETFs, and institutional funds. Long-term funds include equity funds, mixed/other funds (balanced/mixed, guaranteed/protected, real estate, and other funds), and bond funds, but exclude money market funds.

Source: Investment Company Institute tabulations of data from the International Investment Funds Association, Bloomberg, World Bank, World Federation of Exchanges, and Euronext

Other Factors Influencing Demand

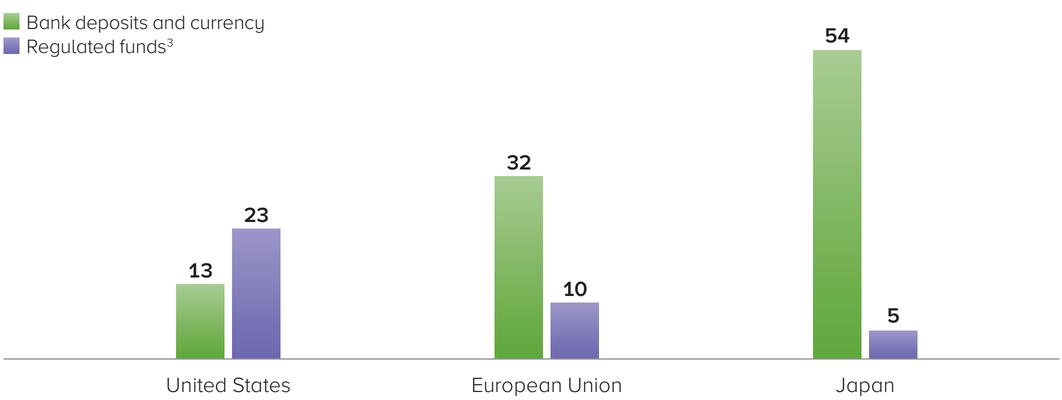
Other factors also influence the demand for regulated funds, and therefore, the size of the regulated fund market. For example, in countries such as Japan where banks have historically dominated the financial landscape, households tend to hold more of their financial assets in bank products and less in regulated funds (Figure 1.11). Although Japan's stock market capitalization is 133 percent of GDP, comparable to that of the United Kingdom, it has substantially less net assets in regulated long-term funds as a proportion of its GDP (45 percent) (Figure 1.10).

Households in Japan hold more than half (54 percent) of their financial assets in bank deposits and currency, but very little in regulated funds (5 percent) (Figure 1.11). By contrast, in the United States, banks compete with capital market instruments for households' financial assets; as a result, households hold a relatively small fraction (13 percent) of their assets in bank deposits compared with 23 percent in regulated funds. EU countries are intermediate cases among industrialized nations, with 32 percent of households' financial wealth in bank deposits and 10 percent in regulated funds. Differences in public policy and tax regimes across countries also likely have contributed to the dispersion of deposits and regulated funds held by households.

FIGURE 1.11

US Households Hold More of Their Wealth in Regulated Funds; Bank-Centric Countries Have a Lower Share

Percentage of household[1] financial wealth, selected dates[2]



[1] Households include households and nonprofit institutions serving households.
[2] Data for the United States and Japan are as of 2021:Q4; data for the European Union are as of 2021:Q3.
[3] For the United States, regulated funds include mutual funds and ETFs. For the European Union and Japan, regulated funds include investment fund shares as defined by their respective systems of national accounts.
Source: Investment Company Institute tabulations of data from the Investment Company Institute, Federal Reserve Board, Eurostat, and Bank of Japan

Size of Worldwide Regulated Funds in Global Capital Markets

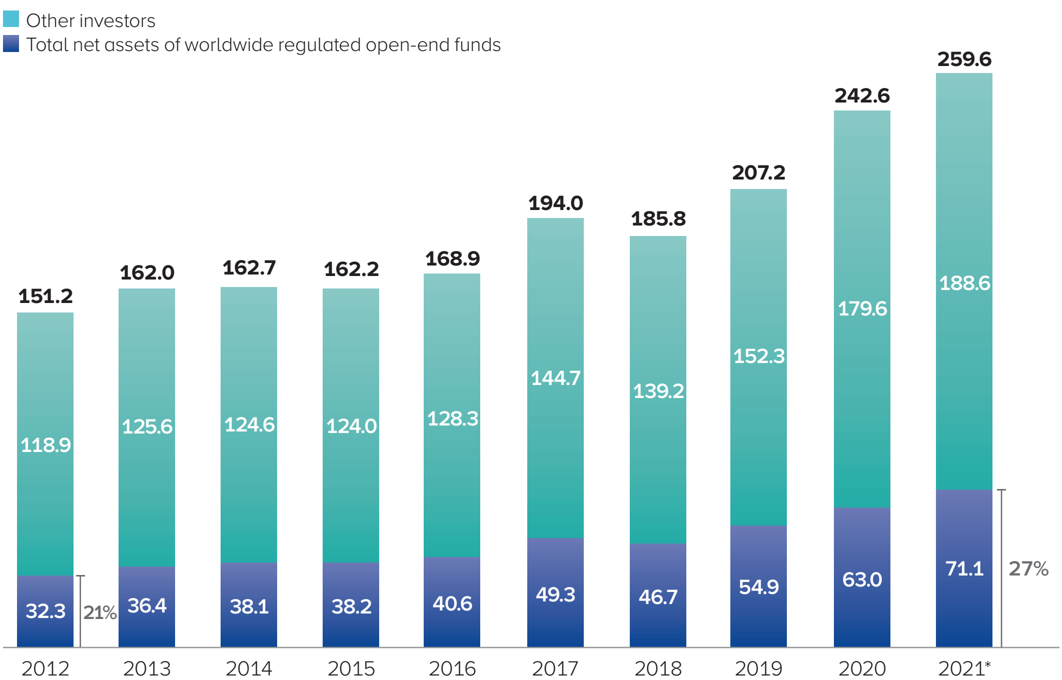
Regulated funds are a growing source of capital for world financial markets, helping finance businesses, governments, and household activities. As of year-end 2021, worldwide capital markets, as measured by the value of equity and debt securities outstanding, totaled $259.6 trillion, of which regulated funds' net assets were 27 percent, or $71.1 trillion (Figure 1.12).

The share of worldwide capital markets held by regulated funds has grown over the past decade. In 2012, worldwide regulated funds held 21 percent of worldwide capital markets, rising to 27 percent in 2021. The remaining 73 percent of worldwide capital markets in 2021 were held by a wide range of other investors, such as central banks, sovereign wealth funds, defined benefit pension plans, banks, insurance companies, hedge funds, broker-dealers, and households' direct holdings of stocks and bonds.

FIGURE 1.12

Worldwide Regulated Open-End Fund Share of Worldwide Equity and Debt Markets

Trillions of US dollars, year-end



* Data for worldwide debt markets are as of September 30, 2021.

Note: Regulated open-end funds include mutual funds, ETFs, and institutional funds.

Source: Investment Company Institute tabulations of data from the International Investment Funds Association, World Federation of Exchanges, and Bank for International Settlements

CHAPTER

2

US-Registered Investment Companies

Registered investment companies are an important segment of the asset management industry in the United States. US-registered investment companies play a major role in the US economy and financial markets, and a growing role in global financial markets. These funds managed more than $34 trillion in total net assets at year-end 2021, largely on behalf of 108 million US retail investors. The industry has experienced robust growth over the past quarter century from asset appreciation and strong demand from households due to rising household wealth, the aging US population, and the evolution of employer-based retirement systems. US funds supply investment capital in securities markets around the world and are important investors in the US stock and municipal securities markets.

IN THIS CHAPTER

Number of Investment Companies

The total number of investment companies* offered by US financial services companies has increased overall since 2005 (the recent low point) but remains below the recent peak at year-end 2000 (Figure 2.1). In 2021, the overall number of investment companies rose slightly as an increase in the number of exchange-traded funds (ETFs) more than offset the decrease in mutual funds, closed-end funds, and unit investment trusts (UITs). The number of mutual funds decreased from 9,027 at year-end 2020 to 8,887 at year-end 2021; the number of closed-end funds fell to 461 at year-end 2021, the lowest level in recent history; and the number of UITs fell from 4,310 at year-end 2020 to 4,112 at year-end 2021. These declines contrast with the continued growth in the number of ETFs, which increased from 2,296 at year-end 2020 to 2,690 at year-end 2021.

FIGURE 2.1

Number of Investment Companies by Type

Year-end

	Mutual funds[1]	ETFs[2]	Closed-end funds	UITs	Total
2000	8,349	80	482	10,072	18,983
2001	8,480	102	490	9,295	18,367
2002	8,490	113	543	8,303	17,449
2003	8,406	119	581	7,233	16,339
2004	8,411	152	618	6,499	15,680
2005	8,439	204	635	6,019	15,297
2006	8,704	359	646	5,907	15,616
2007	8,723	629	664	6,030	16,046
2008	8,860	743	644	5,984	16,231
2009	8,594	820	629	6,049	16,092
2010	8,523	950	626	5,971	16,070
2011	8,662	1,166	634	6,043	16,505
2012	8,742	1,239	604	5,787	16,372
2013	8,970	1,332	601	5,552	16,455
2014	9,256	1,451	570	5,381	16,658
2015	9,515	1,644	561	5,188	16,908
2016	9,505	1,774	534	5,100	16,913
2017	9,354	1,900	532	5,035	16,821
2018	9,616	2,057	504	4,917	17,094
2019	9,414	2,176	501	4,572	16,663
2020	9,027	2,296	492	4,310	16,125
2021	8,887	2,690	461	4,112	16,150

[1] Mutual fund data include mutual funds that invest primarily in other mutual funds.
[2] ETF data include ETFs that invest primarily in other ETFs.

* The terms *investment companies* and *US investment companies* are used at times throughout this book in place of *US-registered investment companies*. US-registered investment companies are open-end mutual funds, exchange-traded funds, closed-end funds, and unit investment trusts.

Investment Company Assets

Total assets in US-registered investment companies rose by $4.9 trillion in 2021, to a year-end level of $34.6 trillion (Figure 2.2). With a combined $34.2 trillion in assets, mutual funds and ETFs accounted for the vast majority of total industry assets.

FIGURE 2.2

Investment Company Total Net Assets by Type

Billions of dollars, year-end

	Mutual funds	ETFs	Closed-end funds[1]	UITs	Total[2]
2000	$6,956	$66	$150	$74	$7,245
2001	6,969	83	145	49	7,246
2002	6,380	102	161	36	6,680
2003	7,399	151	216	36	7,801
2004	8,093	228	255	37	8,614
2005	8,889	301	276	41	9,507
2006	10,395	423	299	50	11,167
2007	11,995	608	316	53	12,973
2008	9,616	531	185	29	10,360
2009	11,104	777	224	38	12,144
2010	11,825	992	239	51	13,107
2011	11,624	1,048	244	60	12,976
2012	13,046	1,337	265	72	14,720
2013	15,039	1,675	282	87	17,082
2014	15,867	1,975	292	101	18,234
2015	15,648	2,101	263	94	18,106
2016	16,342	2,525	265	85	19,216
2017	18,750	3,401	277	85	22,513
2018	17,698	3,371	252	70	21,391
2019	21,277	4,396	279	79	26,031
2020	23,883	5,449	282	78	29,692
2021	26,964	7,191	309	95	34,559

[1] Closed-end fund data include preferred share classes.
[2] Total investment company assets include mutual fund holdings of closed-end funds and ETFs.

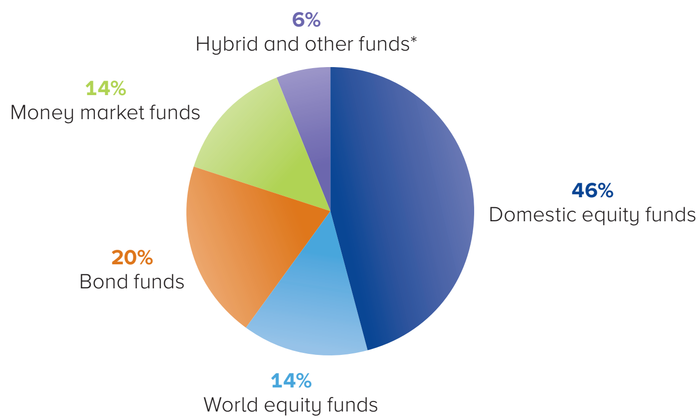
At year-end 2021, US-registered mutual fund and ETF total net assets were concentrated in long-term funds, with equity funds alone constituting 60 percent (Figure 2.3). Domestic equity funds (those that invest primarily in shares of US corporations) held 46 percent of net assets; world equity funds (those that invest significantly in shares of non-US corporations) accounted for 14 percent. Bond funds held 20 percent of fund net assets. Money market funds, hybrid funds, and other funds—such as those that invest primarily in commodities—held the remaining 20 percent.

During 2021, mutual funds recorded an aggregate $363 billion in net inflows (Figure 3.6). Money market funds received $422 billion of net inflows, while long-term mutual funds saw net outflows of $59 billion in 2021. Additionally, mutual fund shareholders reinvested $283 billion in income dividends and $787 billion in capital gains distributions that mutual funds paid out during the year. Investors continued to show strong demand for ETFs, with net share issuance (which includes reinvested dividends) totaling $935 billion in 2021 (Figure 4.8). UITs experienced net new deposits of $60 billion, a 34 percent increase from the previous year, and closed-end funds issued a net $16.8 billion in new shares (Figure 5.3).

FIGURE 2.3

The Majority of US Mutual Fund and ETF Total Net Assets Were in Equity Funds

Percentage of total net assets, year-end 2021



US mutual fund and ETF total net assets: $34.2 trillion

* The *other funds* category includes ETFs—both registered and not registered under the Investment Company Act of 1940—that invest primarily in commodities, currencies, and futures.

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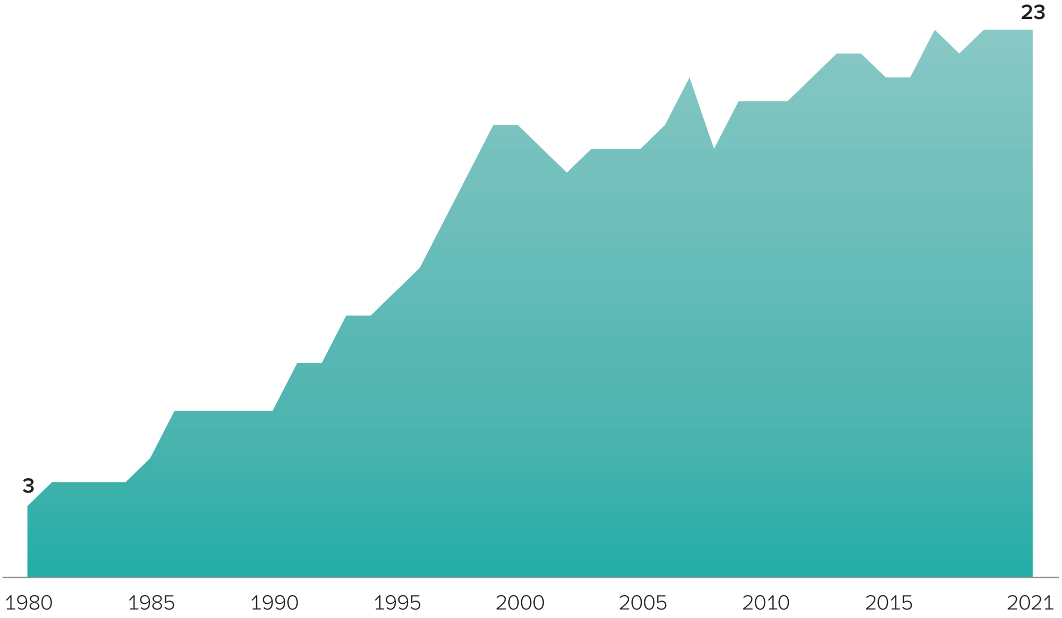
Americans' Continued Reliance on Investment Companies

Households make up the largest group of investors in funds, and registered investment companies managed 23 percent of household financial assets at year-end 2021 (Figure 2.4).

FIGURE 2.4

Share of US Household Financial Assets Held in Investment Companies

Percentage of US household financial assets, year-end



Note: Household financial assets held in registered investment companies include holdings of mutual funds, ETFs, closed-end funds, and UITs. Mutual funds held in IRAs, defined contribution retirement plans, variable annuities, 529 plans, and Coverdell education savings accounts are included.

Sources: Investment Company Institute and Federal Reserve Board

The growth of individual retirement accounts (IRAs) and defined contribution (DC) plans, particularly 401(k) plans, explains some of the increased household reliance on investment companies in the past three decades. IRAs made up 12 percent of household financial assets at year-end 2021, up from 4 percent in 1991, while DC plans have risen over the same period from 6 percent of household financial assets to 9 percent (with 401(k) plans alone accounting for 7 percent of household financial assets at year-end 2021).

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The US Retirement Market

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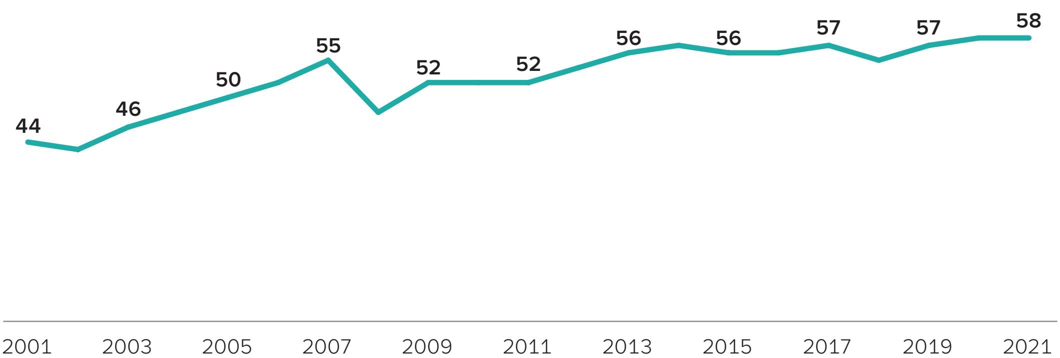
Mutual funds made up a significant portion of DC plan assets (58 percent) and IRA assets (45 percent) at year-end 2021 (Figure 2.5). In addition, the share of DC plan assets held in mutual funds has grown over the past two decades, from 44 percent at year-end 2001 to 58 percent at year-end 2021. Mutual funds also managed $1.5 trillion in variable annuities outside retirement accounts, as well as $12.9 trillion of other assets outside retirement accounts.

FIGURE 2.5

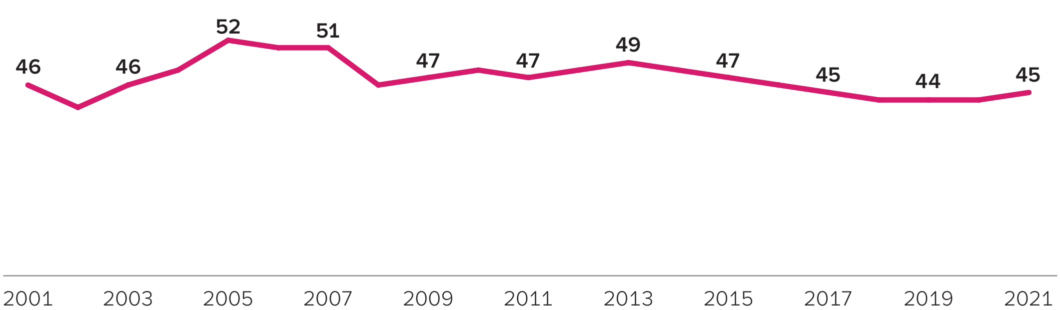
Mutual Funds in US Household Retirement Accounts

Percentage of retirement assets in mutual funds by type of retirement vehicle, year-end

DC plans*



IRAs



* This category includes private-sector employer-sponsored DC plans—such as 401(k) plans—403(b) plans, 457 plans, and the Federal Employees Retirement System (FERS) Thrift Savings Plan (TSP).

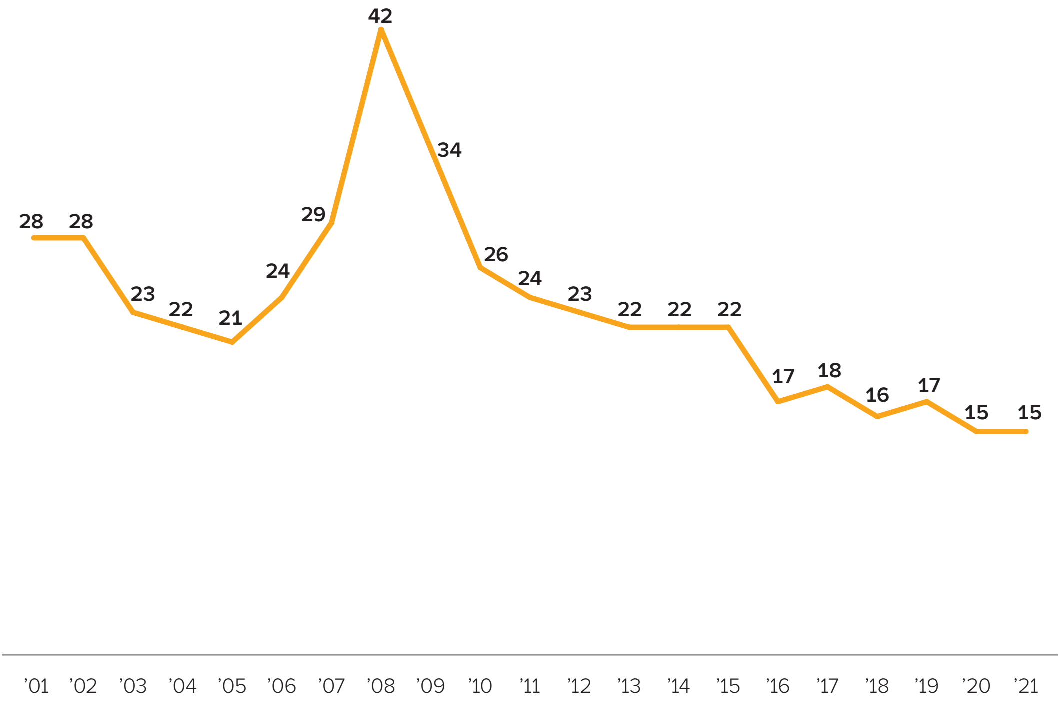
Source: Investment Company Institute. For a complete list of sources, see Investment Company Institute, "The US Retirement Market, Fourth Quarter 2021."

Businesses and other institutional investors also rely on funds. For instance, institutions can use money market funds to manage some of their cash and other short-term assets. At year-end 2021, nonfinancial businesses held 15 percent, or $816 billion, of their short-term assets in money market funds (Figure 2.6). Institutional investors also have contributed to the growing demand for ETFs. Investment managers—including mutual funds, pension funds, hedge funds, and insurance companies—use ETFs to invest in markets, to manage liquidity and investor flows, or to hedge their exposures.

FIGURE 2.6

Money Market Funds Managed 15 Percent of US Nonfinancial Businesses' Short-Term Assets in 2021

Percentage of short-term assets, year-end



Note: US nonfinancial businesses' short-term assets consist of foreign deposits, checkable deposits and currency, time and savings deposits, money market funds, repurchase agreements, and commercial paper.

Sources: Investment Company Institute and Federal Reserve Board

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Money Market Fund Resource Center

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Role of Investment Companies in Financial Markets

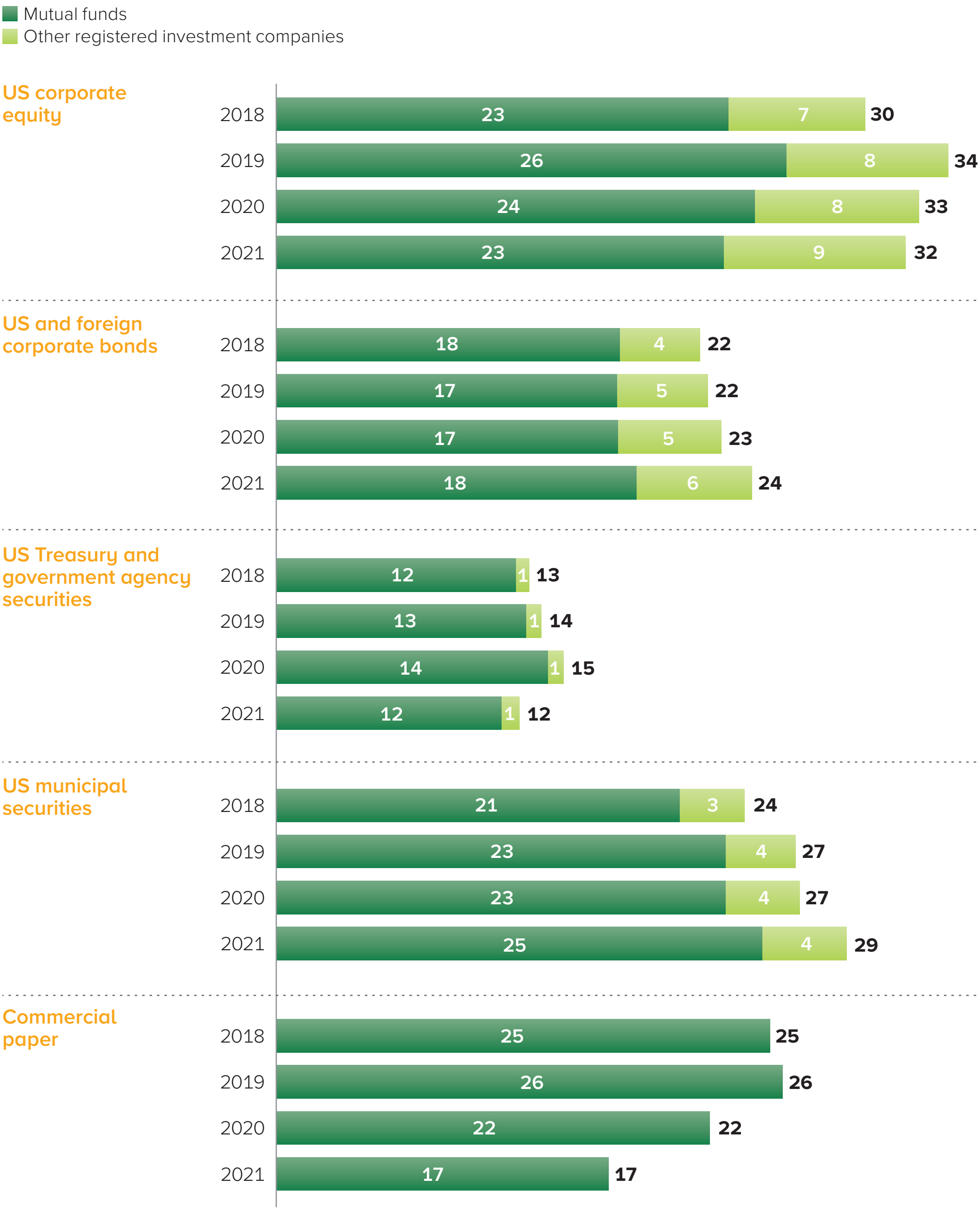
Investment companies have been important investors in domestic financial markets for much of the past 30 years. They have held a largely stable share of the securities outstanding across a variety of asset classes in recent years, with mutual funds accounting for the majority of the holdings (Figure 2.7). At year-end 2021, investment companies held 32 percent of US-issued equities outstanding, little changed from the 30 percent at year-end 2018.

Investment companies held 24 percent of bonds issued by US corporations and foreign bonds held by US residents at year-end 2021, compared with 22 percent at year-end 2018. Also, investment companies held 12 percent of the US Treasury and government agency securities outstanding at year-end 2021, compared with 13 percent at year-end 2018 (Figure 2.7). Investment companies have been one of the largest groups of investors in the US municipal securities market, holding 29 percent of the securities outstanding at year-end 2021. Finally, mutual funds are important investors in the US commercial paper market, which is a critical source of short-term funding for many major corporations around the world. At year-end 2021, the share of the commercial paper market held by mutual funds (primarily prime money market funds) was 17 percent, down from 22 percent at year-end 2020.

FIGURE 2.7

Investment Companies Channel Investment to Stock, Bond, and Money Markets

Percentage of total market securities held by investment companies, year-end



Sources: Investment Company Institute, Federal Reserve Board, and World Federation of Exchanges

Growth of Index Funds

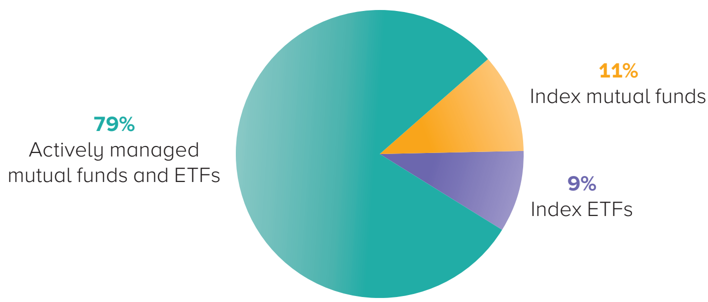
Index funds are designed to track the performance of a market index. To do this, the fund manager purchases all the securities in the index or a representative sample of them—mirroring the index composition—so that the performance of the fund tracks the value of the index. This approach to portfolio management is the primary reason that index funds tend to have below-average expense ratios (Figures 6.7 and 6.9).

Index mutual funds were first offered in the 1970s, followed by index ETFs in the 1990s. By year-end 2021, total net assets in these two index fund categories had grown to $12.5 trillion. Along with this growth, index fund assets have become a larger share of overall fund assets. At year-end 2021, index mutual funds and index ETFs together accounted for 43 percent of assets in long-term funds, up from 21 percent at year-end 2011 (Figure 2.8). Nevertheless, actively managed funds still accounted for the majority of long-term fund assets (57 percent) at year-end 2021.

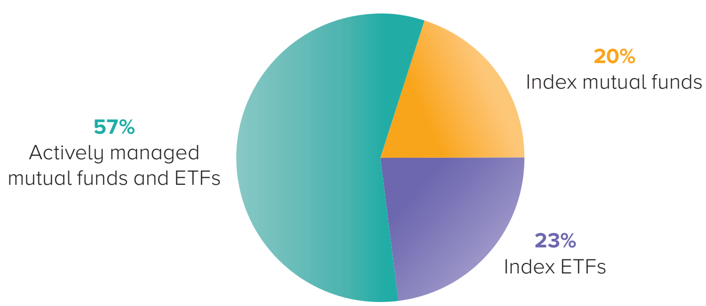
FIGURE 2.8

Index Funds Have Grown as a Share of the Fund Market

Percentage of total net assets, year-end



2011 total net assets: $9.9 trillion



2021 total net assets: $29.3 trillion

Note: Data for ETFs exclude non–1940 Act ETFs. Data for mutual funds exclude money market funds.

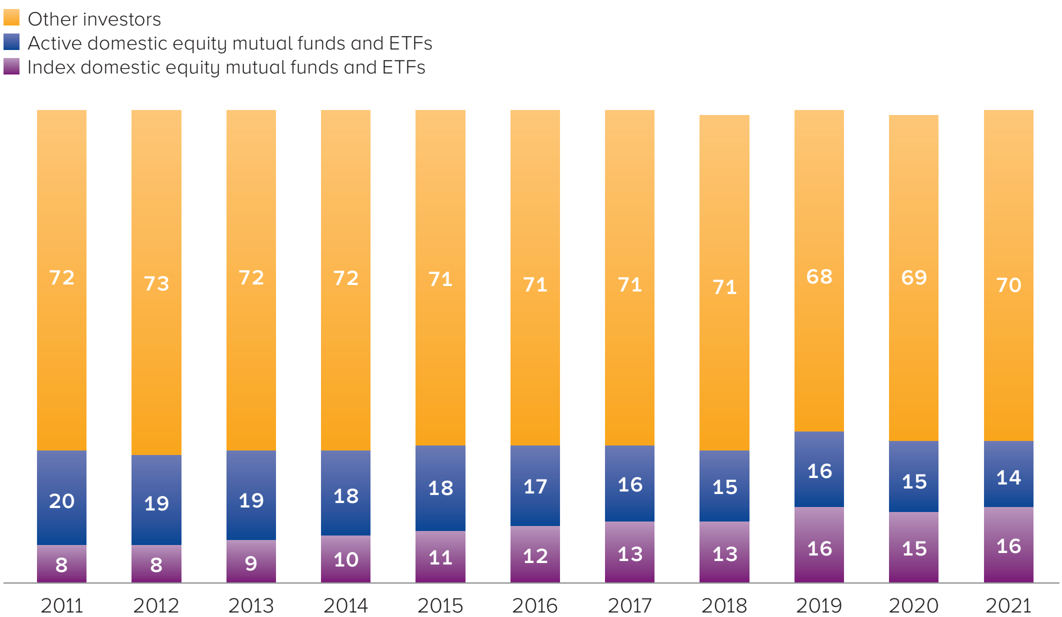
Index funds' growth has been concentrated in funds that invest in equities. Over the past decade, 66 percent of inflows into index funds went to domestic and world equity index funds, whereas bond and hybrid index funds received 34 percent.

Despite their significant growth over the past decade, index domestic equity mutual funds and ETFs remain relatively small investors in the US stock markets, holding only 16 percent of the value of US stocks at year-end 2021 (Figure 2.9). Actively managed domestic equity mutual funds and ETFs held another 14 percent, while other investors—including hedge funds, pension funds, life insurance companies, and individuals—held the majority (70 percent).

FIGURE 2.9

Index Fund Share of US Stock Market Is Small

Percentage of US stock market capitalization, year-end



Sources: Investment Company Institute and World Federation of Exchanges

Unit Investment Trusts

Unit investment trusts (UITs) are registered investment companies with characteristics of both mutual funds and closed-end funds. Like mutual funds, UITs issue redeemable shares (called units), and like closed-end funds, they typically issue a specific, fixed number of shares. But unlike either mutual funds or closed-end funds, UITs have a preset termination date based on the portfolio's investments and the UIT's investment goals. UITs investing in long-term bonds might have a preset termination date of 20 to 30 years, depending on the maturity of the bonds they hold. UITs investing in stocks might seek to capture capital appreciation in a few years or less. When a UIT terminates, proceeds from the securities are paid to unit holders or, at a unit holder's election, reinvested in another trust.

UITs fall into two main categories: bond (or debt) trusts and equity trusts. Bond trusts are either taxable or tax-free; equity trusts are either domestic or international/global. The first UIT, introduced in 1961, held tax-free bonds, and historically, most UIT total net assets were invested in bonds. Equity UITs, however, have grown in popularity over the past three decades. Assets in equity UITs have far exceeded assets of bond UITs in recent years and constituted 93 percent of the assets in UITs at year-end 2021 (Figure 2.10). The number of trusts outstanding has been decreasing as sponsors created fewer new trusts and existing trusts reached their preset termination dates.

Federal law requires that UITs have a largely fixed portfolio—one that is not actively managed or traded. Once the trust's portfolio has been selected, its composition may change only in very limited circumstances. Most UITs hold a diversified portfolio, described in detail in the prospectus, with securities professionally selected to meet a stated investment goal, such as growth, income, or capital appreciation.

Investors can obtain UIT price quotes from brokerage or investment firms and investment company websites. Some, but not all, UITs list their prices on Nasdaq's Mutual Fund Quotation Service. Some broker-dealers offer their own trusts or sell trusts offered by nationally recognized independent sponsors. Units of these trusts can be bought through their registered representatives. Units can also be bought from the representatives of smaller investment firms that sell trusts sponsored by third-party firms.

Though a fixed number of units of a UIT are sold in a public offering, a trust sponsor is likely to maintain a secondary market, in which investors can sell their units back to the sponsor and other investors can buy those units. Even absent a secondary market, UITs are required by law to redeem outstanding units at their net asset value (NAV), which is based on the underlying securities' current market value.

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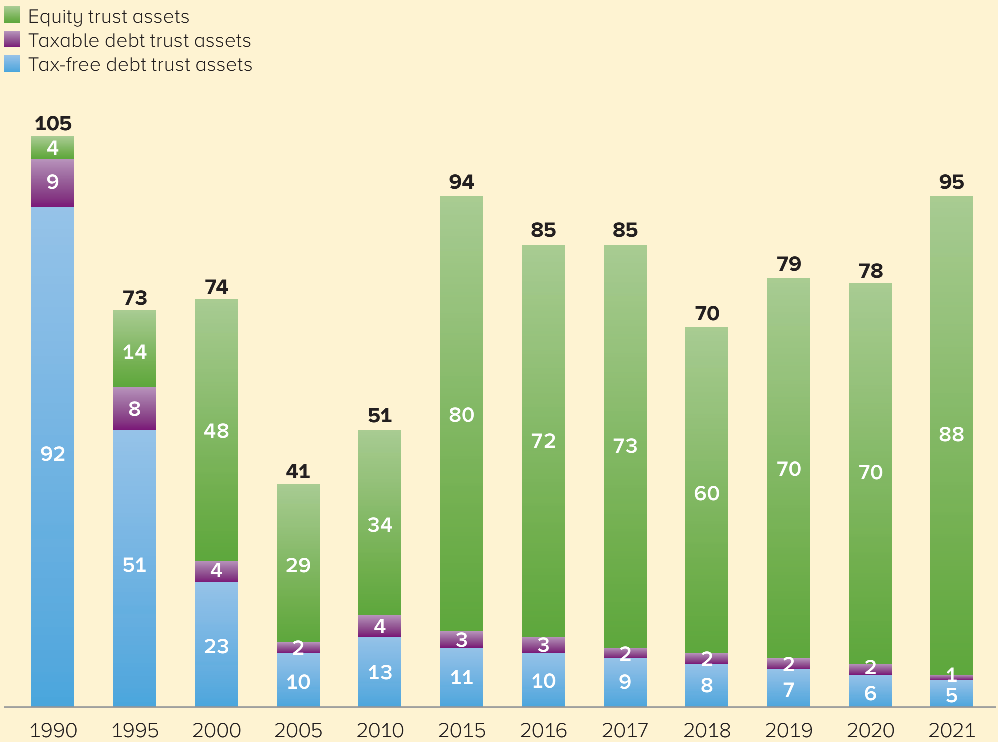
FIGURE 2.10

Total Net Assets and Number of UITs

Billions of dollars, year-end



Total number of trusts

1990	1995	2000	2005	2010	2015	2016	2017	2018	2019	2020	2021
12,131	12,979	10,072	6,019	5,971	5,188	5,100	5,035	4,917	4,572	4,310	4,112

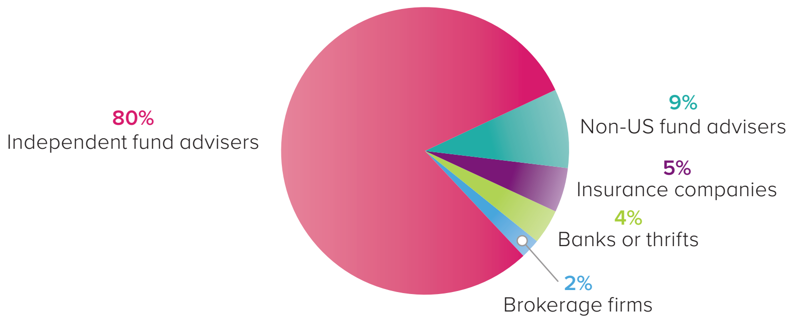
Fund Complexes and Sponsors

A variety of financial services companies offer registered funds in the United States. At year-end 2021, 80 percent of investment company complexes were independent fund advisers (Figure 2.11), managing 72 percent of investment company assets. Other types of investment company complexes in the US market include non-US fund advisers, insurance companies, banks, thrifts, and brokerage firms.

FIGURE 2.11

80 Percent of Fund Complexes Were Independent Fund Advisers

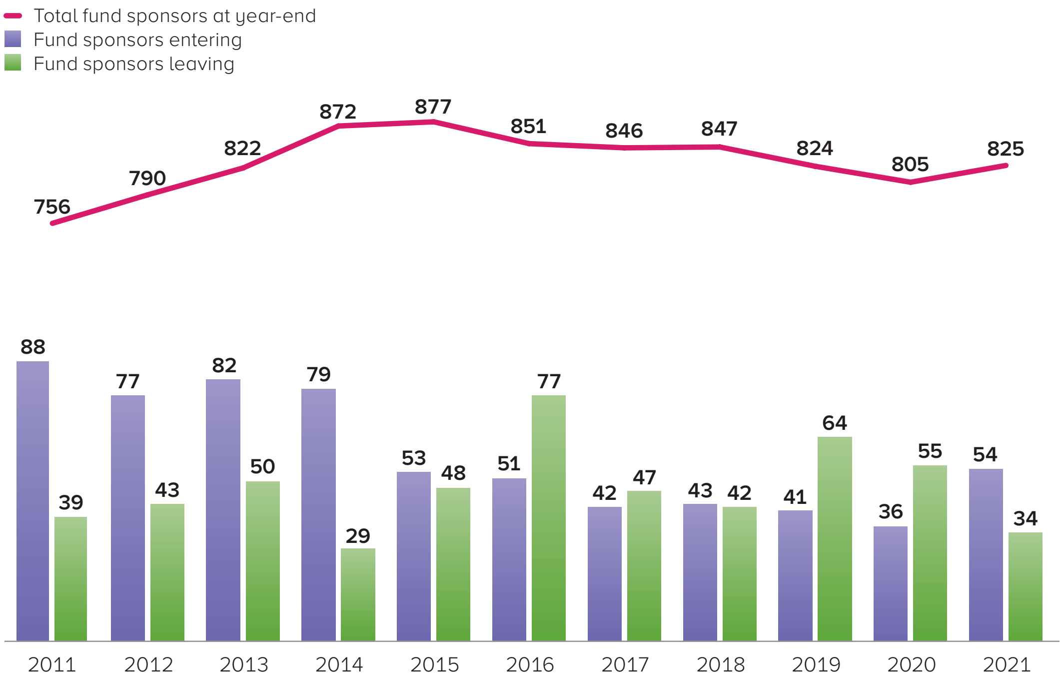
Percentage of investment company complexes by type of intermediary, year-end 2021



At year-end 2021, 825 fund sponsors from around the world competed in the US market to provide investment management services to fund investors (Figure 2.12). The decline in the number of fund sponsors since year-end 2015 may be due to a variety of business decisions, including larger fund sponsors acquiring smaller ones, fund sponsors liquidating funds and leaving the business, or larger sponsors selling their advisory businesses. Prior to 2015, the number of fund sponsors had been increasing as the economy and financial markets recovered from the 2007–2009 financial crisis. Overall, from 2012 through 2021, 558 sponsors entered the market while 489 left, for a net increase of 69.

FIGURE 2.12

Number of Fund Sponsors



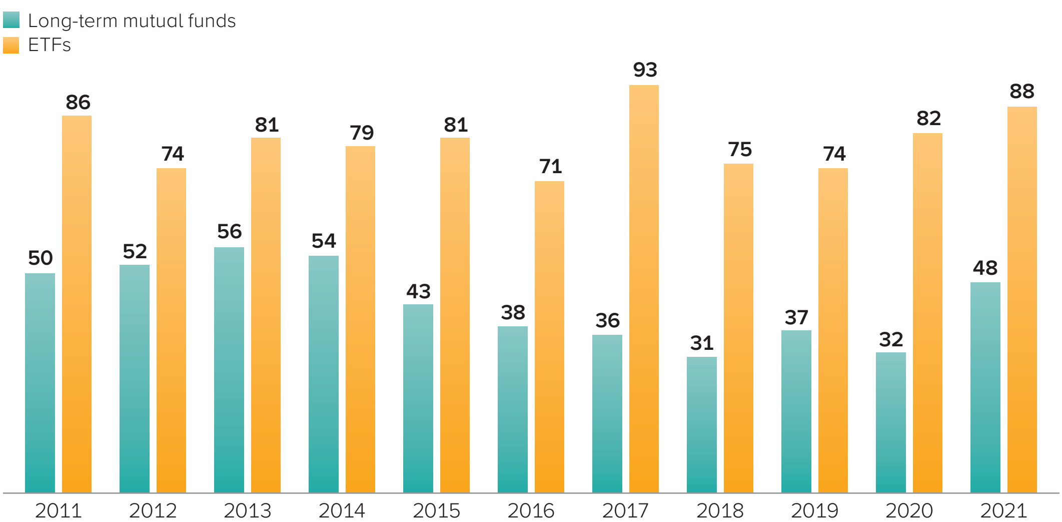
Many recent entrants to the fund industry have adopted solutions in which the fund's sponsor arranges for a third party to provide certain services (e.g., audit, trustee, some legal) through a turnkey setup. This allows the sponsor to focus more on managing portfolios and gathering assets. Through an arrangement known as a series trust, the third party provides services to a number of independent fund sponsors under a single complex that serves as an "umbrella." This can be cost-efficient because the costs of operating funds are spread across the combined assets of a number of funds in the series trust.

Although the increased availability of other investment products has led to changes in how investors are allocating their portfolios in the past decade, the percentage of mutual fund companies retaining assets and attracting net new investments increased substantially in 2021. Nearly half of fund complexes saw positive flows to their long-term mutual funds in 2021, up from 32 percent in 2020 and the highest level since 2014 (Figure 2.13). Demand for long-term mutual funds offered by smaller fund complexes, some of which may be organized as series trusts (see above), contributed to this increase. Among mutual fund complexes that experienced outflows in 2020 followed by inflows in 2021, 64 percent had less than $5 billion in mutual fund assets under management at year-end 2020.

FIGURE 2.13

Positive Flows to Long-Term Mutual Funds and Positive Net Share Issuance of ETFs

Percentage of fund complexes



Note: Long-term mutual fund data include net new cash flow and reinvested dividends; ETF data for net share issuance include reinvested dividends.

In the past decade, the concentration of mutual fund and ETF assets managed by the largest fund complexes has increased. The share of assets managed by the five largest firms rose from 35 percent at year-end 2005 to 54 percent at year-end 2021, and the share managed by the 10 largest firms increased from 46 percent to 66 percent (Figure 2.14). Some of the increase in market share occurred at the expense of the middle tier of firms—those ranked from 11 to 25—whose market share fell from 21 percent in 2005 to 17 percent in 2021.

FIGURE 2.14

Share of Mutual Fund and ETF Assets at the Largest Fund Complexes

Percentage of total net assets of mutual funds and ETFs, year-end

	2005	2010	2015	2016	2017	2018	2019	2020	2021
Largest 5 complexes	35	42	45	47	50	51	53	53	54
Largest 10 complexes	46	55	56	58	60	61	64	64	66
Largest 25 complexes	67	74	75	76	77	79	80	81	83

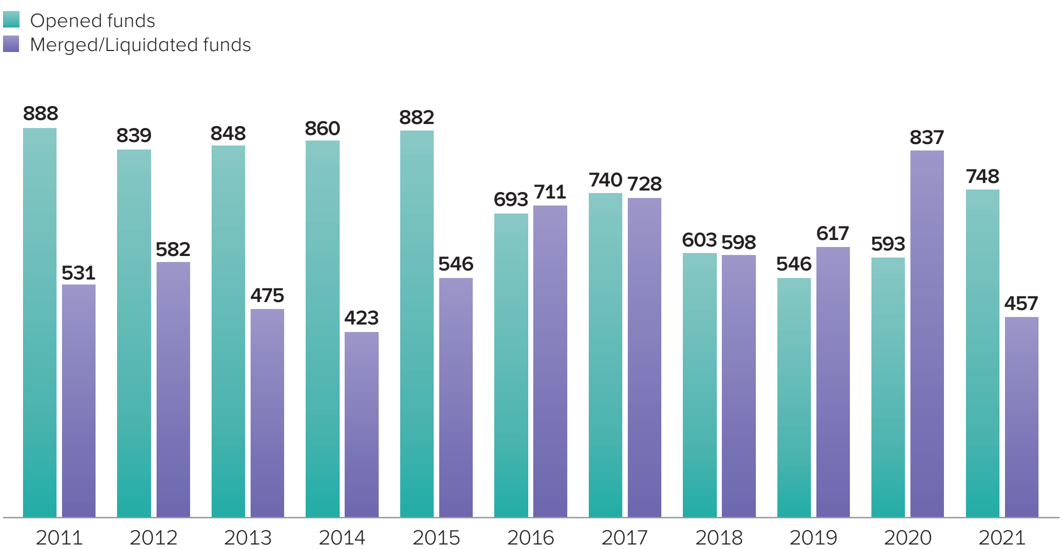
Note: Data include only mutual funds and ETFs registered under the Investment Company Act of 1940.

At least two factors have contributed to the rise in industry concentration. First, the increased concentration reflects the growing popularity of index funds—the 10 largest fund complexes manage most of the assets in index mutual funds. Actively managed domestic equity mutual funds had outflows in every year after 2005, while index domestic equity mutual funds had inflows in each of these years except for 2020 and 2021. Index domestic equity ETFs had positive net share issuance in each of these years. Second, strong inflows over the past decade to bond mutual funds (Figure 3.12), which are fewer in number and are less likely to be offered by smaller fund sponsors, helped boost the share of assets managed by large fund complexes.

Macroeconomic conditions and competitive dynamics can affect the supply of funds offered for sale. Fund sponsors create new funds to meet investor demand and merge or liquidate those that do not attract sufficient investor interest. A total of 748 mutual funds and ETFs opened in 2021, up from 593 in 2020 and nearly the same as the 2011–2020 annual average of 749 (Figure 2.15). The number of mutual fund and ETF mergers and liquidations decreased from 837 in 2020 to 457 in 2021.

FIGURE 2.15

Number of Mutual Funds and ETFs Entering and Leaving the Industry



Note: Data include mutual funds that do not report statistical information to the Investment Company Institute and mutual funds that invest primarily in other mutual funds. ETF data include ETFs that invest primarily in other ETFs.

Fund Proxy Voting Reflects Heterogeneous Industry

Investment companies are major shareholders of public companies, and have held a steady share of US-issued equities outstanding over the past several years (Figure 2.7). Like any company shareholder, they are entitled to vote on proxy proposals put forth by a company's board or its shareholders. Funds normally delegate proxy voting responsibilities to fund advisers, which have a fiduciary duty to vote in the best interest of fund shareholders.

During proxy year 2020 (the 12 months that ended June 30, 2020), shareholders of the 3,000 largest public companies considered 23,970 proposals—98 percent (23,523) of these were proposed by management and 2 percent (447) were submitted by shareholders. Investment companies cast more than 7.6 million votes on these proposals, with each investment company voting, on average, on about 1,500 separate proxy proposals. Because management proposals account for the bulk of proxy proposals, 74 percent of funds' votes were cast on management proposals related to uncontested elections of directors, with an additional 13 percent and 11 percent related to management proposals on management compensation and ratification of audit firms, respectively.

Investment companies voted in favor of management proposals 93 percent of the time. The strong support for management proxy proposals likely reflects that the vast majority of them are not controversial—85 percent of management proposals were uncontested elections of directors and ratifications of the audit firms that companies selected.

During the same proxy year, 4 percent of the votes that investment companies cast were on 447 shareholder proxy proposals. Among the shareholder proposals, 39 percent were related to social and environmental matters; 27 percent to board structures and elections; and the remainder to shareholder rights and antitakeover issues, compensation matters, and miscellaneous issues. Shareholder proxy proposals received support from investment companies, on average, 41 percent of the time.

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Investment companies' support for shareholder proposals varied considerably depending on a range of factors. These factors included, among other things, the details of the proposal, the issuer to whom the proposal applied, and the backdrop and context in which the proposal was set. Investment companies tend to offer more support for shareholder proxy proposals that are likely to increase their rights as company shareholders. For example, investment companies voted in favor of shareholder proxy proposals related to shareholder rights or antitakeover measures nearly 53 percent of the time in proxy year 2020.

Investment companies, on average, have provided more limited support for social and environmental proposals. In proxy year 2020, these proposals received a favorable vote 39 percent of the time. Average levels of support can mask important nuances of how investment companies vote on such issues. These kinds of proposals, though classified generally as "social and environmental," cover a wide array of issues, including the environment, diversity in hiring practices, human rights matters, and issues about the safety of a company's business operations.

In addition, these proposals must be viewed in context. For example, suppose virtually identical proposals are directed to two different companies. An investment company might view the proposal as appropriate for the first company, but inappropriate for the second because the latter has already taken steps to address the proposal's concerns.

In short, there is no one-size-fits-all description of how funds vote, other than to say that investment companies seek to vote in the interests of their shareholders and in a way that is consistent with their investment objectives and policies.

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Proxy Voting Resource Center

www.ici.org/proxy_voting

Environmental, Social, and Governance Investing

Perhaps one of the most significant recent global trends is the increasing attention being paid to environmental, social, and governance (ESG) matters. These matters vary widely but are generally considered to include topics related to climate change, diversity and inclusion, human rights, the rights of company shareholders, and companies' compensation structures. The fund industry is responding to increased investor interest in ESG investing by, among other things, creating new funds that explicitly tailor their investments to specific ESG criteria.

Funds consider ESG factors to varying degrees. For decades, some funds have incorporated ESG factors into their investment processes as a way to enhance fund performance, manage investment risks, and identify emerging investment risks and opportunities, much as they would consider macroeconomic or interest rate risks; idiosyncratic business risks; and investment exposures to particular companies, industries, or geographical regions. Because these funds "integrate" ESG factors into the investment process, this type of investing is known as ESG integration.

Funds' use of ESG integration is distinct from funds' use of "sustainable investing strategies," which use ESG analysis as a significant part of the fund's investment thesis as a way to pursue investment returns and ESG-related outcomes.

LEARN MORE

Funds' Use of ESG Integration and Sustainable Investing Strategies: An Introduction
www.ici.org/files/2020/20_ppr_esg_integration.pdf

Approaches to ESG Investing

The investment strategies funds use vary, as do the ways they describe their approaches. This section describes some of the most common approaches.

- **Exclusionary investing:** Investment strategies that exclude, or "screen out," investments in particular industries or companies that do not meet certain ESG criteria. This may also be described as negative screening, sustainable, or socially responsible investing (SRI).
- **Inclusionary investing:** Investment strategies that generally seek investment returns by pursuing a strategic investing thesis focusing on investments that systematically tilt a portfolio based on ESG factors alongside traditional financial analysis. This may also be described as best-in-class, ESG thematic investing, ESG tilt, positive screening, or sustainable investing.
- **Impact investing:** Investment strategies that seek to generate positive, measurable social and environmental impact alongside a financial return. This may also be described as community, goal-based, sustainable, or thematic investing.

These common approaches to ESG investing are not mutually exclusive—a single fund may use multiple approaches (e.g., a best-in-class fund that excludes certain types of investments). As a result, seeking to classify funds that invest according to ESG criteria as solely exclusionary, inclusionary, or impact can be challenging. Applying ICI's long-standing general approach to classifying funds enables research into these funds (e.g., tracking data and monitoring trends).

How ICI Categorizes Funds for Research and Statistical Purposes

ICI seeks to categorize funds as objectively as possible by applying predetermined rules and definitions to the prospectus language of mutual funds, ETFs, and closed-end funds, with a special focus on the "investment objective" and "principal investment strategies" sections.

For example, ICI Research uses prospectus language to determine in which of four broad categories to place a fund: equity, bond, hybrid, or money market. Funds are then placed in subcategories—for example, classifying equity funds as large-, mid-, or small-cap; or bond funds as investment grade or high-yield. To keep fund classifications up to date, ICI monitors funds' prospectuses for material revisions.

This approach produces fund classifications that are consistent and relatively stable, which is very helpful when monitoring current and historical trends in fund data.

Using ICI's Approach to Classify Funds That Invest According to ESG Criteria

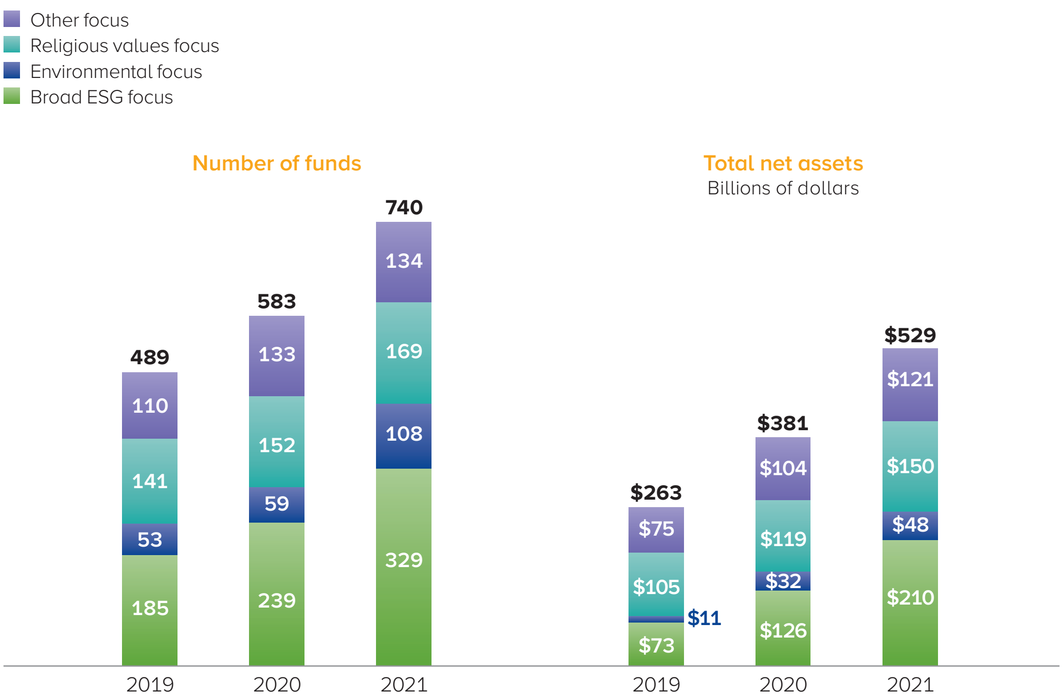
ICI Research examines the prospectuses of funds to classify those that invest according to ESG criteria using the same approach that it does for other categories across all funds (see page 41). In particular, ICI looks for language indicating that a fund places an important and explicit emphasis on environmental, social, or governance criteria to achieve certain goals.

Following this approach, in 2021, 740 mutual funds and ETFs with assets of $529 billion (Figure 2.16) would be classified generally as investing according to exclusionary, inclusionary, or impact investing ESG criteria. This is a sharp increase from year-end 2020—when there were 583 funds with assets of $381 billion—reflecting growing investor interest in these funds.

FIGURE 2.16

Number and Total Net Assets of Funds That Invest According to ESG Criteria

By focus, year-end



Note: Data include mutual funds and ETFs. Data include mutual funds that invest primarily in other mutual funds and ETFs that invest primarily in other ETFs.

Among funds that use such criteria in selecting their investments, ICI classifies these funds into groups based on the frameworks or guidelines expressed at the forefront of their principal investment strategies sections.

» **Broad ESG focus:** These funds focus broadly on ESG matters. They consider all three elements of ESG (rather than focusing on one or two of the considerations) or may include ESG in their names. Index funds in this group may track a socially responsible index such as the MSCI KLD 400 Social Index.

» **Environmental focus:** These funds focus more narrowly on environmental matters. They may include terms such as alternative energy, climate change, clean energy, environmental solutions, or low carbon in their principal investment strategies or fund names.

» **Religious values focus:** These funds invest in accordance with specific religious values.

» **Other focus:** These funds focus more narrowly on some combination of environmental, social, or governance elements, but not all three. They often negatively screen to eliminate certain types of investments.

Of the 740 funds at the end of 2021, 329 funds with assets of $210 billion fall into the broad ESG focus subcategory; 108 funds with assets of $48 billion in the environmental focus subcategory; 169 funds with assets of $150 billion in the religious values focus subcategory; and 134 funds with assets of $121 billion in the other focus subcategory (Figure 2.16).

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ESG Resource Center
www.ici.org/esg

CHAPTER
3

US Mutual Funds

A mutual fund is an investment company that pools money from shareholders and invests in a portfolio of securities. In 2021, an estimated 102.6 million individual investors in 59.0 million US households owned mutual funds, relying on them to meet long-term personal financial objectives, such as preparing for retirement, education, or a home purchase. US households and institutions also use money market funds as cash management tools. Mutual funds had net inflows of $363 billion in 2021, or 1.5 percent of year-end 2020 total net assets. Changing demographics, portfolio rebalancing, and investors' reactions to US and worldwide economic and financial conditions play important roles in determining how demand for specific types of mutual funds—and for mutual funds in general—evolves.

IN THIS CHAPTER

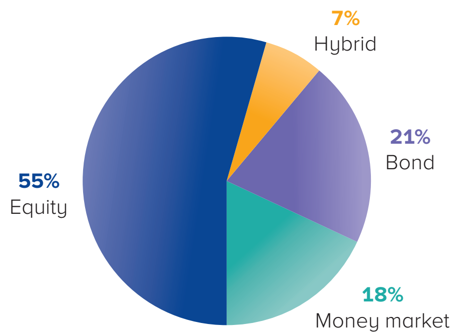
Overview of Mutual Fund Trends

With $27.0 trillion in total net assets (Figure 3.1), the US mutual fund industry remained the largest in the world at year-end 2021 (Figure 1.3). The majority of US mutual fund net assets at year-end 2021 were in long-term mutual funds, with equity funds alone making up 55 percent of US mutual fund net assets. Bond funds were the second-largest category, with 21 percent of net assets. Money market funds (18 percent) and hybrid funds (7 percent) held the remainder.

FIGURE 3.1

Equity Mutual Funds Held More Than Half of Mutual Fund Total Net Assets

Percentage of total net assets, year-end 2021



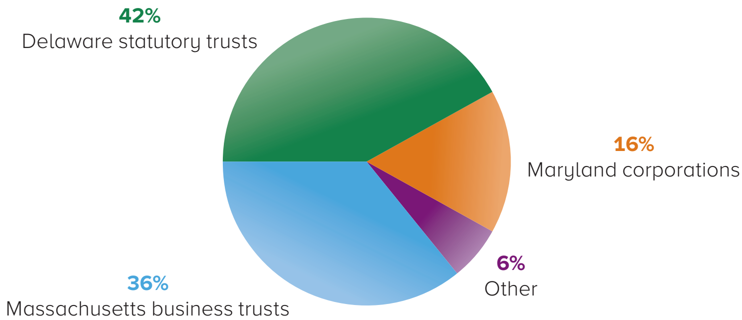
US mutual fund total net assets: $27.0 trillion

A mutual fund is typically organized under state law either as a corporation or a business trust (sometimes called a statutory trust). The three most popular forms of organization are Delaware statutory trusts, Massachusetts business trusts, and Maryland corporations (Figure 3.2). In 2021, 42 percent of mutual funds were organized as Delaware statutory trusts, 36 percent were organized as Massachusetts business trusts, and 16 percent were organized as Maryland corporations. Six percent of mutual funds chose other forms of organization, such as limited liability partnerships, or other domiciles, such as Ohio or Wisconsin.

FIGURE 3.2

The Most Popular Forms of Mutual Fund Organization

Percentage of funds, year-end 2021



Number of funds: 9,340

Note: Data include mutual funds that do not report statistical information to the Investment Company Institute and mutual funds that invest primarily in other mutual funds.

Investor Demand for US Mutual Funds

A variety of factors influence investor demand for mutual funds, such as funds' ability to assist investors in achieving their investment objectives. For example, US households rely on equity, bond, and hybrid mutual funds to meet long-term personal financial objectives, such as preparing for retirement, saving for education, purchasing a house, or preparing for emergencies. US households, as well as businesses and other institutional investors, use money market funds as cash management tools because they provide a high degree of liquidity and competitive short-term yields.

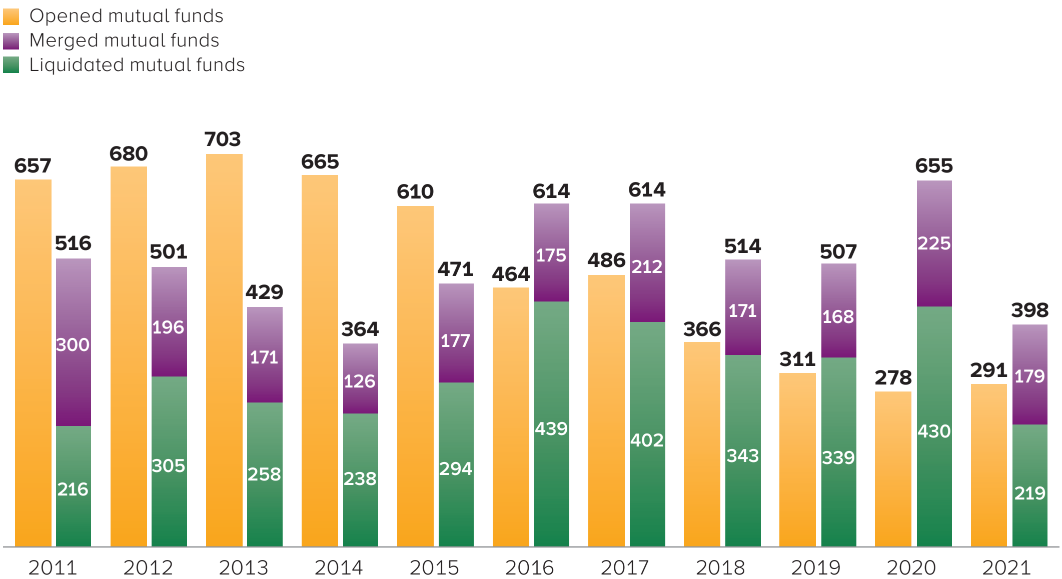
Continued long-running investing trends and portfolio rebalancing were important factors that influenced investor demand for mutual funds in 2021. Domestic equity mutual funds experienced net outflows, reflecting two major factors: an ongoing shift to index-based products and redemptions to keep equity allocations at their portfolio targets in response to substantial gains in US stock prices during the year. In contrast, demand for bond mutual funds was strong in 2021, as investors directed money toward bond funds to keep fixed-income allocations at their portfolio targets; in addition, the aging of the US population continued to play a role. Despite near-zero yields on short-term assets, money market funds experienced another year of strong demand.

Entry and Exit of US Mutual Funds

Mutual fund sponsors create new funds to meet investor demand, and they merge or liquidate those that do not attract sufficient investor interest. A total of 291 mutual funds opened in 2021 (Figure 3.3). An increase in the number of taxable bond fund launches contributed to the increase in the number of new mutual funds offered from 2020 to 2021. During the same time, the number of mutual funds that were either merged or liquidated decreased 39 percent to 398 funds, as sponsors eliminated fewer equity and hybrid mutual funds from their lineups.

FIGURE 3.3

Number of Mutual Funds Entering and Exiting the Industry



Note: Data include mutual funds that do not report statistical information to the Investment Company Institute and mutual funds that invest primarily in other mutual funds.

Investors in US Mutual Funds

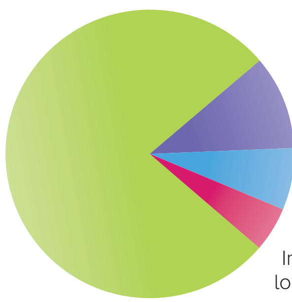
Demand for mutual funds is, in part, related to the types of investors who hold mutual fund shares. Retail investors (i.e., households) held the vast majority (88 percent) of the $27.0 trillion in US mutual fund net assets at year-end 2021 (Figure 3.4). The proportion of long-term mutual fund net assets held by retail investors is even higher (94 percent). Retail investors also held substantial money market fund net assets ($2.8 trillion), but this was a relatively small share (12 percent) of their total mutual fund net assets ($23.7 trillion).

In contrast, institutional investors such as nonfinancial businesses, financial institutions, and nonprofit organizations held a relatively small portion of mutual fund net assets. At year-end 2021, institutions held 12 percent of mutual fund net assets (Figure 3.4). The majority (60 percent) of the $3.2 trillion that institutions held in mutual funds was in money market funds, because one of the primary reasons institutions use mutual funds is to help manage their cash balances.

FIGURE 3.4

Households Held 88 Percent of Mutual Fund Total Net Assets

Trillions of dollars, year-end 2021



Mutual fund total net assets: $27.0 trillion
Long-term mutual fund total net assets: $22.2 trillion
Money market fund total net assets: $4.8 trillion

* Mutual funds held as investments in individual retirement accounts, defined contribution retirement plans, variable annuities, 529 plans, and Coverdell education savings accounts are counted as household holdings of mutual funds.

Mutual Fund Assets by Tax Status and Types of Distributions

Fund investors are responsible for paying tax on the amount of a fund's earnings and gains distributed to them, whether they receive the distributions in cash or reinvest them in additional fund shares. Investors often attempt to lessen the impact of taxes on their investments by investing in tax-exempt funds and tax-advantaged retirement and education accounts and variable annuities. As of year-end 2021, 4 percent of all mutual fund assets ($1.1 trillion) were held in tax-exempt funds, and 53 percent ($14.3 trillion) were invested in tax-advantaged accounts held by households (Figure 3.5).

FIGURE 3.5

The Majority of Mutual Fund Total Net Assets Were Held in Tax-Advantaged Accounts

Billions of dollars, 2021

	Total net assets Year-end	Dividend distributions	Capital gains distributions
Taxable nonhousehold accounts	$3,165	$19	$39
Taxable household accounts	8,476	135	279
Tax-advantaged household accounts	14,259	142	502
Tax-exempt funds	1,064	21	1
Total	**26,964**	**318**	**822**

Note: Capital gains distributions include long-term and short-term capital gains. For more information, see "How US-Registered Investment Companies Operate and the Core Principles Underlying Their Regulation," available at www.icifactbook.org/us-reg-funds-principles.pdf.

Ordinary Dividend Distributions

Ordinary dividend distributions represent income—primarily from interest and dividends earned by securities in a fund's portfolio—after expenses are paid by the fund. Mutual funds distributed $318 billion in dividends to fund shareholders in 2021 (Figure 3.5). Bond and money market funds accounted for 40 percent of all dividend distributions in 2021. Fifty-one percent of all dividend distributions were paid to tax-advantaged household accounts and tax-exempt fund shareholders. Another 42 percent were paid to taxable household accounts.

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Capital Gains Distributions

Capital gains distributions represent a fund's net gains, if any, from the sale of securities held in its portfolio. When gains from these sales exceed losses, they are distributed to fund shareholders. Mutual funds distributed $822 billion in capital gains to shareholders in 2021 (Figure 3.5).* Sixty-one percent of these distributions were paid to tax-advantaged household accounts, and another 34 percent were paid to taxable household accounts and tax-exempt fund shareholders. Equity mutual funds typically account for the bulk of capital gains distributions. In 2021, 74 percent of equity mutual fund share classes made a capital gains distribution, and 87 percent of these share classes distributed more than 2.0 percent of their assets as capital gains.

For more information, see "How US-Registered Investment Companies Operate and the Core Principles Underlying Their Regulation," available at www.icifactbook.org/us-reg-funds-principles.pdf.

* Only the net gains from the sale of a fund's assets held for more than one year (long-term capital gain distributions) are taxed as capital gains. Net short-term gains are taxed as ordinary dividend distributions. Data presented here on capital gains distributions include both long-term and short-term capital gains.

Developments in Mutual Fund Flows

Overall demand for mutual funds as measured by net new cash flow—new fund sales less redemptions, plus net exchanges—increased in 2021 (Figure 3.6). In 2021, mutual funds had net inflows of $363 billion (1.5 percent of year-end 2020 total net assets), following net inflows of $207 billion in 2020. Long-term mutual funds experienced net outflows of $59 billion in 2021, as inflows to bond funds were more than offset by outflows from equity and hybrid funds. Money market funds received $422 billion in net inflows. A number of factors—including portfolio rebalancing, broad-based increases in global equity markets, ongoing demographic trends, and demand for indexed products—appeared to influence US mutual fund flows in 2021.

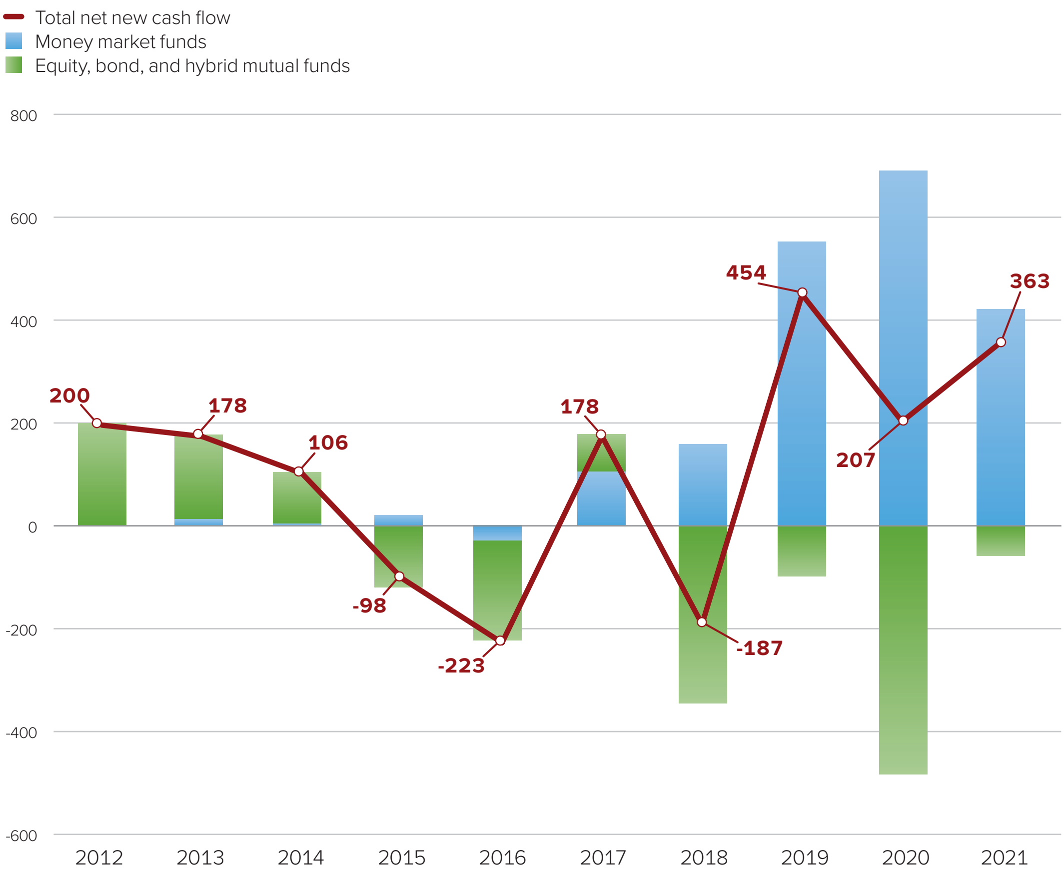
Long-Term Mutual Fund Flows

Although net new cash flows into long-term mutual funds are typically correlated with market returns, they tend to be moderate as a percentage of total net assets, even during episodes of market turmoil. Several factors may contribute to this phenomenon. For example, households (i.e., retail investors) own the vast majority of US long-term mutual fund net assets (Figure 3.4). Retail investors generally respond less strongly to market events than do institutional investors. Most notably, households often use mutual funds to save for the long term, such as for college or retirement. Many of these investors make stable contributions through periodic payroll deductions, even during periods of market stress. In addition, many mutual fund shareholders seek the advice of financial advisers, who may provide a steadying influence during market downturns. These factors are amplified by the fact that net assets in mutual funds are spread across more than 100 million investors and that fund investors have a wide variety of individual characteristics (such as age or appetite for risk) and goals (such as saving for the purchase of a home, for education, or for retirement). They also are bound to have a wide range of views on market conditions and how best to respond to those conditions to meet their individual goals. As a result, even during months when funds as a whole experience net outflows, many investors continue to purchase fund shares.

FIGURE 3.6

Net New Cash Flow to Mutual Funds

Billions of dollars, annual



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Even in Bear Markets, Equity Fund Investors Stay the Course
www.ici.org/viewpoints/view_18_equity_flows

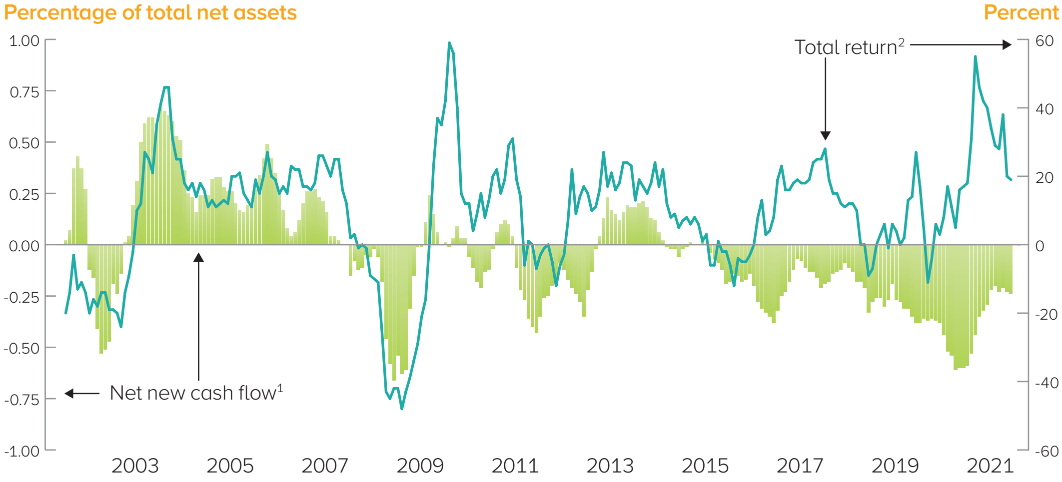
Equity Mutual Funds

Historically, net new cash flows to equity mutual funds have tended to rise and fall with returns on stocks (Figure 3.7). Global stock markets returned 19 percent in 2021, following a 17 percent return in 2020.* Despite strong global stock market performance for the year, equity mutual funds experienced net outflows totaling $435 billion in 2021 (3.4 percent of year-end 2020 total net assets), following $644 billion in net outflows in 2020. In both years, outflows from equity mutual funds were concentrated in domestic equity funds.

FIGURE 3.7

Net New Cash Flow to Equity Mutual Funds Typically Is Related to World Equity Returns

Monthly



[1] Net new cash flow is reported as a percentage of previous month-end equity mutual fund total net assets, plotted as a six-month moving average.

[2] The total return on equities is measured as the year-over-year percent change in the MSCI All Country World Daily Gross Total Return Index.

Sources: Investment Company Institute, MSCI, and Bloomberg

* As measured by the MSCI All Country World Daily Gross Total Return Index.

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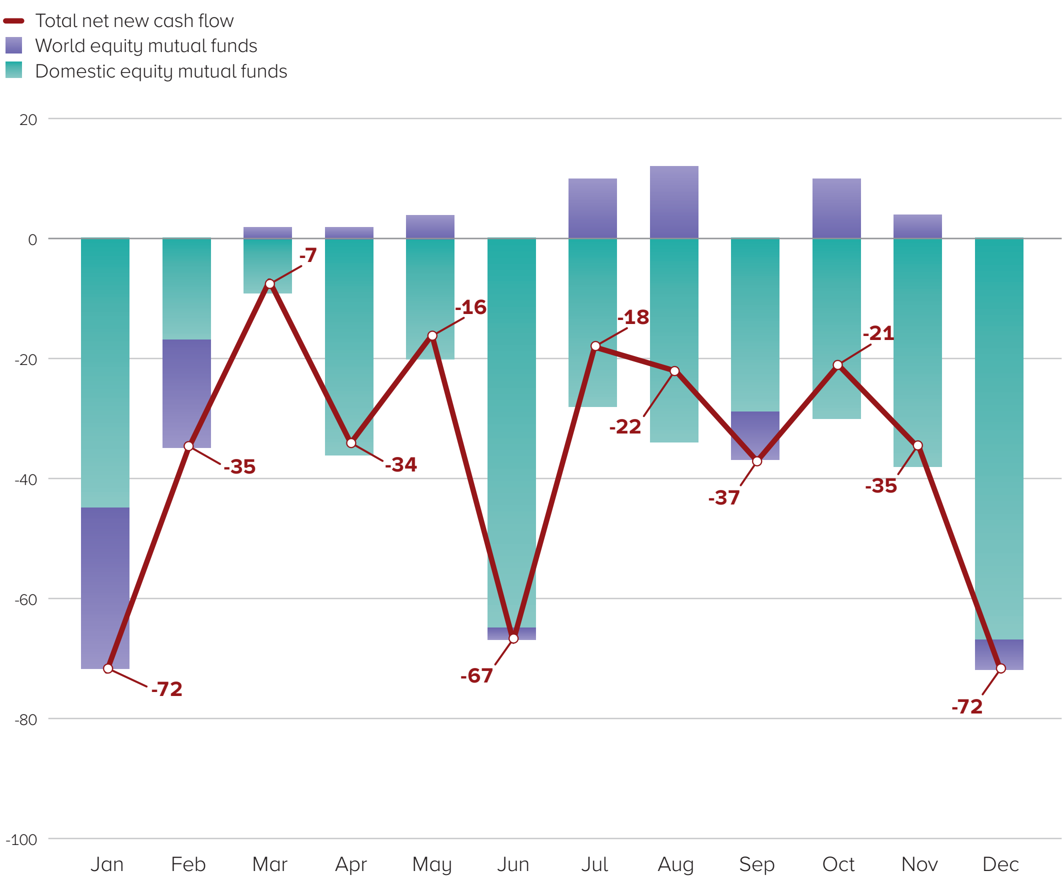
From December Outflows to January Inflows: Seasonal Factors in Mutual Fund Flows
www.ici.org/viewpoints/view_19_seasonal_nncf

Equity mutual funds had net outflows in every month in 2021 (Figure 3.8). Portfolio rebalancing likely played a role in investors' decisions to redeem from equity funds in 2021. In 2021, the 19 percent return on global stocks outpaced the 1.6 percent loss on US bonds* and would have resulted in equities accounting for a larger share of investors' portfolios. For example, without taking any investment actions, investors following a 60/40 target portfolio allocation (60 percent in equity funds and 40 percent in bond funds) would have seen their equity allocation rise to 64 percent of their total portfolio from relatively strong gains in stock prices. To remain at their equity allocation targets, investors would have needed to redeem from equity funds in 2021.

FIGURE 3.8

Net New Cash Flow to Equity Mutual Funds

Billions of dollars; monthly, 2021



* As measured by the FTSE US Broad Investment Grade Bond Index.

In addition to portfolio rebalancing, net outflows from domestic equity mutual funds in 2021 also may have been driven by investor demand for domestic equity exchange-traded funds (ETFs). As discussed in chapter 4, demand for ETFs has been very strong over the past decade. Domestic equity ETFs had net creations in every month of 2021, which resulted in $520 billion in net share issuance (Figure 4.9). In contrast, domestic equity mutual funds had net outflows of $419 billion (Figure 3.8) over the same period.

Although investors redeemed $16 billion from world equity mutual funds (Figure 3.8), on net, in 2021, this represented an increase in demand from 2020, which had net redemptions of $173 billion. Emerging market equity, global equity, and world equity alternative strategy funds received combined inflows of $28 billion in 2021, but this was offset by outflows of $44 billion from international equity and regional equity funds.

Rebalancing may have contributed to outflows from world equity mutual funds in 2021. Some types of funds rebalance portfolios automatically as part of an asset allocation strategy. The assets in funds offering asset allocation strategies—such as target date funds (discussed in more detail on page 59)—have grown considerably over the past decade. Target date funds usually invest through a fund-of-funds approach, meaning they primarily hold and invest in shares of other equity and bond mutual funds or ETFs. These funds typically hold a higher proportion of foreign equities and bonds than many US investors had traditionally allocated to foreign investments. As global equity markets rose in 2021, these kinds of asset allocation funds rebalanced their portfolios away from stocks, including foreign stocks, to maintain their target allocations.

Asset-Weighted Turnover Rate

The turnover rate—the percentage of a fund's holdings that have been bought or sold over a year—is a measure of a fund's trading activity. The rate is calculated by dividing the lesser of purchases or sales (excluding those of short-term assets) in a fund's portfolio by average total net assets.

To analyze the turnover rate that shareholders actually experience in their funds, it is important to identify those funds in which shareholders are most heavily invested. Neither a simple average nor a median takes into account where fund assets are concentrated. An asset-weighted average gives more weight to funds with more net assets, and accordingly, indicates the average portfolio turnover actually experienced by fund shareholders.
In 2021, the asset-weighted annual turnover rate experienced by equity mutual fund investors was 27 percent, well below the average of the past 37 years (Figure 3.9).

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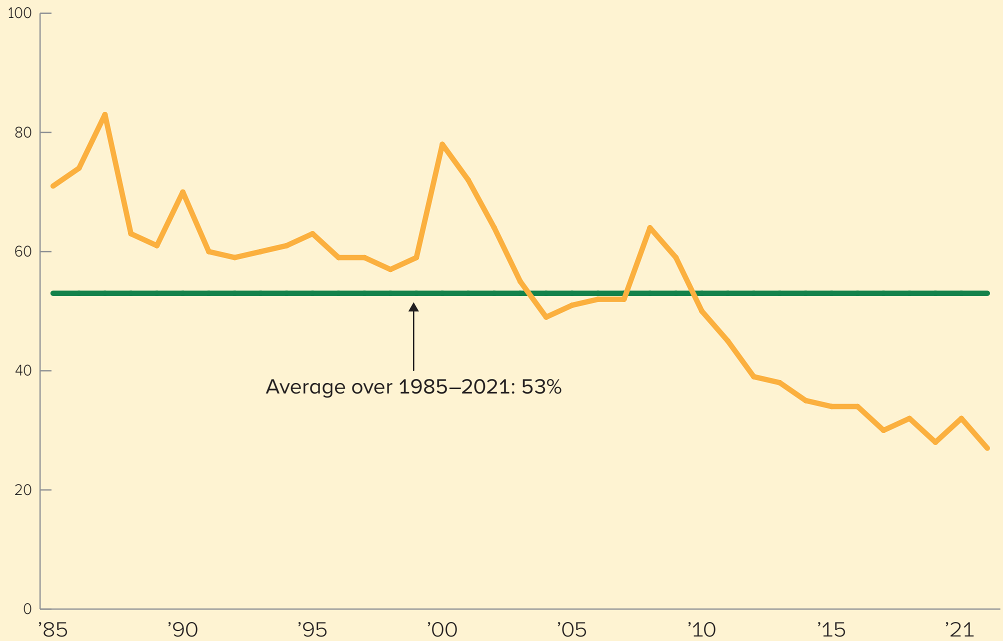
Investors tend to own equity funds with relatively low turnover rates. In 2021, nearly two-thirds of equity mutual fund total net assets were in funds with portfolio turnover rates of less than 27 percent. This reflects the propensity for mutual funds with below-average turnover to attract shareholder dollars.

FIGURE 3.9

Turnover Rate Experienced by Equity Mutual Fund Investors



Note: The turnover rate is an asset-weighted average.

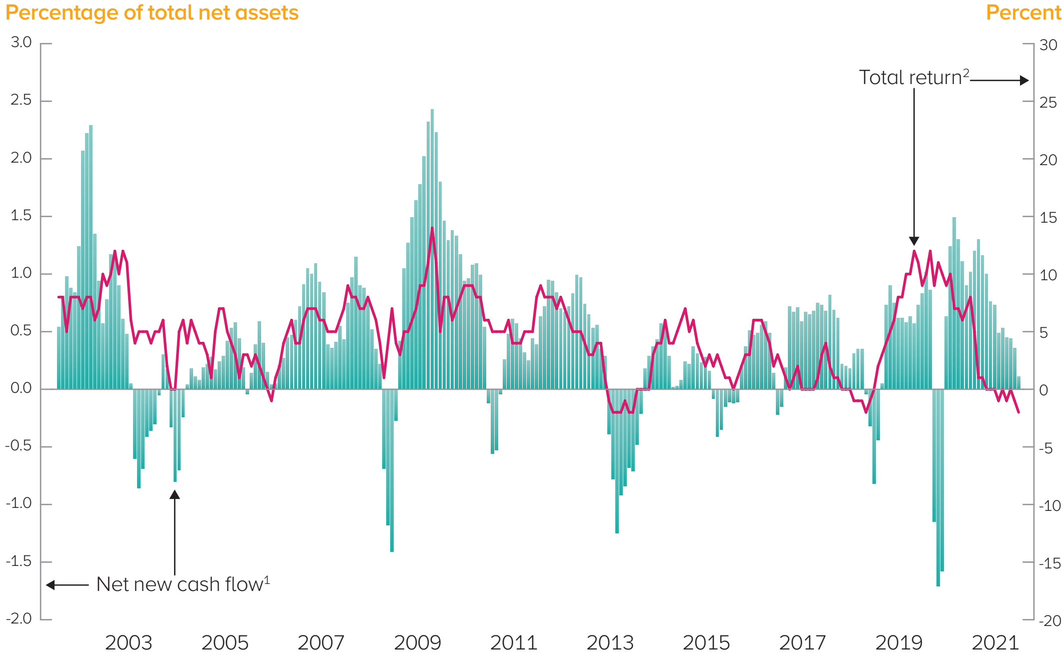
Bond Mutual Funds

Bond mutual fund net new cash flows typically are correlated with the performance of US bonds (Figure 3.10), which, in turn, is largely driven by the US interest rate environment. Long-term interest rates generally fluctuated throughout 2021, but ended the year higher than they were at year-end 2020. The yield on the 10-year Treasury started 2021 at 0.93 percent, increased to 1.74 percent by the end of March, decreased to 1.19 percent by early August, and increased to 1.52 percent at the end of the year. For the year as a whole, the total return on US bonds was down, with a capital loss of 1.6 percent.

FIGURE 3.10

Net New Cash Flow to Bond Mutual Funds Typically Is Related to Bond Returns

Monthly



[1] Net new cash flow is reported as a percentage of previous month-end bond mutual fund total net assets, plotted as a three-month moving average. Data exclude high-yield bond mutual funds.

[2] The total return on bonds is measured as the year-over-year percent change in the FTSE US Broad Investment Grade Bond Index.

Sources: Investment Company Institute, FTSE Russell, and Bloomberg

Taxable bond mutual funds received strong inflows for almost all of 2021, with net inflows totaling $316 billion between January and November (Figure 3.11). Portfolio rebalancing likely played a role in these inflows (see page 53). With substantial returns on US stocks, investors and target date funds following asset allocation strategies would have needed to purchase bond funds during this period to remain at their target allocations.

In December, however, investors redeemed $10 billion, on net, from taxable bond mutual funds. Signs of strong growth in the US economy in 2021 (real GDP expanded 5.7 percent, the unemployment rate fell to 3.9 percent, and US stocks returned 27 percent*) coincided with elevated levels of inflation (the year-over-year change in the Consumer Price Index was 7.0 percent in December 2021). Alongside these market conditions, the Federal Reserve announced that they would begin to taper their asset purchase program in November; in December, they announced that they would begin to accelerate their reduction of bond purchases. As a result, investors expected a higher probability that the Federal Reserve would soon raise the federal funds rate, which likely contributed to outflows from taxable bond mutual funds in December.

* As measured by the Wilshire 5000 Total Market Index.

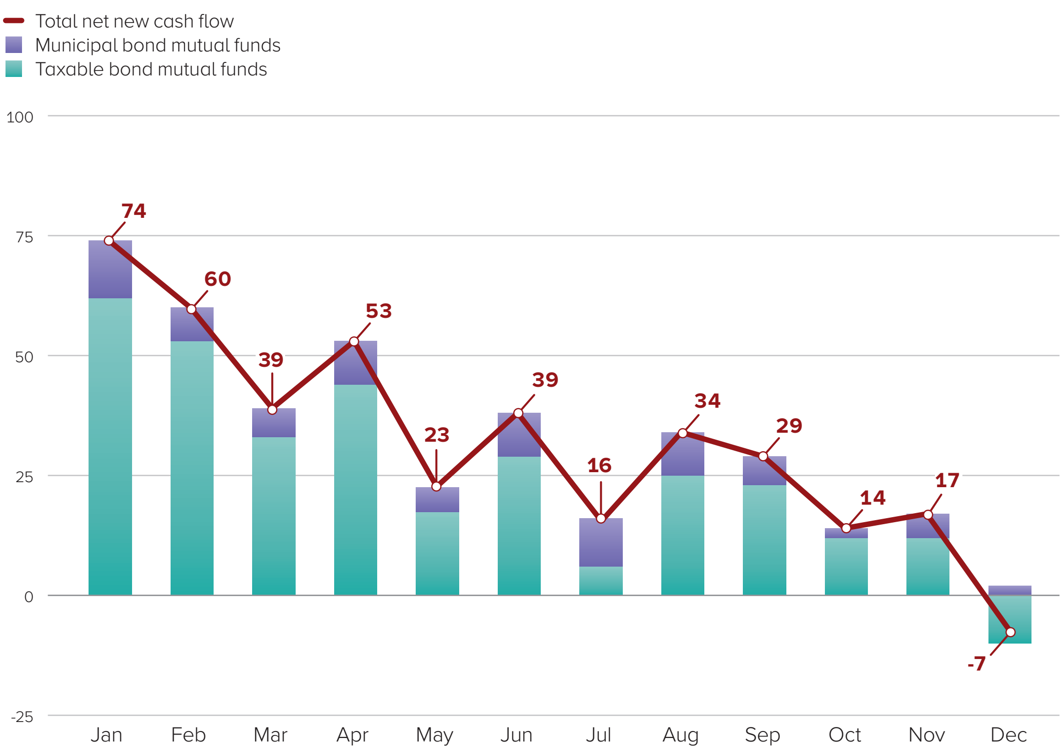
Investor demand varied across specific categories of taxable bond mutual funds in 2021, with substantial inflows being directed to multisector and inflation-protected bond funds. Multisector bond mutual funds received $82 billion in net inflows, or 15 percent of their net assets at year-end 2020, and inflation-protected bond mutual funds received $21 billion in net inflows, or 18 percent of their net assets at year-end 2020. In addition, high-yield bond funds saw net inflows of $22 billion; government bond mutual funds saw net inflows of $15 billion; and world bond mutual funds, which typically hold a mix of bonds denominated in US dollars and foreign currencies, saw net inflows of $44 billion. Investment grade bond funds (excluding inflation-protected funds) had the bulk of net inflows into taxable bond mutual funds in 2021 ($122 billion), but this represented just 5.1 percent of their year-end 2020 total net assets.

Demand for municipal bond mutual funds was strong in 2021, with net inflows in every month totaling $84 billion for the year, or 9.5 percent of their year-end 2020 total net assets.

FIGURE 3.11

Net New Cash Flow to Bond Mutual Funds

Billions of dollars; monthly, 2021



How Bond Mutual Funds Manage Investor Flows

When meeting redemptions, fund managers' actions are guided by market conditions, expected investor flows, and other factors. A fund might decide to sell some of its holdings to raise the cash needed to fulfill redemptions. But its choice of which particular securities to sell may depend on market conditions. For example, during a market downturn, with liquidity at a premium, some fund managers might seek to add shareholder value by selling some of their funds' more-liquid bonds (which, being in high demand, are trading at a premium to fundamental value). Other fund managers may conclude that it is necessary and appropriate to sell a representative "slice" of their funds' entire portfolios.

Bond mutual fund managers have other ways of meeting redemption requests. For example, a fund might already have cash on hand. Or, the fund may use the cash that bond mutual funds receive each day in the form of interest income from bonds held in the portfolio, proceeds from matured bonds, or new sales of fund shares.

In addition, bond funds often use derivatives or hold liquid assets other than cash. For example, a high-yield bond fund might hold some portion of its assets in equities, because equities are very liquid, and the return profiles of high-yield bonds and equities can be similar. Derivatives can be more liquid than their physical counterparts, and funds are required to segregate liquid assets to support their derivatives positions. As these positions are closed, this cash collateral provides a ready source of liquidity to meet redemptions. This is especially true for many of the funds commonly called liquid alternative funds, as these funds are explicitly designed to allow frequent investor trading, and do so in large measure through the use of derivatives.

Long-Term Demand for Bond Mutual Funds

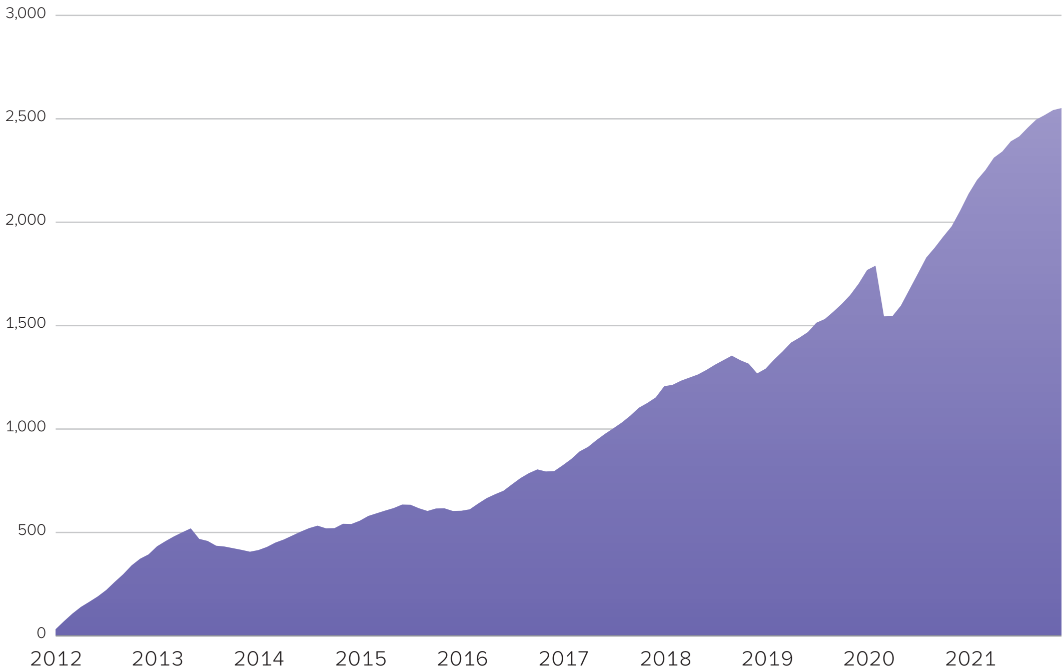
Despite several periods of market turmoil, bond mutual funds have experienced net inflows through most of the past decade, with $2.6 trillion in net new cash flow and reinvested dividends from 2012 through 2021 (Figure 3.12).

A number of factors have helped sustain this long-term demand for bond mutual funds, including demographics. Older investors tend to have larger account balances because they have had more time to accumulate savings and take advantage of compounding. At the same time, as investors age, they tend to shift toward fixed-income products. Over the past decade, the aging US population has boosted flows to bond funds.

FIGURE 3.12

Bond Mutual Funds Have Experienced Net Inflows Through Most of the Past Decade

Cumulative flows to bond mutual funds, billions of dollars, monthly



Note: Bond mutual fund data include net new cash flow and reinvested dividends.

The continued popularity of target date mutual funds also likely helped increase inflows to bond mutual funds in 2021. Target date funds invest in a changing mix of equities and fixed-income investments. As the fund approaches and passes its target date (which is usually specified in the fund's name), the fund gradually reallocates assets from equities to fixed-income investments, including bonds. Over the past 10 years, target date mutual funds have received net inflows of $462 billion. By year-end 2021, target date mutual funds had total net assets of $1.8 trillion (Figure 8.20). Investor interest in these funds likely reflects their automatic rebalancing features as well as their inclusion as an investment option in many defined contribution (DC) plans (Figure 8.12).

These long-term factors, combined with mostly positive returns on bonds and inflows from portfolio allocation strategies, have caused bond mutual fund total net assets to double over the past decade—from $2.8 trillion at year-end 2011 to $5.6 trillion at year-end 2021. However, their share of the US bond market (US government bonds, corporate bonds, and tax-exempt bonds) has stayed relatively stable during this time. Bond mutual funds held 10 percent of the US bond market at year-end 2021, compared with 8 percent at year-end 2011.

Hybrid Mutual Funds

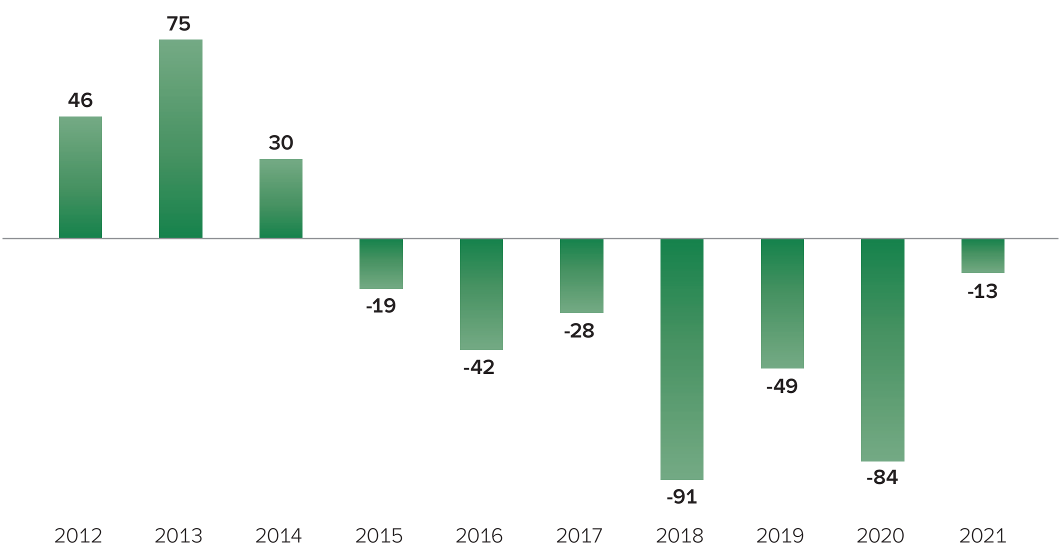
Hybrid funds (also called asset allocation funds or balanced funds) invest in a mix of stocks and bonds. This approach offers a way to balance the potential capital appreciation of stocks with the income and relative stability of bonds over the long term. The fund's portfolio may be periodically rebalanced to bring its asset allocation more in line with prospectus objectives, which could be necessary following capital gains or losses in the stock or bond markets.

Over the past seven years, investors have moved away from hybrid mutual funds, which had been a popular way to achieve a managed, balanced portfolio of stocks and bonds (Figure 3.13). In 2021, hybrid mutual funds had outflows of $13 billion (or just 0.8 percent of prior year-end total net assets), following $313 billion of net outflows over the previous six years. Many factors likely have contributed to this change. For example, investors may be shifting out of hybrid funds and into portfolios of ETFs that are periodically rebalanced, often with the assistance of a fee-based financial adviser. In addition, investors may be shifting assets toward target date funds and lifestyle funds as an alternative way to achieve a balanced portfolio.*

FIGURE 3.13

Net New Cash Flow to Hybrid Mutual Funds

Billions of dollars, annual



* ICI generally excludes funds of funds from total net asset and net new cash flow calculations to avoid double counting. Although target date funds are classified as hybrid funds by ICI, 97 percent of target date fund assets are in funds of funds, and therefore, their flows are excluded from the hybrid mutual fund flows presented in Figure 3.13.

Growth of Other Investment Products

Outflows from some long-term mutual funds over the past decade reflect a broader shift, driven by both investors and retirement plan sponsors, toward other pooled investment vehicles. This trend is reflected in the outflows from actively managed funds and the growth of index mutual funds, ETFs, and collective investment trusts (CITs) since 2007.

Index mutual funds—which hold all (or a representative sample) of the securities in a specified index—are popular among investors. Of households that owned mutual funds, 42 percent owned at least one index equity mutual fund in 2021. As of year-end 2021, 496 index mutual funds managed total net assets of $5.7 trillion. For 2021 as a whole, investors added $41 billion in net new cash flow to these funds (Figure 3.14). Outflows from index domestic and world equity mutual funds ($43 billion and $14 billion, respectively) were more than offset by inflows into index bond and hybrid mutual funds ($98 billion). Some of the outflows from index equity mutual funds are likely attributable to portfolio rebalancing, with investors shifting assets from equity mutual funds to bond mutual funds as they seek to stay within their target portfolio allocations. The outflows from index equity mutual funds also reflect some assets moving from mutual funds into other products, such as ETFs or CITs. At year-end 2021, net assets in index equity mutual funds made up 32 percent of total equity mutual fund net assets (Figure 3.15).

FIGURE 3.14

Net New Cash Flow to Index Mutual Funds

Billions of dollars, annual

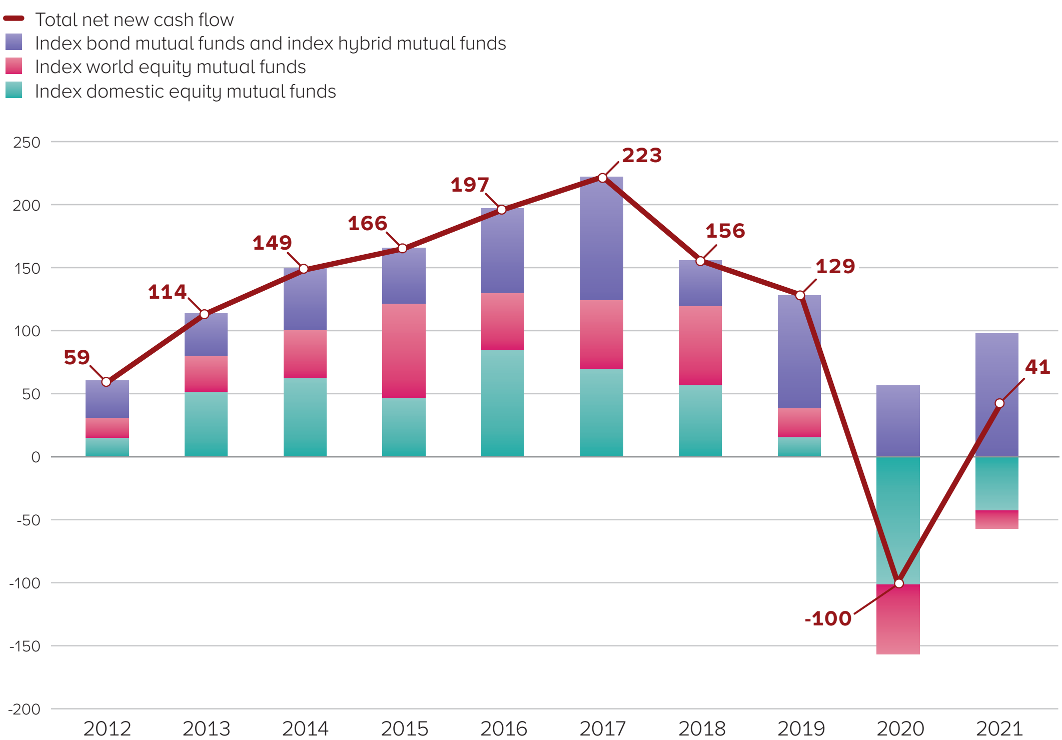
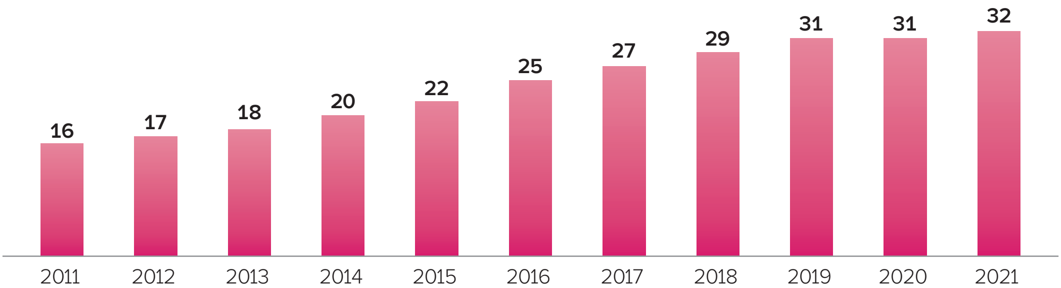


FIGURE 3.15

Share of Index Equity Mutual Funds Increased in 2021

Percentage of equity mutual funds' total net assets, year-end

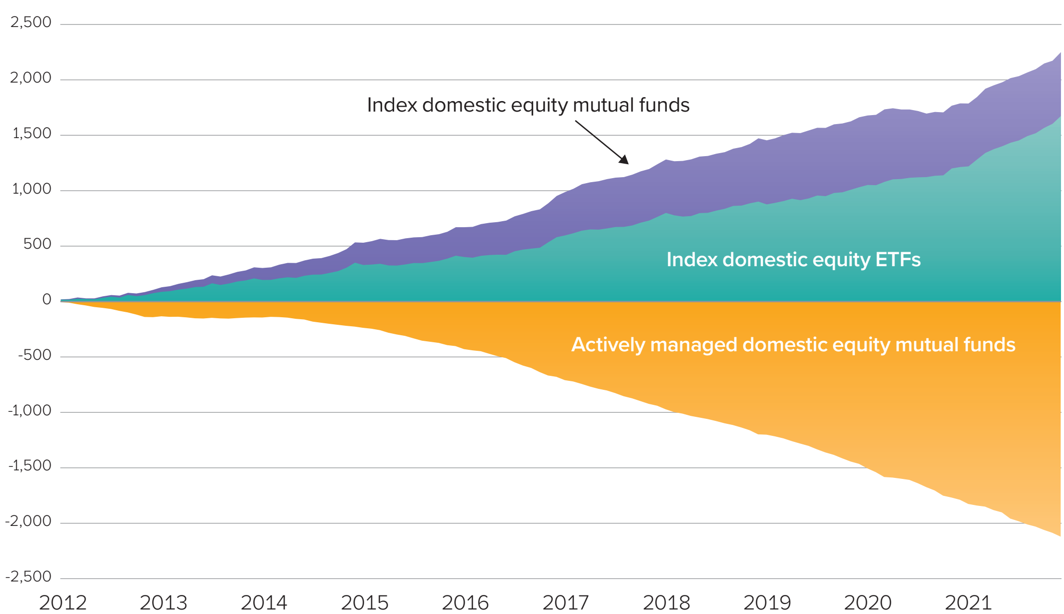


Index domestic equity mutual funds and ETFs have particularly benefited from the overall increased investor demand for index-based investment products. From 2012 through 2021, index domestic equity mutual funds and ETFs received $2.2 trillion in net new cash and reinvested dividends, while actively managed domestic equity mutual funds experienced net outflows of $2.1 trillion (including reinvested dividends) (Figure 3.16). Index domestic equity ETFs have grown particularly quickly—attracting nearly three times the amount of net inflows of index domestic equity mutual funds since 2012. Part of the recent increasing popularity of ETFs is likely

FIGURE 3.16

Some of the Outflows from Domestic Equity Mutual Funds Have Gone to ETFs

Cumulative flows to domestic equity mutual funds and net share issuance of index domestic equity ETFs, billions of dollars, monthly



Note: Mutual fund data include net new cash flow and reinvested dividends; ETF data for net share issuance include reinvested dividends.

attributable to more brokers and financial advisers using them in their clients' portfolios. In 2020, full-service brokers and fee-based advisers had 24 percent and 35 percent, respectively, of their clients' household assets invested in ETFs, up sharply from 6 percent and 10 percent in 2011 (Figure 3.17).

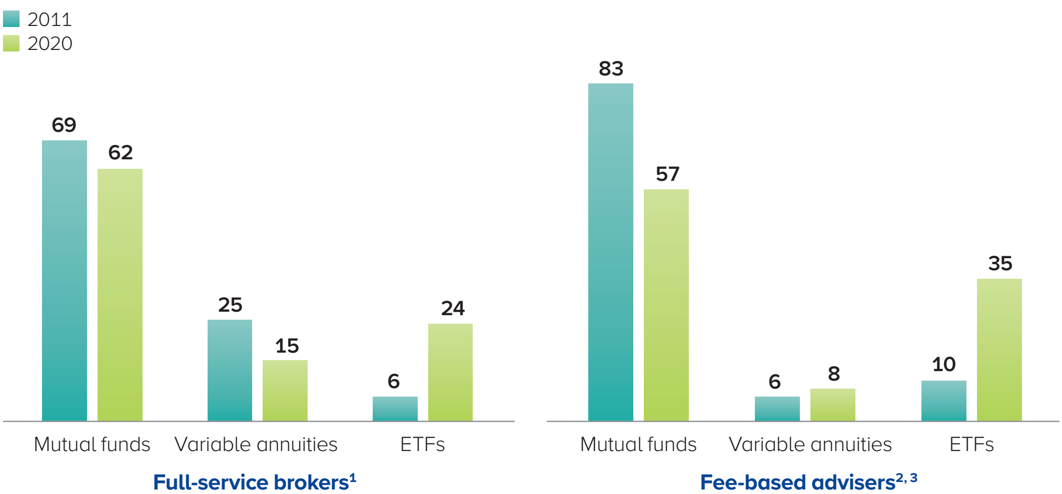
CITs are an alternative to mutual funds for DC plans. Like mutual funds, CITs pool the assets of investors and (either actively or passively) invest those assets according to a particular strategy. Much like institutional share classes of mutual funds, CITs generally require substantial minimum investment thresholds, which can limit the costs of managing pooled investment products. Unlike mutual funds, which are regulated under the Investment Company Act of 1940, CITs are regulated under banking laws and are not marketed as widely as mutual funds; this can also reduce their operational and compliance costs as compared with mutual funds.

More retirement plan sponsors have begun offering CITs as options in 401(k) plan lineups. As Figure 3.18 demonstrates, this trend has translated into a growing share of assets held in CITs by large 401(k) plans. That share increased from 6 percent in 2000 to an estimated 27 percent in 2020. This recent expansion is due, in part, to the growth in target date CITs.

FIGURE 3.17

Fee-Based Advisers Are Investing Larger Portions of Client Portfolios in ETFs

Percentage of household assets invested in investment category by adviser type

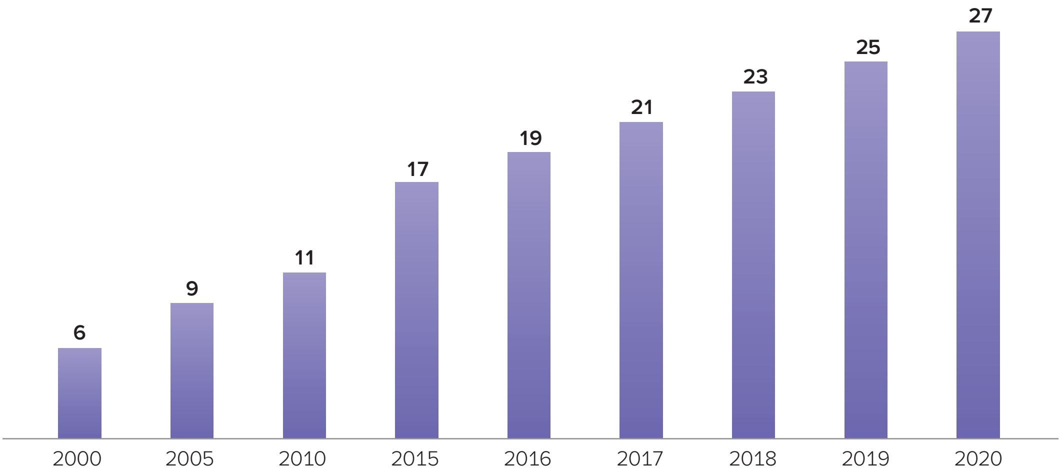


[1] This category includes wirehouses as well as regional, independent, and bank broker-dealers.
[2] This category includes registered investment advisers and dually registered investment adviser broker-dealers.
[3] This category excludes an unknown portion of assets from investors who received fee-based advice but implemented trades themselves through discount brokers and fund supermarkets.
Source: Cerulli Associates, "The State of US Retail and Institutional Asset Management, 2021"

FIGURE 3.18

Assets of Large 401(k) Plans Are Increasingly Held in Collective Investment Trusts

Percentage of assets in 401(k) plans with 100 participants or more



Note: Assets exclude Direct Filing Entity assets that are reinvested in collective investment trusts. Data prior to 2020 come from the Form 5500 Research data sets released by the Department of Labor. Data for 2020 are preliminary, based on Department of Labor Form 5500 latest data sets.

Source: Investment Company Institute tabulations of Department of Labor Form 5500 data

Money Market Funds

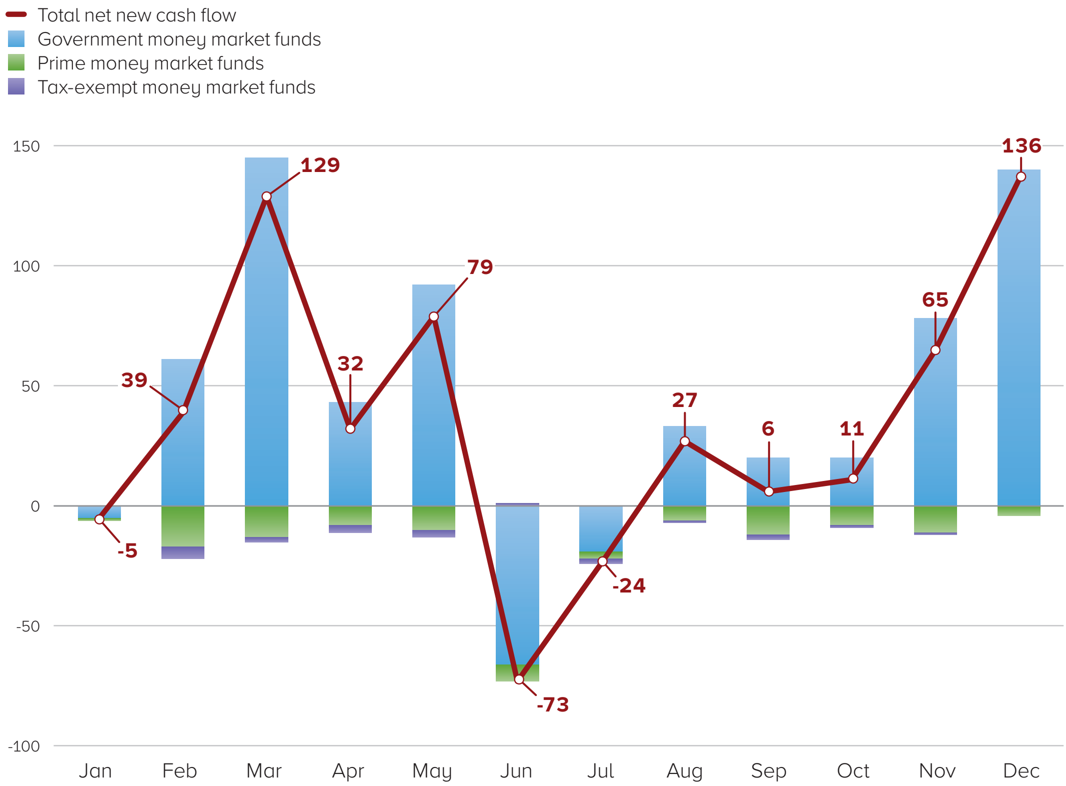
In 2021, demand for money market funds remained strong, with $422 billion in net new cash flows—despite another year of near-zero yields (Figures 3.6 and 3.19). Government money market funds received substantial inflows ($541 billion) while prime money market funds and tax-exempt money market funds had outflows of $100 billion and $19 billion, respectively.

Demand for government money market funds in 2021 was likely shaped by movements in long-term interest rates. In the first quarter of 2021, the yield on the 10-year Treasury sharply increased 81 basis points, which led to capital losses on long-term bonds. To mitigate these losses, investors may have shifted some of their bond fund positions into money market funds to shorten the duration of their fixed-income investments. And with the Federal Reserve announcements in November and December (see page 56), investors likely expected that long-term interest rates would soon rise, which may have contributed to additional inflows into money market funds in those months.

FIGURE 3.19

Net New Cash Flow to Money Market Funds

Billions of dollars; monthly, 2021



CHAPTER

4

US Exchange-Traded Funds

ETFs are a convenient, cost-effective tool for investors seeking to gain or shed exposure to broad markets, particular sectors or geographical regions, or specific investment strategies. Over the past decade, demand for ETFs has grown markedly as investors—both institutional and retail—increasingly turn to them as investment options. In the past 10 years, net share issuance of ETFs has totaled $3.7 trillion. As investor demand has increased, sponsors have offered more ETFs with a greater variety of investment objectives. With $7.2 trillion in total net assets at year-end 2021, the US ETF industry remained the largest in the world.

IN THIS CHAPTER

What Is an ETF?

An exchange-traded fund (ETF) is a pooled investment vehicle with shares that investors can buy and sell throughout the day on a stock exchange at a market-determined price. Investors may buy or sell ETF shares through a broker or in a brokerage account just as they would the shares of any publicly traded company. ETFs have been available as an investment product for nearly 30 years in the United States. Most ETFs are structured as open-end investment companies, like mutual funds, and are governed by the same regulations. Other ETFs—primarily those investing in commodities, currencies, and futures—have different structures and are subject to different regulatory requirements.

Evolution of the ETF Regulatory Framework

The first US ETF—a broad-based domestic equity fund tracking the S&P 500 index—was launched in 1993 after a fund sponsor received Securities and Exchange Commission (SEC) exemptive relief from several provisions of the Investment Company Act of 1940 that would not otherwise allow the ETF structure. As other fund sponsors wanted to bring new ETFs to market, they had to obtain their own specific exemptive relief orders from the SEC. Until 2008, the SEC only approved exemptive relief orders for ETFs that tracked specified indexes. These ETFs, commonly referred to as index-based ETFs, are designed to track the performance of their designated indexes or, in some cases, a multiple or an inverse (or a multiple of an inverse) of their indexes. At year-end 2021, there were 1,789 index-based ETFs—with $6.8 trillion in total net assets—that were registered with the SEC under the Investment Company Act of 1940.

In early 2008, the SEC granted approval through exemptive relief orders to several fund sponsors to offer fully transparent, actively managed ETFs. Actively managed ETFs do not seek to track the return of a particular index. Instead, an actively managed ETF's investment adviser, like that of an actively managed mutual fund, creates a unique mix of investments to meet a particular investment objective and strategy. As other fund sponsors wanted to offer actively managed ETFs, they had to obtain their own exemptive relief. From the approval of the first actively managed ETFs in 2008 through year-end 2021, the market has grown to 719 actively managed 1940 Act ETFs with $285 billion in total net assets.

After granting more than 300 exemptive orders to fund sponsors for index-based and fully transparent actively managed ETFs since 1993, the SEC adopted the "ETF rule" (Rule 6c-11 under the Investment Company Act of 1940) in September 2019. The ETF rule enables any fund sponsor to offer ETFs that satisfy certain conditions (e.g., daily disclosure of all portfolio holdings, net asset value [NAV], market price, premium or discount, and bid-ask spread; as well as written policies and procedures regarding basket construction) without the expense and delay of obtaining exemptive relief from the SEC. The ETF rule also removes a competitive disadvantage that favored some ETF sponsors with older, more flexible forms of exemptive relief. Under the new rule, the vast majority of ETFs currently registered with the SEC are subject to identical requirements.

In 2019, the SEC also granted separate approval through the exemptive relief process to five models of ETFs that did not fall under the new ETF rule because they do not fully disclose their portfolio holdings each day. These ETFs, commonly referred to as non-transparent or semi-transparent ETFs, provide limited daily information on the value of the securities they hold and, similar to mutual funds, publicly disclose their full schedule of portfolio holdings at least quarterly. These new ETFs have been approved for use only in limited asset classes—primarily domestic equity—and must prominently disclose on their prospectuses, websites, and marketing materials that they are different from the more traditional ETFs allowed under the ETF rule. The first ETFs of this new type were launched in 2020, and by year-end 2021 there were 43 of these funds with $5.6 billion in total net assets.

ETFs and Mutual Funds

An ETF is a registered investment company that is similar to a mutual fund in that it offers investors a proportionate share in a pool of stocks, bonds, and other assets such as derivatives or bank loans. Like a mutual fund, an ETF is required to post the mark-to-market NAV of its portfolio at the end of each trading day and must conform to the main investor protection mechanisms of the Investment Company Act of 1940, including limitations on leverage, daily valuation and liquidity requirements, prohibitions on transactions with affiliates, and rigorous disclosure obligations. Also, like mutual funds, creations and redemptions of ETF shares are aggregated and executed just once per day at NAV. Despite these similarities, key features differentiate ETFs from mutual funds.

Key Differences

One major difference is that retail investors buy and sell ETF shares on the secondary market (stock exchange) through a broker-dealer, much like they would any other type of stock. In contrast, mutual fund shares are not listed on stock exchanges, but are purchased and sold through a variety of distribution channels, including through investment professionals—full-service brokers, independent financial planners, bank or savings institution representatives, or insurance agents—or directly from a fund company or discount broker.

Pricing also differs between mutual funds and ETFs. Mutual funds are "forward priced," which means that although investors can place orders to buy or sell mutual fund shares throughout the day, all orders placed during the day will receive the same price—the NAV—the next time it is computed. Most mutual funds calculate their NAV as of 4:00 p.m. eastern time because that is the time US stock exchanges typically close. In contrast, the market price of an ETF share is

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www.ici.org/pdf/per20-05.pdf

continuously determined on a stock exchange. Consequently, the price at which investors buy and sell ETF shares on the secondary market may not necessarily equal the NAV of the portfolio of securities in the ETF. Two investors selling the same ETF shares at different times on the same day may receive different prices for their shares, both of which may differ from the ETF's NAV, which—like a mutual fund—generally is calculated as of 4:00 p.m. eastern time.

ETF Total Net Assets

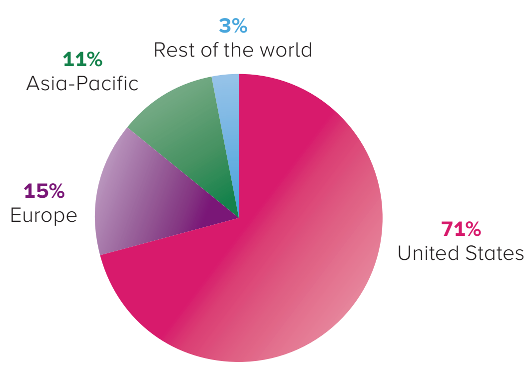
At year-end 2021, the US ETF market—with 2,570 funds and $7.2 trillion in total net assets—remained the largest in the world, accounting for 71 percent of the $10.1 trillion in ETF net assets worldwide (Figures 4.1 and 4.2). Within the United States, total net assets in ETFs accounted for 21 percent of assets managed by investment companies at year-end 2021.

The vast majority of assets in US ETFs are in funds registered with and regulated by the SEC under the Investment Company Act of 1940 (Figure 4.2). At year-end 2021, less than 2 percent of net assets were held in ETFs that are not registered with or regulated by the SEC under the Investment Company Act of 1940; these funds invest primarily in commodities, currencies, and futures. Non–1940 Act ETFs that invest in commodity or currency futures are regulated by the Commodity Futures Trading Commission (CFTC) under the Commodity Exchange Act and by the SEC under the Securities Act of 1933. Those that invest solely in physical commodities or currencies are regulated by the SEC under the Securities Act of 1933. At year-end 2021, there were 62 of these non–1940 Act ETFs with $125 billion in net assets.

FIGURE 4.1

The United States Has the Largest ETF Market

Percentage of total net assets, year-end 2021



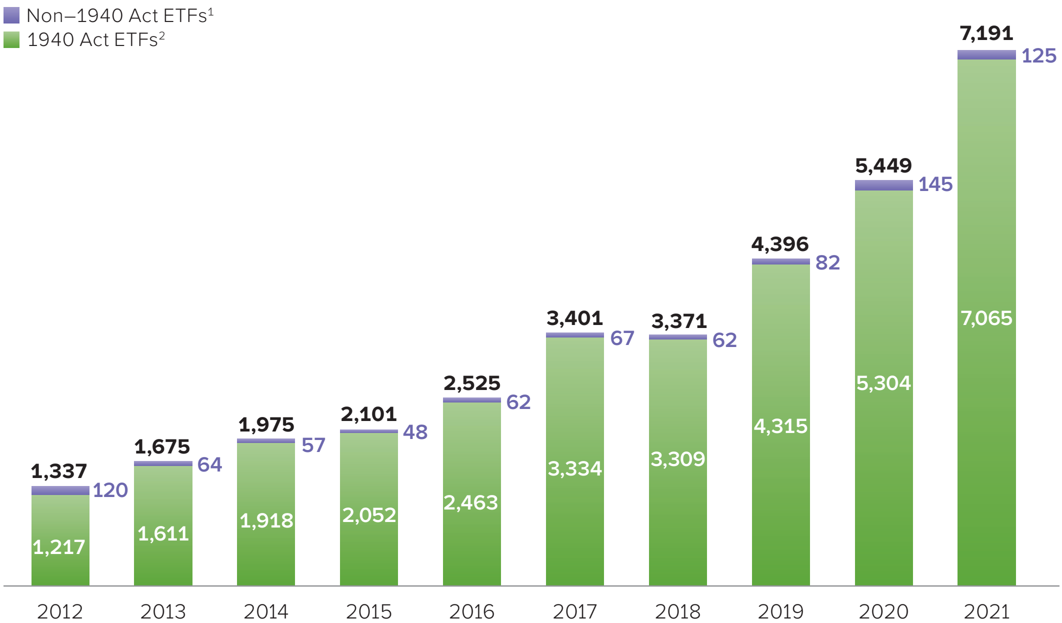
Worldwide ETF total net assets: $10.1 trillion

Sources: Investment Company Institute and ETFGI

FIGURE 4.2

Total Net Assets and Number of ETFs

Billions of dollars, year-end



Number of ETFs

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1,195	1,295	1,412	1,597	1,717	1,836	1,989	2,096	2,203	2,570

[1] The funds in this category are not registered under the Investment Company Act of 1940 and invest primarily in commodities, currencies, and futures.

[2] The funds in this category are registered under the Investment Company Act of 1940.

Origination of an ETF

An ETF originates with a sponsor—a company or financial institution—that chooses the investment objective of the ETF. In the case of an index-based ETF, the sponsor chooses both an index and a method of tracking its target index. Many early ETFs tracked traditional indexes, mostly those weighted by market capitalization. As the industry has evolved, index-based ETFs have tended to follow benchmarks that use an array of index construction methodologies, with weightings based on market capitalization, as well as other fundamental factors, such as sales or book value. Others follow factor-based metrics—indexes that first screen potential securities for a variety of attributes, including dividend payments, value, or growth—and then weight the selected securities equally or by market capitalization. Other customized index approaches include screening, selecting, and weighting securities to minimize volatility, maximize diversification, or achieve a high or low degree of correlation with the market.

Index-based ETFs track their target index in various ways. An index-based ETF may replicate its index (that is, it may invest 100 percent of its assets proportionately in all the securities in the target index) or it may invest in a representative sample of securities in the target index. Representative sampling is a practical solution for ETFs tracking indexes that contain thousands of securities (e.g., total stock market or broad-based fixed-income indexes), securities that have restrictions on ownership or transferability (e.g., certain foreign securities), or securities that are difficult to obtain (e.g., some fixed-income securities).

The sponsor of an actively managed ETF determines the investment objective of the fund and may trade securities at its discretion, much like an actively managed mutual fund. For instance, the sponsor may try to achieve an investment objective such as outperforming a segment of the market or investing in a particular sector through a portfolio of stocks, bonds, or other assets.

Creation and Redemption of ETF Shares—Primary Market Activity

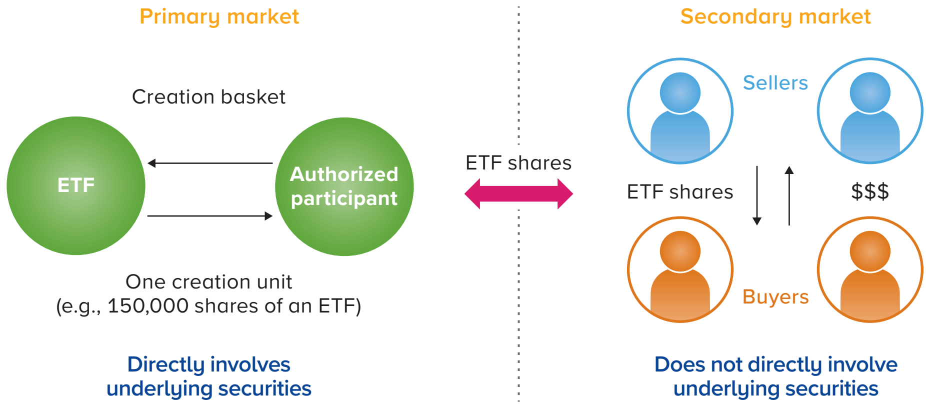
The creation or redemption of ETF shares—activity directly involving the ETF's underlying securities—is categorized as primary market activity. The creation and redemption mechanism in the ETF structure allows the number of shares outstanding in an ETF to expand or contract based on demand (Figure 4.3). Each business day, ETFs publish the creation and redemption baskets for the next trading day. The creation and redemption baskets are specific lists of names and quantities of securities, cash, and/or other assets. Often baskets will track the ETF's portfolio through either a pro rata slice or a representative sample. At times, baskets may be limited to a subset of the ETF's portfolio and contain a cash component. For example, the composition of baskets for bond ETFs may vary from day to day with the mix of cash and the selection of bonds in the baskets based on liquidity in the underlying bond market. Typically, the composition of an ETF's daily creation and redemption baskets mirror one another.

Creation

ETF shares are created when an authorized participant, or AP (see page 74), submits an order for one or more creation units. A creation unit consists of a specified number of ETF shares, generally ranging from 25,000 to 250,000 shares. The ETF shares are delivered to the AP when the specified creation basket is transferred to the fund. The fund may permit or require an AP to substitute cash for some or all of the securities or assets in the creation basket. This generally occurs when an instrument in the creation basket is difficult to obtain or may not be held by certain types of investors (such as certain foreign securities). An AP also may be charged a cash adjustment or transaction fee to offset any transaction expenses the fund undertakes. The value of the creation basket and any cash adjustment equals the value of the creation unit based on the ETF's NAV at the end of the day on which the transaction was initiated.

FIGURE 4.3

Creation of ETF Shares



Note: The creation basket represents a specific list of securities, cash, and/or other assets.

The AP can either keep the ETF shares that make up the creation unit or sell all or part of them to its clients or to other investors on a stock exchange, in a "dark pool" (private exchange), or in other trading venues. Purchases and sales of existing ETF shares among investors, including APs, are referred to as secondary market trading or activity.

Redemption

The redemption process in the primary market is simply the reverse of the creation process. A creation unit is redeemed when an AP acquires the number of ETF shares specified in the ETF's creation unit and returns the creation unit to the fund. In return, the AP receives the daily redemption basket of securities, cash, and/or other assets. The total value of the redemption basket and any cash adjustment is equivalent to the value of the creation unit based on the ETF's NAV at the end of the day on which the transaction was initiated.

How ETFs Trade

The price of an ETF share on a stock exchange is influenced by the forces of supply and demand. Though imbalances in supply and demand can cause the price of an ETF share to deviate from its underlying value, substantial deviations tend to be short-lived for many ETFs. Two primary features of an ETF's structure promote trading of its shares at a price that approximates its underlying value: portfolio transparency and the ability for APs to create or redeem ETF shares at the NAV at the end of each trading day.

Transparency of an ETF's holdings—either through full disclosure of the portfolio or other information on the value of the securities—enables investors to observe and attempt to profit from discrepancies between the ETF's share price and its underlying value during the trading day.

When there are discrepancies between an ETF's market price and the value of its underlying securities, trading can more closely align the ETF's price and its underlying value. For example, if an ETF is trading at a discount to its underlying value, investors may buy ETF shares or sell the underlying securities, or both. Increased demand for the ETF's shares should raise its price, and any sales of the underlying securities should lower their prices, narrowing the gap between the ETF and its underlying value. If the ETF is trading at a premium to its underlying value, investors may choose to sell the ETF shares or buy the underlying securities, or both. These actions should bring the ETF's price and the market value of its underlying securities closer together by reducing the ETF share price or raising the price of the underlying securities, or both.

The ability to create or redeem ETF shares at the end of each trading day also helps an ETF trade at market prices that approximate the underlying market value of the portfolio. When a deviation between an ETF's market price and its underlying value occurs, APs (on their own behalf or on behalf of other market participants) may create or redeem creation units in the primary market in an effort to capture a profit. For example, when an ETF is trading at a discount, market participants may find it profitable to buy the ETF shares and sell short the underlying securities. At the end of the day, APs return ETF shares to the fund in exchange for the ETF's redemption basket, which is used to cover the short positions in the underlying securities. When an ETF is trading at a premium, market participants may find it profitable to sell short the ETF during the day while simultaneously buying the underlying securities. At the end of the day, the APs (on their own behalf or on behalf of other market participants) will deliver the creation basket to the ETF in exchange for ETF shares that are used to cover the short sales.

These actions by market participants, commonly described as arbitrage, help keep the market-determined price of an ETF's shares close to its underlying value.

LEARN MORE

Glossary of Exchange-Traded Funds and Other Related Financial Terms
www.ici.org/files/2019/bro_etf_glossary.pdf

What Is an AP?

An authorized participant (AP) is typically a large financial institution that enters into a legal contract with an ETF distributor to create and redeem shares of the fund. In addition, APs are US-registered, self-clearing broker-dealers that can process all required trade submission, clearance, and settlement transactions on their own account; they are also full participating members of the National Securities Clearing Corporation (NSCC) and the Depository Trust Company (DTC).

APs play a key role in the primary market for ETF shares because they are the only investors allowed to interact directly with the fund. APs do not receive compensation from an ETF or its sponsor and have no legal obligation to create or redeem the ETF's shares. Rather, APs typically derive their compensation from acting as dealers in ETF shares. Also, APs create and redeem shares in the primary market when doing so is a more effective way of managing their firms' aggregate exposure than trading in the secondary market. Some APs are clearing brokers (rather than dealers) and receive payment for processing creations and redemptions as an agent for a wide array of market participants such as registered investment advisers and various liquidity providers, including market makers, hedge funds, and proprietary trading firms.

Over the years, policymakers have expressed concern that APs will step away from their role in facilitating creations and redemptions of ETF shares during periods of market stress, which would have knock-on effects in the secondary market for ETF shares. To investigate this concern, ICI conducted a member survey to assess the activity of APs during the March 2020 stress period and compared the experience with a more "normal" period in March 2019. In short, APs facilitated a significantly higher volume of ETF creations and redemptions for more ETFs during March 2020 than in March 2019. Rather than pulling back, on average, more APs participated in ETF primary market activity during the crisis in March 2020 (Figure 4.4). For example, across all ETF asset classes, there was a daily average of 2.0 active APs per ETF during the March 2020 period compared with a daily average of 1.6 active APs per ETF in the March 2019 period.

CONTINUED ON THE NEXT PAGE

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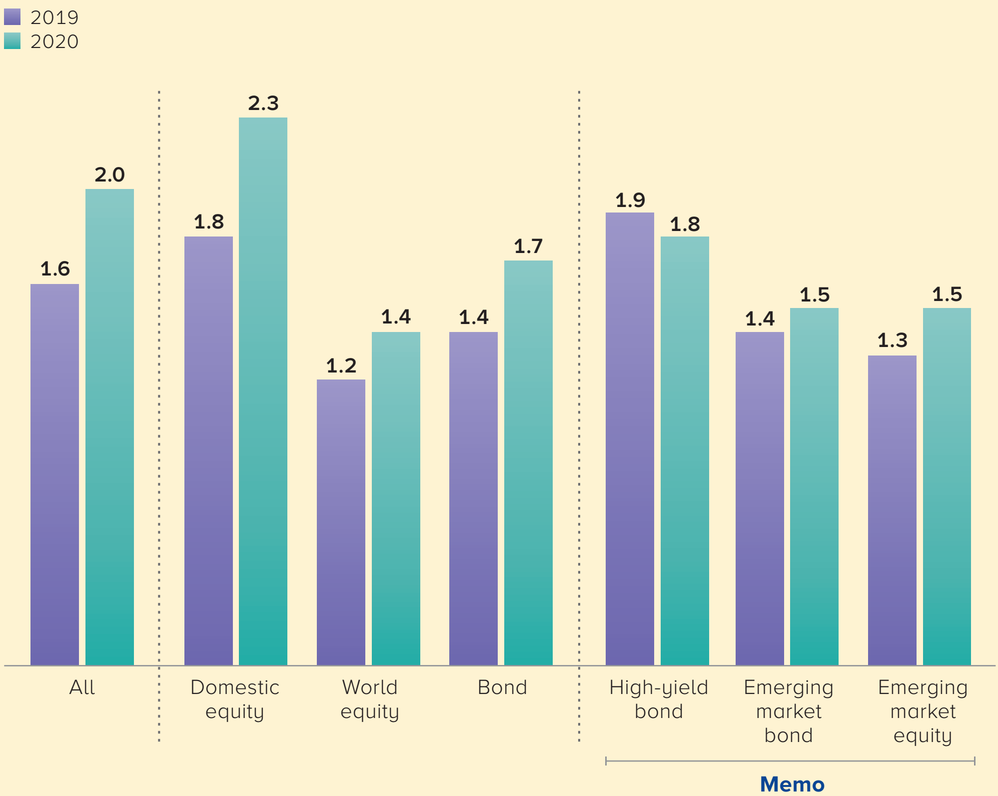
The Role and Activities of Authorized Participants of Exchange-Traded Funds
www.ici.org/pdf/ppr_15_aps_etfs.pdf

CONTINUED FROM THE PREVIOUS PAGE

FIGURE 4.4

Authorized Participants Increased Their Activity Across a Wide Range of ETF Asset Classes in March 2020

Daily average number of active APs per ETF; March 11–March 29, 2019, and March 9–March 27, 2020



Source: Investment Company Institute survey of ETF sponsors. See *Report of the COVID-19 Market Impact Working Group*, "Experiences of US Exchange-Traded Funds During the COVID-19 Crisis."

Secondary Market Trading in ETF Shares

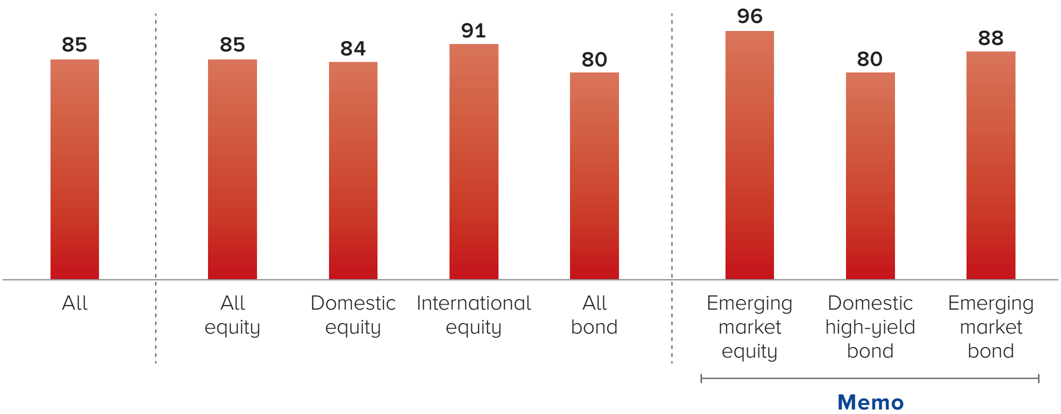
ETF investors trading in the secondary market (e.g., on an exchange) do not interact with the ETF directly and, for the most part, do not create transactions in the underlying securities, because only the ETF shares are changing hands. Although many large institutional investors can access these funds in both the primary and secondary markets, retail investors generally can access them only in the secondary market. ETF investors trading in the secondary market generally are not motivated by arbitrage. They are using ETFs to gain or reduce exposure to particular asset classes or investment strategies. Thus, these funds provide investors with an efficient means to transfer risk.

Across all ETFs, most activity is conducted in the secondary market (trading ETF shares) rather than the primary market (creations and redemptions of ETF shares through an AP). On average, 85 percent of the total activity in ETFs occurred on the secondary market in 2021 (Figure 4.5). Even for ETFs focused on narrower investment objectives—such as emerging market equity, domestic high-yield bond, and emerging market bond—the bulk of the trading occurred on the secondary market (96 percent, 80 percent, and 88 percent, respectively).

FIGURE 4.5

Most ETF Activity Occurs on the Secondary Market

Percentage of secondary market activity[1] relative to total activity,[2] 2021



[1] Secondary market activity is measured as total dollar volume of ETF shares traded in each category.

[2] Total activity is measured as the sum of primary market and secondary market activity. Primary market activity is measured as the total of gross issuance and gross redemptions of ETF shares in each category.

Sources: Investment Company Institute and Bloomberg

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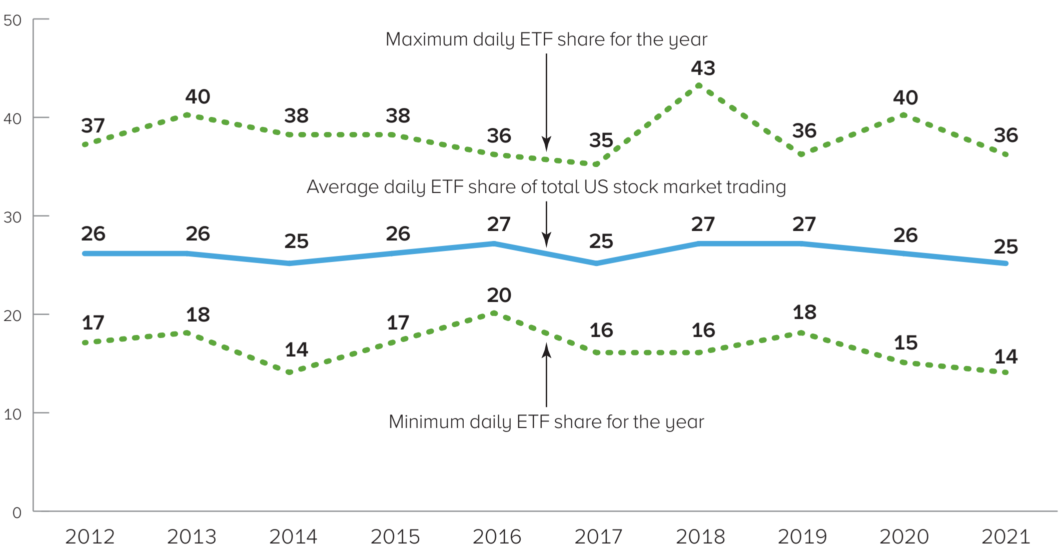
Investors use ETFs for a variety of reasons, such as acquiring or shedding exposure to specific asset classes and investment strategies, diversifying their portfolios, and hedging investment risks. It is, therefore, not surprising that ETF secondary market trading volumes (as measured by the value of shares traded) are a substantial share of total trading on US stock exchanges and other venues. On a daily basis, ETF trading volume accounted for an average of 25 percent of total stock market trading in 2021 (Figure 4.6). Also, despite tremendous growth in ETFs in the past decade, their average daily share of total stock market trading has remained relatively flat—fluctuating in a narrow range between 25 and 27 percent.

During periods of market turbulence, ETF secondary market trading volumes rise—both in absolute terms and as a share of total stock market trading—as investors, especially institutional investors, turn to ETFs to quickly and efficiently transfer and hedge risks. For example, in late 2018, stock market volatility jumped, largely reflecting market participants' concerns about slowing global growth and intensifying trade tensions. On December 24, 2018, when the S&P 500 index neared bear market territory following its September peak, ETF trading volume accounted for 43 percent of total stock market trading—its highest share during 2018 (Figure 4.6). During the financial market stress brought on by the COVID-19 crisis, ETF trading volume surged—reaching 40 percent of total stock market trading on March 3, 2020, as investors quickly sought to reposition their exposures in the face of the looming pandemic.

FIGURE 4.6

ETF Secondary Market Trading Averaged 25 Percent of Daily US Stock Trading in 2021

Percentage of total US stock market trading volume, annual



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Date of maximum	Dec 31	Jun 20	Feb 3	Aug 24	Sep 13	Dec 1	Dec 24	Jan 2	Mar 3	Nov 26
Date of minimum	Sep 21	Feb 12	Jun 27	Jun 26	Jul 28	Jun 23	Jun 22	Nov 26	Dec 18	Jun 25

Sources: Investment Company Institute, Bloomberg, and Cboe Exchange, Inc.

Most ETF secondary market trades represent investors exchanging shares of ETFs among themselves; unlike primary market activity, these trades do not affect the ETF's underlying securities. In 2021, domestic equity ETFs had a total of $4.9 trillion in primary market activity, which represented only 4.6 percent of the $106.3 trillion traded in company stocks during the year (Figure 4.7). Even during 2018—a year with multiple episodes of heightened stock market volatility—creations and redemptions of domestic equity ETFs accounted for only 5.4 percent of the $65.1 trillion traded in company stocks that year. It is important to note that in the past decade, only a small fraction of company stock trading volume has been attributable to ETFs. And in 2020, even with the market turmoil surrounding the COVID-19 public health crisis, domestic equity ETFs had just $4.2 trillion in primary market activity, which represented only 4.7 percent of the $88.9 trillion traded in company stocks during the year.

FIGURE 4.7

Domestic Equity ETFs Have Had Minimal Impact on Underlying US Stocks

Annual

	Domestic equity ETF primary market activity* Trillions of dollars	Value of company stock traded Trillions of dollars	Domestic equity ETF primary market activity as a share of company stock traded Percent
2012	$1.7	$38.7	4.4%
2013	1.9	41.2	4.6
2014	2.3	48.7	4.6
2015	2.5	51.3	4.9
2016	2.2	49.7	4.4
2017	2.2	51.3	4.2
2018	3.5	65.1	5.4
2019	2.9	59.4	5.0
2020	4.2	88.9	4.7
2021	4.9	106.3	4.6

* Primary market activity is measured as the total of gross issuance and gross redemptions.
Sources: Investment Company Institute, Bloomberg, and Cboe Exchange, Inc.

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Experiences of US Exchange-Traded Funds During the COVID-19 Crisis
www.ici.org/pdf/20_rpt_covid2.pdf

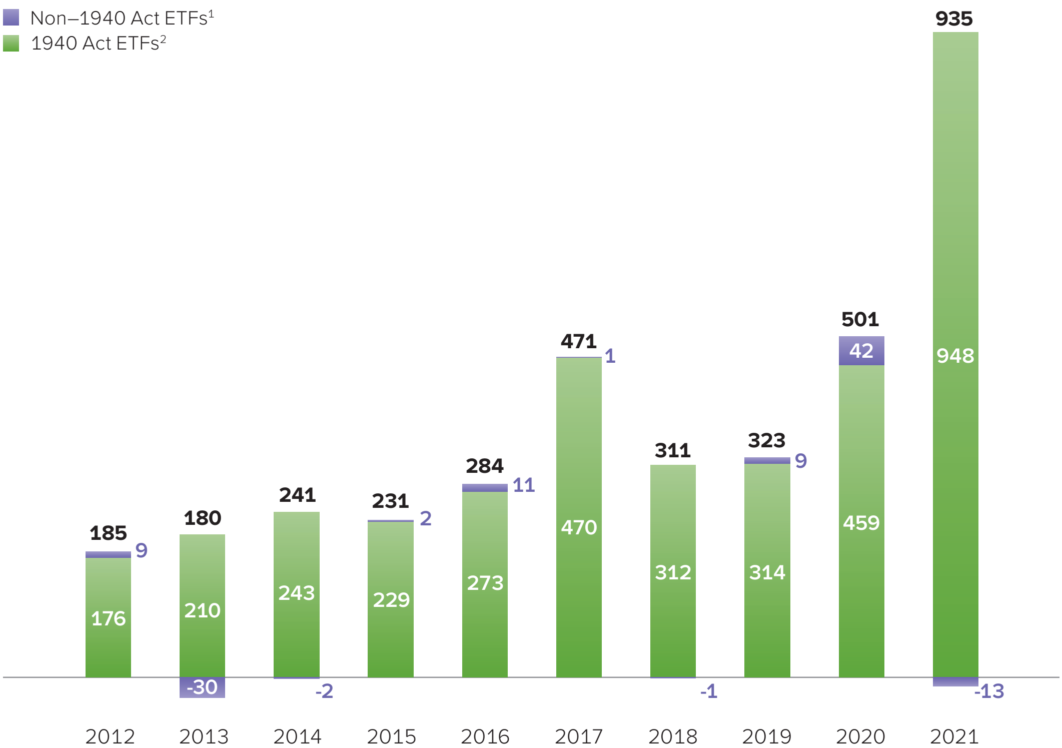
Demand for ETFs

In the past decade, demand for ETFs has grown as institutional investors have found ETFs to be a convenient vehicle for participating in, or hedging against, broad movements in the stock market. Increased awareness of these investment vehicles by retail investors and their financial advisers also has influenced demand for ETFs. For 2021 as a whole, net share issuance of ETF shares (including reinvested dividends) surged to a record $935 billion, up from 2020's robust $501 billion (Figure 4.8).

FIGURE 4.8

Net Share Issuance of ETFs Surged in 2021

Billions of dollars, annual



[1] The funds in this category are not registered under the Investment Company Act of 1940 and invest primarily in commodities, currencies, and futures.

[2] The funds in this category are registered under the Investment Company Act of 1940.

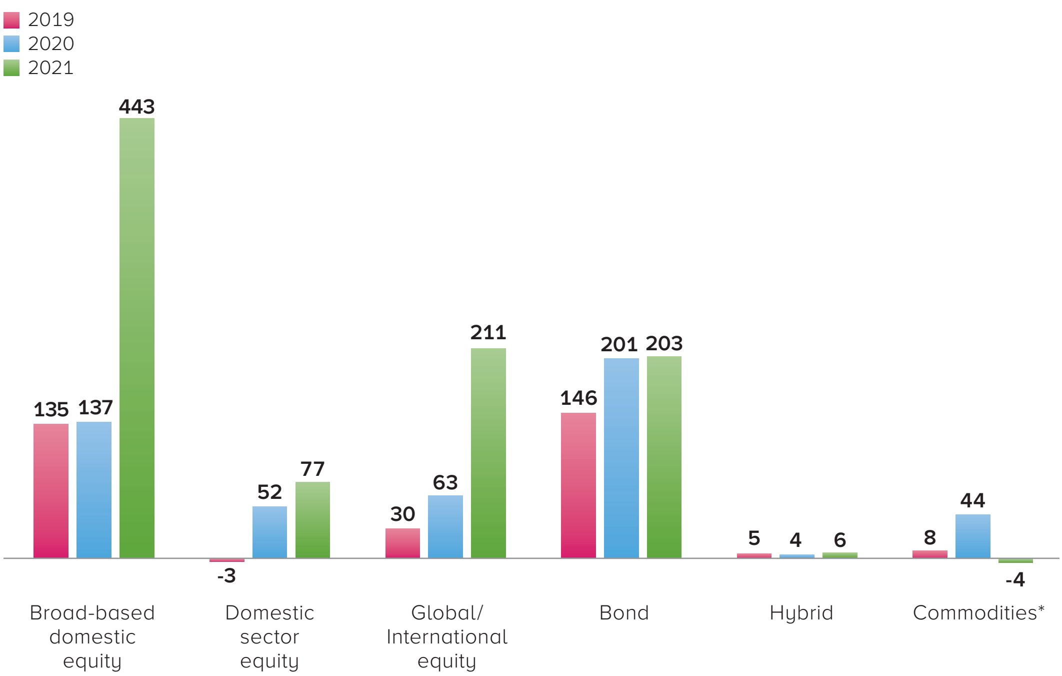
Note: Data for net share issuance include reinvested dividends.

In 2021, net share issuance of ETFs increased across nearly all asset classes (Figure 4.9). Demand for bond ETFs, likely boosted by the aging of Generation X and the Baby Boom Generation, remained high in 2021, with net share issuance totaling $203 billion. Net share issuance of broad-based domestic equity ETFs rose sharply in 2021, with $443 billion in net new shares issued, up from $137 billion in 2020 and $135 billion in 2019. Demand for global/ international equity ETFs, which totaled $211 billion for 2021, picked up as well. Upward revisions to the outlook for gross domestic product (GDP) growth in the United States and improved economic conditions in other countries across the world likely helped fuel the increase in demand for equity ETFs. Two additional trends continued to contribute to flows into equity ETFs: fee-based advisers' increased use of ETFs in client portfolios (Figure 3.17), and conversions of mutual funds to the ETF structure.

FIGURE 4.9

Net Share Issuance of ETFs by Investment Classification

Billions of dollars, annual



* Commodity ETFs include funds—both registered and not registered under the Investment Company Act of 1940—that invest primarily in commodities, currencies, and futures.

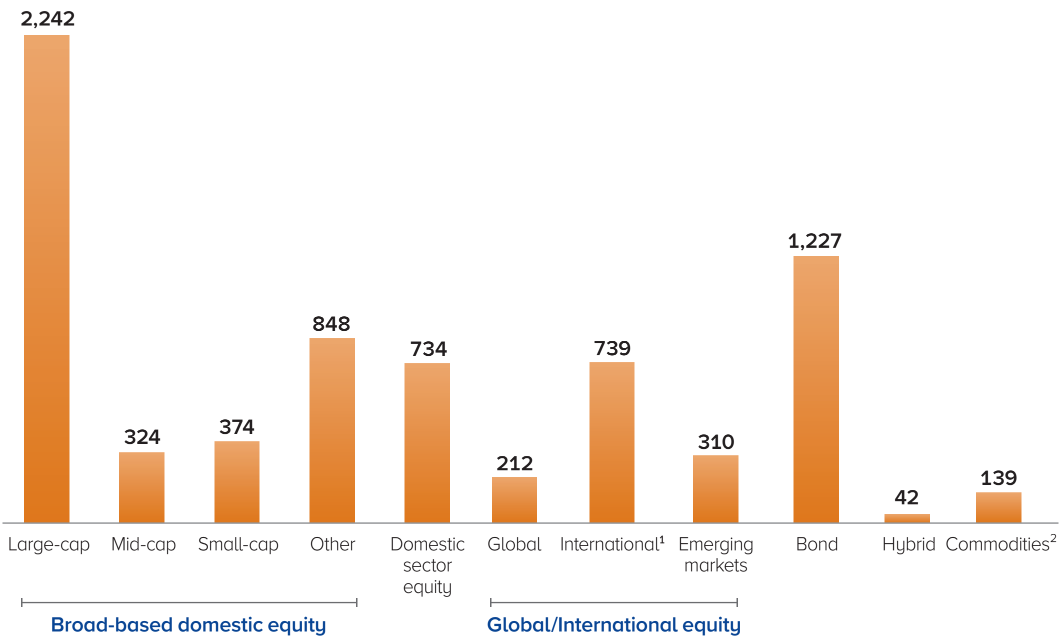
Note: Data for net share issuance include reinvested dividends.

ETFs have been available for nearly 30 years, and in that time, large-cap domestic equity ETFs have accounted for the largest proportion of ETF net assets. At year-end 2021, net assets in large-cap domestic equity ETFs totaled $2.2 trillion, or 31 percent of ETF net assets (Figure 4.10). Fueled by strong investor demand, bond ETFs held 17 percent ($1.2 trillion) of ETF net assets. International equity ETFs accounted for $739 billion, or 10 percent of ETF net assets.

FIGURE 4.10

Total Net Assets of ETFs Were Concentrated in Large-Cap Domestic Stocks

Billions of dollars, year-end 2021



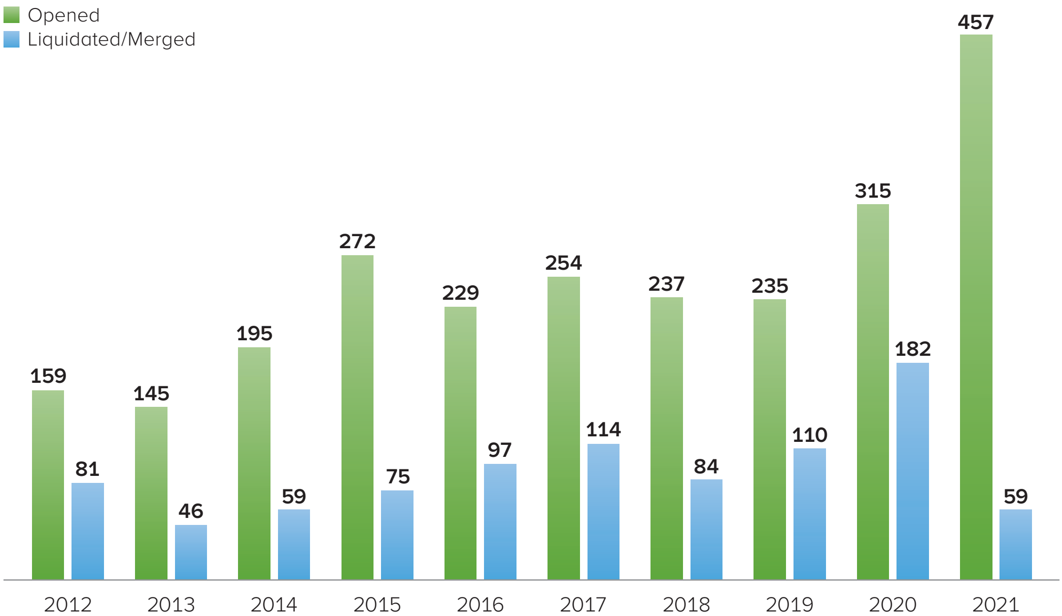
[1] This category includes international, regional, and single country ETFs but excludes emerging market ETFs.

[2] Commodity ETFs include funds—both registered and not registered under the Investment Company Act of 1940—that invest primarily in commodities, currencies, and futures.

Strong investor demand for ETFs has led to a substantial increase in the number of ETFs created by fund sponsors, with 2,498 new ETFs offered to investors in the past decade (Figure 4.11). Over the same period, 907 ETFs were liquidated or merged with another fund. In any given year, fund sponsors will liquidate or merge ETFs that have failed to attract sufficient demand. In 2021, 457 ETFs—most of which were domestic equity ETFs—were launched. Meanwhile, 59 ETFs were liquidated or merged, as sponsors eliminated some global/international equity ETFs from their lineups.

FIGURE 4.11

Number of ETFs Entering and Exiting the Industry



Note: Data include ETFs that invest primarily in other ETFs.

Characteristics of ETF-Owning Households

About 11 percent of US households (13.9 million) held ETFs in 2021. Of households that owned mutual funds, an estimated 19 percent also owned ETFs. ETF-owning households tended to include investors who owned a range of equity and fixed-income investments. In 2021, 98 percent of ETF-owning households also owned equity mutual funds, individual stocks, or variable annuities (Figure 4.12). Fifty-one percent of households that owned ETFs also held bond mutual funds, individual bonds, or fixed annuities, and 42 percent owned investment real estate.

FIGURE 4.12

ETF-Owning Households Held a Broad Range of Investments

Percentage of ETF-owning households holding each type of investment, 2021

Equity mutual funds, individual stocks, or variable annuities (total)	**98**
Bond mutual funds, individual bonds, or fixed annuities (total)	**51**
Mutual funds (total)	**79**
Equity	74
Bond	42
Hybrid	40
Money market	46
Individual stocks	**85**
Individual bonds	**20**
Fixed or variable annuities	**25**
Investment real estate	**42**

Note: Multiple responses are included.

Some characteristics of ETF-owning households are similar to those of households that own mutual funds and those that own stocks directly. For instance, households that owned ETFs—like households owning mutual funds and those owning individual stocks—tended to have household incomes above the national median (Figure 4.13). ETF-owning households, however, also exhibit some characteristics that distinguish them from other households. For example, ETF-owning households tended to be younger and more likely to own individual retirement accounts than households that own mutual funds and those that own individual stocks.

FIGURE 4.13

Characteristics of ETF-Owning Households

2021

	All US households	Households owning ETFs	Households owning mutual funds	Households owning individual stocks
Median				
Age of head of household[1]	52	45	51	49
Household income[2]	$65,000	$125,000	$104,900	$113,000
Household financial assets[3]	$100,000	$375,000	$320,000	$375,000
Percentage of households				
Household primary or co-decisionmaker for saving and investing				
Married or living with a partner	55	60	70	67
College or postgraduate degree	39	55	57	56
Employed (full- or part-time)	60	74	75	73
Retired from lifetime occupation	29	22	24	24
Household owns				
IRA(s)	37	72	66	59
DC retirement plan account(s)	47	68	84	68

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

[2] Total reported is household income before taxes in 2020.

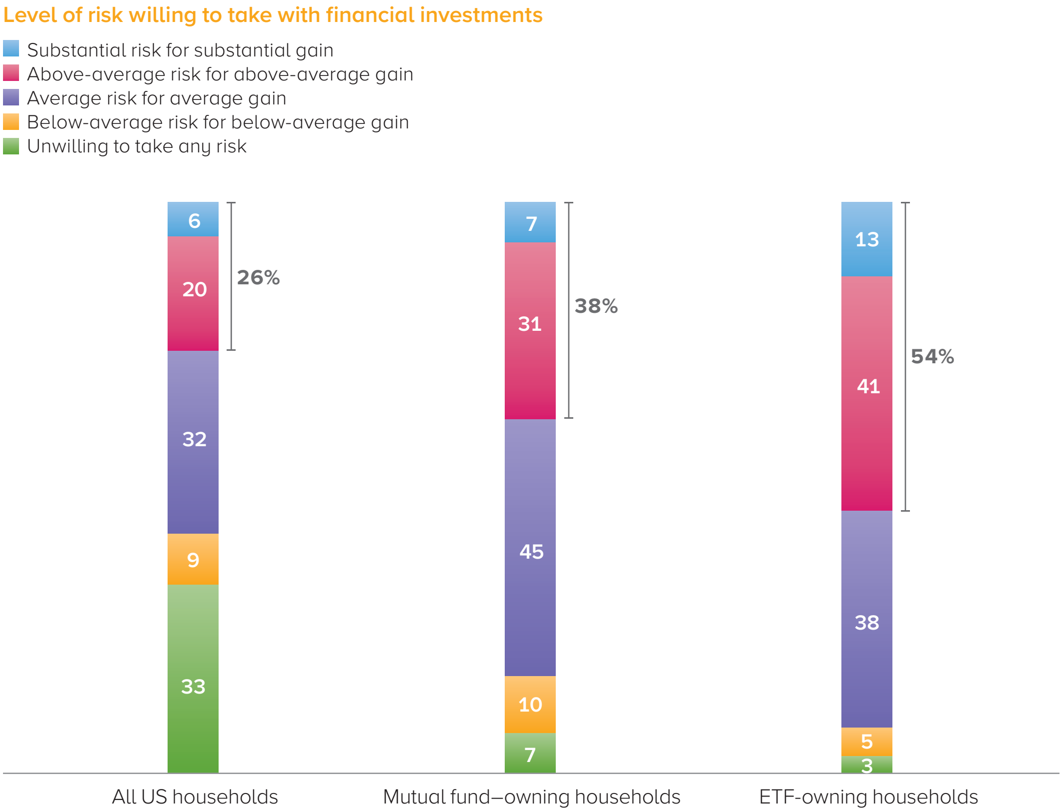
[3] Household financial assets include assets in employer-sponsored retirement plans but exclude the household's primary residence.

ETF-owning households also exhibit more willingness to take investment risk (Figure 4.14). Fifty-four percent of ETF-owning households were willing to take substantial or above-average investment risk for substantial or above-average gain in 2021, compared with 26 percent of all US households and 38 percent of mutual fund–owning households. This result may be explained by the predominance of equity ETFs, which make up 80 percent of ETF total net assets (Figure 4.10). Investors who are more willing to take investment risk generally may be more likely to invest in equities.

FIGURE 4.14

ETF-Owning Households Are Willing to Take More Investment Risk

Percent, 2021



CHAPTER

5

US Closed-End Funds

Closed-end funds are one of four types of investment companies, along with mutual (or open-end) funds, exchange-traded funds (ETFs), and unit investment trusts. Closed-end funds generally issue a fixed number of shares that are listed on a stock exchange or traded in the over-the-counter market. The assets of a closed-end fund are professionally managed in accordance with the fund's investment objectives and policies, and may be invested in stocks, bonds, and other securities. Total assets of closed-end funds were $309 billion at year-end 2021.

IN THIS CHAPTER

What Is a Closed-End Fund?

A closed-end fund is a type of investment company whose shares are listed on a stock exchange or traded in the over-the-counter market. The assets of a closed-end fund are professionally managed in accordance with the fund's investment objectives and policies, and may be invested in equities, bonds, and other securities. The market price of a closed-end fund share fluctuates like that of other publicly traded securities and is determined by supply and demand in the marketplace.

A closed-end fund is created by issuing a fixed number of common shares to investors during an initial public offering. Subsequent issuance of common shares can occur through secondary or follow-on offerings, at-the-market offerings, rights offerings, or dividend reinvestments. Closed-end funds also are permitted to issue one class of preferred shares in addition to common shares. Holders of preferred shares are paid dividends, but do not participate in the gains and losses on the fund's investments. Issuing preferred shares allows a closed-end fund to raise additional capital, which it can use to purchase more securities for its portfolio.

Once issued, shares of a closed-end fund generally are bought and sold by investors in the open market and are not purchased or redeemed directly by the fund—although some closed-end funds may adopt stock repurchase programs or periodically tender for shares. Because a closed-end fund does not need to maintain cash reserves or sell securities to meet redemptions, the fund has the flexibility to invest in less-liquid portfolio securities. For example, a closed-end fund may invest in securities of very small companies, municipal bonds that are not widely traded, or securities traded in countries that do not have fully developed securities markets.

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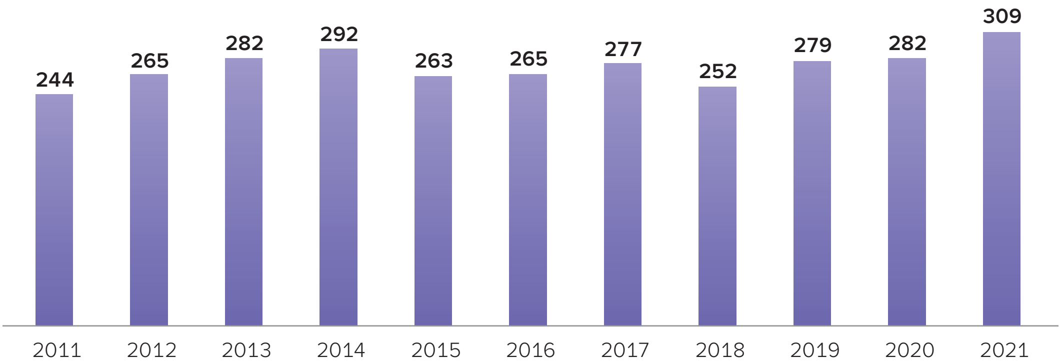
Total Assets of Closed-End Funds

At year-end 2021, 461 closed-end funds had total assets of $309 billion (Figure 5.1)—an increase of 9.8 percent from year-end 2020. The growth in total assets in 2021 was primarily driven by rising US stock prices and increased demand for both equity and bond closed-end funds.

FIGURE 5.1

Total Assets of Closed-End Funds Increased to $309 Billion by Year-End 2021

Billions of dollars, year-end



Number of closed-end funds

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
634	604	601	570	561	534	532	504	501	492	461

Note: *Total assets* is the fair value of assets held in closed-end fund portfolios funded by common and preferred shares less any liabilities (not including liabilities attributed to preferred shares).

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

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The Closed-End Fund Market, 2021

www.ici.org/research/industry/closedend

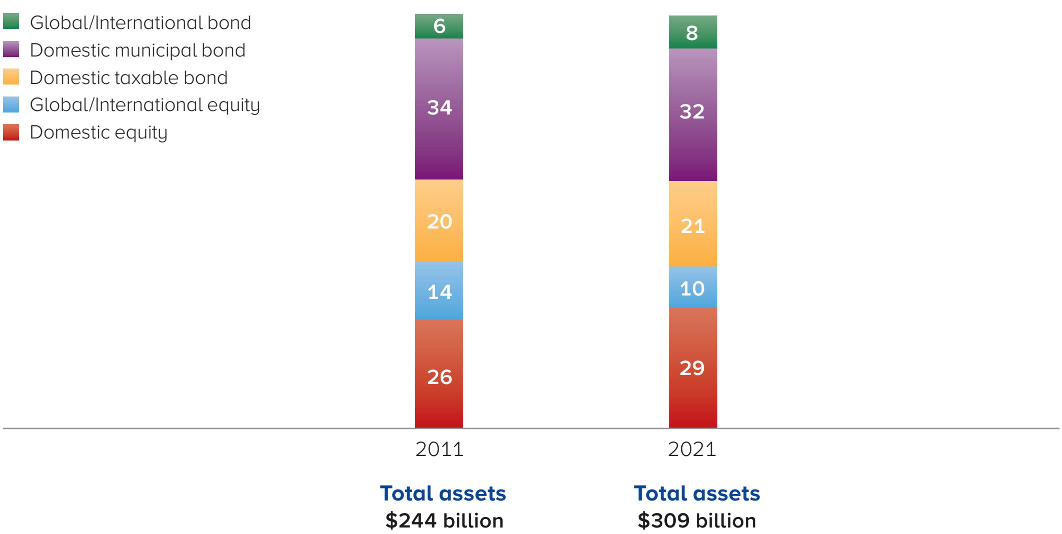
Historically, bond funds have accounted for a large share of assets in closed-end funds. At year-end 2011, 61 percent of all closed-end fund assets were held by bond funds, with the remainder held by equity funds (Figure 5.2). At year-end 2021, 60 percent of closed-end fund assets ($186 billion) were held by bond funds. The remaining 40 percent of closed-end fund assets ($123 billion) were held by equity funds. These shares have remained relatively stable, in part because of two offsetting factors. Over the past 10 years, cumulative net issuance of bond closed-end fund shares exceeded that of equity fund shares—offsetting the total returns on US stocks,* which exceeded those of US bonds† during this time.

The number of closed-end funds available to investors decreased for the 10th straight year in 2021, and remains well below its recent peak in 2011 (Figure 5.1). Over this period, more closed-end funds were liquidated, merged, or converted into open-end mutual funds or ETFs than were launched.

FIGURE 5.2

Composition of the Closed-End Fund Market by Investment Objective

Percentage of closed-end fund total assets, year-end



Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

* As measured by the Wilshire 5000 Total Market Index.

† As measured by the FTSE US Broad Investment Grade Bond Index.

Net Issuance of Closed-End Funds

Net issuance of closed-end fund shares was $16.8 billion in 2021, compared with $2.7 billion in 2020 (Figure 5.3). In 2021, equity closed-end funds had positive net share issuance of $7.6 billion, while bond closed-end funds had positive net share issuance of $9.2 billion. Among equity closed-end funds, net share issuance was concentrated primarily in domestic funds ($6.0 billion). Among bond closed-end funds, domestic taxable funds saw $6.3 billion in net share issuance, global/international funds had $2.1 billion in net share issuance, and domestic municipal funds experienced $0.7 billion in net share issuance.

FIGURE 5.3

Closed-End Fund Net Share Issuance

Millions of dollars

		Equity			Bond			
	Total	Total	Domestic	Global/ International	Total	Domestic taxable	Domestic municipal	Global/ International
2012	$11,385	$2,953	$2,840	$113	$8,432	$3,249	$3,102	$2,081
2013	14,515	3,605	4,097	-491	10,909	3,921	530	6,459
2014	4,935	4,314	3,819	494	621	266	567	-212
2015	1,859	1,267	224	1,043	592	708	-11	-104
2016	829	58	242	-184	771	1,437	-168	-498
2017	678	-548	-147	-401	1,226	758	231	237
2018	1,869	-412	-352	-60	2,280	300	1,985	-4
2019	5,882	2,633	828	1,805	3,249	1,311	1,674	265
2020	2,737	1,901	1,977	-76	837	560	-316	593
2021	16,762	7,612	6,013	1,599	9,150	6,281	739	2,131

Note: Net share issuance is the dollar value of gross issuance (proceeds from initial and additional public offerings of shares) minus gross redemptions of shares (share repurchases and fund liquidations).

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

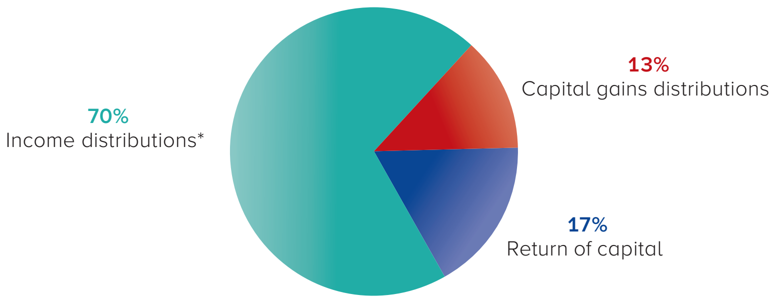
Closed-End Fund Distributions

In 2021, closed-end funds distributed an estimated $16.4 billion to shareholders (Figure 5.4). Closed-end funds may make distributions to shareholders from three possible sources: income distributions, which are payments from interest and dividends that the fund earns on its investments in securities; realized capital gains distributions; and return of capital. Income distributions accounted for 70 percent of closed-end fund distributions, capital gains distributions for 13 percent, and return of capital for 17 percent.

FIGURE 5.4

Closed-End Fund Distributions

Percentage of closed-end fund distributions, 2021



Total closed-end fund distributions: $16.4 billion

* Income distributions are paid from interest and dividends that the fund earns on its investments in securities.
Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

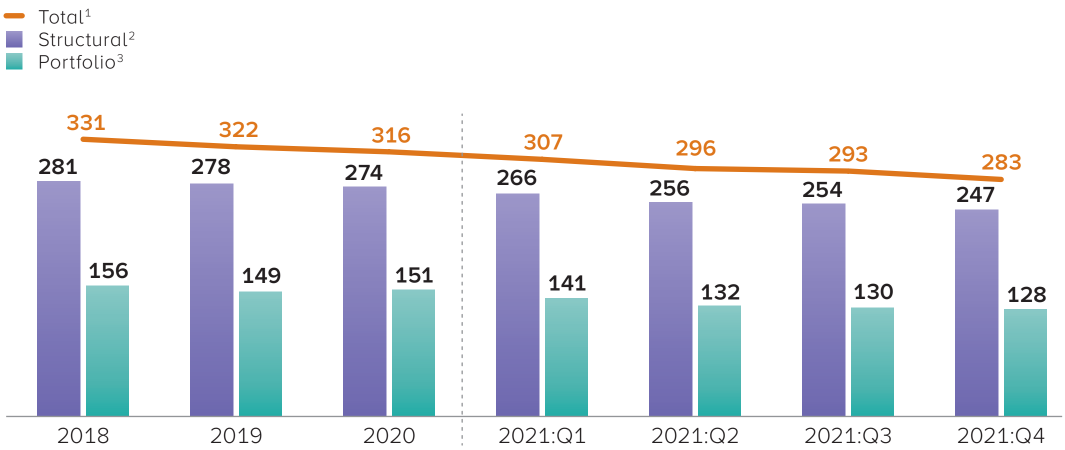
Closed-End Fund Leverage

Closed-end funds have the ability, subject to strict regulatory limits, to use leverage as part of their investment strategy. The use of leverage by a closed-end fund can allow it to achieve higher long-term returns, but also increases risk and the likelihood of share price volatility. Closed-end fund leverage can be classified as either structural leverage or portfolio leverage. At year-end 2021, at least 283 funds, accounting for 61 percent of closed-end funds, were using structural leverage, some types of portfolio leverage (i.e., tender option bonds or reverse repurchase agreements), or both as a part of their investment strategy (Figure 5.5).

FIGURE 5.5

Closed-End Funds Are Employing Structural Leverage and Some Types of Portfolio Leverage

Number of funds, end of period



[1] Components do not add to the total because funds may employ both structural and portfolio leverage.

[2] Structural leverage affects the closed-end fund's capital structure by increasing the fund's portfolio assets through borrowing and issuing debt and preferred shares.

[3] Portfolio leverage is leverage that results from particular types of portfolio investments, including certain types of derivatives, reverse repurchase agreements, tender option bonds, and other investments or types of transactions. Data are only available for reverse repurchase agreements and tender option bonds. Given data collection constraints, and the continuing development of types of investments/transactions with a leverage characteristic (and the use of different definitions of *leverage*), actual portfolio leverage may be materially different from what is reflected above.

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

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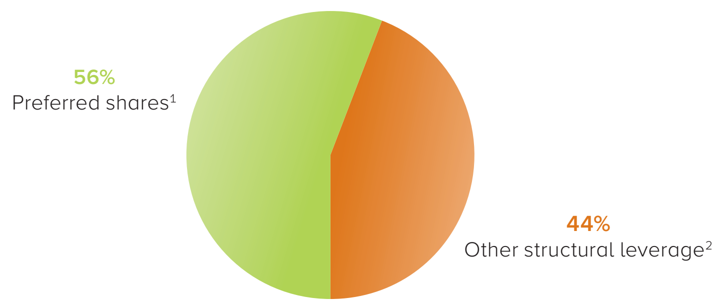
Frequently Asked Questions About Closed-End Funds and Their Use of Leverage
www.ici.org/faqs/faq/other/faqs_closed_end

Structural leverage affects the closed-end fund's capital structure by increasing the fund's portfolio assets. Types of closed-end fund structural leverage include borrowing capital and issuing debt and preferred shares. At the end of 2021, 247 funds had a total of $52.0 billion in structural leverage, with 56 percent from preferred shares and 44 percent from other structural leverage, which includes bank borrowing and other forms of debt (Figures 5.5 and 5.6). The average leverage ratio* across those closed-end funds employing structural leverage was 27 percent at year-end 2021; among these funds, the average leverage ratio for bond funds was somewhat higher (28 percent) than that of equity funds (24 percent).

FIGURE 5.6

Preferred Shares Constituted the Majority of Closed-End Fund Structural Leverage

Percentage of closed-end fund structural leverage, year-end 2021



Total closed-end fund structural leverage: $52.0 billion

[1] A closed-end fund may issue preferred shares to raise additional capital, which can be used to purchase more securities for its portfolio. Holders of preferred shares are paid dividends, but do not participate in the gains and losses on the fund's investments.

[2] *Other structural leverage* includes bank borrowing and other forms of debt.

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

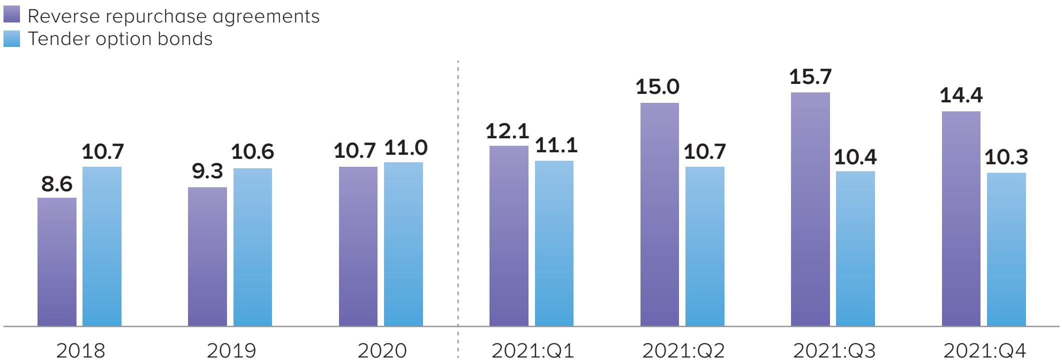
* The *leverage ratio* is the ratio of the amount of structural leverage to the sum of the amount of common share assets and structural leverage.

Portfolio leverage is leverage that results from particular portfolio investments, such as certain types of derivatives, reverse repurchase agreements, and tender option bonds. At the end of 2021, 128 closed-end funds had $24.7 billion outstanding in reverse repurchase agreements and tender option bonds (Figures 5.5 and 5.7).

FIGURE 5.7

Use of Portfolio Leverage

Billions of dollars, end of period



Note: Portfolio leverage is leverage that results from particular types of portfolio investments, including certain types of derivatives, reverse repurchase agreements, tender option bonds, and other investments or types of transactions. Data are only available for reverse repurchase agreements and tender option bonds. Given data collection constraints, and the continuing development of types of investments/transactions with a leverage characteristic (and the use of different definitions of *leverage*), actual portfolio leverage may be materially different from what is reflected above.

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

Closed-End Fund Discounts

More than 95 percent of exchange-listed closed-end funds calculate the value of their portfolios every business day, while the rest calculate their portfolio values weekly or on some other basis. The net asset value (NAV) of a closed-end fund is calculated by subtracting the fund's liabilities (e.g., fund borrowing) from the current market value of its assets and dividing by the total number of shares outstanding. The NAV changes as the total value of the underlying portfolio securities rises or falls, or the fund's liabilities change.

Because an exchange-listed closed-end fund's shares trade based on investor demand, the fund may trade at a price higher or lower than its NAV. A closed-end fund trading at a share price higher than its NAV is said to be trading at a "premium" to the NAV, while a closed-end fund trading at a share price lower than its NAV is said to be trading at a "discount." Funds may trade at discounts or premiums to the NAV based on market

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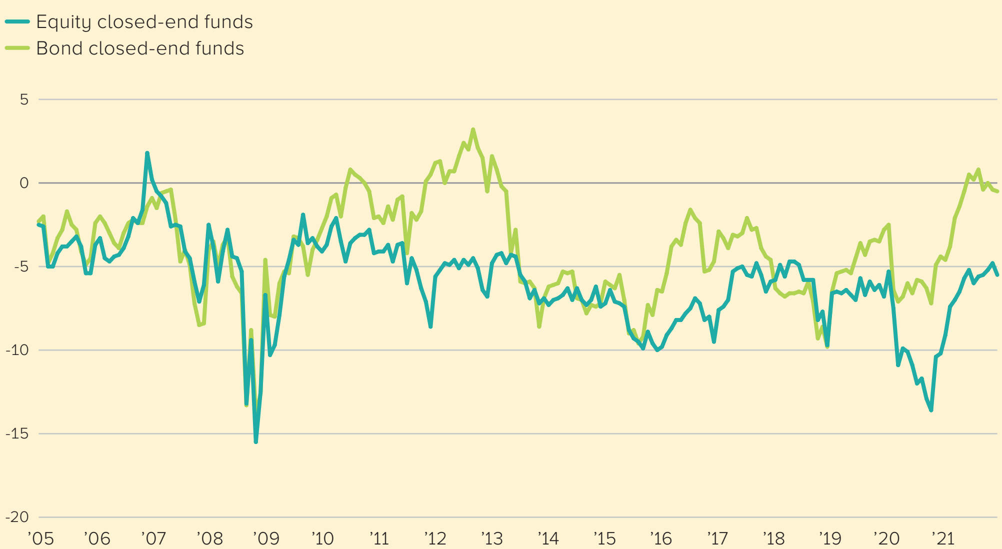
perceptions or investor sentiment. For example, a closed-end fund that invests in securities that are anticipated to generate above-average future returns and are difficult for retail investors to obtain directly may trade at a premium because of a high level of market interest. In contrast, a closed-end fund with large unrealized capital gains may trade at a discount because investors will have priced in any perceived tax liability.

Closed-end fund price deviations narrowed significantly in the first half of 2021. For equity closed-end funds, the average discount narrowed from 10.2 percent in December 2020 to 5.2 percent at the end of June 2021, while bond closed-end funds went from an average discount of 4.4 percent to an average premium of 0.5 percent over that same period. Average discounts remained relatively stable for the rest of the year, with the average discount of equity closed-end funds ending the year at 5.5 percent, while bond closed-end funds ended the year with an average discount of 0.5 percent.

FIGURE 5.8

Closed-End Funds' Premium/Discount Rate

Percent, month-end



Note: The premium/discount rate is the simple average of the percent difference between share price and NAV at month-end.

Source: Investment Company Institute tabulations of Bloomberg data

Characteristics of Households Owning Closed-End Funds

An estimated 3.5 million US households owned closed-end funds in 2021. These households tended to include investors who owned a range of equity and fixed-income investments. In 2021, 95 percent of households owning closed-end funds also owned equity mutual funds, individual stocks, or variable annuities (Figure 5.9). Sixty-five percent of households that owned closed-end funds also held bond mutual funds, individual bonds, or fixed annuities. In addition, 62 percent of these households owned investment real estate.

FIGURE 5.9

Closed-End Fund Investors Owned a Broad Range of Investments

Percentage of closed-end fund–owning households holding each type of investment, 2021

Equity mutual funds, individual stocks, or variable annuities (total)	**95**
Bond mutual funds, individual bonds, or fixed annuities (total)	**65**
Mutual funds (total)	**85**
Equity	80
Bond	57
Hybrid	57
Money market	65
Individual stocks	**82**
Individual bonds	**41**
Fixed or variable annuities	**43**
Investment real estate	**62**

Note: Multiple responses are included.
Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

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A Guide to Closed-End Funds
www.ici.org/cef/background/bro_g2_ce

Because a large number of households that owned closed-end funds also owned individual stocks and mutual funds, the characteristics of each group were similar in many respects. For instance, households that owned closed-end funds (like households owning individual stocks and mutual funds) tended to be headed by college-educated individuals and tended to have household incomes above the national median (Figure 5.10).

Nonetheless, households that owned closed-end funds exhibited certain differences. For example, although households with closed-end funds tended to have similar household financial assets as those owning individual stocks, they had greater household financial assets than households owning mutual funds (Figure 5.10). Also, 31 percent of individuals heading households that owned closed-end funds were retired from their lifetime occupations, compared with 24 percent for those owning individual stocks and those owning mutual funds.

FIGURE 5.10

Closed-End Fund Investors Had Above-Average Household Incomes and Financial Assets

2021

	All US households	Households owning closed-end funds	Households owning mutual funds	Households owning individual stocks
Median				
Age of head of household[1]	52	57	51	49
Household income[2]	$65,000	$110,000	$104,900	$113,000
Household financial assets[3]	$100,000	$400,000	$320,000	$375,000
Percentage of households				
Household primary or co-decisionmaker for saving and investing				
Married or living with a partner	55	62	70	67
College or postgraduate degree	39	61	57	56
Employed (full- or part-time)	60	72	75	73
Retired from lifetime occupation	29	31	24	24
Household owns				
IRA(s)	37	76	66	59
DC retirement plan account(s)	47	68	84	68

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

[2] Total reported is household income before taxes in 2020.

[3] Household financial assets include assets in employer-sponsored retirement plans but exclude the household's primary residence.

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2021"

CHAPTER 6

US Fund Expenses and Fees

Mutual funds provide investors with many investment-related services, and for those services, investors incur two primary types of expenses and fees: ongoing expenses and sales loads. Average expense ratios (i.e., ongoing expenses) paid by US mutual fund investors have fallen substantially over time. For example, on an asset-weighted basis, average expense ratios for equity mutual funds fell from 0.99 percent in 2000 to 0.47 percent in 2021, a 53 percent decline.

IN THIS CHAPTER

Trends in Mutual Fund Expenses

Mutual fund investors incur two primary types of expenses and fees: ongoing expenses and sales loads. Ongoing expenses cover portfolio management, fund administration, daily fund accounting and pricing, shareholder services (such as call centers and websites), distribution charges (known as 12b-1 fees), and other operating costs. These expenses are included in a fund's expense ratio—the fund's annual expenses expressed as a percentage of its assets. Because expenses are paid from fund assets, investors pay these expenses indirectly. Sales loads are paid at the time of share purchase (front-end loads), when shares are redeemed (back-end loads), or over time (level loads).

On an asset-weighted basis, average expense ratios* incurred by mutual fund investors have fallen substantially (Figure 6.1). In 2000, equity mutual fund investors incurred expense ratios of 0.99 percent, on average, or 99 cents for every $100 invested. By 2021, that average had fallen to 0.47 percent, a 53 percent decline. Hybrid and bond mutual fund expense ratios also have declined. The average hybrid mutual fund expense ratio fell from 0.89 percent in 2000 to 0.57 percent in 2021, a reduction of 36 percent. In addition, the average bond mutual fund expense ratio fell from 0.76 percent in 2000 to 0.39 percent in 2021, a decline of 49 percent.

* In this chapter, unless otherwise noted, average expense ratios are calculated on an asset-weighted basis. ICI's fee research uses asset-weighted averages to summarize the expenses and fees that shareholders pay through funds. In this context, asset-weighted averages are preferable to simple averages, which would overstate the expenses and fees of funds in which investors hold few dollars. ICI weights the expense ratio of each fund's share class by its year-end assets.

The fund investment categories used in this chapter are broad and encompass diverse investment styles (e.g., active and index), a range of general investment types (e.g., equity, bond, and hybrid funds), and a variety of arrangements for shareholder services, recordkeeping, or distribution charges (known as 12b-1 fees). This material is intended to provide general information on fees incurred by investors through funds as well as insight into average fees across the marketplace. It is not intended for benchmarking fees and expenses incurred by a particular investor, or charged by a particular fund or other investment product.

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Trends in the Expenses and Fees of Funds, 2021
www.ici.org/files/2022-03/per28-02.pdf

FIGURE 6.1

Expense Ratios Incurred by Mutual Fund Investors Have Declined Substantially Since 2000

Percent

	Equity mutual funds	Hybrid mutual funds	Bond mutual funds
2000	0.99	0.89	0.76
2001	0.99	0.89	0.75
2002	1.00	0.89	0.73
2003	1.00	0.90	0.75
2004	0.95	0.85	0.72
2005	0.91	0.81	0.69
2006	0.88	0.78	0.67
2007	0.86	0.77	0.64
2008	0.83	0.77	0.61
2009	0.86	0.84	0.64
2010	0.83	0.82	0.63
2011	0.79	0.80	0.62
2012	0.77	0.79	0.61
2013	0.74	0.80	0.61
2014	0.70	0.78	0.57
2015	0.67	0.76	0.54
2016	0.63	0.73	0.51
2017	0.59	0.70	0.48
2018	0.54	0.66	0.47
2019	0.51	0.63	0.46
2020	0.50	0.59	0.42
2021	0.47	0.57	0.39

Note: Expense ratios are measured as asset-weighted averages. Data exclude mutual funds available as investment choices in variable annuities.
Sources: Investment Company Institute, Lipper, and Morningstar. See *ICI Research Perspective*, “Trends in the Expenses and Fees of Funds, 2021.”

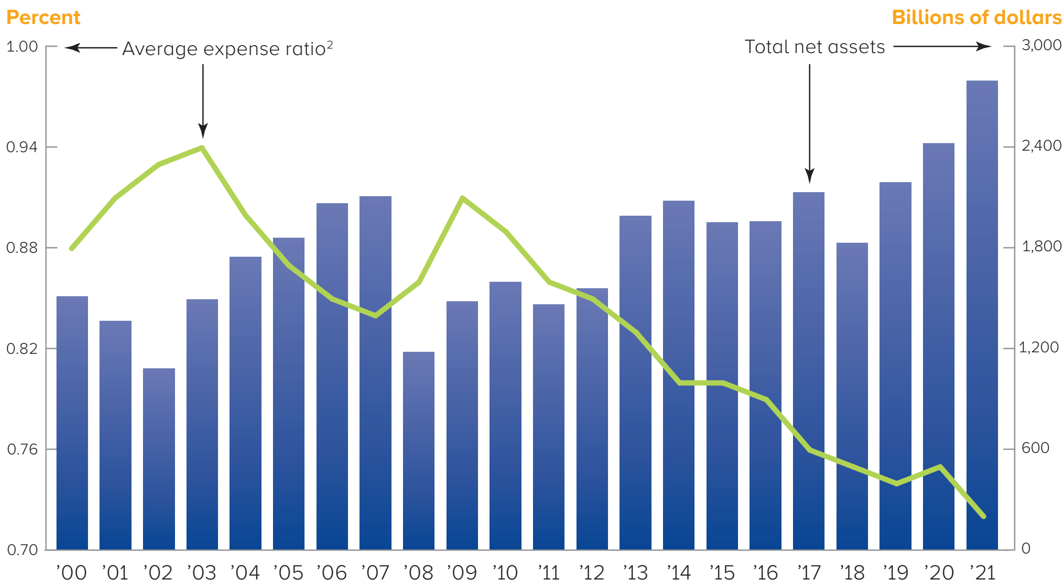
Understanding the Decline in Mutual Fund Expense Ratios

Several factors help account for the steep drop in mutual fund expense ratios. First, expense ratios often vary inversely with fund assets. Some fund costs included in expense ratios—such as transfer agency fees, accounting and audit fees, and directors' fees—are more or less fixed in dollar terms. This means that when a fund's assets rise, these costs contribute less to a fund's expense ratio. Thus, if the assets of a fixed sample of funds rise over time, the sample's average expense ratio tends to fall over the same period (Figure 6.2).

FIGURE 6.2

Mutual Fund Expense Ratios Tend to Fall as Fund Assets Rise

Share classes of actively managed domestic equity mutual funds continuously in existence since 2000[1]



[1] Calculations are based on a fixed sample of share classes. Data exclude mutual funds available as investment choices in variable annuities and index mutual funds.

[2] Expense ratios are measured as asset-weighted averages.

Sources: Investment Company Institute, Lipper, and Morningstar. See *ICI Research Perspective*, "Trends in the Expenses and Fees of Funds, 2021."

Another factor contributing to the decline of the average expense ratios of long-term mutual funds is the shift toward no-load share classes (see page 111), particularly institutional no-load share classes, which tend to have below-average expense ratios. In part, this shift reflects a change in how investors pay for services from brokers and other financial professionals (see page 112).

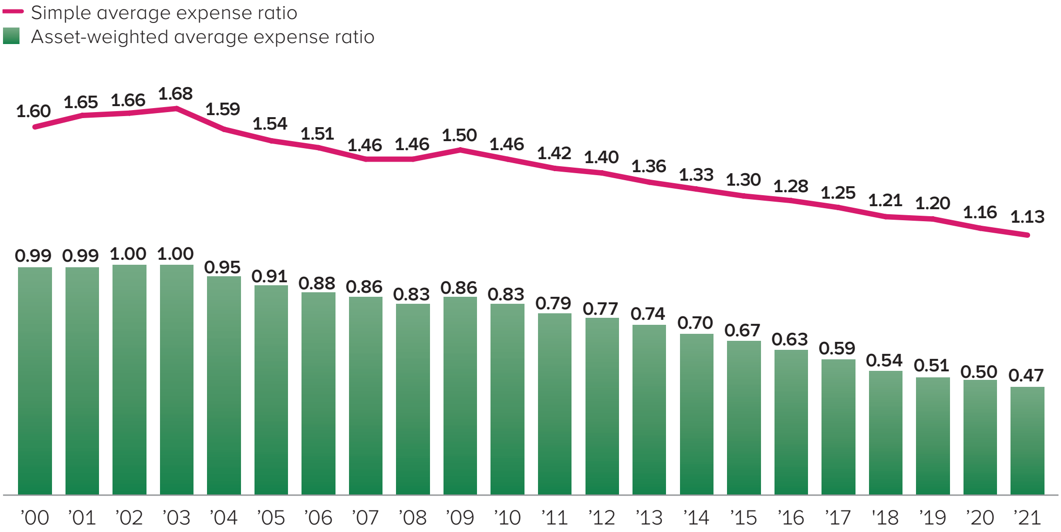
Mutual fund expense ratios also have fallen because of economies of scale and competition. Investor demand for mutual fund services has increased dramatically in the past few decades. From 1990 to 2021, the number of households owning mutual funds more than doubled—from 23.4 million to 59.0 million (Figure 7.1). All else being equal, this sharp increase in demand would tend to boost mutual fund expense ratios. Any such tendency, however, was mitigated by downward pressure on expense ratios—from competition among existing mutual fund sponsors, new mutual fund sponsors entering the industry, competition from products such as exchange-traded funds (ETFs) (see chapter 4 and page 108 of this chapter), and economies of scale resulting from the growth in fund assets.

Finally, shareholders tend to invest in mutual funds with below-average expense ratios (Figure 6.3). The simple average expense ratio of equity mutual funds (the average for all equity mutual funds offered for sale) was 1.13 percent in 2021. The asset-weighted average expense ratio for equity mutual funds (the average shareholders actually paid) was far lower, at 0.47 percent.

FIGURE 6.3

Fund Shareholders Paid Below-Average Expense Ratios for Equity Mutual Funds

Percent



Note: Data exclude mutual funds available as investment choices in variable annuities.
Sources: Investment Company Institute, Lipper, and Morningstar

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IRA Investors Are Concentrated in Lower-Cost Mutual Funds

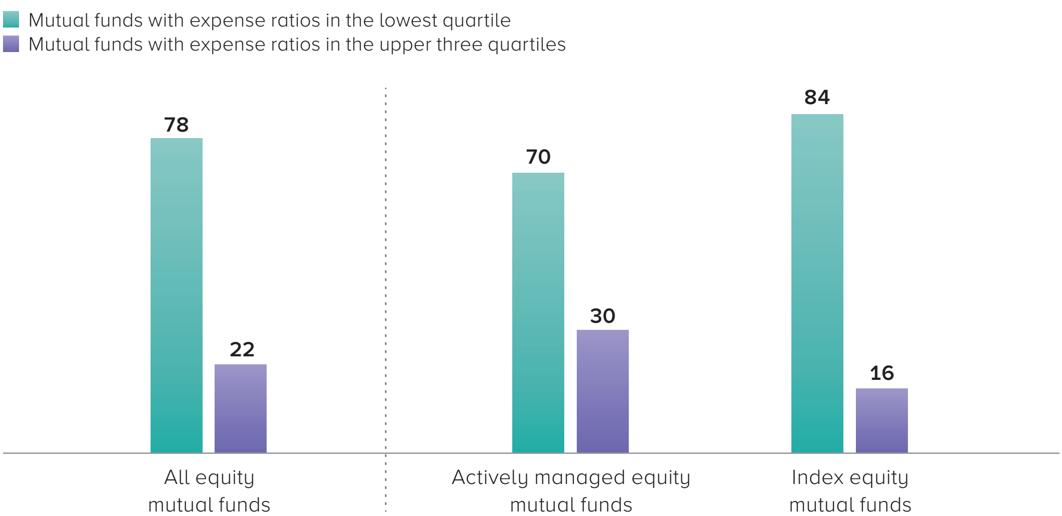
www.ici.org/viewpoints/20_view_irafees

Another way to illustrate the tendency for investors to gravitate to lower-cost funds is to examine how the allocation of their assets across funds varies by expense ratio. At year-end 2021, equity mutual funds with expense ratios in the lowest quartile held most (78 percent) of equity mutual funds' total net assets (Figure 6.4). This pattern holds for both actively managed and index equity mutual funds. Actively managed equity mutual funds with expense ratios in the lowest quartile held 70 percent of actively managed equity mutual funds' net assets at year-end 2021, and lower-cost index equity mutual funds held 84 percent of index equity mutual funds' net assets.

FIGURE 6.4

Total Net Assets Are Concentrated in Lower-Cost Mutual Funds

Percentage of total net assets, 2021



Note: Data exclude mutual funds available as investment choices in variable annuities.
Sources: Investment Company Institute and Morningstar

Differences in Mutual Fund Expense Ratios

Like the prices of most goods and services, the expense ratios of individual mutual funds differ considerably across the array of available products. The expense ratios of individual funds depend on many factors, including investment objective (see below), fund assets (see page 101), and payments to financial intermediaries (see page 112).

Mutual Fund Investment Objective

Mutual fund expense ratios vary by investment objective (Figure 6.5). For example, bond and money market mutual funds tend to have lower expense ratios than equity mutual funds. Among equity mutual funds, expense ratios tend to be higher for funds that specialize in a given sector—such as healthcare or real estate—or those that invest in equities around the world, because such funds tend to cost more to manage. Even within a particular investment objective, mutual fund expense ratios can vary considerably. For example, 10 percent of equity mutual funds that focus on growth stocks have expense ratios of 0.62 percent or less, while 10 percent have expense ratios of 1.78 percent or more. Among other things, this variation reflects the fact that some growth funds focus more on small- or mid-cap stocks and others focus more on large-cap stocks. Portfolios of small- and mid-cap stocks tend to cost more to manage since information about these types of stocks is less readily available, which means that active portfolio managers must spend more time doing research.

FIGURE 6.5

Mutual Fund Expense Ratios Vary Across Investment Objectives

Percent, 2021

Investment objective	10th percentile	Median	90th percentile	Asset-weighted average	Simple average
Equity mutual funds	**0.56**	**1.04**	**1.89**	**0.47**	**1.13**
Growth	0.62	1.00	1.78	0.65	1.08
Sector	0.70	1.17	2.01	0.66	1.27
Value	0.61	1.00	1.79	0.57	1.08
Blend	0.28	0.88	1.70	0.27	0.94
World	0.66	1.10	1.95	0.60	1.18
Hybrid mutual funds	**0.47**	**1.05**	**1.99**	**0.57**	**1.16**
Bond mutual funds	**0.35**	**0.72**	**1.55**	**0.39**	**0.82**
Investment grade	0.27	0.60	1.39	0.28	0.70
World	0.50	0.90	1.73	0.45	0.98
Government	0.17	0.65	1.53	0.29	0.74
High-yield	0.57	0.86	1.72	0.63	0.97
Municipal	0.39	0.65	1.51	0.45	0.78
Money market funds	**0.06**	**0.12**	**0.26**	**0.12**	**0.14**
Memo:					
Index equity mutual funds	**0.04**	**0.29**	**1.58**	**0.06**	**0.56**
Target date mutual funds*	**0.25**	**0.62**	**1.23**	**0.33**	**0.68**

* Data include mutual funds that invest primarily in other mutual funds. Ninety-five percent of target date mutual funds invest primarily in other mutual funds.

Note: Each fund's share class is weighted equally for the median, 10th, and 90th percentiles. Data exclude mutual funds available as investment choices in variable annuities.

Sources: Investment Company Institute and Morningstar. See *ICI Research Perspective*, "Trends in the Expenses and Fees of Funds, 2021."

Expense Ratios of Index Mutual Funds and Index ETFs

An index fund generally seeks to replicate the return on a specified index. Under this approach, often referred to as passive management, portfolio managers buy and hold all—or a representative sample of—the securities in their target indexes. This approach to portfolio management is a primary reason that both index mutual funds and index ETFs tend to have below-average expense ratios. By contrast, under an active management approach, managers have more discretion to increase or reduce exposure to sectors or securities within their funds' investment mandates. Active managers may also undertake significant research about stocks or bonds, market sectors, or geographic regions. This approach offers investors the chance to earn superior returns, or to meet other investment objectives such as limiting downside risk, managing volatility, under- or overweighting various sectors, and altering asset allocations in response to market conditions. These characteristics tend to make active management more costly than management of an index fund.

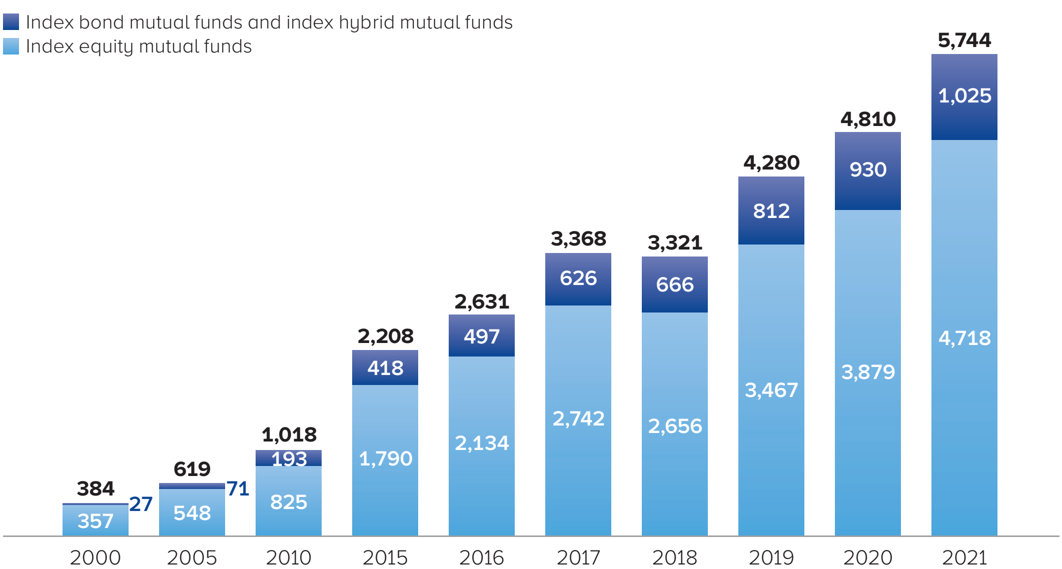
Index Mutual Funds

Growth in index mutual funds has contributed to the decline in asset-weighted average expense ratios of equity, hybrid, and bond mutual funds. From 2000 to 2021, index mutual fund total net assets grew significantly, from $384 billion to $5.7 trillion (Figure 6.6). Consequently, over the same period, index mutual funds' share of long-term mutual fund net assets more than tripled, from 7.5 percent at year-end 2000 to 25.9 percent at year-end 2021. Within index mutual funds, index equity mutual funds accounted for the bulk (82 percent) of index mutual fund net assets at year-end 2021.

FIGURE 6.6

Total Net Assets of Index Mutual Funds Have Increased in Recent Years

Billions of dollars, year-end



Number of index mutual funds

2000	2005	2010	2015	2016	2017	2018	2019	2020	2021
271	322	368	407	421	452	494	494	493	496

Index mutual funds tend to have below-average expense ratios for several reasons. First, their approach to portfolio management—in which managers generally seek to replicate the return on a specified index by buying and holding all (or a representative sample) of the securities in their target indexes—lends itself to being less costly. This is because index funds' portfolios tend not to change frequently, and therefore, have low turnover rates.

Second, index mutual funds tend to have below-average expense ratios because of their investment focus. Net assets of index equity mutual funds are concentrated more heavily in large-cap blend funds that target US large-cap indexes, such as the S&P 500. Net assets of actively managed equity mutual funds, on the other hand, are more widely distributed across stocks of varying capitalizations, international regions, or specialized business sectors. Managing portfolios of small- or mid-cap, international, or sector stocks is generally acknowledged to be more expensive than managing portfolios of US large-cap stocks.

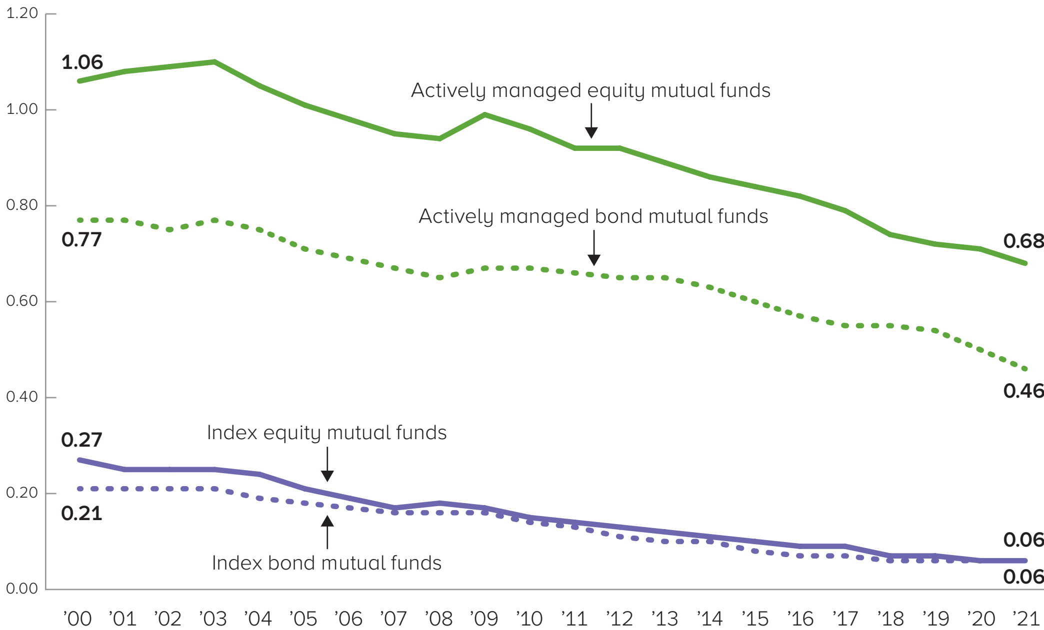
Finally, index mutual funds are larger on average than actively managed mutual funds, which, through economies of scale, helps reduce fund expense ratios. At year-end 2021, the average index equity mutual fund ($11.4 billion) was significantly larger than the average actively managed equity mutual fund ($2.5 billion).

These reasons, among others, help explain why index mutual funds generally have lower expense ratios than actively managed mutual funds. It is important to note that both index and actively managed mutual funds have contributed to the decline in the average expense ratios of mutual funds (Figure 6.7). From 2000 to 2021, the average expense ratio of index equity mutual funds fell from 0.27 percent to 0.06 percent, while the average expense ratio for actively managed equity mutual funds fell from 1.06 percent to 0.68 percent. Over the same period, the average expense ratio of index bond mutual funds fell from 0.21 percent to 0.06 percent and the average expense ratio of actively managed bond mutual funds fell from 0.77 percent to 0.46 percent.

FIGURE 6.7

Expense Ratios of Actively Managed and Index Mutual Funds Have Fallen

Percent



Note: Expense ratios are measured as asset-weighted averages. Data exclude mutual funds available as investment choices in variable annuities.
Sources: Investment Company Institute, Lipper, and Morningstar. See *ICI Research Perspective*, "Trends in the Expenses and Fees of Funds, 2021."

The downward trend in the average expense ratios of both index and actively managed mutual funds reflects, in part, investors' increasing tendency to buy lower-cost funds. Investor demand for index mutual funds is disproportionately concentrated in funds with the lowest costs. This phenomenon is not unique to index mutual funds, however; the proportion of assets in the lowest-cost actively managed mutual funds is also high (Figure 6.4).

Index ETFs

The trends in ETFs over the past decade have influenced asset-weighted average expense ratios of index equity and index bond ETFs. ETF total net assets have grown rapidly in recent years, from $992 billion at year-end 2010 to $7.2 trillion at year-end 2021 (Figure 2.2). During this time, ETFs have become a significant market participant, with net assets accounting for 21 percent of total net assets managed by investment companies at year-end 2021. ETFs are largely index-based and generally registered with the Securities and Exchange Commission (SEC) under the Investment Company Act of 1940. Actively managed ETFs registered under the 1940 Act represented 4.0 percent of ETF total net assets at year-end 2021, and ETFs not registered under the 1940 Act represented 1.7 percent. Like index mutual funds, most of the net assets in ETFs are in funds that focus on equities. Equity ETFs accounted for 80 percent of the total net assets of ETFs at year-end 2021.

Part of the strong growth in ETFs is attributable to their distribution structure, in which the ETF generally charges an expense ratio that provides no compensation to financial professionals. Compensation to financial professionals for distribution or account servicing and maintenance is typically paid directly by the investor.*

Financial professionals often provide programs that offer investors a suite of ETFs suited to their investment goals. In such cases, investors would typically pay financial professionals an asset-based fee in addition to the ETF expense ratios in the suite of ETFs selected. Also, because ETFs are generally index funds, they typically have lower expense ratios.

Like mutual fund investors, ETF shareholders tend to invest in funds with below-average expense ratios (Figure 6.8). The simple average expense ratio of index equity ETFs (the average for all index equity ETFs offered for sale) was 0.45 percent in 2021. The asset-weighted average expense ratio for index equity ETFs (the average shareholders actually paid) was much less than that, 0.16 percent. The same holds for index bond ETFs, with a simple average expense ratio of 0.24 percent in 2021 and an asset-weighted average expense ratio of 0.12 percent.

* Some ETFs bundle distribution fees in the expense ratio to cover marketing and distribution expenses. These fees are usually small, typically no more than 0.04 percent.

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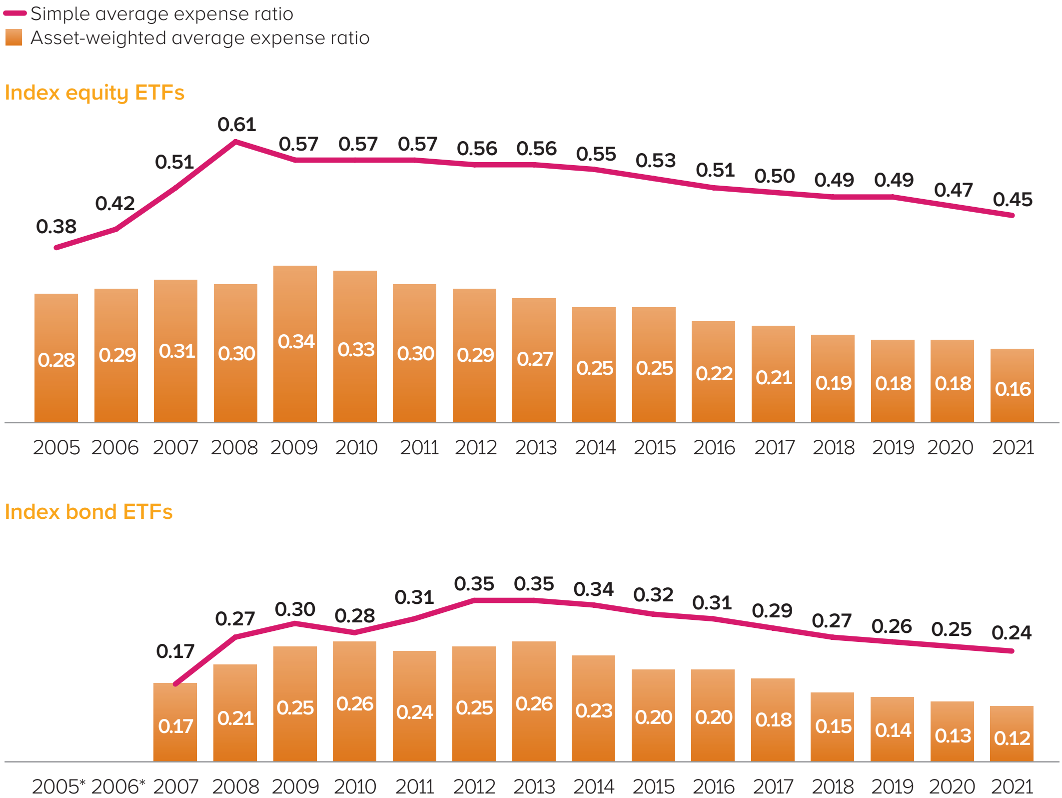
FIGURE 6.8

Expense Ratios Incurred by Index ETF Investors Have Generally Declined in Recent Years

Percent



* Data for index bond ETFs are excluded prior to 2007 because of a limited number of funds.
Note: Data exclude ETFs not registered under the Investment Company Act of 1940.
Sources: Investment Company Institute and Morningstar. See *ICI Research Perspective*, "Trends in the Expenses and Fees of Funds, 2021."

Additionally, index ETF expense ratios differ based on their investment objectives (Figure 6.9). Among index bond ETFs, for example, expense ratios tend to be higher for those that invest in either foreign or high-yield bonds because such securities are typically more costly to manage than securities such as Treasury bonds. Indeed, the asset-weighted average expense ratio for index high-yield bond ETFs was 0.38 percent in 2021, compared to the asset-weighted average expense ratio of 0.11 percent for index government bond ETFs. Even within specific investment objectives, expense ratios vary among index ETFs for a range of reasons. For example, expense ratios may differ because not all index ETFs in a given investment objective rely on the same index, and licensing fees that ETFs pay to index providers may vary.

FIGURE 6.9

Index ETF Expense Ratios Vary Across Investment Objectives

Percent, 2021

Investment objective	10th percentile	Median	90th percentile	Asset-weighted average	Simple average
Index equity ETFs	**0.09**	**0.45**	**0.80**	**0.16**	**0.45**
Growth	0.07	0.29	0.60	0.16	0.32
Sector	0.10	0.45	0.95	0.25	0.50
Value	0.07	0.28	0.60	0.18	0.33
Blend	0.05	0.34	0.89	0.11	0.39
World	0.09	0.50	0.80	0.24	0.48
Index hybrid ETFs	**0.46**	**0.60**	**0.94**	**0.52**	**0.64**
Index bond ETFs	**0.05**	**0.18**	**0.50**	**0.12**	**0.24**
Corporate	0.05	0.10	0.24	0.06	0.13
World	0.20	0.35	0.58	0.20	0.38
Government	0.04	0.12	0.92	0.11	0.24
High-yield	0.17	0.38	0.60	0.38	0.39
Municipal	0.17	0.18	0.31	0.14	0.21
Memo:					
Active equity ETFs	**0.25**	**0.75**	**0.95**	**0.48**	**0.70**

Note: Each fund's share class is weighted equally for the median, 10th, and 90th percentiles. Data exclude ETFs not registered under the Investment Company Act of 1940.
Sources: Investment Company Institute and Morningstar. See *ICI Research Perspective*, "Trends in the Expenses and Fees of Funds, 2021."

Mutual Fund Fee Structures

Mutual funds often are categorized by the class of shares that fund sponsors offer, primarily load or no-load classes. Load classes generally serve investors who buy shares through financial professionals; no-load classes usually serve investors who buy shares without the assistance of a financial professional or who choose to compensate their financial professionals separately. Funds sold through financial professionals typically offer more than one share class in order to provide investors with alternative ways to pay for financial services.

12b-1 Fees

Since 1980, when the SEC adopted Rule 12b-1 under the Investment Company Act of 1940, mutual funds and their shareholders have had the flexibility to compensate financial professionals and other financial intermediaries through asset-based fees. These distribution fees, known as 12b-1 fees, enable investors to pay indirectly for some or all of the services they receive from financial professionals (such as brokers) and other financial intermediaries (such as retirement plan recordkeepers and discount brokerage firms). Funds also use 12b-1 fees to a very limited extent to help defray advertising and marketing costs.

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Load Share Classes

Load share classes include a sales load, a 12b-1 fee, or both. Sales loads and 12b-1 fees are used to compensate brokers and other financial professionals for their services.

Front-end load shares, which are predominantly Class A shares, were the traditional way investors compensated financial professionals for assistance. These shares generally charge a sales load—a percentage of the sales price or offering price—at the time of purchase. They also generally have a 12b-1 fee, often 0.25 percent. 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. Additionally, most front-end load share classes have breakpoint discounts, in which front-end load fees decline as the size of an investor's initial purchase rises, and many fund providers offer discounted load fees when an investor has total balances exceeding a given amount in that provider's funds.

Back-end load shares, often called Class B shares, typically do not have a front-end load. Investors using back-end load shares pay for services provided by financial professionals through a combination of an annual 12b-1 fee and a contingent deferred sales load (CDSL). The CDSL is paid if fund shares are redeemed before a given number of years of ownership. Back-end load shares usually convert after a specified number of years to a share class with a lower 12b-1 fee (for example, Class A shares). The assets in back-end load shares have declined substantially in recent years.

Level load shares, which include Class C shares, generally do not have front-end loads. Investors in this share class compensate financial professionals with an annual 12b-1 fee (typically 1 percent) and a CDSL (also typically 1 percent) that shareholders pay if they sell their shares within a year of purchase.

No-Load Share Classes

No-load share classes have neither a front-end load nor a 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 also purchase no-load funds through employer-sponsored retirement plans, discount brokerage firms, and bank trust departments. Some financial professionals who charge investors separately for their services, rather than through a load or 12b-1 fee, help investors select a portfolio of no-load funds.

Mutual Fund Load Fees

Many mutual fund investors engage an investment professional, such as a broker, an investment adviser, or a financial planner. Among households owning mutual fund shares outside employer-sponsored retirement plans, 79 percent own mutual fund shares through investment professionals (Figure 7.7). These professionals can provide many benefits to investors, such as helping them identify financial goals, analyzing an existing financial portfolio, determining an appropriate asset allocation, and—depending on the type of financial professional—providing investment advice or recommendations to help investors achieve their financial goals. The investment professional also may provide ongoing services, such as responding to investors' inquiries or periodically reviewing and rebalancing their portfolios.

Over the past few decades, the way that fund shareholders compensate financial professionals has changed significantly, moving away from front-end loads and toward asset-based fees. An important element in the changing distribution structure of mutual funds has been this shift toward asset-based fees, which are assessed as a percentage of the assets that the financial professional helps an investor manage. Increasingly, these fees compensate brokers and other financial professionals who sell mutual funds. An investor may pay an asset-based fee indirectly through a fund's 12b-1 fee, which is included in the fund's expense ratio, or directly (out of pocket) to the financial professional, in which case it is not included in the fund's expense ratio.

In part because of the shift toward asset-based fees (either through the fund or out of pocket), the total net assets of no-load share classes have increased substantially in recent years. Also, front-end and back-end load share classes have had net outflows in each year since 2010 (Figure 6.10), and gross sales of back-end load share classes have dwindled almost to zero (Figure 6.11). As a result, the percentage of long-term mutual fund net assets held in front-end and back-end load share classes fell from 22 percent at year-end 2010 to 11 percent at year-end 2021 (Figure 6.12).

By contrast, no-load share classes—those with neither a front-end nor a back-end load fee and a 12b-1 fee of no more than 0.25 percent—generally have seen net inflows and rising net assets since 2010 (Figures 6.10 and 6.12). As a result, the percentage of long-term mutual fund total net assets held in no-load share classes rose from 56 percent at year-end 2010 to 73 percent at year-end 2021.

Some of the shift toward no-load share classes can be attributed to do-it-yourself investors. A larger factor, however, is the growth of sales through defined contribution plans as well as sales of no-load share classes through sales channels that compensate financial professionals (for example, discount brokers, fee-based advisers, full-service brokerage platforms) with asset-based fees outside of funds.

FIGURE 6.10

No-Load Long-Term Mutual Fund Share Classes Garnered Inflows in 2021

Billions of dollars, annual

	2000	2005	2010	2015	2016	2017	2018	2019	2020	2021
All long-term mutual funds	**$231**	**$192**	**$243**	**-$120**	**-$193**	**$72**	**-$346**	**-$99**	**-$484**	**-$59**
Load	**77**	**27**	**-57**	**-129**	**-238**	**-298**	**-231**	**-130**	**-140**	**-96**
Front-end[1]	19	54	-53	-105	-187	-225	-162	-77	-87	-61
Back-end[2]	27	-47	-28	-6	-5	-3	-2	-1	-1	(*)
Level[3]	30	18	21	-22	-45	-70	-66	-53	-51	-34
Other[4]	3	2	2	(*)	-1	(*)	(*)	(*)	(*)	(*)
Unclassified[5]	-1	-1	(*)	5	(*)	1	-1	(*)	(*)	(*)
No-load[6]	**103**	**124**	**260**	**78**	**126**	**456**	**-1**	**152**	**-193**	**193**
Retail	79	65	55	5	-28	41	-93	-23	-179	11
Institutional	24	59	205	73	154	415	92	176	-14	182
Variable annuities	**51**	**18**	**7**	**-67**	**-79**	**-112**	**-124**	**-125**	**-134**	**-167**
"R" share classes[7]	**(*)**	**24**	**33**	**-2**	**-2**	**26**	**10**	**4**	**-17**	**11**

[1] Front-end load > 1 percent. Primarily includes Class A shares; includes sales 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.
(*) = inflow or outflow of less than $500 million
Sources: Investment Company Institute, Lipper, and Morningstar

FIGURE 6.11

Gross Sales of Long-Term Mutual Funds Are Concentrated in No-Load Share Classes

Billions of dollars, annual

	2000	2005	2010	2015	2016	2017	2018	2019	2020	2021
All long-term mutual funds	**$2,291**	**$1,739**	**$2,700**	**$3,497**	**$3,557**	**$3,922**	**$4,116**	**$3,824**	**$5,005**	**$5,177**
Load	**978**	**538**	**579**	**503**	**437**	**369**	**349**	**343**	**382**	**376**
Front-end[1]	704	408	455	395	361	309	296	297	341	339
Back-end[2]	175	36	8	3	2	2	1	1	(*)	(*)
Level[3]	91	85	111	99	72	56	48	45	39	35
Other[4]	7	8	5	2	1	1	1	1	1	1
Unclassified[5]	(*)	1	1	5	(*)	2	3	(*)	(*)	(*)
No-load[6]	**1,043**	**936**	**1,692**	**2,594**	**2,727**	**3,165**	**3,362**	**3,108**	**4,075**	**4,265**
Retail	774	598	931	1,222	1,222	1,334	1,427	1,263	1,642	1,737
Institutional	269	338	761	1,372	1,505	1,832	1,935	1,845	2,433	2,529
Variable annuities	**268**	**225**	**318**	**247**	**245**	**184**	**210**	**188**	**324**	**241**
"R" share classes[7]	**2**	**40**	**112**	**152**	**148**	**203**	**195**	**185**	**224**	**295**

[1] Front-end load > 1 percent. Primarily includes Class A shares; includes sales 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.
(*) = gross sales of less than $500 million
Sources: Investment Company Institute, Lipper, and Morningstar

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The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2020
www.ici.org/files/2021/per27-06.pdf

FIGURE 6.12

Total Net Assets of Long-Term Mutual Funds Are Concentrated in No-Load Share Classes

Billions of dollars, year-end

	2000	2005	2010	2015	2016	2017	2018	2019	2020	2021
All long-term mutual funds	**$5,111**	**$6,862**	**$9,021**	**$12,893**	**$13,614**	**$15,903**	**$14,660**	**$17,645**	**$19,550**	**$22,209**
Load	**2,141**	**2,346**	**2,406**	**2,510**	**2,432**	**2,449**	**2,109**	**2,373**	**2,519**	**2,751**
Front-end[1]	1,485	1,750	1,926	2,053	2,007	2,052	1,816	2,104	2,297	2,550
Back-end[2]	487	276	78	17	12	8	4	4	2	1
Level[3]	145	288	381	429	408	378	283	258	211	191
Other[4]	21	26	18	7	6	6	6	7	8	9
Unclassified[5]	2	5	2	5	(*)	4	1	(*)	(*)	1
No-load[6]	**2,178**	**3,391**	**5,028**	**8,301**	**9,032**	**10,996**	**10,322**	**12,653**	**14,138**	**16,253**
Retail	1,616	2,384	3,056	4,569	4,862	5,631	5,061	6,231	6,744	7,658
Institutional	563	1,007	1,973	3,732	4,170	5,365	5,261	6,422	7,395	8,594
Variable annuities	**784**	**1,039**	**1,289**	**1,595**	**1,635**	**1,792**	**1,590**	**1,815**	**1,942**	**2,110**
"R" share classes[7]	**8**	**86**	**297**	**487**	**514**	**666**	**640**	**803**	**951**	**1,096**

[1] Front-end load > 1 percent. Primarily includes Class A shares; includes sales 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.
(*) = total net assets of less than $500 million
Sources: Investment Company Institute, Lipper, and Morningstar

CHAPTER

7

Characteristics of US Mutual Fund Owners

Ownership of mutual funds by US households grew substantially in the 1980s and 1990s and has held steady for the past two decades, averaging about 45 percent since 2000. In 2021, 45 percent of all US households owned mutual funds. The estimated 102.6 million people who owned mutual funds in 2021 belong to all age and income groups; have a variety of financial goals; and buy and sell mutual funds through three principal sources: investment professionals, employer-sponsored retirement plans, and discount brokers or fund companies directly.

IN THIS CHAPTER

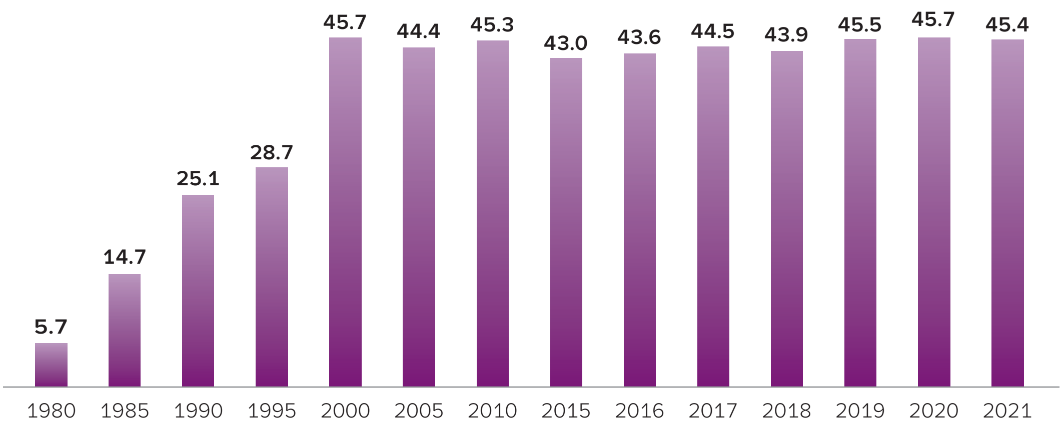
Individual and Household Ownership of Mutual Funds

In 2021, an estimated 102.6 million individual investors owned mutual funds—and at year-end 2021, these investors held 88 percent of total mutual fund assets (Figure 3.4), directly or through retirement accounts. Household ownership of mutual funds has remained relatively steady since 2000. Altogether, 45.4 percent of US households—or 59.0 million—owned mutual funds in 2021, about the same as the 2000–2021 average of 45 percent (Figure 7.1). Mutual funds were a major component of many US households' financial holdings in 2021. Among households owning mutual funds, the median amount invested in mutual funds was $200,000 (Figure 7.2). Seventy percent of individuals heading households that owned mutual funds were married or living with a partner, 57 percent were college graduates, and 75 percent worked full- or part-time.

FIGURE 7.1

Forty-Five Percent of US Households Owned Mutual Funds in 2021

Percentage of US households owning mutual funds



Millions of US households owning mutual funds

1980	1985	1990	1995	2000	2005	2010	2015	2016	2017	2018	2019	2020	2021
4.6	12.8	23.4	28.4	48.6	50.3	53.2	53.6	54.9	56.2	56.0	58.5	58.7	59.0

Note: The survey methodology was changed to a dual-frame sample of cell phones and landlines in 2014.
Source: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2021"

FIGURE 7.2

Characteristics of Mutual Fund Investors

2021

How many people own mutual funds?

102.6 million US individuals

59.0 million US households

Who are they?

51 is the median age of the head of household

70 percent are married or living with a partner

57 percent are college graduates

75 percent are employed (full- or part-time)

9 percent are Silent or GI Generation (born 1904 to 1945)

33 percent are Baby Boomers (born 1946 to 1964)

30 percent are Generation X (born 1965 to 1980)

28 percent are Generation Z or Millennials (born 1981 to 2012)*

$104,900 is the median household income

What do they own?

$320,000 is the median household financial assets

$200,000 is the median household mutual fund assets

62 percent hold more than half of their financial assets in mutual funds

66 percent own individual retirement accounts (IRAs)

84 percent own defined contribution (DC) retirement plan accounts

4 mutual funds is the median number owned

89 percent own equity funds

When and how did they make their first mutual fund purchase?

50 percent bought their first mutual fund before 2000

63 percent purchased their first mutual fund through an employer-sponsored retirement plan

Why do they invest?

92 percent use mutual funds to save for retirement

48 percent use mutual funds to save for emergencies

46 percent use mutual funds to reduce taxable income

24 percent use mutual funds to save for education

* Generation Z (born 1997 to 2012) and the Millennial Generation (born 1981 to 1996) are aged 9 to 40 in 2021; survey respondents, however, must be 18 or older.

Sources: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2021"; *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2021"; and *ICI Research Report*, "Profile of Mutual Fund Shareholders, 2021"

Mutual Fund Ownership by Age and Income

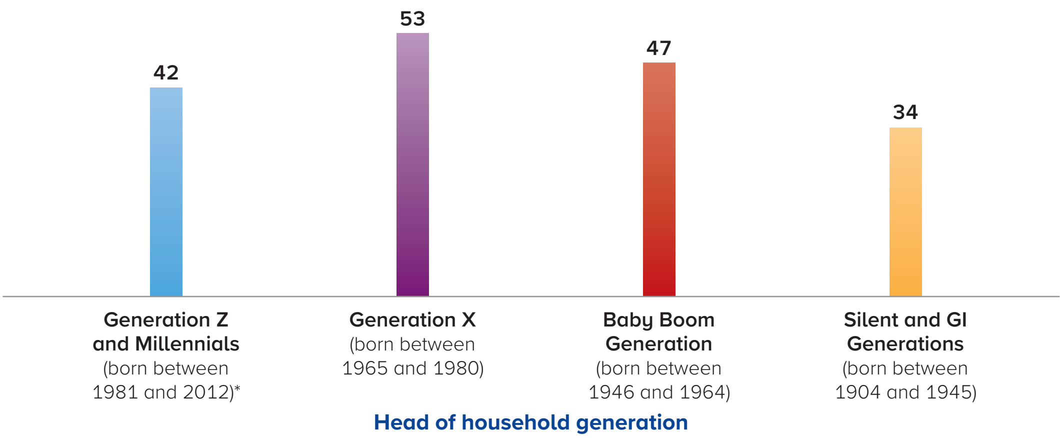
Mutual fund–owning households span all generations, but members of Generation X (born between 1965 and 1980) had the highest mutual fund ownership rate in 2021, at 53 percent (Figure 7.3). Forty-two percent of Generation Z and Millennial households (born between 1981 and 2012) owned mutual funds in 2021. Forty-seven percent of households headed by a Baby Boomer (born between 1946 and 1964) and 34 percent of Silent and GI Generation households (born between 1904 and 1945) owned mutual funds in 2021.

Among mutual fund–owning households in 2021, 33 percent were headed by members of the Baby Boom Generation, 30 percent were headed by members of Generation X, 28 percent were headed by members of Generation Z and Millennials, and 9 percent were headed by members of the Silent and GI Generations (Figure 7.4). Heads of mutual fund–owning households had a median age of 51 years (Figure 7.2).

FIGURE 7.3

Incidence of Mutual Fund Ownership Is Greatest Among Generation X

Percentage of US households within each generation group, 2021



Age of head of household in 2021

18 to 40*	41 to 56	57 to 75	76 or older

* Generation Z (born 1997 to 2012) and the Millennial Generation (born 1981 to 1996) are aged 9 to 40 in 2021; survey respondents, however, must be 18 or older.

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

Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2021"

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Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2021

www.ici.org/files/2021/per27-11.pdf

Baby Boomers held the largest percentage of households' mutual fund assets, at 49 percent (Figure 7.4). Households headed by members of Generation X (27 percent), Generation Z and the Millennial Generation (14 percent), and the Silent and GI Generations (10 percent) held the rest. This pattern of asset ownership reflects the fact that Generation Z and Millennial households are younger and have not had as much time to save as Baby Boom households, which are in their peak earning and saving years.

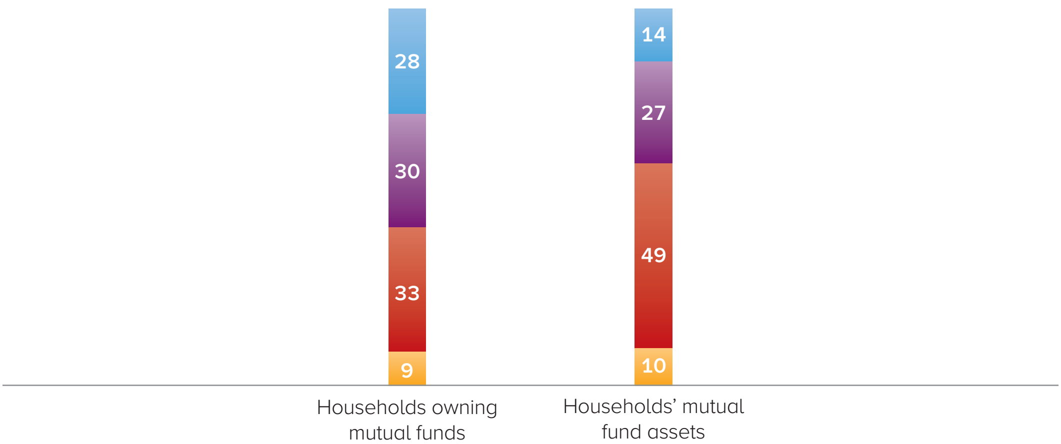
FIGURE 7.4

Baby Boomers and Generation X Are the Largest Shareholder Groups and Hold More Than Three-Quarters of Household Mutual Fund Assets

Percentage of US households owning mutual funds and household mutual fund assets by generation, 2021

Head of household generation

- Generation Z and Millennials (born between 1981 and 2012)*
- Generation X (born between 1965 and 1980)
- Baby Boom Generation (born between 1946 and 1964)
- Silent and GI Generations (born between 1904 and 1945)



* Generation Z (born 1997 to 2012) and the Millennial Generation (born 1981 to 1996) are aged 9 to 40 in 2021; survey respondents, however, must be 18 or older.

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

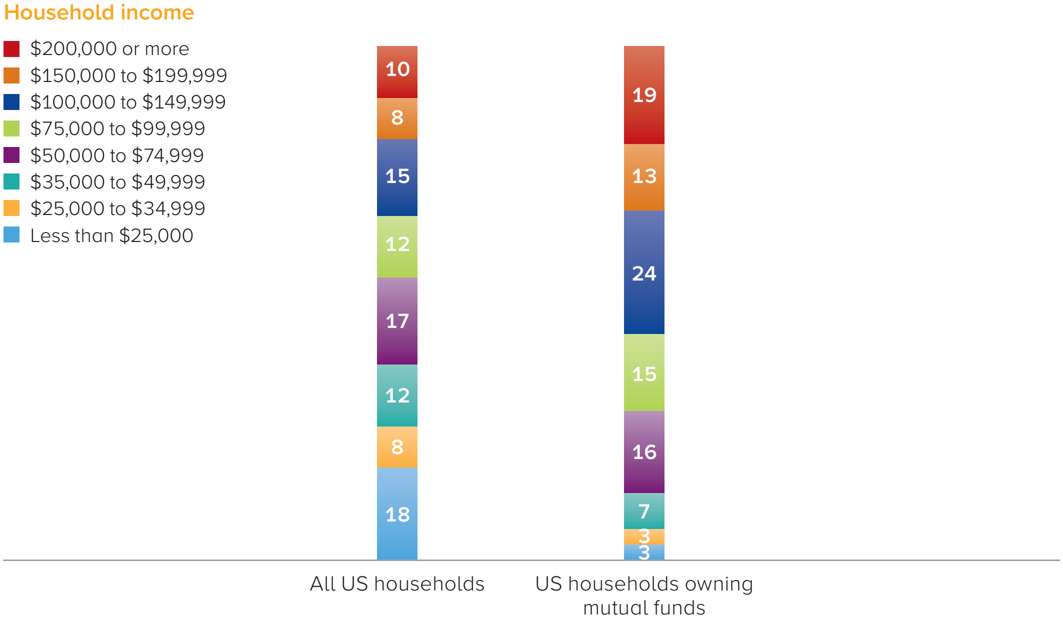
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2021"

US households owning mutual funds had a range of annual household incomes: 13 percent had annual household income of less than $50,000; 16 percent had between $50,000 and $74,999; 15 percent had between $75,000 and $99,999; 24 percent had between $100,000 and $149,999; and the remaining 32 percent had $150,000 or more (Figure 7.5). The median household income of mutual fund–owning households in 2021 was $104,900 (Figure 7.2).

FIGURE 7.5

Mutual Fund Shareholders Have a Range of Incomes

Percent distribution of all US households and US households owning mutual funds by household income, 2021



Note: Total reported is household income before taxes in 2020.

Source: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2021"

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***ICI Explains*: Who Invests in Mutual Funds and Why?**

www.ici.org/video/19_explain_mutualfunds

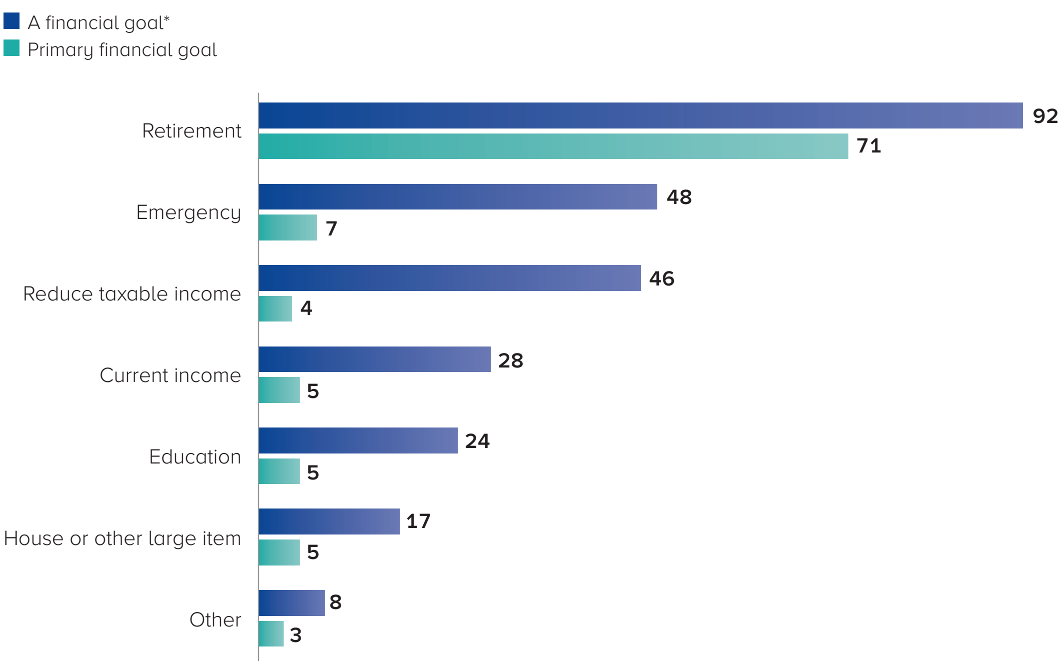
Savings Goals of Mutual Fund Investors

Mutual funds play a key role in the long- and short-term savings goals of US households. In 2021, 92 percent of mutual fund–owning households indicated that saving for retirement was one of their financial goals, and 71 percent said it was their primary financial goal (Figure 7.6). Mutual fund–owning households often purchase their first mutual fund through employer-sponsored retirement plans. In 2021, across all mutual fund–owning households, 63 percent had purchased their first fund through that channel (Figure 7.2). Retirement, however, is not the only financial goal for mutual fund–owning households—48 percent reported saving for emergencies as a goal; 46 percent reported reducing taxable income as a goal; and 24 percent reported saving for education as a goal (Figure 7.6).

FIGURE 7.6

Majority of Mutual Fund Investors Focus on Retirement

Percentage of US households owning mutual funds, 2021



* Multiple responses are included.
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2021"

Where Investors Own Mutual Funds

The importance that mutual fund–owning households place on retirement saving is reflected in where they own their funds—in 2021, 94 percent of these households held mutual fund shares inside employer-sponsored retirement plans, individual retirement accounts (IRAs), or variable annuities. It is also reflected in the type of funds they choose—households are more likely to invest their retirement assets in long-term mutual funds than in money market funds. Indeed, defined contribution (DC) retirement plan and IRA assets held in equity, bond, and hybrid mutual funds totaled $12.0 trillion at year-end 2021, or 54 percent of those funds' total net assets industrywide (Figure 8.19). By contrast, DC retirement plan and IRA assets in money market funds totaled just $529 billion, or 11 percent of those funds' total net assets industrywide.

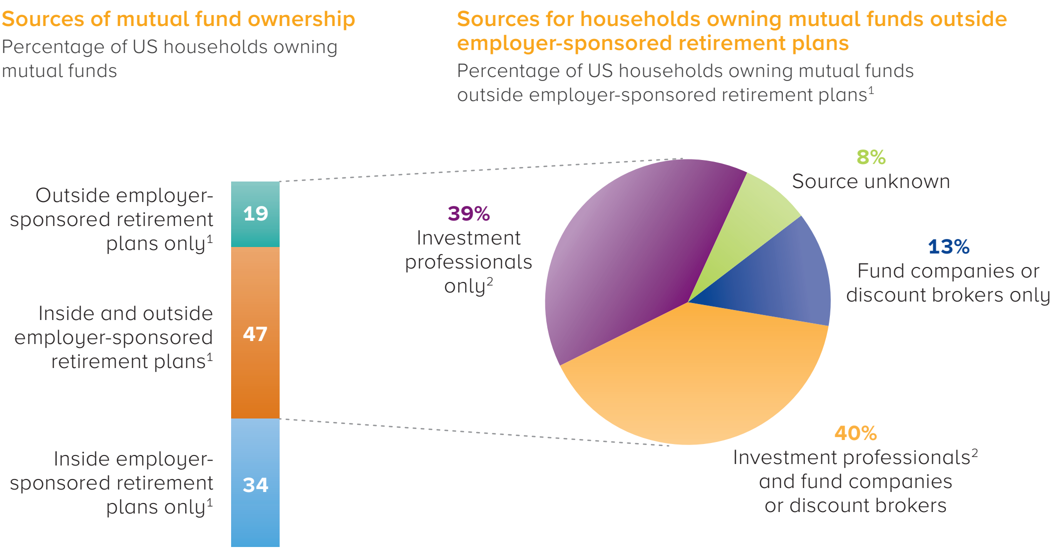
In 2021, 81 percent of mutual fund–owning households held funds inside employer-sponsored retirement plans, with 34 percent owning funds only inside such plans (Figure 7.7). Sixty-six percent of mutual fund–owning households held funds outside employer-sponsored retirement accounts, with 19 percent owning funds only outside such plans. For mutual fund–owning households without mutual funds in employer-sponsored retirement plans, 57 percent held funds in traditional or Roth IRAs. In many cases, these IRAs held assets rolled over from 401(k) plans or other employer-sponsored retirement plans (either defined benefit or DC plans).

Households owning mutual funds outside employer-sponsored retirement plans buy their fund shares through a variety of sources. In 2021, 79 percent of these households owned funds purchased with the help of an investment professional, including registered investment advisers, full-service brokers, independent financial planners, bank and savings institution representatives, insurance agents, and accountants (Figure 7.7). Thirty-nine percent of these households owned funds purchased solely with the help of an investment professional, and another 40 percent owned funds purchased from investment professionals and from fund companies directly or discount brokers. Thirteen percent solely owned funds purchased from fund companies directly or discount brokers.

FIGURE 7.7

Mutual Fund Investments Outside Retirement Plans Are Often Guided by Investment Professionals

2021



[1] Employer-sponsored retirement plans include DC plans (such as 401(k), 403(b), or 457 plans) and employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs).

[2] Investment professionals include registered investment advisers, full-service brokers, independent financial planners, bank and savings institution representatives, insurance agents, and accountants.

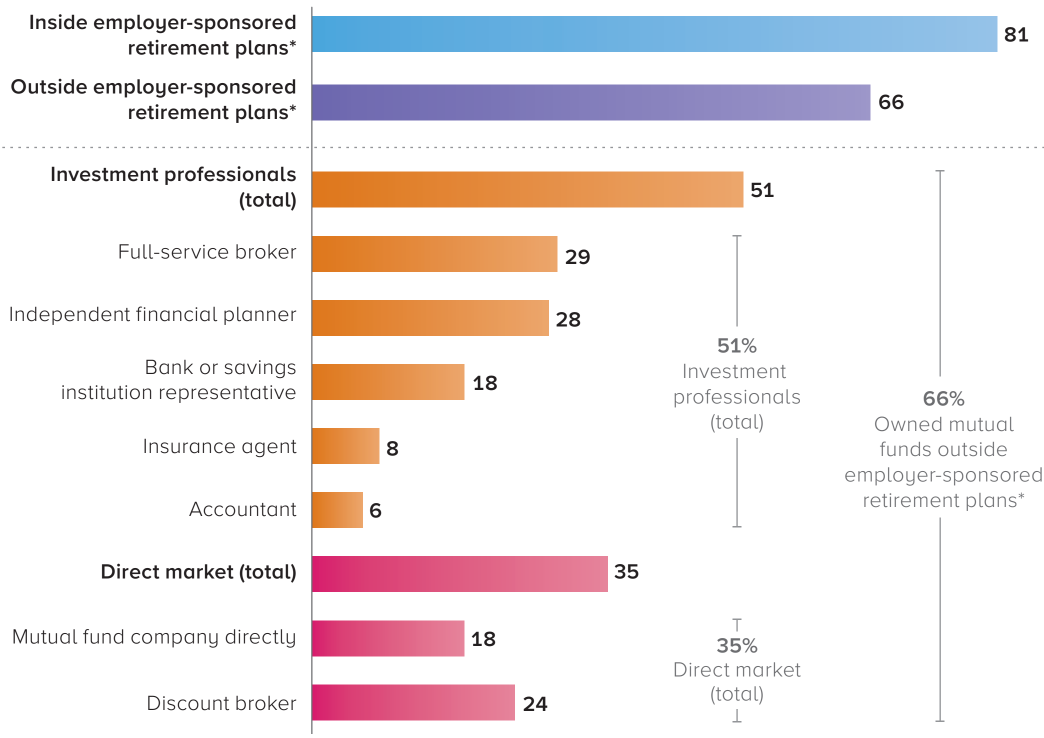
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2021"

In 2021, mutual fund–owning households that held mutual funds outside employer-sponsored retirement plans purchased funds through two sources: investment professionals and the direct market channel. In 2021, more than half of households owning mutual funds held funds purchased through an investment professional and more than one-third owned funds purchased through the direct market channel (Figure 7.8).

FIGURE 7.8

Mutual Fund Investors Purchase Mutual Funds Through a Variety of Channels

Percentage of US households owning mutual funds, 2021



* Employer-sponsored retirement plans include DC plans (such as 401(k), 403(b), or 457 plans) and employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs).

Note: Multiple responses are included.

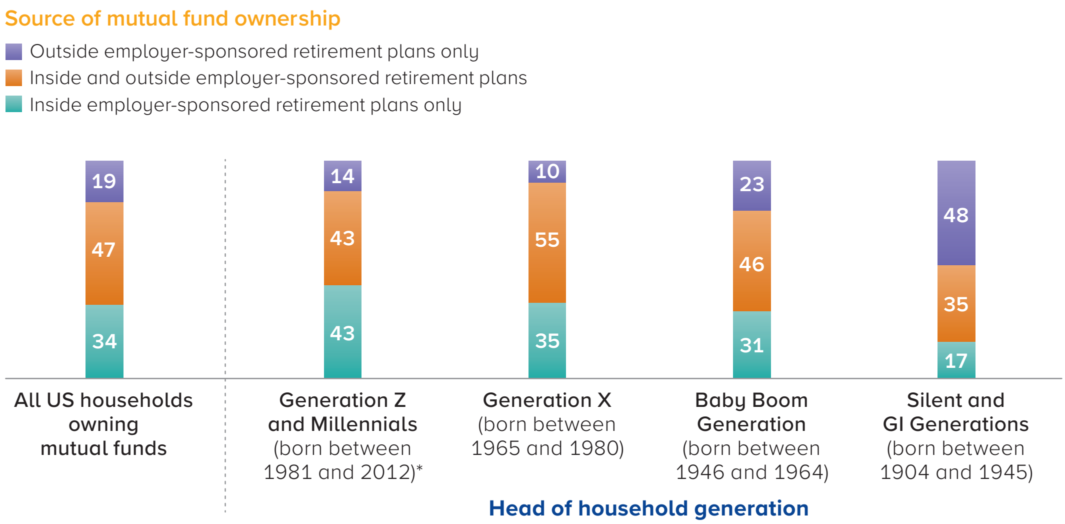
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2021"

Younger generations are more likely to own mutual funds only inside employer-sponsored retirement plans, while older generations are more likely to own funds outside such plans. In 2021, 43 percent of Generation Z and Millennial households that owned mutual funds held them only inside employer-sponsored retirement plans, compared with 31 percent of mutual fund–owning households in the Baby Boom Generation (Figure 7.9). Fifty-seven percent of Generation Z and Millennial households that owned mutual funds held them outside of employer-sponsored retirement plans, compared with 69 percent of mutual fund–owning households headed by a Baby Boomer. Generation X households are more likely than younger or older generations to own funds both inside and outside employer-sponsored retirement plans. In 2021, 55 percent of Generation X households that owned mutual funds held them both inside and outside employer-sponsored retirement plans, compared with 43 percent of Generation Z and Millennial households, 46 percent of Baby Boom households, and 35 percent of Silent and GI Generation households. Although Silent and GI Generation households are the least likely to own mutual funds, those that do are the most likely to hold mutual funds only outside employer-sponsored retirement plans.

FIGURE 7.9

Mutual Fund Ownership Inside and Outside of Employer-Sponsored Retirement Plans

Percentage of US households owning mutual funds by generation, 2021



* Generation Z (born 1997 to 2012) and the Millennial Generation (born 1981 to 1996) are aged 9 to 40 in 2021; survey respondents, however, must be 18 or older.

Note: Generation is based on the age of the household sole or co-decisionmaker for saving and investing. Employer-sponsored retirement plans include DC plans (such as 401(k), 403(b), or 457 plans) and employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs).

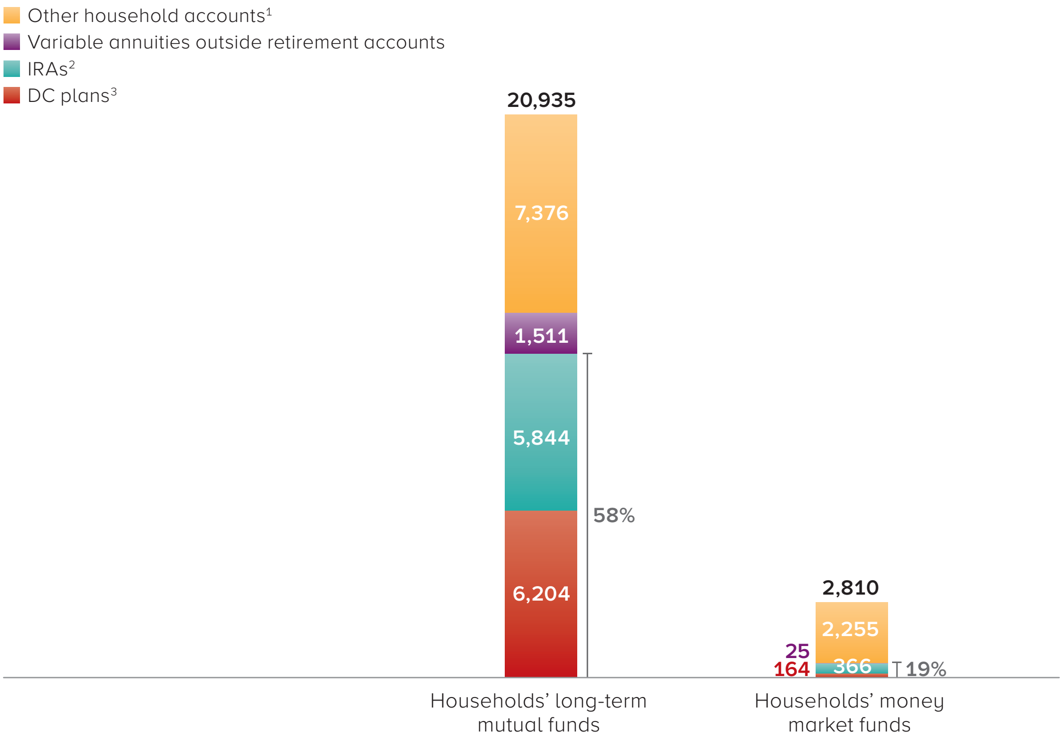
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2021"

At year-end 2021, mutual funds held in DC plans and IRAs accounted for $12.6 trillion (32 percent) of the $39.4 trillion US retirement market (Figures 8.5 and 8.19) and 47 percent of total mutual fund assets. DC plans and IRAs held 54 percent of total net assets in long-term mutual funds but a much smaller share of total net assets in money market funds (11 percent). Similarly, mutual funds held in DC plans and IRAs accounted for 58 percent of household long-term mutual fund assets, but only 19 percent of household money market fund assets (Figure 7.10).

FIGURE 7.10

Households' Mutual Fund Assets by Type of Account

Billions of dollars, year-end 2021



[1] Mutual funds held as investments in 529 plans and Coverdell ESAs are counted in this category.

[2] IRAs include traditional IRAs, Roth IRAs, and employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs).

[3] DC plans include 401(k) plans, 403(b) plans, 457 plans, and other DC plans without 401(k) features.

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Characteristics of Mutual Fund Investors, 2021

www.ici.org/files/2021/per27-12.pdf

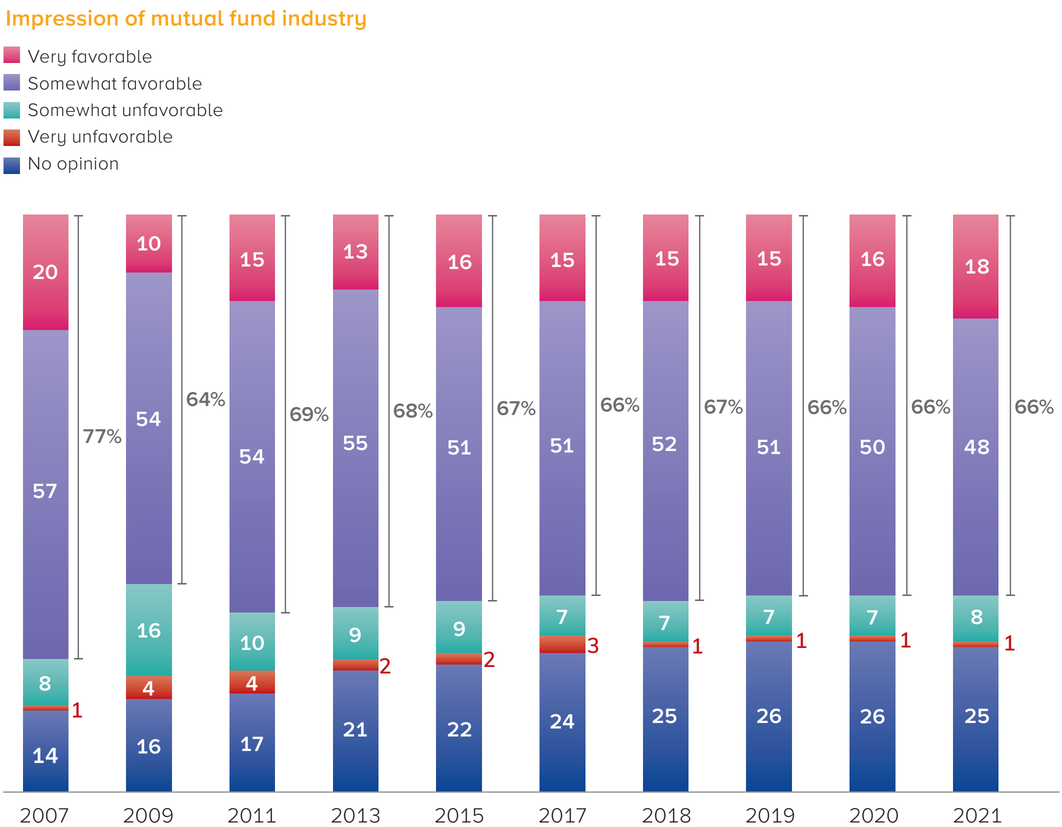
Shareholder Sentiment and Confidence

Each year, ICI surveys US households about a variety of topics, including shareholder sentiment. In 2021, 66 percent of mutual fund shareholders familiar with mutual fund companies had "very" or "somewhat" favorable impressions of fund companies, the same as in 2019 and 2020 (Figure 7.11). The share of mutual fund owners with "very" favorable impressions of fund companies was 18 percent.

FIGURE 7.11

Most Shareholders View the Mutual Fund Industry Favorably

Percentage of US households owning mutual funds familiar with mutual fund companies



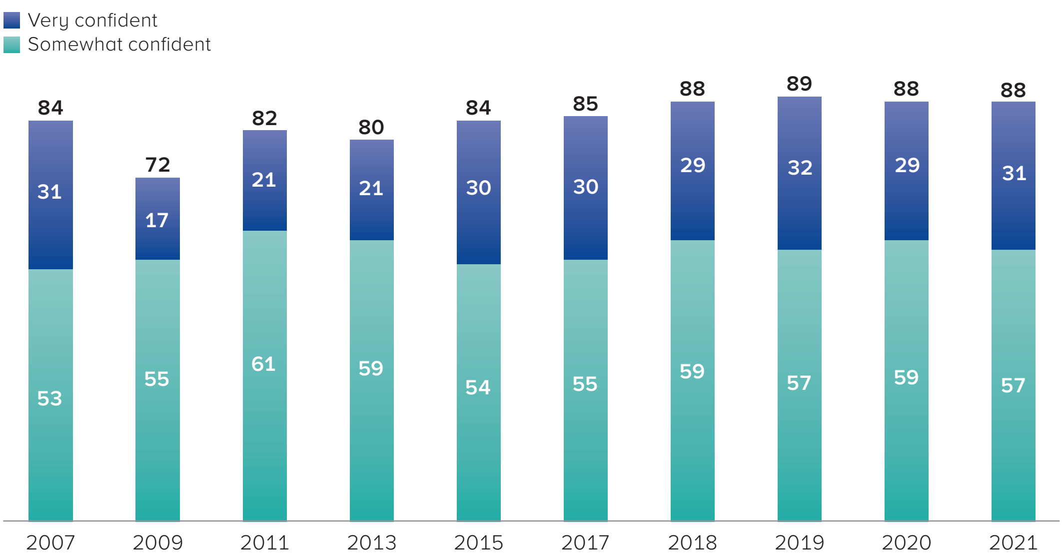
Note: The survey methodology was changed to a dual-frame sample of cell phones and landlines in 2014.
Source: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2021"

Mutual fund–owning households' confidence that mutual funds are helping them reach their financial goals rebounded in the wake of the 2007–2009 financial crisis. In 2009, 72 percent of mutual fund–owning households said they were confident in mutual funds' ability to help them achieve their financial goals, down from 84 percent in 2007 (Figure 7.12). From 2011 through 2013, about eight in 10 mutual fund–owning households said they were confident in mutual funds' ability to help them achieve their financial goals, with more than 20 percent saying they were "very" confident. From 2015 to 2017, around 85 percent of mutual fund–owning households said they were confident in mutual funds' ability to help them achieve their financial goals, rising to 88 percent in 2018, 89 percent in 2019, and 88 percent in 2020. In 2021, 88 percent of mutual fund–owning households had confidence in mutual funds, with 31 percent indicating they were "very" confident in mutual funds' ability to help them achieve their financial goals.

FIGURE 7.12

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

Percentage of US households owning mutual funds by level of confidence that mutual funds can help them meet their investment goals



Note: The survey methodology was changed to a dual-frame sample of cell phones and landlines in 2014. The question has four choices; the other two possible responses are "not very confident" and "not at all confident."

Source: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2021"

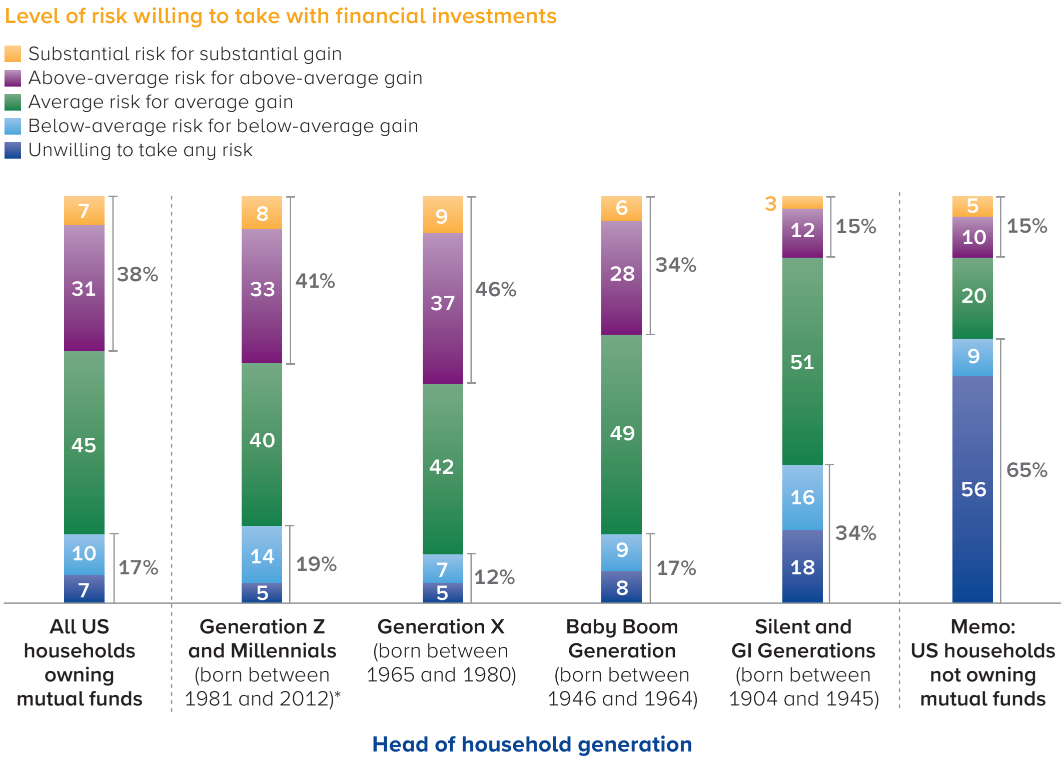
Willingness to Take Investment Risk

The ICI survey also asked households about their willingness to take investment risk. Households owning mutual funds are far more willing to take investment risk than other households. In 2021, 38 percent of households owning mutual funds were willing to take above-average or substantial investment risk, more than double the 15 percent of households not owning mutual funds (Figure 7.13).

FIGURE 7.13

Households' Willingness to Take Investment Risk

Percentage of US households owning mutual funds by generation, 2021



* Generation Z (born 1997 to 2012) and the Millennial Generation (born 1981 to 1996) are aged 9 to 40 in 2021; survey respondents, however, must be 18 or older.

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

Sources: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2021" and *ICI Research Report*, "Profile of Mutual Fund Shareholders, 2021"

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Profile of Mutual Fund Shareholders, 2021

www.ici.org/files/2021/21_rpt_profiles.pdf

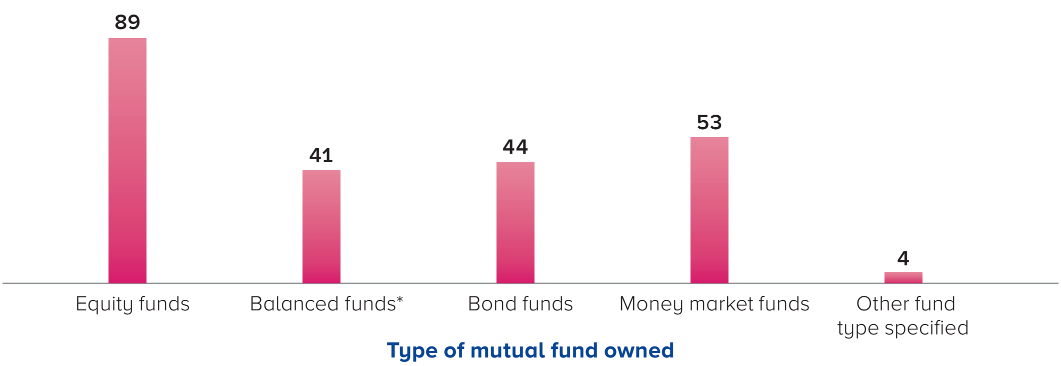
Risk tolerance varies with the age of the head of household, and younger households tend to be more willing to take investment risk than older households. In 2021, 41 percent of Generation Z and Millennial mutual fund–owning households and 46 percent of Generation X mutual fund–owning households were willing to take above-average or substantial investment risk (Figure 7.13). This willingness to take risk drops to 34 percent for mutual fund–owning households in the Baby Boom Generation and 15 percent for mutual fund–owning households in the Silent and GI Generations.

Mutual fund–owning households' willingness to take investment risk is reflected in the types of mutual funds they own. Equity funds were the most commonly owned type of mutual fund in 2021, held by 89 percent of mutual fund–owning households (Figure 7.14). In addition, 41 percent owned balanced funds, 44 percent owned bond funds, and 53 percent owned money market funds.

FIGURE 7.14

Equity Funds Are the Most Commonly Owned Type of Mutual Fund

Percentage of US households owning mutual funds, 2021



* The Investment Company Institute classifies this fund category as *hybrid* in its data.
Note: Multiple responses are included.
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2021"

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What US Households Consider When They Select Mutual Funds, 2021
www.ici.org/files/2022/per28-03.pdf

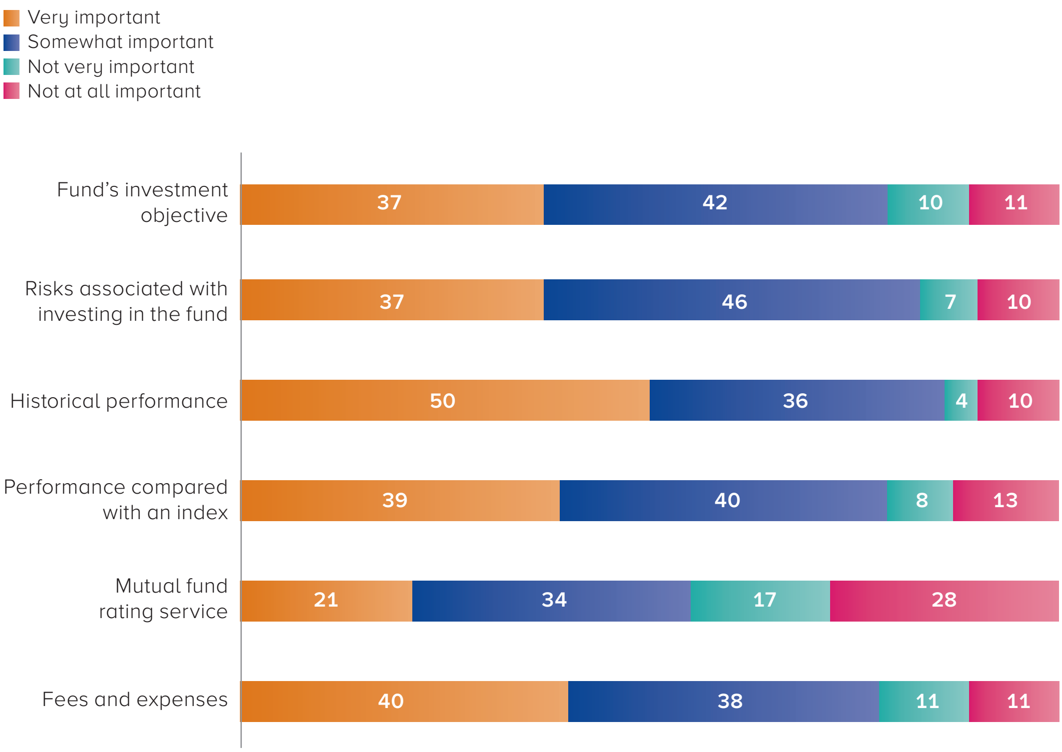
How Households Select Mutual Funds

ICI also surveyed mutual fund–owning households about the importance of a variety of factors when making their mutual fund purchase decisions. In 2021, 89 percent of mutual fund–owning households considered a fund's investment objective when making their purchase decision (Figure 7.15). Similarly, 90 percent of mutual fund–owning households reviewed the risk level of a fund's investments. Ninety percent of mutual fund–owning households said that they reviewed the historical performance of a fund. Eighty-seven percent of mutual fund–owning households indicated that they considered a fund's performance compared with an index, and 72 percent of mutual fund–owning households considered a fund's rating from a rating service. Almost nine in 10 mutual fund–owning households indicated that they reviewed the fund's fees and expenses.

FIGURE 7.15

Most Mutual Fund–Owning Households Research Fund Investments

Percentage of US households owning mutual funds, 2021



Source: *ICI Research Perspective*, "What US Households Consider When They Select Mutual Funds, 2021"

Shareholder Use of the Internet

An overwhelming majority of mutual fund–owning households have internet access. In 2021, 95 percent of US households owning mutual funds had internet access (Figure 7.16), up from 68 percent in 2000. Internet access traditionally has been greatest among younger people—in both mutual fund–owning households and the general population. Increasing access among older households, however, has narrowed the gap considerably.

FIGURE 7.16

Internet Access Is Nearly Universal Among Mutual Fund–Owning Households

Percentage of US households with internet access, 2021

	All US households	Mutual fund–owning households	Households with DC plan accounts[1]
Age of head of household[2]			
Younger than 35	91	96	95
35 to 49	92	99	99
50 to 64	85	97	95
65 or older	68	86	84
Education level			
High school diploma or less	70	86	88
Some college or associate's degree	88	95	93
College or postgraduate degree	91	97	96
Household income[3]			
Less than $50,000	69	86	82
$50,000 to $99,999	87	91	92
$100,000 to $149,999	96	99	98
$150,000 or more	95	99	99
Total	**83**	**95**	**94**

[1] DC plans include 401(k), 403(b), 457, and other DC plans.

[2] Age is based on the sole or co-decisionmaker for household saving and investing.

[3] Total reported is household income before taxes in 2020.

Note: Internet access includes access to the internet at home, work, or some other location.

Source: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2021"

CHAPTER

8

US Retirement and Education Savings

National policies that have created or enhanced tax-advantaged savings accounts have proven integral to helping Americans save for retirement and other long-term goals. Because many Americans use mutual funds in tax-advantaged accounts to reach these goals, ICI studies the US retirement market; the investors who use 401(k) plans, IRAs, 529 plans, and other tax-advantaged savings vehicles; and the role of mutual funds in the retirement and education savings markets. At year-end 2021, US retirement market assets totaled $39 trillion, and assets in 529 education savings plans were more than $450 billion.

IN THIS CHAPTER

The US Retirement System

American households rely on a combination of resources in retirement, and the role each type of resource plays has changed over time and varies across households. The traditional analogy compares retirement resources to a three-legged stool, with resources divided equally among the legs—Social Security, employer-sponsored pension plans, and private savings. A better analogy, however, is to think of Americans' retirement resources as a five-layer pyramid. Unlike the legs of a stool, pyramid layers need not be the same size.

Retirement Resource Pyramid

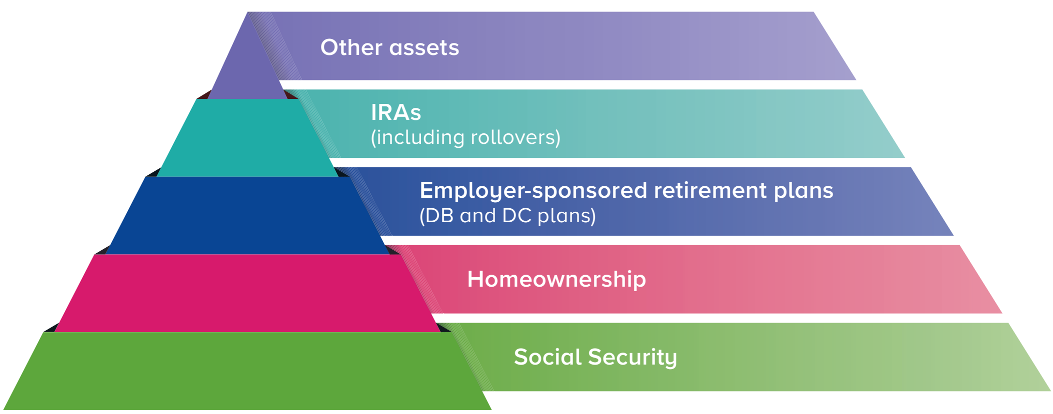
The retirement resource pyramid has five layers, which draw from government programs, compensation deferred until retirement, and other savings (Figure 8.1):

- Social Security
- homeownership
- employer-sponsored retirement plans (private-sector and government employer plans, including both defined benefit [DB] and defined contribution [DC] plans)
- individual retirement accounts (IRAs), including rollovers
- other assets

Though the use of each layer differs by household, together these resources have broadly enabled recent generations of retirees to maintain their standard of living in retirement.

FIGURE 8.1

Retirement Resource Pyramid



Source: Investment Company Institute, *The Success of the US Retirement System*

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Retirement Resource Center
www.ici.org/retirement

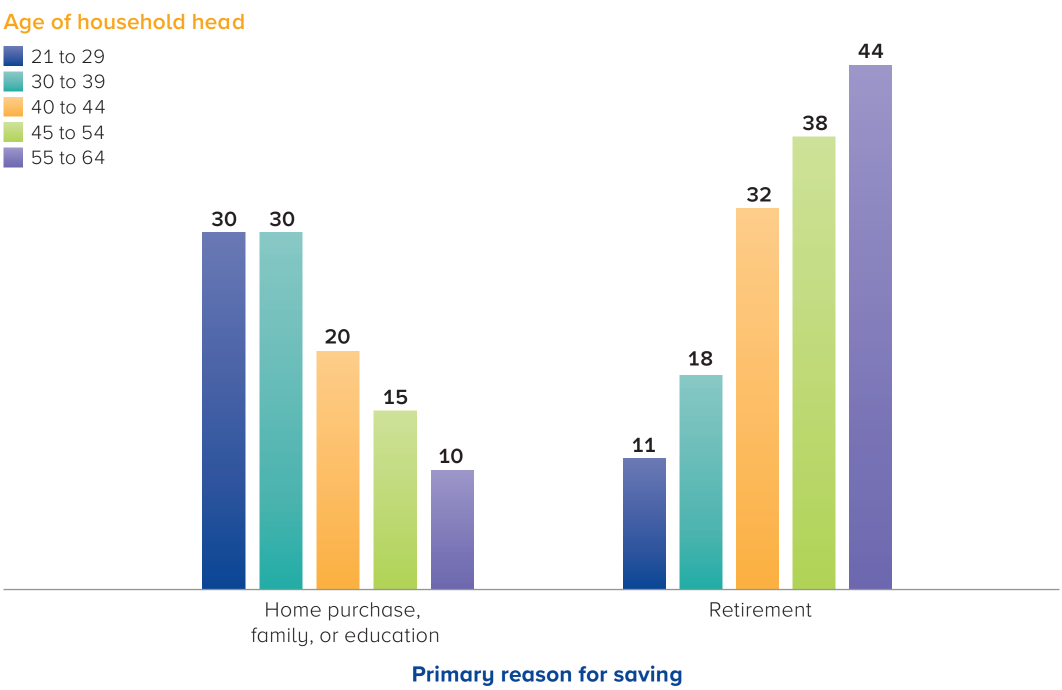
The composition of each household's retirement pyramid varies with income. For example, lower-income households tend to rely more on Social Security, reflecting the fact that Social Security benefits replace a higher share of pre-retirement earnings for workers with lower lifetime earnings.

The amount and composition of retirement resources also change with age. Younger households are more likely to save primarily for reasons other than retirement, such as for a home purchase, family, or education (Figure 8.2). By contrast, older households are more likely to save primarily for retirement, as many already have reached their other savings goals. The tendency of younger workers to focus less on saving for retirement is consistent with economic models of life-cycle consumption predicting that most workers delay saving for retirement until later in their careers, when they typically have higher earnings.

FIGURE 8.2

Primary Reason for Household Saving Changes with Age

Percentage of households by age of household head, 2019



Source: Investment Company Institute tabulations of the 2019 Federal Reserve Board Survey of Consumer Finances

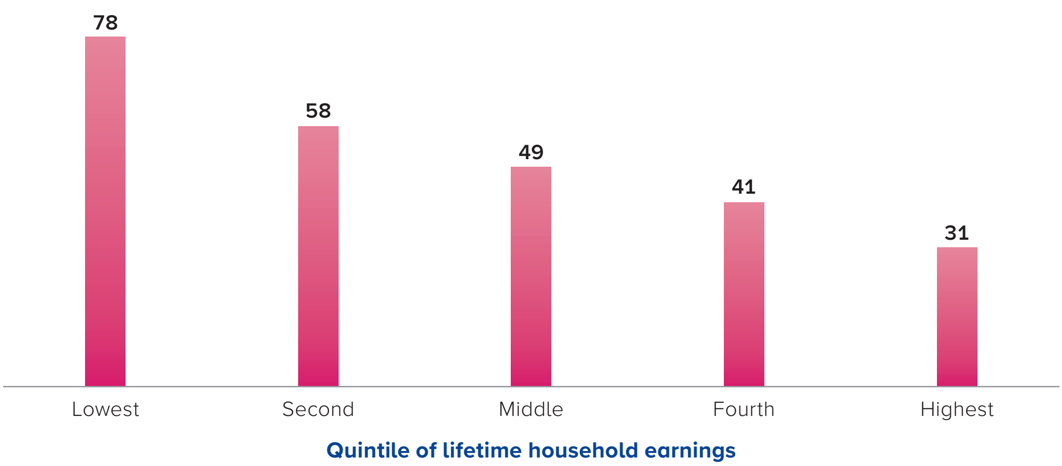
Social Security, the base of the US retirement resource pyramid, is a substantial component of retiree income and the primary source of income for lower-income retirees. Social Security benefits are funded through a payroll tax equal to 12.4 percent of earnings of covered workers (split equally between employers and employees) up to a maximum taxable earnings amount ($142,800 in 2021). The benefit formula is highly progressive, with benefits representing a much higher percentage of earnings for workers with lower lifetime earnings.

By design, Social Security is the primary means of support for retirees with low lifetime earnings, and a substantial source of income for all retired workers. The Congressional Budget Office estimates that, for those in the lowest quintile (20 percent) of households ranked by lifetime household earnings, first-year Social Security benefits will replace 78 percent of inflation-indexed lifetime earnings, on average, for workers born in the 1960s who claim benefits at age 65 (Figure 8.3). That replacement rate drops to 58 percent for workers in the second quintile of households, and then declines more slowly as lifetime household earnings increase. Even for workers in the top 20 percent of households, Social Security benefits are projected to replace a considerable portion (31 percent) of earnings.

FIGURE 8.3

Social Security Benefit Formula Is Highly Progressive

Average scheduled Social Security replacement rates for workers in the 1960s birth cohort by quintile of lifetime household earnings, percent



Note: The replacement rate is the ratio of Social Security benefits net of income tax to average inflation-indexed lifetime earnings. Replacement rates are for workers claiming benefits at age 65. For workers born in the 1960s, the Social Security full benefit retirement age is 67. If these workers claimed benefits at age 67, benefits would increase by about 15 percent.
Source: Congressional Budget Office, *CBO's 2021 Long-Term Projections for Social Security: Additional Information*

For many near-retiree households, homeownership is the second most important retirement resource after Social Security. Older households are more likely to own their homes; more likely to own their homes without mortgage debt; and, if they still have mortgages, more likely to have small mortgages relative to the value of their homes. Retired households typically benefit from this resource simply by living in their homes rent-free.

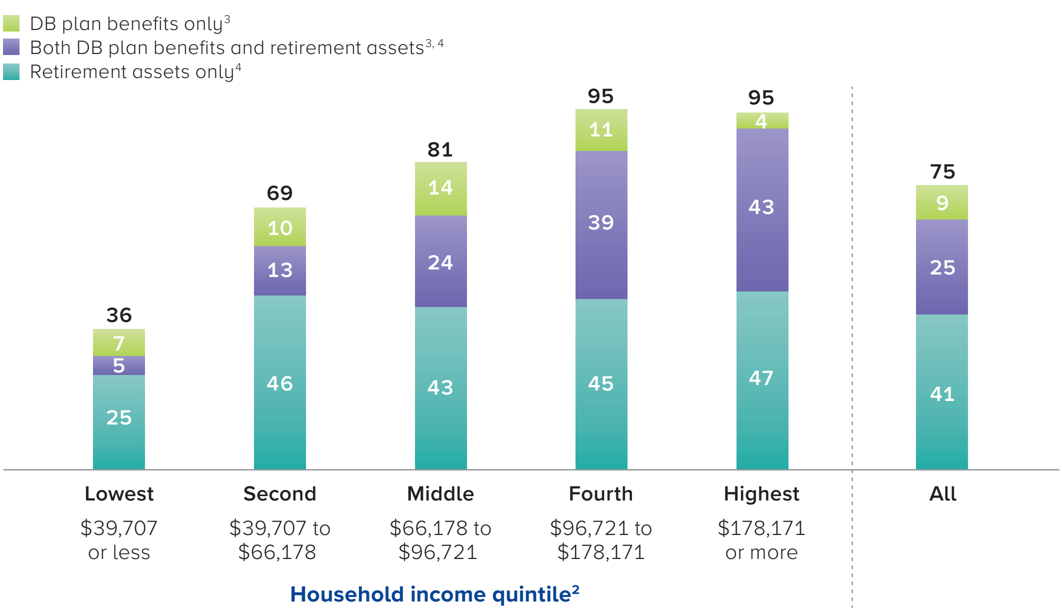
Employer-sponsored retirement plans and IRAs, which complement Social Security benefits and are important resources for households regardless of income or wealth, increase in importance for households for which Social Security replaces a smaller share of earnings. In 2019, three-quarters of near-retiree households had accrued benefits in employer-sponsored retirement plans—DB and DC plans sponsored by private-sector and government employers—or IRAs (Figure 8.4).

Finally, although less important on average, retirees also rely on other assets in retirement. These assets can be financial—including bank deposits, stocks, bonds, and mutual funds owned outside employer-sponsored retirement plans and IRAs. They also can be

FIGURE 8.4

Near-Retiree Households Across All Income Groups Have Retirement Assets, DB Plan Benefits, or Both

Percentage of near-retiree households[1] by income quintile,[2] 2019



[1] *Near-retiree households* are those with a head of household aged 55 to 64, and a working head of household or working spouse.

[2] Income is household income before taxes in 2018.

[3] Households currently receiving DB plan benefits and households with the promise of future DB plan benefits, whether from private-sector or government employers, are counted in this category.

[4] In this figure, retirement assets include DC plan assets (401(k), 403(b), 457, thrift, and other DC plans), whether from private-sector or government employers, and IRAs (traditional, Roth, SEP, SAR-SEP, and SIMPLE).

Source: Investment Company Institute tabulations of the 2019 Federal Reserve Board Survey of Consumer Finances nonfinancial—including business equity, investment real estate, second homes, vehicles, and consumer durables (long-lived goods such as household appliances and furniture). Higher-income households are more likely to have large holdings of assets in this category.

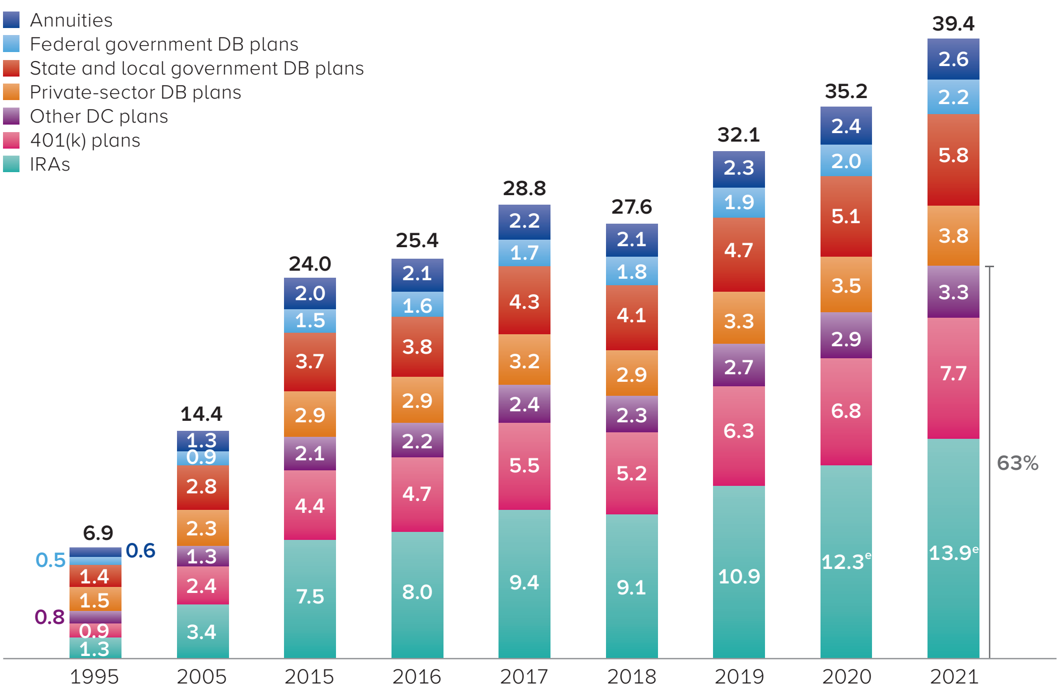
Snapshot of US Retirement Market Assets

Employer-sponsored retirement plans, IRAs (including rollovers), and annuities play an important role in the US retirement system, with assets totaling $39.4 trillion at year-end 2021 (Figure 8.5)—up 12 percent from year-end 2020. The largest components of retirement assets were IRAs and employer-sponsored DC plans (including 401(k) plans), which together represented 63 percent of all retirement market assets at year-end 2021. Other employer-sponsored plans include private-sector DB plans ($3.8 trillion), state and local government DB plans ($5.8 trillion), and federal government DB plans ($2.2 trillion). In addition, annuity reserves outside of retirement plans were $2.6 trillion at year-end 2021.

FIGURE 8.5

US Retirement Market Assets

Trillions of dollars, year-end



e Data are estimated.

Source: Investment Company Institute. For a complete list of sources, see Investment Company Institute, "The US Retirement Market, Fourth Quarter 2021."

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ICI Explains: **The Retirement Pyramid: How to Best View Your Resources**

www.ici.org/video/21_explain_retirement

Retirement assets include individual account-based savings (DC plans and IRAs) and assets held in DB plans. Traditional DB plans promise to pay benefits in retirement typically based on salary and years of service. Some DB plans, however, do not have sufficient assets to cover promised benefits that households have a legal right to expect. The total unfunded liabilities of DB plans were $5.2 trillion at year-end 2021, and underfunding is more pronounced in government-sector pension plans. As of year-end 2021, state and local government DB plans had $5.8 trillion in assets and $3.6 trillion in unfunded liabilities and federal DB plans had $2.2 trillion in assets and $1.6 trillion in unfunded liabilities. By comparison, private-sector DB plans had $3.8 trillion in assets and $7 billion in unfunded liabilities.

Ownership of Retirement Resources

Many US households have accumulated resources earmarked for retirement (Figure 8.6). Across all age groups, 63 percent of US households (82 million) reported that they had employer-sponsored retirement plans, IRAs, or both in 2021. Fifty-six percent of US households reported that they had employer-sponsored retirement plans—that is, they had assets in DC plan accounts, were receiving or expecting to receive benefits from DB plans, or both. Thirty-seven percent reported having assets in IRAs, including 30 percent that had both IRAs and employer-sponsored retirement plans. US households represent a wide range of ages at different points in the life cycle of savings. Focus on retirement savings tends to increase with age (Figure 8.2), and older households are more likely to have retirement resources; for example, three-quarters of near-retiree households have retirement accumulations (Figure 8.4).

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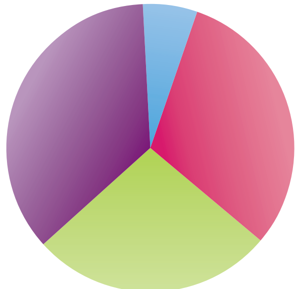
The US Retirement Market
www.ici.org/research/stats/retirement

FIGURE 8.6

Many US Households Have Retirement Resources Outside Social Security

Percentage of US households, 2021



Total number of US households: 129.9 million

[1] This category includes traditional, Roth, and employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs).

[2] Employer-sponsored retirement plans include DC and DB retirement plans.

Sources: Investment Company Institute and US Census Bureau. See *ICI Research Perspective*, "The Role of IRAs in US Households' Saving for Retirement, 2021."

US Retiree Income

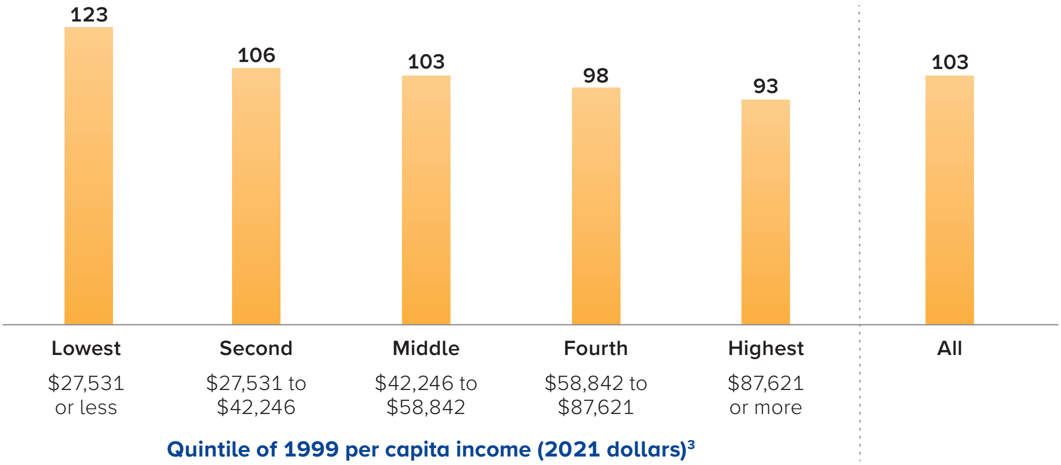
Most American workers maintain or increase their spendable income after claiming Social Security, according to a study coauthored by ICI and Internal Revenue Service Statistics of Income Division staff. The study also finds that, after claiming, most get substantial amounts of both Social Security benefits and retirement income (from employer-sponsored retirement plans, annuities, or IRAs).

Lower-income workers typically had higher replacement rates of spendable income—income available after paying taxes and making contributions to retirement accounts (Figure 8.7). Three years after claiming, the median worker in the study had spendable income that was greater (103 percent) than spendable income in the year before claiming. Notably, median replacement rates were found to be highest for individuals in the lowest quintile of income in 1999 (123 percent) and lowest for individuals in the highest quintile (93 percent).

FIGURE 8.7

Most Workers Maintain Spendable Income After Claiming Social Security

Median spendable income replacement rate[1] three years after claiming Social Security among individuals in the sample[2] by 1999 per capita income,[3] percent



[1] Spendable income is the sum of labor income, Social Security benefits, and retirement income (DB and DC pension, annuity, and IRA income) less payroll taxes and a proportional amount of federal income taxes. The replacement rate is expressed as a percentage of spendable income in the year before Social Security was claimed.

[2] The sample consists of all working taxpayers aged 55 to 61 in 1999 who claimed Social Security retirement benefits between 2000 and 2007.

[3] For individuals filing a non-joint return, per capita income is income reported on the tax return. For married individuals filing a joint return, per capita income is income reported on the tax return divided by two.

Source: *Using Panel Tax Data to Examine the Transition to Retirement*, available at www.ici.org/transition_to_retirement

In addition to Social Security, the vast majority of workers analyzed had resources from employer-sponsored retirement plans, annuities, and IRAs (Figure 8.8). Over the five-year period from one year before an individual claims Social Security to three years after claiming, 81 percent received income—either directly or through a spouse—from employer plans, annuities, or IRAs. Another 8 percent had evidence of these resources—a Form 1099-R (reporting a rollover or other retirement account transaction that did not generate income), a Form 5498 (indicating IRA ownership), or both—but were not yet drawing on them.

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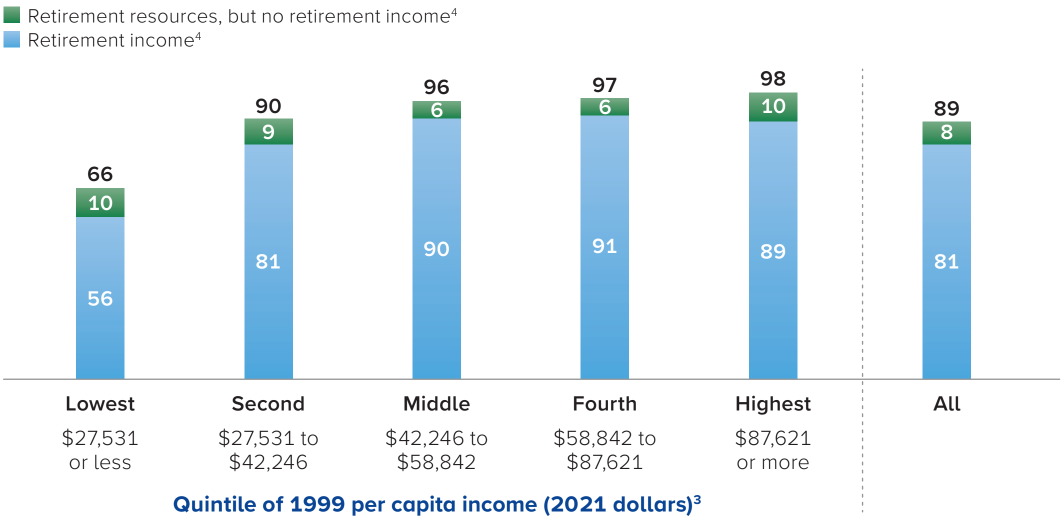
The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2018
www.ici.org/files/2021/21_ppr_dcplan_profile_401k.pdf

FIGURE 8.8

Nearly Nine in 10 Had Retirement Resources Outside of Social Security

Percentage of sample[1] who had evidence of retirement resources outside of Social Security[2] by 1999 per capita income[3]



[1] The sample consists of all working taxpayers aged 55 to 61 in 1999 who claimed Social Security retirement benefits between 2000 and 2007.

[2] The period analyzed is the five-year period starting one year prior to claiming Social Security and ending three years after claiming.

[3] For individuals filing a non-joint return, per capita income is income reported on the tax return. For married individuals filing a joint return, per capita income is income reported on the tax return divided by two.

[4] Retirement income is income from DB and DC pensions, annuities, and IRAs.

Source: *Using Panel Tax Data to Examine the Transition to Retirement*, available at www.ici.org/transition_to_retirement

Defined Contribution Retirement Plans

DC plans provide employees with a retirement account funded with employer contributions, employee contributions, or both, plus investment earnings or losses on those contributions, less withdrawals. Assets in employer-sponsored DC plans have grown faster than assets in DB plans over the past three decades, increasing from 31 percent of total DC and DB plan assets in 1991 to 48 percent at year-end 2021.

At the end of 2021, employer-sponsored DC plans—which include 401(k) plans, 403(b) plans, 457 plans, the federal Thrift Savings Plan (TSP), and other private-sector DC plans—held an estimated $11.0 trillion in assets (Figure 8.5). With $7.7 trillion in assets at year-end 2021, 401(k) plans held the largest share of employer-sponsored DC plan assets. 403(b) plans—which are similar to 401(k) plans and are offered by educational and certain nonprofit organizations—held another $1.3 trillion in assets. In addition, 457 plans—which serve employees of state and local governments and certain tax-exempt organizations—and the TSP held a total of $1.3 trillion. Other private-sector DC plans without 401(k) features held the remaining $0.7 trillion.

401(k) and 403(b) Plan Design and Investment Lineup

Plan Design

Employers that sponsor a 401(k) plan have the option to include features such as employer contributions, access to plan assets through participant loans, and automatic enrollment of employees into the plan to encourage participation. The most common of these plan features is employer contributions. In 401(k) plans, employers can make contributions without regard to employee contributions or by using a matching structure that gives employees an incentive to contribute to the plan. Recent analysis of large 401(k) plans by BrightScope and ICI found that 87 percent made employer contributions in plan year 2018. Nearly eight out of 10 (78 percent) large 401(k) plans had participant loans outstanding, and about three out of 10 (31 percent) included automatic enrollment in 2018. An analysis of large private-sector 403(b) plans found that they also offer a variety of combinations of these plan design features.

When designing 401(k) plans, employers tend to select a combination of features that their employees are likely to value. In 2018, 45 percent of large 401(k) plans had both employer contributions and participant loans outstanding but no automatic enrollment, making this the most common combination of plan activities. The next most common plan design combined all three activities—employer contributions, automatic enrollment, and outstanding loans—and was offered by 24 percent of large 401(k) plans. Fourteen percent of large 401(k) plans had employer contributions only, and about 3 percent did not report any of the three activities.

Investment Lineup

In addition to choosing how to structure contributions to the 401(k) plan, employers also select the investment options that are available to plan participants. In 2018, domestic equity funds, international equity funds, and domestic bond funds were offered in nearly all large 401(k) plans (Figure 8.9). Although these three fund types are equally likely to be offered, when these funds are available in the plan, employers tend to offer more domestic equity funds (10 funds on average) than domestic bond funds (three funds) or international equity funds (three funds). Target date funds also are common investment choices, with nearly 85 percent of large 401(k) plans offering 10 of these funds on average. In addition, 45 percent of large 401(k) plans offered one money fund on average and 70 percent offered one guaranteed investment contract (GIC). In total, the average large 401(k) plan offered 28 funds to participants in 2018. Large private-sector 403(b) plans also offer participants a diverse array of investment options.

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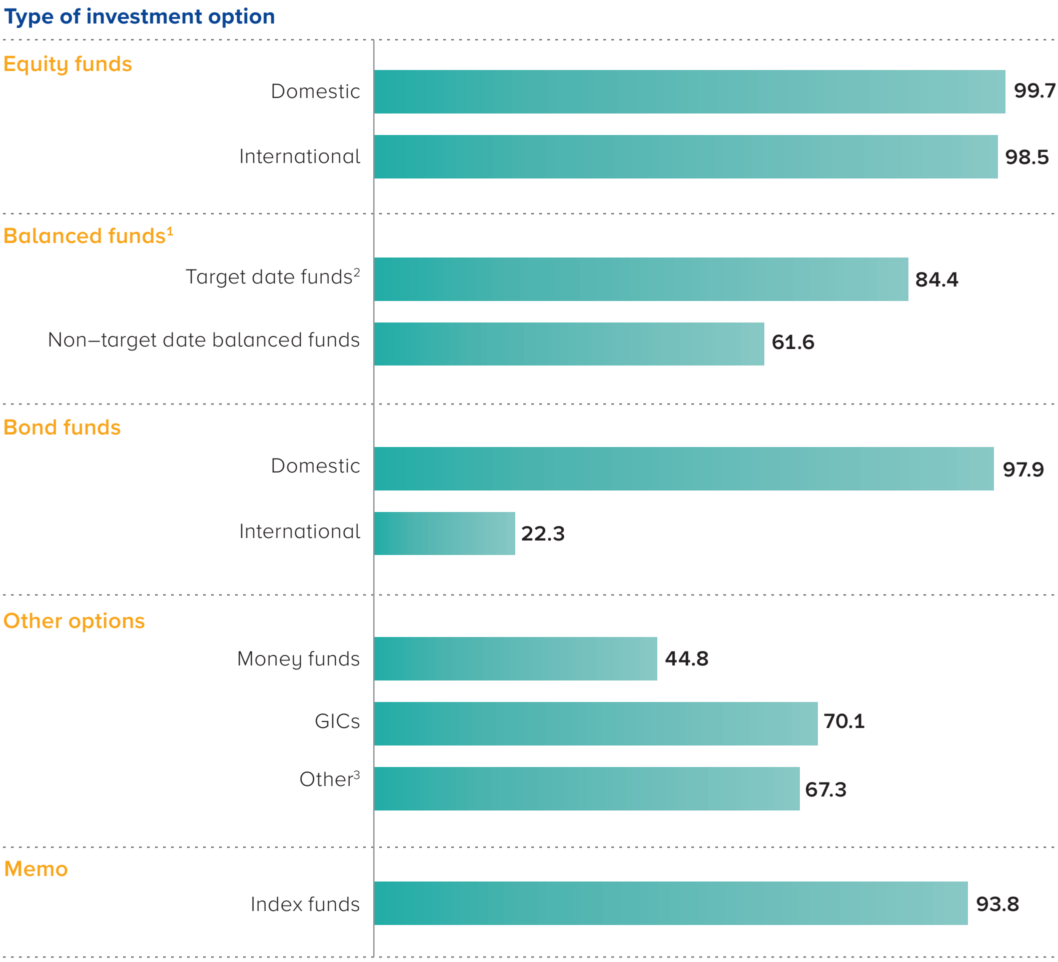
How America Supports Retirement: Challenging the Conventional Wisdom on Who Benefits

www.ici.org/whobenefits

FIGURE 8.9

Incidence of Investment Options Offered in Large 401(k) Plans by Type of Investment

Percentage of plans with audited 401(k) filings in the BrightScope database, 2018



[1] The Investment Company Institute classifies balanced funds as *hybrid* in its data.

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

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

Note: The sample is 56,504 plans with 57.4 million participants and $4.3 trillion in assets. Participant loans are excluded. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. BrightScope audited 401(k) filings generally include plans with 100 participants or more. Plans with fewer than four investment options or more than 100 investment options are excluded from BrightScope audited 401(k) filings for this analysis.

Source: BrightScope Defined Contribution Plan Database. See BrightScope and Investment Company Institute, *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2018.*

401(k) Participants: Asset Allocation, Account Balances, and Loan Activity

Asset Allocation

The amount of income that 401(k) plan accounts provide in retirement depends, in part, on the asset allocation decisions of plan participants.

According to research conducted by ICI and the Employee Benefit Research Institute (EBRI), the asset allocation of 401(k) participants varies with age. At year-end 2019, on average, 401(k) plan participants in their twenties had 31 percent of their 401(k) assets invested in equity funds, 54 percent in target date funds, 5 percent in non–target date balanced funds,* and 2 percent in company stock (Figure 8.10). By comparison, 401(k) plan participants in their sixties had higher allocations to equity funds (38 percent of their 401(k) assets), lower allocations to target date funds (29 percent), and similar allocations to non–target date balanced funds (4 percent) and company stock (5 percent). These older participants also had higher allocations to fixed-income investments. At year-end 2019, on average, 401(k) plan participants in their sixties had 21 percent of their 401(k) account assets in money funds, bond funds, and GICs and other stable value funds, while participants in their twenties allocated a much lower 6 percent to those investments, on average.

All told, younger participants allocate more of their portfolios to equities (which include equity funds; the equity portion of balanced funds, including target date funds; and company stock) compared with older participants. According to EBRI/ICI research, at year-end 2019, participants in their twenties had 84 percent of their 401(k) assets invested in equities, on average, while those in their sixties had 57 percent of their 401(k) assets invested in equities (Figure 8.10).

* The Investment Company Institute classifies balanced funds as *hybrid* in its data.

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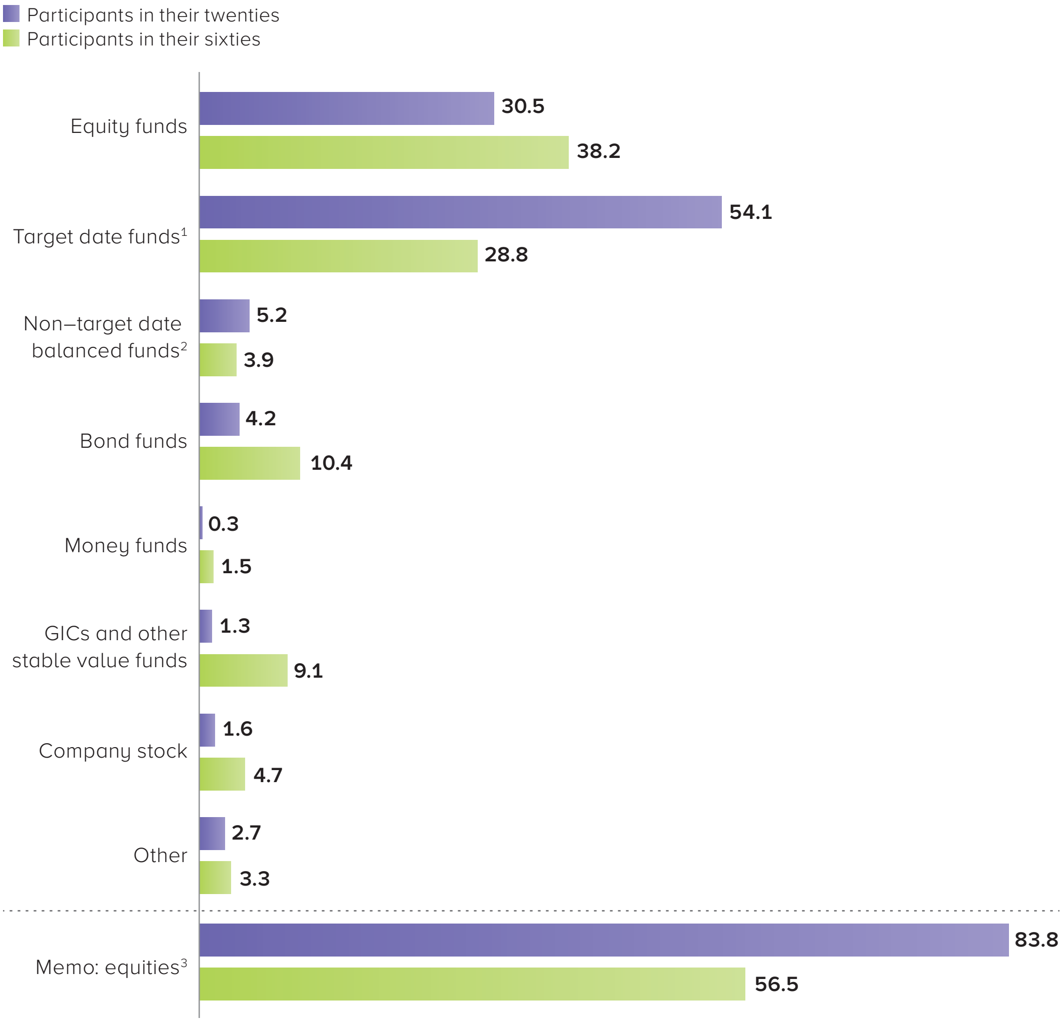
FIGURE 8.10

401(k) Asset Allocation Varies with Participant Age

Average asset allocation of 401(k) account balances, percentage of account balances, year-end 2019



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

[2] The Investment Company Institute classifies balanced funds as *hybrid* in its data.

[3] Equities include equity funds, company stock, and the equity portion of balanced funds.

Note: Funds include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated. Percentages are dollar-weighted averages.

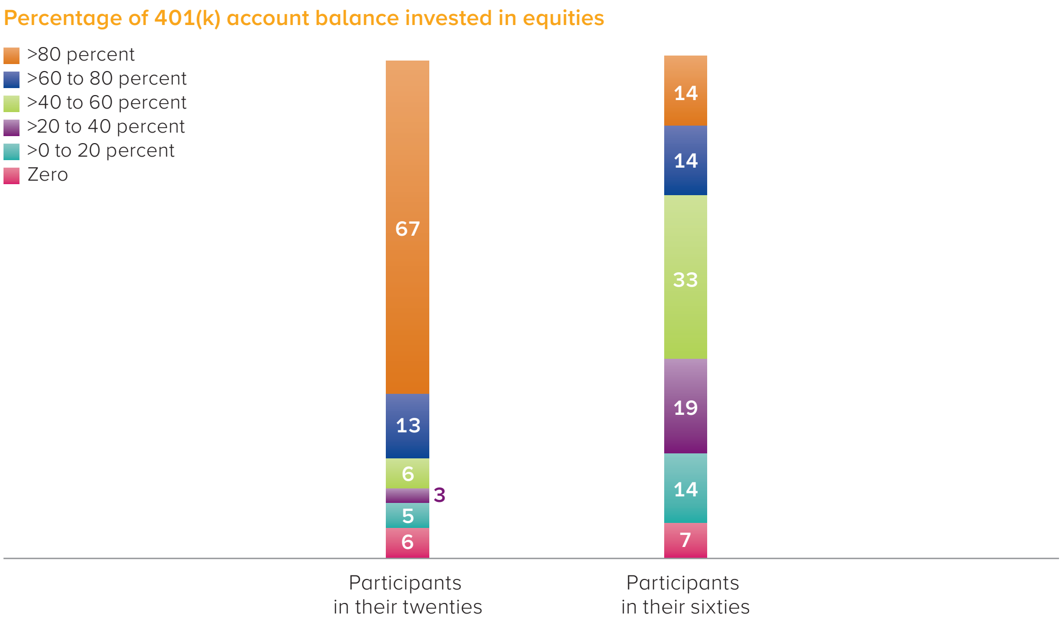
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project. See *ICI Research Perspective*, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2019."

Portfolio allocation also varies widely within age groups. At year-end 2019, 67 percent of 401(k) participants in their twenties held more than 80 percent of their account in equities, while participants in their sixties were much less inclined to hold such high equity allocations (less than 15 percent of them did so) (Figure 8.11). By comparison, 14 percent of those in their twenties and 40 percent of those in their sixties allocated 40 percent or less of their account to equities.

FIGURE 8.11

Asset Allocation to Equities Varies Widely Among 401(k) Plan Participants

Asset allocation distribution of 401(k) participant account balance to equities, percentage of participants, year-end 2019



Note: Equities include equity funds, company stock, and the equity portion of balanced funds. Funds include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated. The Investment Company Institute classifies balanced funds as *hybrid* in its data.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project. See *ICI Research Perspective*, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2019."

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Target Retirement Date Funds Resource Center

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Target Date Funds

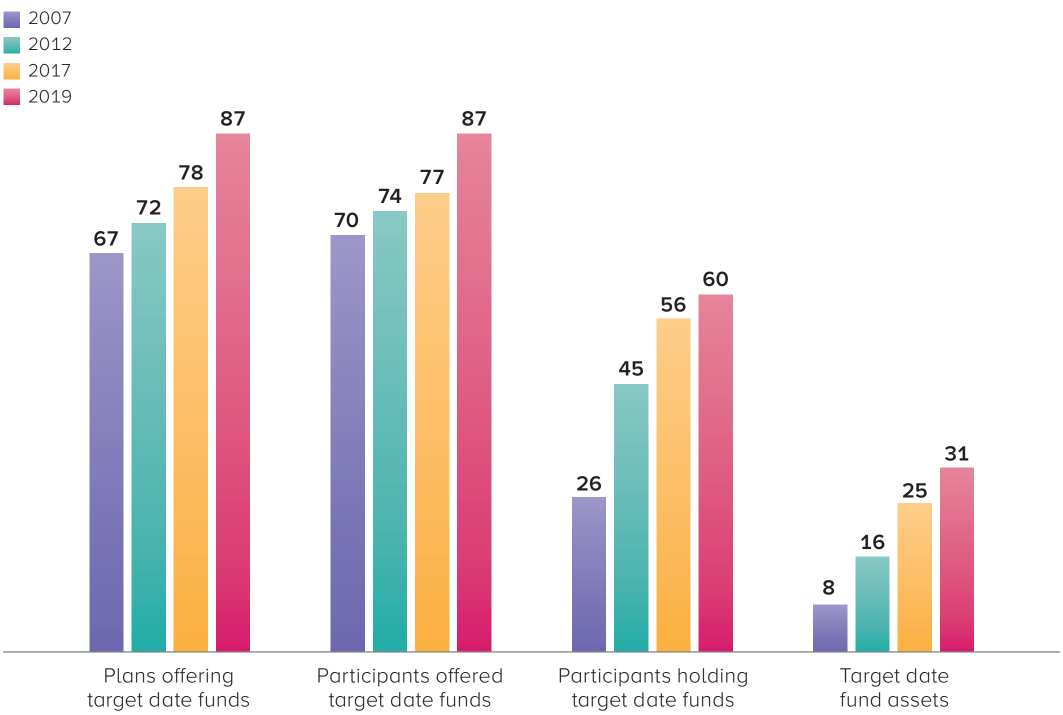
A target date fund (including both target date mutual funds and other pooled target date investments) follows a predetermined reallocation of assets over time based on a specified target retirement date. Typically, the fund rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date, which is usually indicated in the fund's name.

The use of target date funds in 401(k) plans has increased in recent years—from 8 percent of assets at year-end 2007 to 31 percent at year-end 2019 (Figure 8.12). Participant use of target date funds also has increased—from 26 percent of 401(k) plan participants at year-end 2007 to 60 percent at year-end 2019. Over the same time period, both the share of 401(k) plans that offered target date funds and the share of 401(k) plan participants who were offered target date funds have also increased. At year-end 2019, 87 percent of 401(k) plans offered target date funds, and 87 percent of 401(k) plan participants were offered target date funds.

FIGURE 8.12

Target Date Funds' 401(k) Market Share

Percentage of total 401(k) market, year-end



Note: A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name. Funds include mutual funds, bank collective trusts, life insurance separate accounts, and other pooled investment products.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project. See *ICI Research Perspective*, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2019."

Loan Activity

Most 401(k) participants do not borrow from their plans, although the majority (85 percent) have access to loans. At year-end 2019, 18 percent of participants eligible for loans had loans outstanding. Not all participants, however, have access to 401(k) plan loans—factoring in all 401(k) participants with and without loan access in the EBRI/ICI 401(k) database, only 15 percent had loans outstanding at year-end 2019. Unpaid loan balances among participants with loans averaged 8 percent of the remaining 401(k) account balance. In aggregate, US Department of Labor data indicate that outstanding loan amounts were less than 2 percent of 401(k) plan assets in 2019.

Individual Retirement Accounts

The first type of IRA—known as a traditional IRA—was created under the Employee Retirement Income Security Act of 1974 (ERISA). IRAs provide all workers with a contributory retirement savings vehicle and, through rollovers, give workers leaving jobs a means to preserve the tax benefits and growth opportunities that employer-sponsored retirement plans provide. Roth IRAs, first available in 1998, were created to provide a contributory retirement savings vehicle on an after-tax basis, with qualified withdrawals distributed tax-free. In addition, policymakers have added employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs) to encourage small businesses to provide retirement plans by simplifying the rules applicable to tax-qualified plans.

IRA assets totaled $13.9 trillion at year-end 2021, accounting for 35 percent of US retirement assets (Figure 8.13). Mutual funds were 45 percent of IRA assets ($6.2 trillion) at year-end 2021. The *other assets* category—which includes exchange-traded funds (ETFs), closed-end funds, individual stocks and bonds, and other non–mutual fund securities held through brokerage or trust accounts—had 46 percent of IRA assets ($6.5 trillion).

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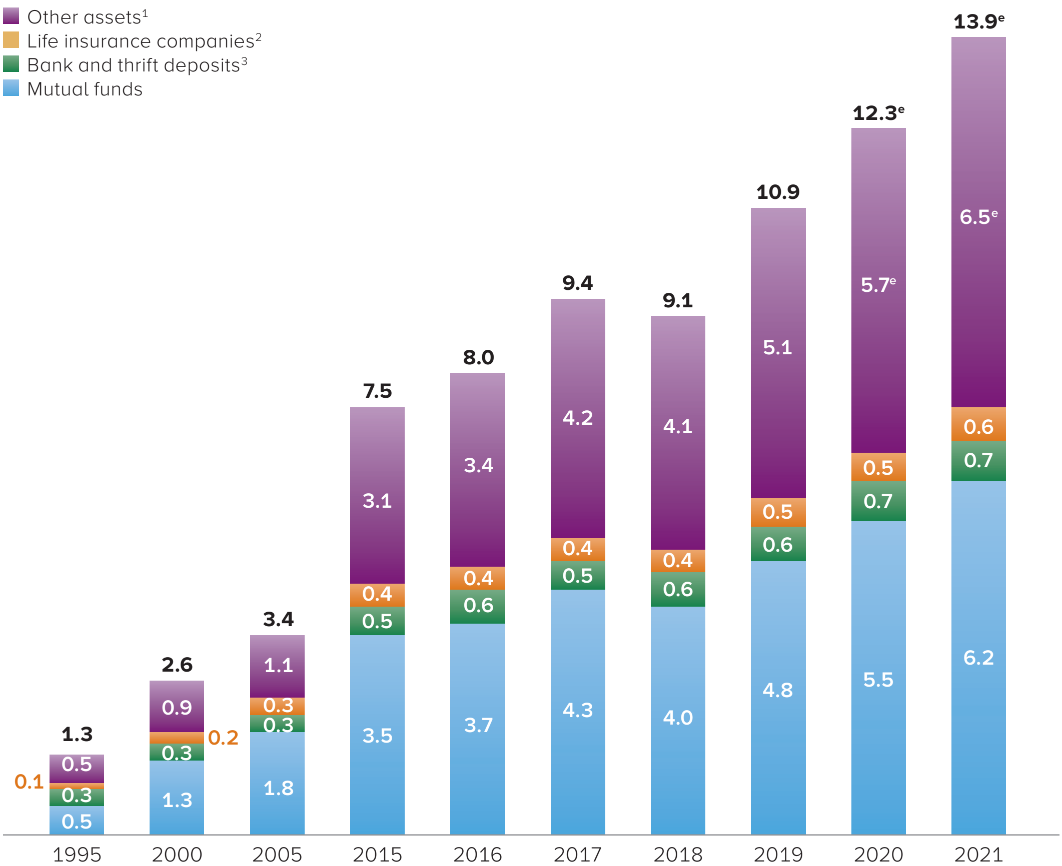
FIGURE 8.13

IRA Assets

Trillions of dollars, year-end



[1] *Other assets* includes individual stocks, individual bonds, closed-end funds, ETFs, and other assets held through brokerage or trust accounts.

[2] Life insurance company IRA assets are annuities held by IRAs, excluding variable annuity mutual fund IRA assets, which are included in mutual funds.

[3] Bank and thrift deposits include Keogh deposits.

[e] Data are estimated.

Source: Investment Company Institute. For a complete list of sources, see Investment Company Institute, "The US Retirement Market, Fourth Quarter 2021."

IRA Investors

More than one-third of US households, or 48 million, owned at least one type of IRA in 2021 (Figure 8.14). Traditional IRAs were the most common type, owned by 37 million US households. Roth IRAs, created as part of the Taxpayer Relief Act of 1997, were owned by 27 million US households. Nearly nine million US households owned employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, or SIMPLE IRAs).

FIGURE 8.14

Millions of US Households Own IRAs

	Year created	Number of US households with type of IRA 2021	Percentage of US households with type of IRA 2021	Assets in IRAs Billions of dollars, year-end 2021
Traditional IRA	1974 (Employee Retirement Income Security Act)	36.6 million	28.2%	$11,798[e]
SEP IRA	1978 (Revenue Act)	8.6 million	6.6%	$790[e]
SAR-SEP IRA	1986 (Tax Reform Act)			
SIMPLE IRA	1996 (Small Business Job Protection Act)			
Roth IRA	1997 (Taxpayer Relief Act)	27.3 million	21.0%	$1,325[e]
Any IRA		47.7 million	36.7%	$13,913[e]

[e] Data are estimated.

Note: Households may own more than one type of IRA. SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs are employer-sponsored IRAs.

Sources: *ICI Research Perspective*, "The Role of IRAs in US Households' Saving for Retirement, 2021" and Investment Company Institute, "The US Retirement Market, Fourth Quarter 2021"

Investment returns and rollovers from employer-sponsored retirement plans, more than new contributions, have fueled the growth of IRAs. For example, the Internal Revenue Service Statistics of Income Division reports that $554 billion was rolled over to IRAs in tax year 2019, compared with $76 billion that was contributed. Although most US households are eligible to make contributions to IRAs, few do so. Indeed, only 13 percent of US households contributed to traditional or Roth IRAs in tax year 2020 and very few eligible households made "catch-up" contributions (the additional contributions individuals aged 50 or older are allowed to make).

Analysis of the IRA Investor Database—which contains information on millions of IRA investors—finds that rollovers play a particularly important role in opening traditional IRAs. In 2018, most new traditional IRAs (76 percent) were opened only with rollovers (Figure 8.15). In contrast, most new Roth IRAs (76 percent) were opened solely with contributions.

FIGURE 8.15

New Roth IRAs Often Are Opened with Contributions; New Traditional IRAs Often Are Opened with Rollovers

Percentage of new IRAs opened in 2018 by type of IRA

Note: New IRAs are accounts that did not exist in the IRA Investor Database in 2017 and were opened by one of the paths indicated in 2018. The calculation excludes IRAs that changed financial services firms. The samples are 0.2 million new Roth IRA investors aged 18 or older at year-end 2018 and 0.3 million new traditional IRA investors aged 18 to 74 at year-end 2018.

Source: The IRA Investor Database™. See *ICI Research Report,* "The IRA Investor Profile: Roth IRA Investors' Activity, 2007–2018."

A substantial share of traditional IRA investors have rolled over assets from an employer-sponsored retirement plan. In any given year, only a small portion of traditional IRA investors have a rollover, but, for the most part, the groups that make rollovers differ from year to year. For example, in each year from 2007 through 2018, about one in 10 traditional IRA investors in the IRA Investor Database had a rollover, but more than half of investors with traditional IRAs at year-end 2018 had a rollover at some point during this period.

Traditional IRA–owning households generally researched the decision to roll over money from their former employers' retirement plans into traditional IRAs. The most common source of information was a professional financial adviser. Advisers were consulted by 65 percent of traditional IRA–owning households with rollovers; about half indicated that they primarily relied on these financial professionals. Older households were more likely to consult professional financial advisers than younger households when making their decision. Nine percent of traditional IRA–owning households with rollovers indicated their primary source of information was online materials from financial services firms, with younger households more likely to rely on online resources as their primary source of information than older households were. Eleven percent of households with rollovers primarily relied on information from their employers.

IRA Portfolios

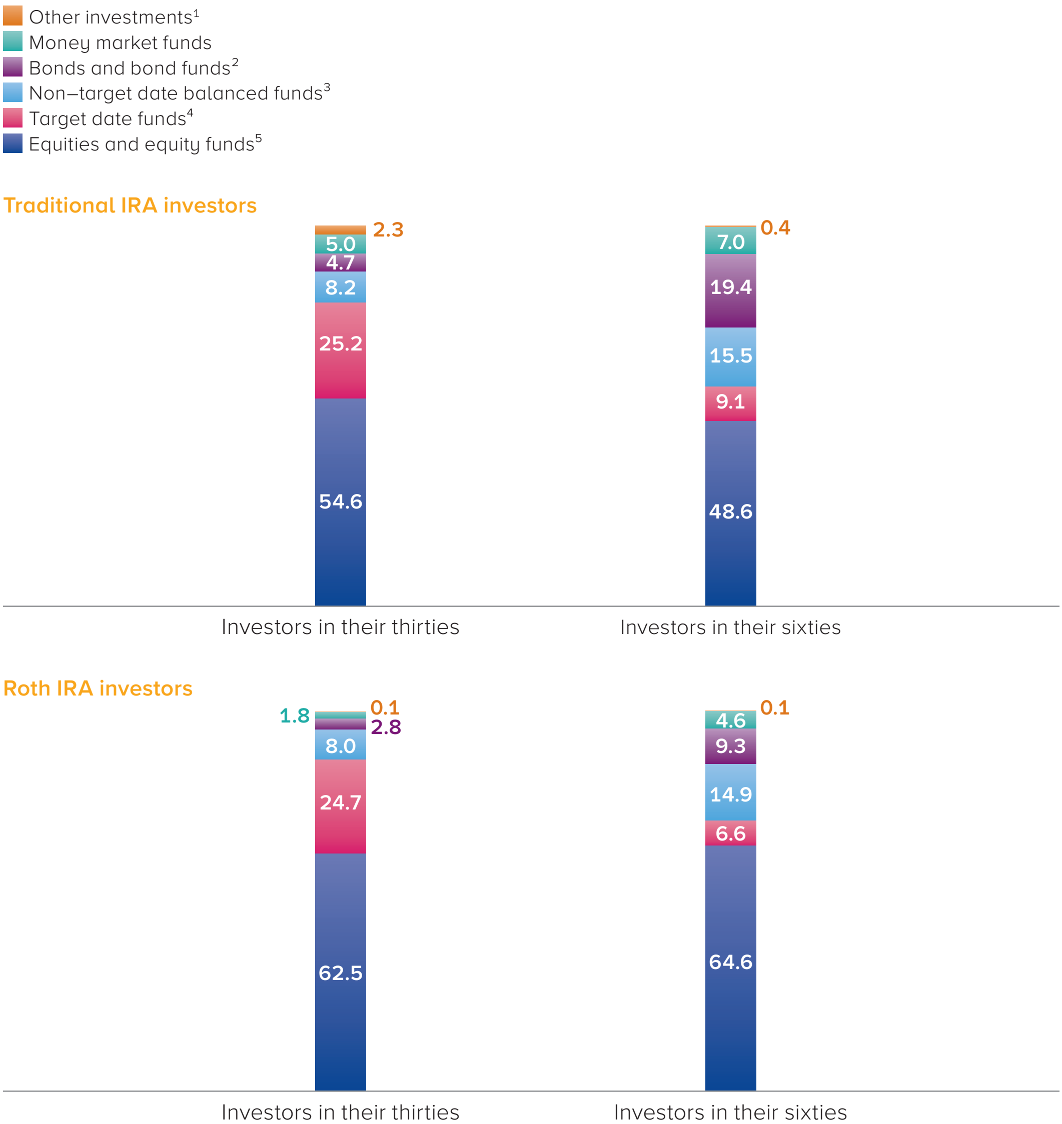
As with 401(k) participants, younger IRA investors tend to have a larger share of their assets invested in equities, equity funds, and target date funds than older investors, according to the IRA Investor Database. Older investors tend to be more invested in bonds, bond funds, and non–target date balanced funds. In 2018, traditional IRA investors in their thirties had, on average, a combined 80 percent of their assets in equities, equity funds, and target date funds (Figure 8.16). Traditional IRA investors in their sixties held a lower share of their assets (58 percent) in these combined categories, while holding much higher allocations across bonds, bond funds, and non–target date balanced funds.

Roth IRA investors display a similar pattern of investing by age, although in all age groups, they tended to have higher allocations to equities and equity funds and lower allocations to bonds and bond funds compared with traditional IRA investors (Figure 8.16).

FIGURE 8.16

IRA Asset Allocation Varies with Investor Age

Average asset allocation of IRA balances, percentage of assets, year-end 2018



[1] *Other investments* includes certificates of deposit and unidentifiable assets.

[2] Bond funds include bond mutual funds, bond closed-end funds, and bond ETFs.

[3] The Investment Company Institute classifies balanced funds as *hybrid* in its data.

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

[5] Equity funds include equity mutual funds, equity closed-end funds, and equity ETFs.

Note: Percentages are dollar-weighted averages.

Source: The IRA Investor Database™. See *ICI Research Report*, "The IRA Investor Profile: Traditional IRA Investors' Activity, 2007–2018" and *ICI Research Report*, "The IRA Investor Profile: Roth IRA Investors' Activity, 2007–2018."

Distributions from IRAs

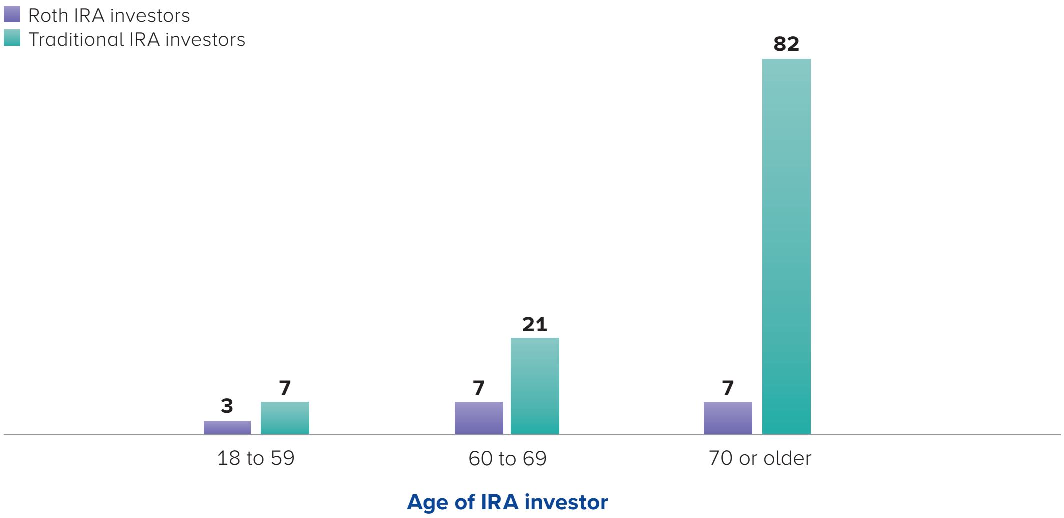
Withdrawals from IRAs tend to occur later in life, often to fulfill required minimum distributions (RMDs) under the law. An RMD is calculated as a percentage of the IRA balance, based on remaining life expectancy. Older traditional IRA owners generally must withdraw at least the minimum amount each year, or pay a penalty (historically, RMDs began at age 70½, but recently, the age was increased to 72). However, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) waived RMDs for 2020. In tax year 2019, 76 percent of households that took traditional IRA withdrawals said they calculated the withdrawal amount based on RMD rules. Only 61 percent of households that took traditional IRA withdrawals in tax year 2020 said they calculated the withdrawal amount based on RMD rules, likely related to the RMD waiver.

Withdrawal activity is lower among younger traditional and Roth IRA investors, likely related to early withdrawal penalties for distributions taken by individuals younger than 59½ (Figure 8.17). Withdrawal activity rises for investors in their sixties (where withdrawals are generally penalty free), and increases substantially for traditional IRA investors aged 70 or older, likely related to RMD rules. The withdrawal rate does not increase after age 70 for Roth IRA investors, who are not subject to RMDs during the owner's lifetime.

FIGURE 8.17

Roth IRA Investors Rarely Take Withdrawals; Traditional IRA Investors Are Heavily Affected by RMDs

Percentage of IRA investors with withdrawals by type of IRA and investor age, 2018



Note: The samples are 4.1 million Roth IRA investors aged 18 or older at year-end 2018 and 6.3 million traditional IRA investors aged 18 or older at year-end 2018.

Source: The IRA Investor Database™. See *ICI Research Report*, "The IRA Investor Profile: Roth IRA Investors' Activity, 2007–2018."

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The IRA Investor Profile

www.ici.org/research/investors/database

Withdrawals from IRAs tend to be retirement related. Of the 23 percent of traditional IRA–owning households in 2021 that reported taking withdrawals in 2020, 83 percent reported that the head of household, the spouse, or both were retired. Among retired traditional IRA–owning households in 2021 that reported taking withdrawals in 2020, 41 percent reported using some or all of the withdrawal amount to pay for living expenses (Figure 8.18). Other uses included reinvesting or saving in another account (36 percent); buying, repairing, or remodeling a home (16 percent); and using it for an emergency (4 percent).

FIGURE 8.18

Traditional IRA Withdrawals Among Retirees Often Are Used to Pay for Living Expenses

Percentage among retired traditional IRA–owning households that made withdrawals, 2021

Purpose of traditional IRA withdrawal	
Took withdrawals to pay for living expenses	41
Spent it on a car, boat, or big-ticket item other than a home	9
Spent it on a healthcare expense	4
Used it for an emergency	4
Used it for home purchase, repair, or remodeling	16
Reinvested or saved it in another account	36
Paid for education	1
Some other purpose	12

Note: Multiple responses are included. The base of respondents includes the 19 percent of traditional IRA–owning households that were retired in 2021 and took withdrawals in tax year 2020. The household was considered retired if either the head of household or spouse responded affirmatively to the question: “Are you retired from your lifetime occupation?”

Source: Investment Company Institute IRA Owners Survey. See *ICI Research Perspective*, “The Role of IRAs in US Households’ Saving for Retirement, 2021.”

The Role of Mutual Funds in Retirement Savings

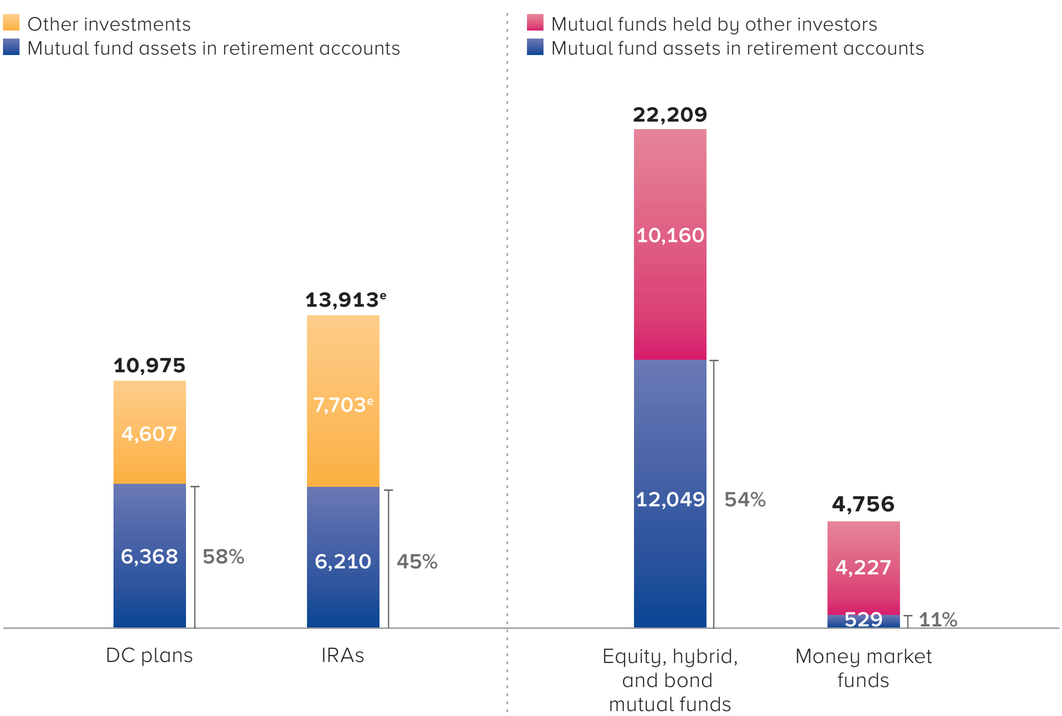
Mutual funds play a major role in employer-sponsored DC plans (such as 401(k) plans) and IRAs. At year-end 2021, mutual funds accounted for 58 percent of DC plan assets and 45 percent of IRA assets (Figure 8.19). Investors held slightly more mutual fund assets in DC plans ($6.4 trillion) than in IRAs ($6.2 trillion). Among DC plans, 401(k) plans held the most assets in mutual funds, with $5.0 trillion, followed by 403(b) plans ($670 billion), other private-sector DC plans ($539 billion), and 457 plans ($177 billion). Combined, the $12.6 trillion of mutual fund assets held in DC plans and IRAs at the end of 2021 accounted for 32 percent of the $39.4 trillion US retirement market.

Assets in DC plans and IRAs represent a large share of mutual fund assets overall, and long-term mutual fund assets in particular (Figure 8.19). The $12.6 trillion in mutual fund retirement assets made up 47 percent of all mutual fund assets at year-end 2021. DC plans and IRAs held 54 percent of equity, hybrid, and bond mutual fund assets, but only 11 percent of money market fund assets.

FIGURE 8.19

Substantial Amounts of Retirement Assets Are Invested in Mutual Funds

Assets, billions of dollars, year-end 2021



[e] Data are estimated.

Sources: Investment Company Institute and Federal Reserve Board. See Investment Company Institute, "The US Retirement Market, Fourth Quarter 2021."

Types of Mutual Funds Used by Retirement Investors

Retirement investors tend to hold equity investments. At year-end 2021, 59 percent of the $12.6 trillion in mutual fund retirement assets held in DC plans and IRAs were invested in equity funds. US domestic equity funds alone constituted $5.8 trillion, or 46 percent, of mutual fund assets held in DC plans and IRAs; world equity funds were an additional 13 percent.

Retirement investors also gain exposure to equities through hybrid funds, which invest in a mix of equity, bond, and money market securities. At year-end 2021, 23 percent of mutual fund assets held in DC plans and IRAs were held in hybrid funds.

The remaining 18 percent of mutual fund assets held in DC plans and IRAs at the end of 2021 were invested in bond funds and money market funds. Bond funds held $1.7 trillion, or 14 percent, of mutual fund assets held in DC plans or IRAs, and money market funds accounted for $529 billion, or 4 percent.

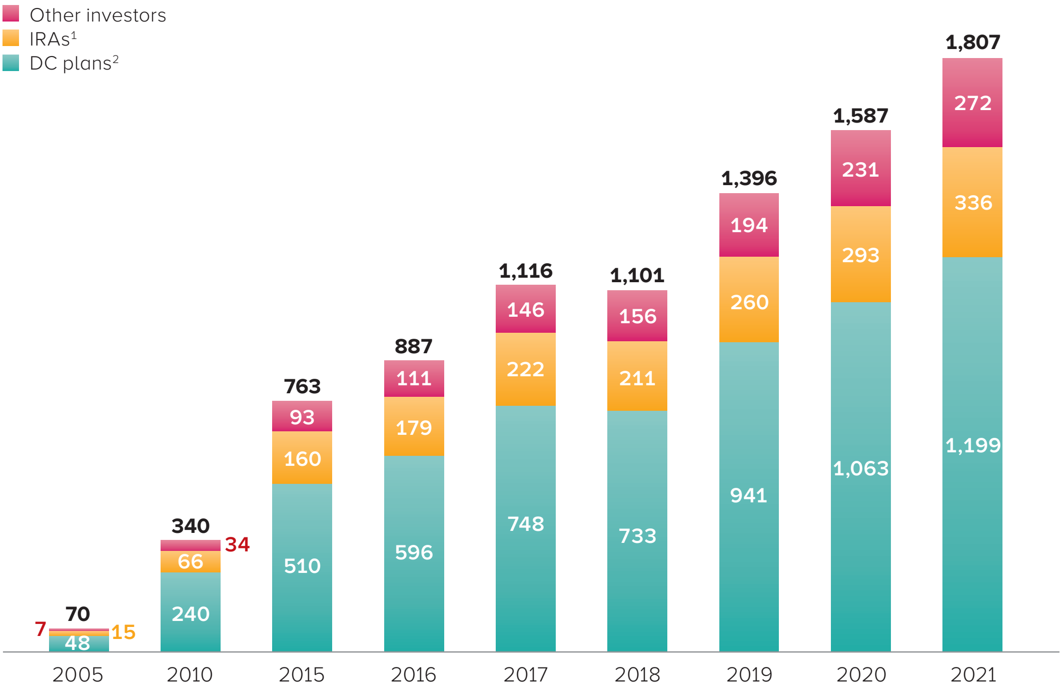
Target Date Mutual Funds in Retirement Accounts

Target date mutual funds, generally included in the hybrid fund category, have grown more popular among investors and retirement plan sponsors over the past decade. Assets in target date mutual funds totaled $1.8 trillion at year-end 2021, up from $1.6 trillion at year-end 2020, and $340 billion at year-end 2010 (Figure 8.20). At year-end 2021, most (85 percent) target date mutual fund assets were held in retirement accounts, predominantly DC plan accounts.

FIGURE 8.20

Target Date Mutual Fund Assets by Account Type

Billions of dollars, year-end



[1] IRAs include traditional IRAs, Roth IRAs, and employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs).

[2] DC plans include 401(k) plans, other private-sector DC plans without 401(k) features, 403(b) plans, and 457 plans.

Note: Data include mutual funds that invest primarily in other mutual funds. A target date mutual fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Source: Investment Company Institute, "The US Retirement Market, Fourth Quarter 2021"

The Role of Mutual Funds in Education Savings

Twenty-four percent of households that owned mutual funds in 2021 cited education as a financial goal for their fund investments (Figure 7.6). Nevertheless, the demand for education savings vehicles has been moderate since their introduction in the 1990s, partly because of their limited availability and partly due to investors' lack of familiarity with them. The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) enhanced the attractiveness of two education savings vehicles—Section 529 plans and Coverdell education savings accounts (ESAs)—by making them more flexible and allowing larger contributions. The 2006 Pension Protection Act (PPA) made the EGTRRA enhancements permanent. The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 extended the EGTRRA enhancements to Coverdell ESAs for two years; the American Taxpayer Relief Act of 2012 made these enhancements permanent. The Setting Every Community Up for Retirement Enhancement Act of 2019 (SECURE Act) expanded the types of education costs that are coverable by 529 plans.

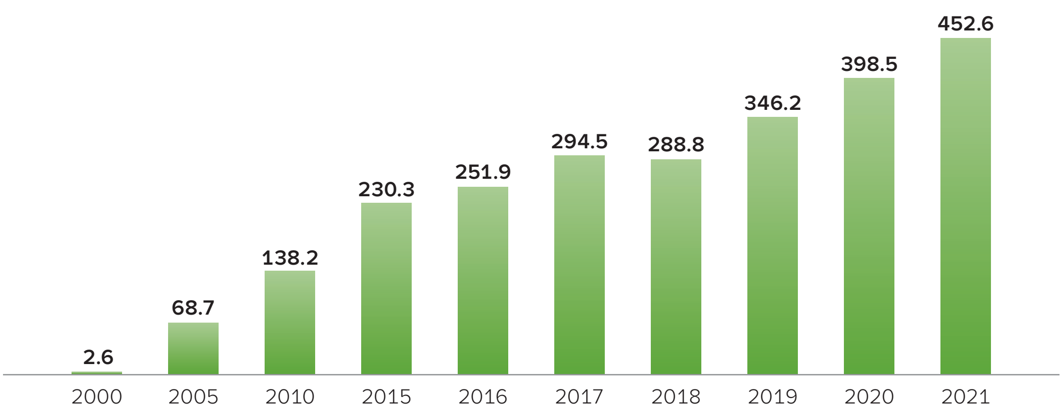
Assets in 529 Savings Plans

Assets in Section 529 savings plans were $453 billion at year-end 2021, up 14 percent from year-end 2020 (Figure 8.21). As of year-end 2021, there were 14.7 million 529 savings plan accounts, with an average account size of approximately $30,700.

FIGURE 8.21

Section 529 Savings Plan Assets

Billions of dollars, year-end



Note: Data were estimated for a few individual state observations in order to construct a continuous time series.

Sources: Investment Company Institute and College Savings Plans Network. See Investment Company Institute, "529 Plan Program Statistics, December 2021."

Characteristics of Households Saving for College

In 2021, as a group, households saving for college through 529 plans, Coverdell ESAs, or mutual funds held outside these accounts tended to be headed by younger individuals—about half (48 percent) were younger than 45 (Figure 8.22). Heads of households saving for college had a range of educational attainment. Sixty-five percent had completed college, 26 percent had an associate's degree or some college, and 9 percent had a high school diploma or less. These households also represented a range of incomes: 35 percent of households saving for college had household income of less than $100,000. Finally, 63 percent of these households had children (younger than 18) in the home, and 43 percent had more than one child in the home.

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529 Plan Program Statistics
www.ici.org/research/stats/529s

FIGURE 8.22

Characteristics of Households Saving for College

Percentage of US households saving for college,[1] 2021

Age of head of household[2]	
Younger than 35	20
35 to 44	28
45 to 54	26
55 to 64	15
65 or older	11
Education level of head of household[2]	
High school diploma or less	9
Associate's degree or some college	26
Completed college	23
Some graduate school or completed graduate school	42
Household income[3]	
Less than $50,000	10
$50,000 to $99,999	25
$100,000 to $149,999	22
$150,000 to $199,999	16
$200,000 or more	27
Number of children in home[4]	
None	37
One	20
Two	25
Three or more	18

[1] Households saving for college are households that own education savings plans (Coverdell ESAs or 529 plans) or that said paying for education was one of their financial goals for their mutual funds.

[2] Age and education level are based on the sole or co-decisionmaker for saving and investing.

[3] Total reported is household income before taxes in 2020.

[4] The number of children reported is children younger than 18 living in the home.

PART

2

Data Tables

TABLE 1

Mutual Funds: Total Net Assets, Number of Funds, and Number of Share Classes

Year-end

Year	Total net assets Billions of dollars	Number of funds	Number of share classes
1940	$0.45	68	–
1945	1.28	73	–
1950	2.53	98	–
1955	7.84	125	–
1960	17.03	161	–
1965	35.22	170	–
1970	47.62	361	–
1975	45.87	426	–
1976	51.28	452	–
1977	48.94	477	–
1978	55.84	505	–
1979	94.51	526	–
1980	134.76	564	–
1981	241.37	665	–
1982	296.68	857	–
1983	292.99	1,026	–
1984	370.68	1,243	1,243
1985	495.39	1,528	1,528
1986	715.67	1,835	1,835
1987	769.17	2,312	2,312
1988	809.37	2,737	2,737
1989	980.67	2,935	2,935
1990	1,064.34	3,078	3,176
1991	1,392.17	3,402	3,586
1992	1,641.58	3,823	4,207
1993	2,068.94	4,533	5,561
1994	2,153.69	5,324	7,696
1995	2,807.61	5,724	9,006
1996	3,520.29	6,246	10,350
1997	4,461.17	6,675	11,988
1998	5,516.07	7,308	13,707
1999	6,833.75	7,758	15,209
2000	6,955.94	8,134	16,687
2001	6,969.00	8,268	17,967
2002	6,380.19	8,223	18,947
2003	7,398.75	8,107	19,290
2004	8,093.27	8,039	20,025
2005	8,888.70	7,967	20,534
2006	10,395.24	8,106	21,231
2007	11,995.19	8,019	21,569
2008	9,615.53	8,015	22,226
2009	11,104.27	7,644	21,614
2010	11,824.60	7,539	21,887
2011	11,624.30	7,574	22,270
2012	13,046.11	7,589	22,652
2013	15,039.24	7,714	23,406
2014	15,867.05	7,927	24,244
2015	15,647.73	8,115	25,075
2016	16,342.28	8,067	25,131
2017	18,750.00	7,959	25,132
2018	17,697.52	8,087	25,032
2019	21,276.79	7,937	24,589
2020	23,883.06	7,629	23,892
2021	26,964.46	7,481	23,459

Note: Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 2

Mutual Funds: Total Sales, New Sales, Exchange Sales, Redemptions, and Exchange Redemptions

Billions of dollars, annual

Year	Total sales[1]	New sales	Exchange sales[2]	Redemptions	Exchange redemptions[3]
1945	$0.29	–	–	$0.11	–
1950	0.52	–	–	0.28	–
1955	1.21	–	–	0.44	–
1960	2.10	–	–	0.84	–
1965	4.36	$3.93	–	1.96	–
1970	4.63	3.84	–	2.99	–
1975	10.06	8.94	–	9.57	–
1980	247.42	238.96	$10.10	216.08	$9.94
1981	472.13	452.42	14.44	362.44	14.59
1982	626.94	604.09	28.25	588.35	27.86
1983	547.77	532.04	35.67	565.83	36.03
1984	680.12	661.74	36.66	607.02	37.11
1985	953.85	933.37	46.55	864.88	46.84
1986	1,204.90	1,179.40	107.75	1,015.64	107.96
1987	1,251.19	1,220.27	205.68	1,178.75	207.35
1988	1,176.81	1,143.62	134.28	1,166.67	134.24
1989	1,444.84	1,401.21	130.66	1,327.05	131.95
1990	1,564.55	1,517.16	138.79	1,470.80	140.98
1991	2,037.33	1,990.26	155.75	1,879.62	154.31
1992	2,749.56	2,704.59	197.43	2,548.05	198.15
1993	3,187.32	3,137.61	248.79	2,904.31	253.95
1994	3,074.99	3,019.14	317.53	2,928.42	324.99
1995	3,598.52	3,523.91	351.53	3,314.74	351.08
1996	4,669.20	4,584.62	504.73	4,265.81	503.91
1997	5,799.28	5,703.11	613.42	5,323.65	618.42
1998	7,227.21	7,123.95	742.91	6,647.64	743.30
1999	9,041.22	8,920.81	949.93	8,560.63	947.21
2000	11,107.08	10,968.25	1,149.66	10,582.54	1,145.07
2001	12,864.47	12,745.95	797.12	12,239.48	797.34
2002	13,167.80	13,083.43	747.34	13,008.87	745.47
2003	12,393.19	12,315.05	571.85	12,360.77	573.70
2004	12,190.71	12,100.61	408.99	12,038.36	417.93
2005	13,938.45	13,811.67	420.83	13,546.09	432.40
2006	17,408.21	17,227.72	487.70	16,751.26	492.17
2007	23,467.84	23,233.76	606.40	22,350.06	611.68
2008	26,345.40	26,131.42	734.70	25,709.70	729.68
2009	20,678.36	20,527.11	530.15	20,674.99	528.31
2010	18,207.60	18,051.01	420.14	18,318.36	434.82
2011	17,834.47	17,658.86	448.02	17,736.93	466.44
2012	17,020.53	16,829.95	422.01	16,618.13	434.00
2013	18,157.54	17,968.52	517.65	17,777.38	530.96
2014	18,715.53	18,498.90	425.47	18,385.54	433.27
2015	20,936.13	20,712.39	442.75	20,808.39	444.97
2016	21,886.90	21,660.00	593.63	21,885.88	591.10
2017	21,098.35	20,841.87	597.36	20,662.52	598.24
2018	24,126.18	23,821.01	622.08	24,011.96	618.31
2019	26,425.02	26,085.25	469.68	25,633.52	467.32
2020	33,139.74	32,871.67	773.70	32,672.71	765.49
2021	33,778.01	33,494.60	696.06	33,124.50	702.91

[1] Total sales are the dollar value of new sales plus sales made through reinvestment of income dividends from existing accounts; this number excludes reinvestment of capital gains distributions.

[2] Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group.

[3] Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 3

Mutual Funds: Total Net Assets

Billions of dollars, year-end

		Long-term funds		
Year	Total	Equity	Bond and income	Money market funds
1960	$17.03	$16.00	$1.02	–
1965	35.22	32.76	2.46	–
1970	47.62	45.13	2.49	–
1975	45.87	37.49	4.68	$3.70
1980	134.76	44.42	13.98	76.36
1981	241.37	41.19	14.01	186.16
1982	296.68	53.63	23.21	219.84
1983	292.99	76.97	36.63	179.39

		Long-term funds						
		Equity			Bond		Money market funds	
Year	Total	Domestic	World	Hybrid	Taxable	Municipal	Taxable	Tax-exempt
1984	$370.68	$74.55	$5.19	$11.15	$25.45	$20.79	$209.75	$23.80
1985	495.39	103.39	7.94	17.61	83.20	39.44	207.55	36.25
1986	715.67	138.98	15.47	25.76	167.63	75.67	228.35	63.81
1987	769.17	158.02	17.43	29.25	171.40	76.97	254.68	61.42
1988	809.37	171.40	17.98	26.35	168.96	86.73	272.20	65.76
1989	980.67	221.45	23.59	35.64	166.25	105.66	358.62	69.47
1990	1,064.34	211.18	28.30	35.98	170.29	120.25	414.56	83.78
1991	1,392.17	365.21	39.52	52.04	238.75	154.20	452.46	89.98
1992	1,641.58	468.41	45.68	77.63	307.41	196.26	451.35	94.84
1993	2,068.94	626.54	114.13	142.33	366.03	254.60	461.88	103.44
1994	2,153.69	691.57	161.19	161.40	301.21	227.31	501.11	109.89
1995	2,807.61	1,052.57	196.51	206.70	345.52	253.29	631.32	121.69
1996	3,520.29	1,440.81	285.20	248.36	391.05	253.07	763.94	137.87
1997	4,461.17	2,021.58	346.37	311.71	450.75	271.87	901.23	157.66
1998	5,516.07	2,585.90	391.64	360.04	528.25	298.57	1,166.97	184.71
1999	6,833.75	3,454.77	585.19	374.31	535.11	271.31	1,413.16	199.90
2000	6,955.94	3,368.86	563.87	360.84	538.71	278.41	1,611.38	233.87
2001	6,969.00	2,946.98	444.03	357.95	638.60	296.22	2,026.15	259.08
2002	6,380.19	2,272.69	369.37	335.27	807.75	330.04	1,988.78	276.30
2003	7,398.75	3,117.83	535.01	447.53	922.68	336.31	1,749.10	290.29
2004	8,093.27	3,625.92	716.20	552.25	968.96	328.24	1,589.70	312.00
2005	8,888.70	3,929.15	955.72	621.48	1,016.58	338.95	1,690.45	336.37
2006	10,395.24	4,471.16	1,360.43	731.50	1,128.60	365.09	1,969.42	369.03
2007	11,995.19	4,694.05	1,718.55	821.47	1,301.49	374.14	2,617.67	467.83
2008	9,615.53	2,738.21	913.28	562.16	1,231.86	337.79	3,338.55	493.68
2009	11,104.27	3,564.05	1,303.08	717.27	1,745.48	458.50	2,916.96	398.94
2010	11,824.60	4,053.48	1,536.76	841.67	2,115.22	473.95	2,473.51	330.01
2011	11,624.30	3,855.20	1,352.26	883.37	2,345.02	497.53	2,399.22	291.70
2012	13,046.11	4,323.72	1,608.43	1,031.71	2,808.90	580.17	2,405.74	287.43
2013	15,039.24	5,725.70	2,028.23	1,283.80	2,784.43	499.29	2,447.20	270.61
2014	15,867.05	6,229.30	2,076.20	1,378.27	2,892.15	566.48	2,463.85	260.79
2015	15,647.73	6,042.43	2,098.04	1,340.62	2,818.47	593.43	2,499.81	254.93
2016	16,342.28	6,411.57	2,155.47	1,399.05	3,034.32	613.73	2,597.87	130.27
2017	18,750.00	7,477.89	2,813.47	1,546.17	3,399.82	665.34	2,716.18	131.13
2018	17,697.52	6,800.22	2,416.19	1,383.22	3,385.39	675.46	2,891.77	145.27
2019	21,276.79	8,438.99	2,923.35	1,578.32	3,890.03	814.10	3,494.38	137.62
2020	23,883.06	9,524.11	3,192.54	1,619.35	4,337.21	876.57	4,227.79	105.49
2021	26,964.46	11,256.87	3,458.33	1,868.70	4,647.75	977.12	4,668.93	86.77

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. The data contain a series break beginning in 1984. All funds were reclassified in 1984, and a separate category was created for hybrid funds. Components may not add to the total because of rounding.

TABLE 4

Mutual Funds: Total Net Assets by Composite Investment Objective

Billions of dollars, year-end

	Equity funds				Bond funds							Money market funds	
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni	Taxable	Tax-exempt
2000	$1,433.91	$563.87	$1,934.94	$360.84	$245.68	$103.20	$32.85	$124.87	$32.10	$131.92	$146.49	$1,611.38	$233.87
2001	1,105.05	444.03	1,841.92	357.95	311.07	105.20	31.75	154.01	36.57	139.78	156.44	2,026.15	259.08
2002	765.43	369.37	1,507.26	335.27	410.53	105.61	34.12	218.98	38.51	152.63	177.41	1,988.78	276.30
2003	1,040.99	535.01	2,076.85	447.53	476.32	156.84	43.97	197.99	47.56	149.26	187.05	1,749.10	290.29
2004	1,152.11	716.20	2,473.82	552.25	520.67	165.81	52.63	176.61	53.24	144.09	184.15	1,589.70	312.00
2005	1,236.08	955.72	2,693.08	621.48	572.64	157.27	59.95	167.34	59.38	147.46	191.50	1,690.45	336.37
2006	1,323.10	1,360.43	3,148.05	731.50	642.92	173.86	80.90	153.14	77.79	154.42	210.67	1,969.42	369.03
2007	1,422.67	1,718.55	3,271.38	821.47	762.92	172.06	109.93	158.19	98.38	155.93	218.21	2,617.67	467.83
2008	809.75	913.28	1,928.46	562.16	737.47	116.91	105.72	188.04	83.73	135.09	202.70	3,338.55	493.68
2009	1,086.64	1,303.08	2,477.40	717.27	1,050.89	196.09	158.10	210.31	130.09	159.26	299.24	2,916.96	398.94
2010	1,247.36	1,536.76	2,806.12	841.67	1,241.61	241.66	246.45	225.43	160.08	156.16	317.80	2,473.51	330.01
2011	1,177.75	1,352.26	2,677.45	883.37	1,365.10	269.49	294.45	241.91	174.08	158.89	338.64	2,399.22	291.70
2012	1,318.00	1,608.43	3,005.72	1,031.71	1,569.92	340.42	369.06	298.15	231.35	177.53	402.64	2,405.74	287.43
2013	1,724.05	2,028.23	4,001.64	1,283.80	1,447.68	417.12	431.41	239.22	249.00	144.82	354.47	2,447.20	270.61
2014	1,855.06	2,076.20	4,374.24	1,378.27	1,520.69	376.36	466.91	253.65	274.54	156.16	410.32	2,463.85	260.79
2015	1,843.58	2,098.04	4,198.86	1,340.62	1,510.19	325.39	431.55	265.59	285.75	159.84	433.59	2,499.81	254.93
2016	1,779.33	2,155.47	4,632.24	1,399.05	1,638.92	371.73	420.45	280.68	322.54	160.86	452.87	2,597.87	130.27
2017	2,094.34	2,813.47	5,383.55	1,546.17	1,838.28	372.73	491.46	290.06	407.30	165.00	500.35	2,716.18	131.13
2018	1,943.99	2,416.19	4,856.23	1,383.22	1,844.63	330.82	493.74	298.71	417.50	157.84	517.62	2,891.77	145.27
2019	2,413.06	2,923.35	6,025.94	1,578.32	2,159.12	337.05	548.33	346.80	498.72	183.64	630.46	3,494.38	137.62
2020	3,020.90	3,192.54	6,503.21	1,619.35	2,517.91	354.64	541.16	393.86	529.63	190.76	685.82	4,227.79	105.49
2021	3,367.78	3,458.33	7,889.09	1,868.70	2,643.43	396.31	578.75	411.14	618.12	197.41	779.71	4,668.93	86.77

Note: Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 5

Mutual Funds: Number of Funds

Year-end

Year	Total	Long-term funds: Equity	Long-term funds: Bond and income	Money market funds
1970	361	323	38	–
1975	426	314	76	36
1980	564	288	170	106
1981	665	306	180	179
1982	857	340	199	318
1983	1,026	396	257	373

		Long-term funds					Money market funds	
		Equity			Bond			
Year	Total	Domestic	World	Hybrid	Taxable	Municipal	Taxable	Tax-exempt
1984	1,243	430	29	89	159	111	331	94
1985	1,528	519	43	103	229	174	350	110
1986	1,835	621	57	121	302	247	360	127
1987	2,312	743	81	164	415	366	389	154
1988	2,737	897	109	179	522	420	433	177
1989	2,935	941	128	189	561	443	470	203
1990	3,078	944	155	192	583	463	505	236
1991	3,402	985	206	211	657	523	552	268
1992	3,823	1,086	239	234	772	628	585	279
1993	4,533	1,280	306	281	950	796	627	293
1994	5,324	1,463	423	360	1,103	1,012	649	314
1995	5,724	1,611	528	411	1,166	1,011	676	321
1996	6,246	1,901	668	465	1,243	981	669	319
1997	6,675	2,181	768	499	1,283	931	685	328
1998	7,308	2,620	889	525	1,349	899	687	339
1999	7,758	2,993	945	528	1,367	882	702	341
2000	8,134	3,308	1,051	506	1,362	870	703	334
2001	8,268	3,593	1,077	470	1,300	814	689	325
2002	8,223	3,703	1,016	457	1,290	769	677	311
2003	8,107	3,648	927	472	1,309	779	659	313
2004	8,039	3,648	887	472	1,322	767	638	305
2005	7,967	3,655	911	480	1,312	740	592	277
2006	8,106	3,738	993	500	1,316	712	573	274
2007	8,019	3,671	1,059	495	1,320	672	544	258
2008	8,015	3,646	1,138	505	1,306	638	533	249
2009	7,644	3,412	1,167	475	1,287	599	476	228
2010	7,539	3,315	1,192	489	1,308	583	442	210
2011	7,574	3,258	1,266	513	1,343	563	430	201
2012	7,589	3,217	1,280	564	1,391	557	400	180
2013	7,714	3,192	1,346	607	1,454	560	382	173
2014	7,927	3,234	1,413	668	1,528	557	364	163
2015	8,115	3,272	1,490	721	1,577	574	336	145
2016	8,067	3,230	1,521	722	1,597	576	319	102
2017	7,959	3,197	1,507	735	1,564	574	299	83
2018	8,087	3,236	1,529	779	1,617	558	287	81
2019	7,937	3,142	1,506	770	1,601	554	284	80
2020	7,629	2,997	1,459	718	1,565	550	265	75
2021	7,481	2,930	1,450	699	1,557	540	245	60

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. The data contain a series break beginning in 1984. All funds were reclassified in 1984, and a separate category was created for hybrid funds.

TABLE 6

Mutual Funds: Number of Funds by Composite Investment Objective

Year-end

	Equity funds				Bond funds							Money market funds	
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni	Taxable	Tax-exempt
2000	1,554	1,051	1,754	506	573	217	155	322	95	588	282	703	334
2001	1,712	1,077	1,881	470	554	221	140	294	91	550	264	689	325
2002	1,722	1,016	1,981	457	575	209	126	283	97	514	255	677	311
2003	1,673	927	1,975	472	601	210	120	281	97	523	256	659	313
2004	1,649	887	1,999	472	615	215	122	275	95	513	254	638	305
2005	1,630	911	2,025	480	609	226	123	262	92	498	242	592	277
2006	1,666	993	2,072	500	594	219	139	255	109	477	235	573	274
2007	1,576	1,059	2,095	495	605	219	150	243	103	444	228	544	258
2008	1,554	1,138	2,092	505	592	214	162	236	102	414	224	533	249
2009	1,442	1,167	1,970	475	570	205	170	237	105	377	222	476	228
2010	1,392	1,192	1,923	489	582	209	184	229	104	361	222	442	210
2011	1,357	1,266	1,901	513	578	209	217	221	118	346	217	430	201
2012	1,343	1,280	1,874	564	579	217	256	215	124	336	221	400	180
2013	1,327	1,346	1,865	607	590	229	291	212	132	331	229	382	173
2014	1,330	1,413	1,904	668	601	240	348	197	142	322	235	364	163
2015	1,345	1,490	1,927	721	616	239	371	190	161	319	255	336	145
2016	1,315	1,521	1,915	722	620	242	371	188	176	319	257	319	102
2017	1,304	1,507	1,893	735	603	238	355	185	183	312	262	299	83
2018	1,329	1,529	1,907	779	604	246	364	192	211	293	265	287	81
2019	1,303	1,506	1,839	770	592	253	350	192	214	285	269	284	80
2020	1,235	1,459	1,762	718	578	250	330	187	220	279	271	265	75
2021	1,205	1,450	1,725	699	574	242	326	190	225	267	273	245	60

Note: Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 7

Mutual Funds: Number of Share Classes

Year-end

		Long-term funds					Money market funds	
		Equity			Bond			
Year	Total	Domestic	World	Hybrid	Taxable	Municipal	Taxable	Tax-exempt
1984	1,243	430	29	89	159	111	331	94
1985	1,528	519	43	103	229	174	350	110
1986	1,835	621	57	121	302	247	360	127
1987	2,312	743	81	164	415	366	389	154
1988	2,737	897	109	179	522	420	433	177
1989	2,935	941	128	189	561	443	470	203
1990	3,176	962	166	199	597	490	522	240
1991	3,586	1,021	227	223	686	558	591	280
1992	4,207	1,189	263	257	876	708	616	298
1993	5,561	1,560	385	347	1,206	1,054	672	337
1994	7,696	2,026	630	515	1,604	1,660	858	403
1995	9,006	2,442	845	634	1,843	1,862	953	427
1996	10,350	3,055	1,155	749	2,049	1,889	1,005	448
1997	11,988	3,858	1,449	872	2,288	1,973	1,075	473
1998	13,707	4,865	1,769	963	2,530	1,954	1,136	490
1999	15,209	5,800	1,964	1,015	2,710	1,992	1,228	500
2000	16,687	6,709	2,288	1,002	2,810	2,030	1,327	521
2001	17,967	7,712	2,496	991	2,866	1,957	1,403	542
2002	18,947	8,407	2,509	1,029	3,058	1,938	1,463	543
2003	19,290	8,531	2,366	1,110	3,215	2,040	1,460	568
2004	20,025	8,995	2,357	1,202	3,374	2,050	1,474	573
2005	20,534	9,252	2,500	1,343	3,420	1,992	1,462	565
2006	21,231	9,625	2,772	1,355	3,532	1,937	1,452	558
2007	21,569	9,688	3,027	1,350	3,624	1,878	1,443	559
2008	22,226	9,871	3,383	1,418	3,739	1,827	1,441	547
2009	21,614	9,333	3,542	1,368	3,768	1,757	1,330	516
2010	21,887	9,195	3,713	1,444	3,980	1,774	1,281	500
2011	22,270	9,174	3,952	1,555	4,141	1,719	1,254	475
2012	22,652	9,138	4,053	1,709	4,432	1,698	1,174	448
2013	23,406	9,213	4,274	1,886	4,714	1,748	1,141	430
2014	24,244	9,409	4,548	2,048	4,990	1,743	1,100	406
2015	25,075	9,622	4,807	2,235	5,206	1,778	1,056	371
2016	25,131	9,624	4,920	2,184	5,327	1,801	1,003	272
2017	25,132	9,616	4,886	2,232	5,351	1,870	946	231
2018	25,032	9,536	4,887	2,294	5,373	1,814	911	217
2019	24,589	9,292	4,827	2,257	5,293	1,794	914	212
2020	23,892	8,908	4,693	2,141	5,253	1,789	896	212
2021	23,459	8,744	4,650	2,069	5,217	1,718	889	172

Note: Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 8

Mutual Funds: Number of Share Classes by Composite Investment Objective

Year-end

	Equity funds				Bond funds							Money market funds	
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni	Taxable	Tax-exempt
2000	3,229	2,288	3,480	1,002	1,134	488	310	678	200	1,392	638	1,327	521
2001	3,754	2,496	3,958	991	1,187	521	292	659	207	1,325	632	1,403	542
2002	3,959	2,509	4,448	1,029	1,340	525	291	675	227	1,285	653	1,463	543
2003	3,938	2,366	4,593	1,110	1,462	535	289	703	226	1,333	707	1,460	568
2004	4,063	2,357	4,932	1,202	1,554	568	302	716	234	1,333	717	1,474	573
2005	4,089	2,500	5,163	1,343	1,576	606	315	687	236	1,306	686	1,462	565
2006	4,240	2,772	5,385	1,355	1,606	616	367	664	279	1,257	680	1,452	558
2007	4,153	3,027	5,535	1,350	1,657	648	412	629	278	1,208	670	1,443	559
2008	4,177	3,383	5,694	1,418	1,658	669	493	624	295	1,150	677	1,441	547
2009	3,928	3,542	5,405	1,368	1,628	650	544	633	313	1,069	688	1,330	516
2010	3,837	3,713	5,358	1,444	1,707	685	617	652	319	1,065	709	1,281	500
2011	3,781	3,952	5,393	1,555	1,719	698	745	618	361	1,029	690	1,254	475
2012	3,767	4,053	5,371	1,709	1,796	739	894	625	378	1,002	696	1,174	448
2013	3,766	4,274	5,447	1,886	1,840	791	1,046	629	408	1,010	738	1,141	430
2014	3,792	4,548	5,617	2,048	1,870	830	1,252	599	439	990	753	1,100	406
2015	3,869	4,807	5,753	2,235	1,936	842	1,334	590	504	976	802	1,056	371
2016	3,819	4,920	5,805	2,184	1,976	851	1,350	589	561	998	803	1,003	272
2017	3,818	4,886	5,798	2,232	1,987	861	1,325	588	590	1,027	843	946	231
2018	3,845	4,887	5,691	2,294	1,977	867	1,297	585	647	963	851	911	217
2019	3,768	4,827	5,524	2,257	1,956	879	1,221	588	649	937	857	914	212
2020	3,587	4,693	5,321	2,141	1,927	875	1,179	581	691	922	867	896	212
2021	3,531	4,650	5,213	2,069	1,914	857	1,163	587	696	855	863	889	172

Note: Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 9

Closed-End Funds: Total Assets and Number of Funds by Type of Fund

	Total assets (Millions of dollars, year-end)						Number of funds (Year-end)					
		Equity funds		Bond funds				Equity funds		Bond funds		
Year	Total	Domestic	Global/ International	Domestic taxable	Domestic municipal	Global/ International	Total	Domestic	Global/ International	Domestic taxable	Domestic municipal	Global/ International
1996	$152,415	$19,830	$27,074	$33,925	$59,540	$12,046	497	50	91	119	205	32
1997	158,477	20,536	29,011	35,025	61,992	11,912	487	45	89	116	205	32
1998	164,456	22,529	25,011	42,833	63,628	10,454	492	44	83	124	211	30
1999	156,581	24,696	16,494	40,529	64,513	10,348	512	49	74	118	241	30
2000	149,798	24,557	11,986	35,313	68,266	9,676	482	53	69	110	220	30
2001	145,185	22,309	8,748	30,559	74,467	9,102	490	52	64	109	238	27
2002	161,165	26,596	6,988	28,143	90,024	9,414	543	63	59	105	291	25
2003	215,909	42,987	9,743	57,581	94,060	11,539	581	75	55	127	297	27
2004	255,455	63,732	18,072	65,963	94,841	12,847	618	95	61	137	295	30
2005	276,482	77,090	27,784	64,485	94,563	12,559	635	120	71	133	280	31
2006	299,111	88,013	33,657	69,836	94,526	13,079	646	128	74	135	276	33
2007	316,135	87,869	57,329	66,335	88,920	15,682	664	136	92	133	269	34
2008	185,099	45,753	26,525	34,596	67,334	10,891	644	128	93	130	260	33
2009	224,407	52,940	34,489	45,639	77,677	13,660	629	117	91	129	260	32
2010	239,384	60,461	36,239	50,578	77,140	14,965	626	117	87	132	258	32
2011	244,023	62,414	33,441	49,646	84,100	14,422	634	125	87	134	256	32
2012	265,175	68,461	32,179	55,195	90,594	18,746	604	125	86	133	223	37
2013	281,806	81,757	32,480	60,170	83,626	23,773	601	131	85	134	210	41
2014	291,613	88,962	30,422	58,361	90,957	22,910	570	126	84	126	194	40
2015	262,989	72,201	27,593	52,912	90,371	19,912	561	122	84	128	188	39
2016	264,802	75,587	26,217	54,772	87,971	20,254	534	118	82	128	172	34
2017	277,299	79,688	29,610	57,157	89,991	20,853	532	117	80	131	171	33
2018	252,206	67,873	23,328	52,997	88,359	19,649	504	109	70	132	159	34
2019	278,673	79,324	27,856	57,177	93,213	21,103	501	112	69	133	152	35
2020	281,587	76,623	29,265	59,378	94,917	21,405	492	110	66	133	147	36
2021	309,159	90,558	32,320	64,508	97,936	23,837	461	104	66	133	124	34

Note: Components may not add to the total because of rounding. Totals are inclusive of preferred share classes.

TABLE 10

Closed-End Funds: Gross Issuance, Gross Redemptions, and Net Issuance by Type of Fund

Millions of dollars, annual

		Equity funds		Bond funds		
Year	Total	Domestic	Global/ International	Domestic taxable	Domestic municipal	Global/ International
Gross issuance[1]						
2007	$31,086	$5,973	$19,764	$2,221	$433	$2,695
2008	275	8	145	121	0	0
2009	3,615	549	485	876	1,389	317
2010	14,017	3,719	114	2,374	7,454	358
2011	14,990	3,850	1,469	1,000	8,669	2
2012	16,844	3,815	533	4,088	6,328	2,081
2013	17,850	4,311	157	4,525	2,393	6,464
2014	8,456	4,263	619	677	2,897	1
2015	4,322	572	1,461	1,433	804	51
2016	4,008	346	156	2,101	1,400	4
2017	3,070	776	302	1,270	371	350
2018	3,780	111	50	401	3,219	0
2019	7,515	854	2,154	1,770	2,472	265
2020	4,886	2,004	6	1,878	185	813
2021	18,097	6,348	1,651	6,820	1,132	2,147
Gross redemptions[2]						
2007	$2,717	$1,024	$105	$254	$1,313	$20
2008	22,713	7,060	1,832	7,031	6,089	701
2009	6,875	2,916	639	1,664	1,627	30
2010	8,587	1,724	55	474	6,335	0
2011	8,972	644	209	276	7,843	0
2012	5,459	974	420	838	3,226	0
2013	3,335	214	649	604	1,864	5
2014	3,522	444	124	411	2,330	213
2015	2,463	348	419	725	816	156
2016	3,179	104	340	664	1,568	502
2017	2,391	923	703	512	140	113
2018	1,912	463	109	101	1,234	4
2019	1,633	26	349	459	798	0
2020	2,149	27	83	1,318	501	220
2021	1,335	335	52	539	393	16
Net issuance[3]						
2007	$28,369	$4,949	$19,659	$1,966	-$880	$2,675
2008	-22,438	-7,052	-1,687	-6,910	-6,089	-700
2009	-3,259	-2,366	-154	-788	-238	287
2010	5,430	1,995	59	1,900	1,119	357
2011	6,018	3,206	1,260	724	825	2
2012	11,385	2,840	113	3,249	3,102	2,081
2013	14,515	4,097	-491	3,921	530	6,459
2014	4,935	3,819	494	266	567	-212
2015	1,859	224	1,043	708	-11	-104
2016	829	242	-184	1,437	-168	-498
2017	678	-147	-401	758	231	237
2018	1,869	-352	-60	300	1,985	-4
2019	5,882	828	1,805	1,311	1,674	265
2020	2,737	1,977	-76	560	-316	593
2021	16,762	6,013	1,599	6,281	739	2,131

[1] Gross issuance of shares is the value of net proceeds from underwritings, additional offerings, and other issuance.
[2] Gross redemptions of shares is the value of share repurchases and fund liquidations. Data are not available prior to 2007.
[3] Net issuance of shares is the dollar value of gross issuance minus gross redemptions. Data are not available prior to 2007.
Note: Components may not add to the total because of rounding. Totals are inclusive of preferred share classes.

TABLE 11

Exchange-Traded Funds: Total Net Assets by Type of Fund

Millions of dollars, year-end

		Investment objective							Legal status			
		Equity						1940 Act ETFs			Memo
		Domestic equity									
Year	Total	Broad-based	Sector[1]	Global/ International	Commodities[2]	Hybrid	Bond	Index	Actively managed	Non–1940 Act ETFs[3]	Funds of funds[4]
1996	$2,411	$2,159	-	$252	-	-	-	$2,411	-	-	-
1997	6,707	6,200	-	506	-	-	-	6,707	-	-	-
1998	15,568	14,058	$484	1,026	-	-	-	15,568	-	-	-
1999	33,873	29,374	2,507	1,992	-	-	-	33,873	-	-	-
2000	65,585	60,529	3,015	2,041	-	-	-	65,585	-	-	-
2001	82,993	74,752	5,224	3,016	-	-	-	82,993	-	-	-
2002	102,143	86,985	5,919	5,324	-	-	$3,915	102,143	-	-	-
2003	150,983	120,430	11,901	13,984	-	-	4,667	150,983	-	-	-
2004	227,540	163,730	20,315	33,644	$1,335	-	8,516	226,205	-	$1,335	-
2005	300,820	186,832	28,975	65,210	4,798	-	15,004	296,022	-	4,798	-
2006	422,550	232,487	43,655	111,194	14,699	-	20,514	407,850	-	14,699	-
2007	608,422	300,930	64,117	179,702	28,906	$119	34,648	579,517	-	28,906	-
2008	531,288	266,161	58,374	113,684	35,728	132	57,209	495,314	$245	35,728	$97
2009	777,128	304,044	82,053	209,315	74,528	169	107,018	701,586	1,014	74,528	824
2010	991,989	372,377	103,807	276,622	101,081	322	137,781	888,175	2,759	101,055	1,294
2011	1,048,139	400,702	108,548	245,114	109,176	377	184,222	934,232	5,039	108,868	1,575
2012	1,337,123	509,350	135,378	328,521	120,016	656	243,203	1,207,037	10,211	119,875	2,215
2013	1,674,713	761,798	202,706	398,834	64,042	1,469	245,862	1,596,580	14,267	63,866	2,561
2014	1,974,550	935,825	267,523	414,805	56,974	3,047	296,376	1,901,223	16,789	56,538	5,030
2015	2,100,681	965,338	267,355	474,640	49,317	3,738	340,293	2,029,319	22,891	48,471	10,453
2016	2,524,542	1,224,187	302,535	502,804	62,777	4,951	427,287	2,433,900	29,013	61,629	9,548
2017	3,401,022	1,603,965	374,360	792,351	68,927	7,800	553,618	3,288,767	44,967	67,288	11,628
2018	3,371,153	1,606,004	332,546	725,420	65,868	8,708	632,607	3,239,590	69,156	62,406	12,231
2019	4,396,205	2,169,305	414,223	883,879	84,931	30,094	813,774	4,215,307	99,312	81,586	13,453
2020	5,449,361	2,661,126	521,453	1,028,695	150,298	34,500	1,053,289	5,130,250	174,061	145,050	16,022
2021	7,190,513	3,787,759	733,710	1,261,208	138,659	42,195	1,226,983	6,780,187	284,957	125,369	24,116

[1] This category includes funds both registered and not registered under the Investment Company Act of 1940.
[2] This category includes funds—both registered and not registered under the Investment Company Act of 1940—that invest primarily in commodities, currencies, and futures.
[3] The funds in this category are not registered under the Investment Company Act of 1940.
[4] Data for ETFs that invest primarily in other ETFs are excluded from the totals.
Note: Components may not add to the total because of rounding.
Sources: Investment Company Institute and Strategic Insight Simfund

TABLE 12

Exchange-Traded Funds: Number of Funds by Type of Fund

Year-end

		Investment objective						Legal status			Memo
		Equity						1940 Act ETFs			
		Domestic equity									
Year	Total	Broad-based	Sector[1]	Global/ International	Commodities[2]	Hybrid	Bond	Index	Actively managed	Non–1940 Act ETFs[3]	Funds of funds[4]
1996	19	2	-	17	-	-	-	19	-	-	-
1997	19	2	-	17	-	-	-	19	-	-	-
1998	29	3	9	17	-	-	-	29	-	-	-
1999	30	4	9	17	-	-	-	30	-	-	-
2000	80	29	26	25	-	-	-	80	-	-	-
2001	102	34	34	34	-	-	-	102	-	-	-
2002	113	34	32	39	-	-	8	113	-	-	-
2003	119	39	33	41	-	-	6	119	-	-	-
2004	152	60	42	43	1	-	6	151	-	1	-
2005	204	81	65	49	3	-	6	201	-	3	-
2006	359	133	119	85	16	-	6	343	-	16	-
2007	629	197	191	159	28	5	49	601	-	28	-
2008	728	204	186	225	45	6	62	670	13	45	15
2009	797	222	179	244	49	5	98	727	21	49	23
2010	923	243	193	298	55	6	128	843	26	54	27
2011	1,135	288	229	368	75	7	168	1,029	33	73	31
2012	1,195	275	222	404	79	13	202	1,076	42	77	44
2013	1,295	293	235	438	76	15	238	1,163	60	72	37
2014	1,412	317	236	494	82	19	264	1,232	108	72	39
2015	1,597	361	266	592	81	21	276	1,404	120	73	47
2016	1,717	396	303	630	80	22	286	1,501	150	66	57
2017	1,836	472	300	630	91	33	310	1,571	196	69	64
2018	1,989	515	325	670	91	35	353	1,662	258	69	68
2019	2,096	578	344	668	89	38	379	1,709	319	68	80
2020	2,203	693	338	638	82	40	412	1,675	466	62	93
2021	2,570	854	419	691	86	51	469	1,789	719	62	120

[1] This category includes funds both registered and not registered under the Investment Company Act of 1940.

[2] This category includes funds—both registered and not registered under the Investment Company Act of 1940—that invest primarily in commodities, currencies, and futures.

[3] The funds in this category are not registered under the Investment Company Act of 1940.

[4] Data for ETFs that invest primarily in other ETFs are excluded from the totals.

Sources: Investment Company Institute and Strategic Insight Simfund

TABLE 13

Exchange-Traded Funds: Net Issuance by Type of Fund

Millions of dollars, annual

Year	Total	Investment objective						Legal status			Memo
		Equity						1940 Act ETFs			
		Domestic equity									
		Broad-based	Sector[1]	Global/ International	Commodities[2]	Hybrid	Bond	Index	Actively managed	Non–1940 Act ETFs[3]	Funds of funds[4]
1996	$1,108	$842	-	$266	-	-	-	$1,108	-	-	-
1997	3,466	3,160	-	306	-	-	-	3,466	-	-	-
1998	6,195	5,158	$484	553	-	-	-	6,195	-	-	-
1999	11,929	10,221	1,596	112	-	-	-	11,929	-	-	-
2000	42,508	40,591	1,033	884	-	-	-	42,508	-	-	-
2001	31,012	26,911	2,735	1,366	-	-	-	31,012	-	-	-
2002	45,302	35,477	2,304	3,792	-	-	$3,729	45,302	-	-	-
2003	15,810	5,737	3,587	5,764	-	-	721	15,810	-	-	-
2004	56,375	29,084	6,514	15,645	$1,353	-	3,778	55,021	-	$1,353	-
2005	56,729	16,941	6,719	23,455	2,859	-	6,756	53,871	-	2,859	-
2006	73,995	21,589	9,780	28,423	8,475	-	5,729	65,520	-	8,475	-
2007	150,617	61,152	18,122	48,842	9,062	$122	13,318	141,555	-	9,062	-
2008	177,220	88,105	30,296	25,243	10,567	58	22,952	166,372	$281	10,567	$107
2009	116,469	-11,842	14,329	39,599	28,410	15	45,958	87,336	724	28,410	237
2010	117,982	28,317	10,187	41,527	8,155	144	29,652	108,136	1,716	8,129	433
2011	117,646	34,657	9,674	24,250	2,948	72	46,045	112,464	2,555	2,627	385
2012	185,399	57,744	14,307	51,896	8,889	246	52,318	171,377	4,988	9,035	505
2013	179,959	99,545	34,434	62,807	-29,870	849	12,195	205,154	4,710	-29,905	1,106
2014	240,844	102,394	40,593	46,642	-1,420	1,629	51,007	240,026	2,584	-1,766	2,365
2015	230,993	49,757	13,368	109,668	2,118	1,110	54,971	222,028	7,435	1,530	5,704
2016	284,048	147,805	19,684	20,217	11,679	1,088	83,576	266,306	6,299	11,444	-772
2017	470,971	156,459	29,565	159,748	1,603	2,500	121,096	454,418	15,425	1,128	895
2018	311,040	141,229	-2,147	70,254	1,700	1,689	98,315	283,448	28,333	-741	1,818
2019	322,550	135,406	-2,704	29,795	8,362	5,495	146,196	287,748	26,017	8,785	-531
2020	500,882	137,281	51,831	62,553	43,707	4,173	201,339	398,254	60,653	41,975	1,511
2021	935,480	442,628	76,996	211,092	-4,247	6,381	202,630	826,190	121,956	-12,666	6,388

[1] This category includes funds both registered and not registered under the Investment Company Act of 1940.

[2] This category includes funds—both registered and not registered under the Investment Company Act of 1940—that invest primarily in commodities, currencies, and futures.

[3] The funds in this category are not registered under the Investment Company Act of 1940.

[4] Data for ETFs that invest primarily in other ETFs are excluded from the totals.

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

TABLE 14

Unit Investment Trusts: Total Net Assets, Number of Trusts, and New Deposits by Type of Trust

	Total net assets Millions of dollars, year-end				Number of trusts Year-end				New deposits Millions of dollars, annual			
Year	Total trusts	Equity	Taxable debt	Tax-free debt	Total trusts	Equity	Taxable debt	Tax-free debt	Total trusts	Equity	Taxable debt	Tax-free debt
1996	$72,204	$22,922	$8,485	$40,796	11,764	378	591	10,795	$21,662	$18,316	$800	$2,546
1997	84,761	40,747	6,480	37,533	11,593	563	513	10,517	38,546	35,855	771	1,919
1998	93,943	56,413	5,380	32,151	10,966	872	414	9,680	47,675	45,947	562	1,166
1999	91,970	62,128	4,283	25,559	10,414	1,081	409	8,924	52,046	50,629	343	1,074
2000	74,161	48,060	3,502	22,599	10,072	1,554	369	8,149	43,649	42,570	196	883
2001	49,249	26,467	3,784	18,999	9,295	1,500	324	7,471	19,049	16,927	572	1,550
2002	36,016	14,651	4,020	17,345	8,303	1,247	366	6,690	11,600	9,131	862	1,607
2003	35,826	19,024	3,311	13,491	7,233	1,206	320	5,707	12,731	10,071	931	1,729
2004	37,267	23,201	2,635	11,432	6,499	1,166	295	5,038	17,125	14,559	981	1,585
2005	40,894	28,634	2,280	9,980	6,019	1,251	304	4,464	22,598	21,526	289	782
2006	49,662	38,809	2,142	8,711	5,907	1,566	319	4,022	29,057	28,185	294	578
2007	53,040	43,295	2,066	7,680	6,030	1,964	327	3,739	35,836	35,101	298	438
2008	28,543	20,080	2,007	6,456	5,984	2,175	343	3,466	23,590	22,335	557	698
2009	38,336	24,774	3,668	9,894	6,049	2,145	438	3,466	22,293	16,159	2,201	3,933
2010	50,567	34,112	3,780	12,675	5,971	2,212	491	3,268	30,936	25,003	928	5,006
2011	59,931	40,638	3,602	15,691	6,043	2,395	512	3,136	36,026	31,900	765	3,361
2012	71,725	51,905	4,063	15,757	5,787	2,426	553	2,808	43,404	40,012	1,236	2,157
2013	86,504	70,850	3,560	12,094	5,552	2,428	580	2,544	55,628	53,719	916	993
2014	101,136	85,887	3,135	12,114	5,381	2,501	593	2,287	65,529	63,991	624	915
2015	94,127	80,417	2,597	11,113	5,188	2,609	587	1,992	65,949	64,582	492	875
2016	84,627	71,590	2,676	10,362	5,100	2,586	635	1,879	49,346	47,564	631	1,151
2017	84,939	73,262	2,370	9,307	5,035	2,557	639	1,839	49,580	48,695	322	563
2018	69,932	59,807	2,246	7,880	4,917	2,522	642	1,753	49,289	48,285	498	506
2019	79,062	69,771	2,120	7,172	4,572	2,397	576	1,599	47,629	46,518	477	634
2020	77,852	70,312	1,679	5,860	4,310	2,312	522	1,476	44,931	44,131	298	503
2021	94,550	88,051	1,366	5,132	4,112	2,333	445	1,334	60,371	59,300	399	671

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

DATA SECTION 3

TABLE 15

Long-Term Mutual Funds: Liquid Assets and Liquid Assets as a Percentage of Total Net Assets

Year-end

	Liquid assets* Millions of dollars				Liquid assets* as a percentage of total net assets Percent			
Year	Total	Equity funds	Hybrid funds	Bond funds	Total	Equity funds	Hybrid funds	Bond funds
1984	$12,181	$7,295	$878	$4,007	8.9%	9.1%	7.9%	8.7%
1985	20,593	10,452	1,413	8,728	8.2	9.4	8.0	7.1
1986	30,611	14,612	2,514	13,485	7.2	9.5	9.8	5.5
1987	37,930	16,319	2,730	18,881	8.4	9.3	9.3	7.6
1988	44,980	17,742	2,986	24,252	9.5	9.4	11.3	9.5
1989	44,603	25,602	5,747	13,253	8.1	10.4	16.1	4.9
1990	48,369	27,344	4,198	16,827	8.5	11.4	11.7	5.8
1991	60,243	30,657	3,309	26,277	7.1	7.6	6.4	6.7
1992	73,858	42,417	6,560	24,881	6.7	8.3	8.5	4.9
1993	99,251	57,539	16,613	25,099	6.6	7.8	11.7	4.0
1994	120,228	70,885	19,929	29,414	7.8	8.3	12.3	5.6
1995	141,245	97,743	19,271	24,231	6.9	7.8	9.3	4.0
1996	151,196	107,667	17,954	25,575	5.8	6.2	7.2	4.0
1997	198,035	145,560	24,634	27,841	5.8	6.1	7.9	3.9
1998	190,519	143,507	25,289	21,724	4.6	4.8	7.0	2.6
1999	217,266	174,660	20,976	21,630	4.2	4.3	5.6	2.7
2000	276,329	224,990	26,777	24,562	5.4	5.7	7.4	3.0
2001	222,019	170,315	26,906	24,798	4.7	5.0	7.5	2.7
2002	208,669	120,491	25,422	62,757	5.1	4.6	7.6	5.5
2003	259,441	154,859	30,645	73,937	4.8	4.2	6.8	5.9
2004	307,048	184,119	36,419	86,510	5.0	4.2	6.6	6.7
2005	303,161	190,880	43,133	69,149	4.4	3.9	6.9	5.1
2006	346,718	218,626	57,461	70,631	4.3	3.7	7.9	4.7
2007	381,641	266,256	56,813	58,572	4.3	4.2	6.9	3.5
2008	314,272	203,274	52,712	58,285	5.4	5.6	9.4	3.7
2009	365,373	169,774	52,531	143,068	4.7	3.5	7.3	6.5
2010	329,767	192,568	60,496	76,702	3.7	3.4	7.2	3.0
2011	461,493	182,513	70,140	208,840	5.2	3.5	7.9	7.3
2012	515,313	199,316	100,471	215,526	5.0	3.4	9.7	6.4
2013	660,378	272,422	150,680	237,275	5.4	3.5	11.7	7.2
2014	744,346	291,579	167,248	285,519	5.7	3.5	12.1	8.3
2015	676,192	258,285	184,648	233,259	5.2	3.2	13.8	6.8
2016	673,427	257,779	178,846	236,802	4.9	3.0	12.8	6.5
2017	801,564	306,802	197,286	297,476	5.0	3.0	12.8	7.3
2018	678,521	268,630	169,557	240,333	4.6	2.9	12.3	5.9
2019	753,452	275,815	184,978	292,658	4.3	2.4	11.7	6.2
2020	780,047	243,461	176,086	360,500	4.0	1.9	10.9	6.9
2021	850,834	260,857	213,853	376,124	3.8	1.8	11.4	6.7

* Liquid assets include certificates of deposit, commercial paper, US government agency issues (one year maturity or less), repurchase agreements, cash reserves, other securities (one year maturity or less), and receivables minus liabilities.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 16

Long-Term Mutual Funds: Liquid Assets* as a Percentage of Total Net Assets by Composite Investment Objective

Percent, year-end

	Equity funds				Bond funds						
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni
2000	6.1%	7.7%	4.9%	7.4%	4.5%	9.0%	-2.2%	-2.8%	-2.2%	3.1%	3.5%
2001	4.9	6.2	4.8	7.5	3.3	7.6	-3.7	-0.6	0.6	2.3	3.2
2002	4.9	5.7	4.1	7.6	9.8	7.9	-2.5	0.5	7.1	2.6	4.2
2003	3.7	5.8	4.1	6.8	9.5	6.1	3.3	1.7	8.7	2.2	3.7
2004	3.6	5.5	4.2	6.6	8.8	6.1	6.1	3.8	8.3	2.9	6.5
2005	3.3	5.2	3.7	6.9	6.4	5.2	6.1	1.2	6.7	2.5	5.7
2006	3.4	4.3	3.7	7.9	6.8	5.0	12.5	-4.1	2.6	2.0	4.5
2007	4.3	5.2	3.5	6.9	2.1	4.7	17.0	-0.8	4.5	1.8	4.6
2008	6.1	8.0	4.2	9.4	1.1	10.9	13.0	4.4	3.6	1.7	4.9
2009	4.5	3.9	2.8	7.3	6.8	5.5	13.5	4.0	6.6	2.8	6.0
2010	3.5	4.4	2.9	7.2	0.3	6.0	16.5	-2.5	2.7	2.1	5.2
2011	3.8	4.5	2.8	7.9	7.2	7.3	17.5	0.9	5.2	3.1	6.6
2012	3.6	4.0	2.9	9.7	5.4	5.7	15.1	2.8	6.9	3.4	6.2
2013	3.6	4.5	3.0	11.7	6.8	4.4	17.2	1.0	7.0	2.0	6.5
2014	3.3	4.9	2.9	12.1	7.5	4.5	19.3	2.5	8.1	3.6	7.6
2015	3.3	4.3	2.6	13.8	4.7	5.9	15.0	3.2	9.5	4.4	8.2
2016	3.1	4.2	2.4	12.8	6.0	5.7	13.7	1.3	6.4	2.7	6.7
2017	3.5	4.1	2.2	12.8	7.4	5.1	15.4	3.8	5.2	2.6	6.3
2018	3.1	4.0	2.3	12.3	5.6	4.2	14.1	2.2	2.2	2.6	6.5
2019	2.8	3.5	1.8	11.7	5.3	5.7	13.9	5.4	3.3	3.4	6.5
2020	2.1	2.7	1.4	10.9	6.6	5.3	12.2	5.5	6.2	3.3	7.2
2021	2.0	2.8	1.2	11.4	6.2	5.8	8.9	5.3	10.1	3.2	6.2

* Liquid assets include certificates of deposit, commercial paper, US government agency issues (one year maturity or less), repurchase agreements, cash reserves, other securities (one year maturity or less), and receivables minus liabilities.

TABLE 17

Long-Term Mutual Funds: Net New Cash Flow, Total Net Assets, and Flows as a Percentage of Previous Year's Total Net Assets

Millions of dollars

	Net new cash flow (Annual)				Total net assets (Year-end)				Flows as a percentage of previous year's total net assets (Percent)			
Year	Total	Equity funds	Hybrid funds	Bond funds	Total	Equity funds	Hybrid funds	Bond funds	Total	Equity funds	Hybrid funds	Bond funds
1985	$73,490	$6,643	$3,720	$63,127	$251,583	$111,329	$17,609	$122,646				
1986	129,991	20,386	6,988	102,618	423,516	154,446	25,764	243,305	51.7%	18.3%	39.7%	83.7%
1987	29,776	19,231	3,748	6,797	453,076	175,452	29,253	248,370	7.0	12.5	14.5	2.8
1988	-23,119	-14,948	-3,684	-4,488	471,417	189,383	26,346	255,688	-5.1	-8.5	-12.6	-1.8
1989	8,731	6,774	3,183	-1,226	552,578	245,037	35,636	271,905	1.9	3.6	12.1	-0.5
1990	20,997	12,915	1,463	6,619	565,998	239,478	35,981	290,539	3.8	5.3	4.1	2.4
1991	106,004	39,888	7,067	59,049	849,725	404,732	52,045	392,948	18.7	16.7	19.6	20.3
1992	171,833	78,983	21,725	71,126	1,095,390	514,087	77,630	503,673	20.2	19.5	41.7	18.1
1993	242,034	127,260	42,619	72,154	1,503,626	740,667	142,331	620,628	22.1	24.8	54.9	14.3
1994	74,741	114,525	21,998	-61,782	1,542,688	852,765	161,404	528,519	5.0	15.5	15.5	-10.0
1995	120,245	124,392	3,738	-7,884	2,054,588	1,249,077	206,705	598,807	7.8	14.6	2.3	-1.5
1996	230,198	216,935	11,795	1,468	2,618,485	1,726,009	248,358	644,118	11.2	17.4	5.7	0.2
1997	270,994	227,107	15,755	28,132	3,402,280	2,367,951	311,713	722,615	10.3	13.2	6.3	4.4
1998	240,458	156,856	10,457	73,144	4,164,395	2,977,539	360,037	826,819	7.1	6.6	3.4	10.1
1999	169,232	187,550	-13,031	-5,288	5,220,692	4,039,961	374,314	806,417	4.1	6.3	-3.6	-0.6
2000	230,927	315,324	-36,736	-47,661	5,110,688	3,932,725	360,841	817,123	4.4	7.8	-9.8	-5.9
2001	131,019	33,272	7,235	90,512	4,683,769	3,391,004	357,947	934,818	2.6	0.8	2.0	11.1
2002	122,354	-28,888	7,979	143,263	4,115,111	2,642,057	335,270	1,137,784	2.6	-0.9	2.2	15.3
2003	216,445	143,996	38,958	33,491	5,359,359	3,652,839	447,530	1,258,989	5.3	5.5	11.6	2.9
2004	210,054	171,903	53,052	-14,901	6,191,574	4,342,123	552,250	1,297,200	3.9	4.7	11.9	-1.2
2005	191,923	123,843	42,752	25,328	6,861,884	4,884,874	621,477	1,355,533	3.1	2.9	7.7	2.0
2006	226,826	147,242	19,859	59,725	8,056,786	5,831,591	731,503	1,493,693	3.3	3.0	3.2	4.4
2007	224,138	73,216	40,361	110,561	8,909,694	6,412,592	821,474	1,675,628	2.8	1.3	5.5	7.4
2008	-210,958	-216,510	-25,634	31,185	5,783,298	3,651,483	562,162	1,569,652	-2.4	-3.4	-3.1	1.9
2009	393,113	2,101	19,617	371,395	7,788,375	4,867,132	717,266	2,203,977	6.8	0.1	3.5	23.7
2010	243,028	-24,843	35,452	232,419	9,021,082	5,590,236	841,672	2,589,174	3.1	-0.5	4.9	10.5
2011	27,610	-130,045	39,607	118,047	8,933,382	5,207,456	883,375	2,842,551	0.3	-2.3	4.7	4.6
2012	200,014	-152,714	46,189	306,539	10,352,941	5,932,158	1,031,712	3,389,071	2.2	-2.9	5.2	10.8
2013	162,706	159,191	74,698	-71,184	12,321,437	7,753,922	1,283,797	3,283,718	1.6	2.7	7.2	-2.1
2014	99,336	25,034	30,417	43,885	13,142,406	8,305,505	1,378,267	3,458,633	0.8	0.3	2.4	1.3
2015	-119,685	-75,765	-18,984	-24,935	12,892,989	8,140,471	1,340,623	3,411,894	-0.9	-0.9	-1.4	-0.7
2016	-193,115	-258,274	-41,797	106,956	13,614,142	8,567,041	1,399,053	3,648,048	-1.5	-3.2	-3.1	3.1
2017	71,621	-159,645	-28,429	259,695	15,902,694	10,291,358	1,546,169	4,065,167	0.5	-1.9	-2.0	7.1
2018	-345,973	-256,916	-91,191	2,134	14,660,482	9,216,412	1,383,216	4,060,854	-2.2	-2.5	-5.9	0.1
2019	-98,601	-361,753	-49,202	312,354	17,644,794	11,362,348	1,578,316	4,704,130	-0.7	-3.9	-3.6	7.7
2020	-483,626	-644,172	-83,848	244,394	19,549,777	12,716,645	1,619,351	5,213,781	-2.7	-5.7	-5.3	5.2
2021	-58,896	-435,211	-13,155	389,469	22,208,761	14,715,195	1,868,695	5,624,871	-0.3	-3.4	-0.8	7.5

Note: Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges. Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 18

Equity Mutual Funds: Net New Cash Flow and Components of Net New Cash Flow

Millions of dollars, annual

		Sales			Redemptions		
Year	Net new cash flow[1]	New + exchange	New[2]	Exchange[3]	Regular + exchange	Regular[4]	Exchange[5]
1984	$4,336	$28,705	$16,586	$12,119	$24,369	$10,669	$13,700
1985	6,643	40,608	25,046	15,562	33,965	17,558	16,406
1986	20,386	87,997	50,774	37,224	67,612	26,051	41,561
1987	19,231	139,596	65,093	74,502	120,365	38,601	81,764
1988	-14,948	68,827	25,641	43,186	83,774	33,247	50,528
1989	6,774	89,345	46,817	42,527	82,571	37,229	45,342
1990	12,915	104,334	62,872	41,462	91,419	44,487	46,931
1991	39,888	146,618	90,192	56,427	106,730	53,394	53,336
1992	78,983	201,720	134,309	67,411	122,738	61,465	61,272
1993	127,260	307,356	213,639	93,717	180,095	91,944	88,151
1994	114,525	366,659	252,887	113,772	252,134	141,097	111,037
1995	124,392	433,853	282,937	150,915	309,461	170,402	139,059
1996	216,935	674,323	442,372	231,951	457,387	240,533	216,854
1997	227,107	880,285	579,063	301,222	653,178	362,020	291,158
1998	156,856	1,065,012	699,372	365,640	908,156	534,090	374,065
1999	187,550	1,410,664	918,438	492,226	1,223,113	743,983	479,130
2000	315,324	1,970,909	1,318,803	652,107	1,655,585	1,031,260	624,325
2001	33,272	1,329,228	953,220	376,008	1,295,956	891,564	404,392
2002	-28,888	1,213,934	893,841	320,094	1,242,822	875,050	367,772
2003	143,996	1,073,973	837,298	236,675	929,977	707,423	222,554
2004	171,903	1,096,318	926,741	169,577	924,415	758,715	165,701
2005	123,843	1,192,366	1,016,940	175,427	1,068,524	877,996	190,527
2006	147,242	1,416,347	1,213,690	202,657	1,269,106	1,047,184	221,921
2007	73,216	1,728,761	1,506,107	222,655	1,655,545	1,388,642	266,903
2008	-216,510	1,524,519	1,329,863	194,656	1,741,029	1,466,162	274,867
2009	2,101	1,193,312	1,031,474	161,838	1,191,211	1,010,865	180,346
2010	-24,843	1,404,883	1,235,143	169,740	1,429,726	1,237,835	191,890
2011	-130,045	1,490,641	1,320,524	170,117	1,620,685	1,416,310	204,376
2012	-152,714	1,447,259	1,257,829	189,430	1,599,973	1,379,770	220,203
2013	159,191	1,862,564	1,639,442	223,122	1,703,373	1,495,471	207,902
2014	25,034	2,006,259	1,795,003	211,256	1,981,225	1,770,976	210,249
2015	-75,765	2,001,932	1,792,240	209,692	2,077,697	1,872,902	204,795
2016	-258,274	1,938,675	1,719,689	218,986	2,196,949	1,952,203	244,745
2017	-159,645	2,222,330	1,934,178	288,153	2,381,975	2,069,498	312,478
2018	-256,916	2,408,519	2,114,631	293,889	2,665,435	2,349,071	316,364
2019	-361,753	2,009,571	1,811,990	197,581	2,371,324	2,140,343	230,981
2020	-644,172	2,578,091	2,294,719	283,372	3,222,263	2,875,023	347,241
2021	-435,211	2,843,766	2,501,814	341,952	3,278,978	2,924,377	354,600

[1] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.
[2] New sales are the dollar value of new purchases of mutual fund shares. This does not include shares purchased through reinvestment of dividends in existing accounts.
[3] Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group.
[4] Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares.
[5] Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group.
Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 19

Hybrid Mutual Funds: Net New Cash Flow and Components of Net New Cash Flow

Millions of dollars, annual

		Sales			Redemptions		
Year	Net new cash flow[1]	New + exchange	New[2]	Exchange[3]	Regular + exchange	Regular[4]	Exchange[5]
1984	$1,801	$4,118	$3,842	$276	$2,318	$2,017	$301
1985	3,720	7,502	6,976	526	3,782	3,161	621
1986	6,988	13,535	12,342	1,194	6,548	5,162	1,386
1987	3,748	14,948	12,419	2,528	11,200	7,848	3,353
1988	-3,684	6,259	4,601	1,658	9,943	7,521	2,422
1989	3,183	11,139	9,334	1,805	7,956	5,780	2,176
1990	1,463	9,671	7,989	1,682	8,208	5,600	2,608
1991	7,067	16,860	13,754	3,106	9,793	7,011	2,782
1992	21,725	32,772	26,463	6,309	11,047	7,209	3,838
1993	42,619	60,610	49,526	11,083	17,990	11,735	6,256
1994	21,998	58,541	49,043	9,498	36,544	25,298	11,245
1995	3,738	43,024	35,385	7,640	39,286	27,807	11,479
1996	11,795	56,783	47,436	9,347	44,988	31,413	13,575
1997	15,755	68,345	55,261	13,084	52,590	38,265	14,325
1998	10,457	82,691	67,294	15,397	72,234	53,161	19,073
1999	-13,031	81,904	67,607	14,297	94,935	69,790	25,144
2000	-36,736	70,364	56,920	13,445	107,100	77,159	29,941
2001	7,235	83,442	65,530	17,912	76,207	58,802	17,405
2002	7,979	93,414	75,393	18,021	85,436	67,201	18,234
2003	38,958	115,845	96,728	19,117	76,888	63,367	13,520
2004	53,052	143,459	125,434	18,025	90,407	77,520	12,887
2005	42,752	144,267	126,616	17,650	101,514	86,200	15,314
2006	19,859	146,088	127,532	18,555	126,229	106,066	20,163
2007	40,361	206,397	183,464	22,933	166,036	144,102	21,934
2008	-25,634	181,310	154,950	26,361	206,944	165,380	41,564
2009	19,617	174,006	149,836	24,169	154,389	127,143	27,246
2010	35,452	205,623	181,664	23,959	170,171	146,500	23,672
2011	39,607	263,829	234,240	29,589	224,222	191,123	33,099
2012	46,189	266,410	239,758	26,653	220,221	195,708	24,513
2013	74,698	339,377	302,602	36,775	264,679	233,743	30,935
2014	30,417	323,300	291,823	31,476	292,882	265,721	27,161
2015	-18,984	299,575	268,697	30,878	318,559	284,108	34,451
2016	-41,797	302,238	263,609	38,629	344,034	303,690	40,345
2017	-28,429	291,792	250,898	40,894	320,221	279,042	41,179
2018	-91,191	262,756	229,824	32,932	353,947	314,484	39,463
2019	-49,202	253,317	225,692	27,625	302,519	273,669	28,851
2020	-83,848	300,050	264,470	35,580	383,898	336,000	47,898
2021	-13,155	319,239	280,659	38,581	332,394	294,724	37,670

[1] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

[2] New sales are the dollar value of new purchases of mutual fund shares. This does not include shares purchased through reinvestment of dividends in existing accounts.

[3] Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group.

[4] Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares.

[5] Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 20

Bond Mutual Funds: Net New Cash Flow and Components of Net New Cash Flow

Millions of dollars, annual

		Sales			Redemptions		
Year	Net new cash flow[1]	New + exchange	New[2]	Exchange[3]	Regular + exchange	Regular[4]	Exchange[5]
1984	$13,058	$25,554	$20,774	$4,780	$12,497	$7,344	$5,152
1985	63,127	83,359	74,485	8,874	20,232	13,094	7,137
1986	102,618	158,874	138,240	20,634	56,256	35,776	20,480
1987	6,797	123,528	93,725	29,803	116,731	69,627	47,104
1988	-4,488	72,174	47,378	24,796	76,662	51,558	25,103
1989	-1,226	71,770	48,602	23,168	72,996	48,517	24,480
1990	6,619	80,414	56,861	23,552	73,795	47,947	25,848
1991	59,049	141,399	107,819	33,580	82,350	56,111	26,239
1992	71,126	217,769	171,897	45,872	146,643	96,398	50,246
1993	72,154	262,155	208,459	53,696	190,000	127,163	62,838
1994	-61,782	186,270	130,728	55,542	248,051	162,620	85,432
1995	-7,884	164,348	108,361	55,986	172,232	114,559	57,673
1996	1,468	201,252	135,795	65,457	199,784	125,091	74,693
1997	28,132	240,600	174,592	66,008	212,467	140,297	72,171
1998	73,144	312,004	228,563	83,440	238,859	159,225	79,635
1999	-5,288	297,350	215,587	81,764	302,638	206,057	96,581
2000	-47,661	250,001	186,271	63,730	297,662	217,818	79,844
2001	90,512	393,737	301,021	92,716	303,225	224,211	79,014
2002	143,263	514,694	401,687	113,008	371,431	283,497	87,934
2003	33,491	520,642	428,512	92,130	487,151	376,116	111,035
2004	-14,901	395,224	340,323	54,901	410,125	341,056	69,070
2005	25,328	402,232	350,627	51,605	376,904	321,127	55,776
2006	59,725	446,110	390,877	55,234	386,385	328,938	57,447
2007	110,561	591,464	505,718	85,745	480,903	409,347	71,555
2008	31,185	709,213	580,580	128,633	678,028	581,399	96,630
2009	371,395	1,006,192	856,450	149,742	634,797	524,597	110,200
2010	232,419	1,089,250	964,032	125,217	856,830	742,133	114,697
2011	118,047	1,103,548	975,973	127,575	985,500	869,638	115,862
2012	306,539	1,246,678	1,121,166	125,512	940,139	837,877	102,261
2013	-71,184	1,307,638	1,158,509	149,129	1,378,822	1,190,473	188,349
2014	43,885	1,278,233	1,174,168	104,066	1,234,349	1,137,547	96,801
2015	-24,935	1,195,113	1,090,485	104,629	1,220,048	1,119,486	100,562
2016	106,956	1,315,907	1,188,165	127,742	1,208,951	1,102,247	106,705
2017	259,695	1,407,851	1,262,212	145,639	1,148,156	1,026,852	121,304
2018	2,134	1,445,088	1,300,620	144,468	1,442,955	1,304,268	138,687
2019	312,354	1,561,200	1,442,853	118,347	1,248,846	1,158,560	90,286
2020	244,394	2,127,357	1,939,565	187,792	1,882,963	1,729,750	153,213
2021	389,469	2,014,328	1,807,296	207,032	1,624,859	1,433,498	191,360

[1] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

[2] New sales are the dollar value of new purchases of mutual fund shares. This does not include shares purchased through reinvestment of dividends in existing accounts.

[3] Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group.

[4] Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares.

[5] Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 21

Long-Term Mutual Funds: Net New Cash Flow by Composite Investment Objective

Millions of dollars, annual

	Equity funds				Bond funds						
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni
2000	$262,240	$57,893	-$4,809	-$36,736	$5,293	-$12,798	-$4,648	-$16,633	-$4,439	-$5,438	-$8,998
2001	-22,874	-23,242	79,389	7,235	49,014	3,371	-1,151	24,657	2,436	6,293	5,892
2002	-52,330	-4,117	27,560	7,979	64,518	4,309	-71	53,225	4,475	5,259	11,549
2003	27,022	24,361	92,613	38,958	30,200	22,589	4,028	-22,124	5,539	-8,212	1,471
2004	-11,545	71,583	111,865	53,052	22,080	-2,843	4,310	-26,259	3,160	-7,939	-7,410
2005	-25,862	106,911	42,794	42,752	36,749	-13,495	6,404	-14,211	5,171	1,232	3,480
2006	-27,620	150,923	23,939	19,859	36,992	3,322	10,936	-17,833	11,203	3,876	11,229
2007	-44,341	141,736	-24,178	40,361	75,928	-4,755	21,130	-2,242	9,646	3,233	7,621
2008	-49,179	-66,998	-100,333	-25,634	8,556	-5,229	6,064	20,600	-6,625	-2,301	10,121
2009	-7,560	29,595	-19,934	19,617	202,250	22,466	32,512	18,950	24,841	6,081	64,295
2010	-26,761	56,220	-54,302	35,452	110,751	19,452	70,075	4,059	16,421	-2,838	14,499
2011	-44,552	3,609	-89,102	39,607	51,137	22,004	44,458	3,362	8,702	-9,890	-1,726
2012	-39,123	6,536	-120,126	46,189	104,803	34,550	42,974	33,763	40,276	8,539	41,633
2013	-3,020	141,080	21,131	74,698	-97,713	55,689	66,241	-51,209	14,302	-22,420	-36,074
2014	-41,285	84,762	-18,443	30,417	9,200	-43,854	24,404	5,743	20,404	-1,064	29,051
2015	-54,315	93,908	-115,358	-18,984	-834	-36,417	-23,564	12,414	8,655	682	14,129
2016	-138,561	-23,415	-96,297	-41,797	83,687	6,852	-39,542	11,312	21,633	2,454	20,560
2017	-103,260	76,476	-132,861	-28,429	138,175	-17,953	47,239	2,044	63,856	-2,010	28,344
2018	-92,605	-6,130	-158,181	-91,191	16,976	-34,276	7,460	5,601	2,190	-7,634	11,817
2019	-109,000	-59,550	-193,202	-49,202	160,843	-30,344	13,595	28,701	46,318	15,316	77,925
2020	-136,564	-173,386	-334,222	-83,848	193,080	4,190	-23,923	25,783	6,105	413	38,746
2021	-166,509	-15,974	-252,727	-13,155	142,423	22,412	43,907	15,227	81,985	5,202	78,313

Note: Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 22

Long-Term Mutual Funds: New Sales by Composite Investment Objective

Millions of dollars, annual

	Equity funds				Bond funds						
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni
2000	$574,045	$342,451	$402,306	$56,920	$79,000	$26,742	$8,242	$24,347	$6,787	$16,985	$24,168
2001	306,495	251,519	395,206	65,530	127,444	36,183	8,948	58,983	12,245	25,028	32,190
2002	249,939	245,137	398,764	75,393	173,270	39,644	10,920	93,873	14,537	26,274	43,168
2003	250,424	205,235	381,638	96,728	187,544	65,537	18,946	71,167	20,084	20,546	44,688
2004	268,105	184,371	474,265	125,434	166,268	48,120	18,132	38,511	17,923	16,820	34,548
2005	264,348	239,613	512,979	126,616	172,174	41,686	23,786	32,063	20,628	21,959	38,331
2006	302,295	354,877	556,519	127,532	184,657	45,475	29,025	29,690	29,478	25,566	46,985
2007	368,591	479,123	658,393	183,464	248,103	54,490	45,536	34,593	38,826	29,589	54,582
2008	340,497	373,142	616,224	154,950	277,339	47,176	53,469	64,527	37,524	30,562	69,983
2009	273,552	283,870	474,051	149,836	426,871	70,111	69,243	90,702	57,874	28,386	113,264
2010	309,518	378,478	547,147	181,664	450,139	95,780	129,634	79,464	71,235	28,530	109,250
2011	340,425	396,830	583,269	234,240	448,964	128,866	138,833	72,171	76,840	19,797	90,501
2012	335,545	360,654	561,631	239,758	489,065	124,084	132,778	109,824	106,445	30,912	128,058
2013	395,554	509,728	734,160	302,602	466,176	172,324	193,022	74,493	116,998	23,833	111,661
2014	425,147	540,388	829,468	291,823	492,598	147,566	194,859	70,497	128,801	22,423	117,425
2015	422,924	581,851	787,465	268,697	466,529	124,802	154,018	79,990	127,089	24,301	113,757
2016	384,320	497,368	838,001	263,609	530,243	130,474	114,899	90,937	132,721	34,344	154,546
2017	415,556	608,656	909,965	250,898	552,483	124,298	159,092	74,595	175,819	28,833	147,092
2018	465,293	668,886	980,452	229,824	568,327	117,093	148,389	89,576	164,968	32,103	180,164
2019	414,448	530,296	867,246	225,692	641,697	104,931	160,559	111,306	193,976	38,443	191,941
2020	575,550	655,449	1,063,720	264,470	930,142	148,604	189,570	175,619	210,389	38,168	247,073
2021	572,048	734,560	1,195,206	280,659	809,265	144,021	187,373	152,182	237,799	34,794	241,861

Note: New sales are the dollar value of new purchases of mutual fund shares. This does not include shares purchased through reinvestment of dividends in existing accounts. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 23

Long-Term Mutual Funds: Exchange Sales by Composite Investment Objective

Millions of dollars, annual

	Equity funds				Bond funds						
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni
2000	$343,618	$169,388	$139,101	$13,445	$16,756	$10,298	$3,011	$15,829	$1,662	$5,304	$10,870
2001	176,019	85,777	114,212	17,912	32,609	11,377	2,057	24,779	2,860	5,348	13,686
2002	144,274	71,079	104,740	18,021	39,468	11,200	2,373	37,280	3,460	5,625	13,602
2003	94,568	41,777	100,330	19,117	33,966	17,109	3,528	18,355	4,664	4,288	10,218
2004	57,575	27,630	84,373	18,025	23,681	8,943	2,056	7,022	4,314	2,750	6,135
2005	55,786	38,396	81,244	17,650	20,833	7,257	2,780	6,575	4,742	2,983	6,435
2006	64,339	56,926	81,392	18,555	21,900	7,278	2,740	5,972	7,024	3,450	6,869
2007	60,892	68,791	92,972	22,933	41,588	7,881	4,629	10,226	5,035	5,706	10,680
2008	58,295	49,364	86,998	26,361	50,416	7,363	8,504	27,495	10,048	7,039	17,767
2009	44,896	47,478	69,464	24,169	76,507	13,163	7,976	18,336	8,641	5,081	20,037
2010	41,943	55,909	71,888	23,959	58,253	13,047	9,482	14,512	10,791	3,852	15,280
2011	48,425	40,006	81,686	29,589	59,218	14,797	10,801	14,323	10,756	3,736	13,944
2012	45,113	47,475	96,842	26,653	54,575	13,406	9,807	14,912	12,957	3,685	16,171
2013	68,219	44,079	110,824	36,775	52,652	18,960	26,824	13,320	10,342	4,900	22,131
2014	61,403	48,151	101,702	31,476	46,053	12,165	10,140	7,231	9,769	3,600	15,107
2015	60,632	53,756	95,303	30,878	40,679	13,663	13,601	9,151	9,412	3,899	14,222
2016	54,074	49,014	115,898	38,629	52,757	14,263	15,466	10,539	9,738	4,106	20,874
2017	62,765	82,355	143,032	40,894	65,913	13,600	18,053	11,159	13,368	4,122	19,423
2018	69,978	72,904	151,007	32,932	52,722	12,039	31,960	13,872	9,112	4,508	20,254
2019	49,028	47,032	101,520	27,625	57,418	9,638	11,110	12,348	9,112	3,699	15,021
2020	75,247	59,676	148,449	35,580	108,415	11,024	9,640	24,243	11,447	3,636	19,388
2021	72,602	101,940	167,410	38,581	80,962	15,116	63,064	18,562	13,332	2,537	13,460

Note: Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 24

Long-Term Mutual Funds: Regular Redemptions by Composite Investment Objective

Millions of dollars, annual

	Equity funds				Bond funds						
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni
2000	$367,514	$288,496	$375,250	$77,159	$71,748	$34,638	$11,437	$35,823	$10,431	$21,856	$31,884
2001	307,078	264,301	320,185	58,802	87,959	32,315	9,538	38,047	10,368	18,584	27,401
2002	276,695	243,144	355,211	67,201	117,988	34,988	11,383	53,740	11,082	20,881	33,434
2003	222,805	183,741	300,877	63,367	152,547	46,729	15,501	79,437	14,856	25,603	41,443
2004	269,782	122,228	366,705	77,520	142,701	48,641	13,819	58,824	14,628	22,817	39,625
2005	275,345	148,065	454,586	86,200	136,660	51,704	18,358	43,913	15,546	20,457	34,488
2006	314,823	223,282	509,079	106,066	147,491	41,938	18,602	43,974	19,036	21,692	36,205
2007	395,443	347,693	645,506	144,102	187,116	56,044	26,366	38,850	28,060	25,962	46,949
2008	377,084	412,073	677,004	165,380	282,488	49,838	49,509	59,781	44,515	32,199	63,068
2009	274,333	253,879	482,652	127,143	248,630	51,002	40,337	69,920	35,602	22,685	56,421
2010	329,686	316,902	591,247	146,500	347,907	79,416	62,845	74,239	55,227	29,101	93,398
2011	377,272	381,923	657,115	191,123	407,040	107,838	95,495	69,534	69,190	28,412	92,128
2012	367,516	352,278	659,976	195,708	393,748	91,821	92,016	77,372	70,307	22,815	89,798
2013	401,260	373,040	721,171	233,743	529,389	121,424	141,378	117,140	101,577	40,542	139,022
2014	464,919	457,135	848,922	265,721	490,252	186,224	170,259	63,759	110,968	23,917	92,168
2015	480,264	498,540	894,098	284,108	466,316	156,690	181,393	68,915	119,603	23,870	102,699
2016	509,040	510,357	932,806	303,690	458,883	126,135	155,374	81,427	114,387	31,051	134,990
2017	506,146	542,838	1,020,515	279,042	427,052	141,241	118,112	74,439	114,587	30,481	120,941
2018	555,551	675,891	1,117,629	314,484	552,183	148,117	160,674	85,783	149,898	38,606	169,007
2019	513,499	580,792	1,046,051	273,669	497,432	133,935	149,313	83,256	150,947	24,779	118,897
2020	701,091	815,251	1,358,681	336,000	773,420	141,425	210,905	151,864	205,536	36,909	209,692
2021	728,470	760,887	1,435,020	294,724	674,086	124,143	145,453	135,534	159,462	29,391	165,430

Note: Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 25

Long-Term Mutual Funds: Exchange Redemptions by Composite Investment Objective

Millions of dollars, annual

	Equity funds				Bond funds						
Year	Capital appreciation	World	Total return	Hybrid funds	Investment grade	High yield	World	Government	Multisector	State muni	National muni
2000	$287,909	$165,451	$170,965	$29,941	$18,714	$15,200	$4,463	$20,986	$2,457	$5,870	$12,153
2001	198,310	96,238	109,844	17,405	23,080	11,874	2,618	21,058	2,301	5,499	12,583
2002	169,848	77,190	120,734	18,234	30,232	11,547	1,981	24,188	2,440	5,758	11,787
2003	95,166	38,910	88,478	13,520	38,764	13,328	2,945	32,209	4,354	7,443	11,992
2004	67,443	18,190	80,067	12,887	25,168	11,265	2,059	12,969	4,450	4,692	8,467
2005	70,651	23,033	96,843	15,314	19,597	10,734	1,804	8,936	4,653	3,253	6,798
2006	79,432	37,597	104,893	20,163	22,074	7,493	2,227	9,521	6,263	3,449	6,420
2007	78,381	58,486	130,037	21,934	26,647	11,082	2,669	8,210	6,155	6,099	10,692
2008	70,886	77,430	126,551	41,564	36,711	9,930	6,400	11,642	9,682	7,703	14,562
2009	51,675	47,874	80,797	27,246	52,499	9,807	4,371	20,168	6,071	4,702	12,584
2010	48,536	61,264	82,090	23,672	49,734	9,959	6,195	15,678	10,379	6,119	16,632
2011	56,130	51,303	96,942	33,099	50,005	13,821	9,681	13,597	9,703	5,011	14,043
2012	52,265	49,315	118,623	24,513	45,090	11,118	7,594	13,601	8,817	3,243	12,797
2013	65,533	39,688	102,681	30,935	87,152	14,171	12,228	21,882	11,461	10,611	30,844
2014	62,916	46,642	100,691	27,161	39,199	17,360	10,335	8,225	7,199	3,170	11,313
2015	57,607	43,160	104,028	34,451	41,726	18,193	9,790	7,812	8,243	3,648	11,150
2016	67,915	59,440	117,390	40,345	40,430	11,752	14,532	8,737	6,439	4,945	19,870
2017	75,436	71,698	165,343	41,179	53,170	14,610	11,794	9,270	10,744	4,484	17,231
2018	72,324	72,028	172,011	39,463	51,890	15,290	12,215	12,065	21,992	5,639	19,595
2019	58,977	56,086	115,918	28,851	40,839	10,977	8,761	11,697	5,824	2,047	10,140
2020	86,270	73,261	187,710	47,898	72,057	14,013	12,228	22,216	10,195	4,483	18,022
2021	82,690	91,587	180,323	37,670	73,718	12,582	61,077	19,984	9,684	2,738	11,578

Note: Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 26

Long-Term Mutual Funds: Annual Redemption Rates

Percent

	Narrow redemption rates[1]				Broad redemption rates[2]			
Year	Total	Equity funds	Hybrid funds	Bond funds	Total	Equity funds	Hybrid funds	Bond funds
1985	17.4%	18.4%	22.0%	15.5%	29.8%	35.6%	26.3%	24.0%
1986	19.8	19.6	23.8	19.6	38.6	50.9	30.2	30.7
1987	26.5	23.4	28.5	28.3	56.7	73.0	40.7	47.5
1988	20.0	18.2	27.1	20.5	36.9	45.9	35.8	30.4
1989	17.9	17.1	18.7	18.4	31.9	38.0	25.7	27.7
1990	17.5	18.4	15.6	17.0	31.0	37.7	22.9	26.2
1991	16.5	16.6	15.9	16.4	28.1	33.1	22.2	24.1
1992	17.0	13.4	11.1	21.5	28.8	26.7	17.0	32.7
1993	17.8	14.7	10.7	22.6	29.9	28.7	16.4	33.8
1994	21.6	17.7	16.7	28.3	35.2	31.6	24.1	43.2
1995	17.4	16.2	15.1	20.3	29.0	29.4	21.3	30.6
1996	17.0	16.2	13.8	20.1	30.1	30.7	19.8	32.1
1997	18.0	17.7	13.7	20.5	30.5	31.9	18.8	31.1
1998	19.7	20.0	15.8	20.6	32.2	34.0	21.5	30.8
1999	21.7	21.2	19.0	25.2	34.5	34.9	25.9	37.1
2000	25.7	25.9	21.0	26.8	39.9	41.5	29.1	36.7
2001	24.0	24.3	16.4	25.6	34.2	35.4	21.2	34.6
2002	27.9	29.0	19.4	27.4	38.6	41.2	24.6	35.8
2003	24.2	22.5	16.2	31.4	31.5	29.5	19.6	40.7
2004	20.4	19.0	15.5	26.7	24.7	23.1	18.1	32.1
2005	19.7	19.0	14.7	24.2	23.7	23.2	17.3	28.4
2006	19.9	19.5	15.7	23.1	23.9	23.7	18.7	27.1
2007	22.9	22.7	18.6	25.8	27.1	27.0	21.4	30.3
2008	30.1	29.1	23.9	35.8	35.7	34.6	29.9	41.8
2009	24.5	23.7	19.9	27.8	29.2	28.0	24.1	33.6
2010	25.3	23.7	18.8	31.0	29.2	27.3	21.8	35.8
2011	27.6	26.2	22.2	32.0	31.5	30.0	26.0	36.3
2012	25.0	24.8	20.4	26.9	28.6	28.7	23.0	30.2
2013	25.8	21.9	20.2	35.7	29.5	24.9	22.9	41.3
2014	24.9	22.1	20.0	33.7	27.6	24.7	22.0	36.6
2015	25.2	22.8	20.9	32.6	27.8	25.3	23.4	35.5
2016	25.3	23.4	22.2	31.2	28.3	26.3	25.1	34.2
2017	22.9	21.9	18.9	26.6	26.1	25.3	21.7	29.8
2018	26.0	24.1	21.5	32.1	29.2	27.3	24.2	35.5
2019	22.1	20.8	18.5	26.4	24.3	23.0	20.4	28.5
2020	26.6	23.9	21.0	34.9	29.5	26.8	24.0	38.0
2021	22.3	21.3	16.9	26.5	25.1	23.9	19.1	30.0

[1] The narrow redemption rate is calculated by taking the sum of regular redemptions for the year as a percentage of average net assets at the beginning and end of the period.

[2] The broad redemption rate is calculated by taking the sum of regular redemptions and exchange redemptions for the year as a percentage of average net assets at the beginning and end of the period.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 27

Long-Term Mutual Funds: Portfolio Holdings: Value and Percentage of Total Net Assets

Year-end

Year	Total net assets	Common and preferred stocks	Long-term US government bonds	Corporate bonds	Municipal bonds	Liquid assets	Other
Millions of dollars							
1995	$2,054,588	$1,215,223	$259,192	$187,575	$245,331	$141,245	$6,021
1996	2,618,485	1,718,207	265,127	233,127	245,183	151,196	5,645
1997	3,402,280	2,358,201	282,360	286,516	266,303	198,035	10,866
1998	4,164,395	3,003,688	286,697	381,435	292,368	190,519	9,688
1999	5,220,692	4,057,388	293,241	380,357	267,264	217,266	5,176
2000	5,110,688	3,908,281	309,755	342,983	269,334	276,329	4,007
2001	4,683,769	3,423,161	379,606	367,727	289,490	222,019	1,766
2002	4,115,111	2,687,479	481,481	415,160	320,410	208,669	1,910
2003	5,359,359	3,760,375	504,575	499,950	331,980	259,441	3,038
2004	6,191,574	4,489,103	537,319	531,265	318,354	307,048	8,483
2005	6,861,884	5,054,529	612,828	547,881	330,945	303,161	12,540
2006	8,056,786	6,023,836	644,739	666,374	359,163	346,718	15,956
2007	8,909,694	6,608,519	749,423	779,991	369,046	381,641	21,075
2008	5,783,298	3,730,264	705,030	675,327	336,873	314,272	21,531
2009	7,788,375	5,085,274	849,830	1,019,336	451,152	365,373	17,411
2010	9,021,082	5,863,421	1,084,732	1,256,538	479,661	329,767	6,963
2011	8,933,382	5,501,860	1,185,691	1,317,242	506,830	461,493	-39,734
2012	10,352,941	6,288,556	1,379,388	1,603,032	592,848	515,313	-26,196
2013	12,321,437	8,214,232	1,208,862	1,728,523	512,634	660,378	-3,192
2014	13,142,406	8,788,541	1,213,236	1,839,763	568,191	744,346	-11,671
2015	12,892,989	8,615,127	1,253,020	1,793,067	582,719	676,192	-27,137
2016	13,614,142	9,059,499	1,363,008	1,933,489	607,888	673,427	-23,170
2017	15,902,694	10,812,797	1,515,355	2,110,970	661,429	801,564	579
2018	14,660,482	9,646,751	1,586,244	2,098,567	667,845	678,521	-17,445
2019	17,644,794	11,929,920	1,824,439	2,353,296	798,405	753,452	-14,718
2020	19,549,777	13,375,802	1,891,875	2,668,272	857,781	780,047	-24,000
2021	22,208,761	15,531,897	2,016,037	2,848,203	953,498	850,834	8,293
Percent							
1995	100.0%	59.1%	12.6%	9.1%	11.9%	6.9%	0.3%
1996	100.0	65.6	10.1	8.9	9.4	5.8	0.2
1997	100.0	69.3	8.3	8.4	7.8	5.8	0.3
1998	100.0	72.1	6.9	9.2	7.0	4.6	0.2
1999	100.0	77.7	5.6	7.3	5.1	4.2	0.1
2000	100.0	76.5	6.1	6.7	5.3	5.4	0.1
2001	100.0	73.1	8.1	7.9	6.2	4.7	0.0
2002	100.0	65.3	11.7	10.1	7.8	5.1	0.0
2003	100.0	70.2	9.4	9.3	6.2	4.8	0.1
2004	100.0	72.5	8.7	8.6	5.1	5.0	0.1
2005	100.0	73.7	8.9	8.0	4.8	4.4	0.2
2006	100.0	74.8	8.0	8.3	4.5	4.3	0.2
2007	100.0	74.2	8.4	8.8	4.1	4.3	0.2
2008	100.0	64.5	12.2	11.7	5.8	5.4	0.4
2009	100.0	65.3	10.9	13.1	5.8	4.7	0.2
2010	100.0	65.0	12.0	13.9	5.3	3.7	0.1
2011	100.0	61.6	13.3	14.7	5.7	5.2	-0.4
2012	100.0	60.7	13.3	15.5	5.7	5.0	-0.3
2013	100.0	66.7	9.8	14.0	4.2	5.4	0.0
2014	100.0	66.9	9.2	14.0	4.3	5.7	-0.1
2015	100.0	66.8	9.7	13.9	4.5	5.2	-0.2
2016	100.0	66.5	10.0	14.2	4.5	4.9	-0.2
2017	100.0	68.0	9.5	13.3	4.2	5.0	0.0
2018	100.0	65.8	10.8	14.3	4.6	4.6	-0.1
2019	100.0	67.6	10.3	13.3	4.5	4.3	-0.1
2020	100.0	68.4	9.7	13.6	4.4	4.0	-0.1
2021	100.0	69.9	9.1	12.8	4.3	3.8	0.0

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 28

Long-Term Mutual Funds: Portfolio Holdings as a Percentage of Total Net Assets by Type of Fund

Year-end

Year	Total net assets	Common and preferred stocks	Long-term US government bonds	Corporate bonds	Municipal bonds	Liquid assets	Other	Total net assets Millions of dollars
Equity funds								
2004	100.0%	95.2%	0.1%	0.4%	0.0%	4.2%	0.1%	$4,342,123
2005	100.0	95.5	0.1	0.4	0.0	3.9	0.1	4,884,874
2006	100.0	95.6	0.1	0.4	0.0	3.8	0.1	5,831,591
2007	100.0	95.2	0.1	0.4	0.0	4.2	0.2	6,412,592
2008	100.0	93.5	0.2	0.5	0.0	5.6	0.3	3,651,483
2009	100.0	95.8	0.1	0.5	0.0	3.5	0.1	4,867,132
2010	100.0	95.7	0.2	0.5	0.0	3.4	0.1	5,590,236
2011	100.0	95.6	0.3	0.6	0.0	3.5	0.0	5,207,456
2012	100.0	95.6	0.3	0.6	0.0	3.4	0.0	5,932,158
2013	100.0	95.6	0.2	0.6	0.0	3.5	0.0	7,753,922
2014	100.0	95.7	0.2	0.6	0.0	3.5	0.1	8,305,506
2015	100.0	96.1	0.2	0.5	0.0	3.2	0.1	8,140,471
2016	100.0	96.2	0.2	0.5	0.0	3.0	0.1	8,567,041
2017	100.0	96.3	0.2	0.4	0.0	3.0	0.1	10,291,358
2018	100.0	96.4	0.2	0.5	0.0	2.9	0.0	9,216,412
2019	100.0	97.0	0.2	0.4	0.0	2.4	0.0	11,362,348
2020	100.0	97.5	0.1	0.3	0.0	1.9	0.1	12,716,645
2021	100.0	97.7	0.1	0.3	0.0	1.8	0.0	14,715,195
Hybrid funds								
2004	100.0%	63.5%	11.0%	18.4%	0.4%	6.6%	0.1%	$552,250
2005	100.0	62.6	10.5	19.5	0.4	6.9	0.0	621,477
2006	100.0	61.2	10.0	19.5	0.3	8.9	0.1	731,503
2007	100.0	60.5	10.3	20.8	0.3	8.0	0.1	821,474
2008	100.0	55.4	9.8	24.3	0.4	9.6	0.4	562,162
2009	100.0	58.3	9.8	23.4	0.4	7.6	0.5	717,266
2010	100.0	60.7	8.9	22.3	0.5	7.3	0.4	841,673
2011	100.0	59.3	9.4	22.1	0.5	7.8	0.8	883,375
2012	100.0	59.4	8.8	21.1	0.5	9.4	0.8	1,031,712
2013	100.0	61.3	7.8	18.6	0.4	11.2	0.6	1,283,797
2014	100.0	59.5	8.2	19.6	0.5	11.8	0.4	1,378,267
2015	100.0	57.5	8.8	19.5	0.6	13.6	-0.1	1,340,624
2016	100.0	57.3	9.0	20.5	0.6	12.5	0.0	1,399,053
2017	100.0	56.8	10.2	19.7	0.6	12.5	0.2	1,546,169
2018	100.0	54.3	12.4	20.6	0.7	11.8	0.1	1,383,216
2019	100.0	56.5	11.9	19.3	0.7	11.4	0.3	1,578,317
2020	100.0	58.6	9.5	20.6	0.7	10.3	0.3	1,619,351
2021	100.0	59.5	9.4	18.6	0.7	11.2	0.6	1,868,695
Bond funds								
2004	100.0%	0.8%	36.3%	31.6%	24.2%	6.6%	0.4%	$1,297,200
2005	100.0	0.8	39.7	29.9	24.0	5.1	0.6	1,355,533
2006	100.0	0.8	37.4	33.4	23.7	4.3	0.5	1,493,693
2007	100.0	1.0	38.9	34.9	21.7	3.0	0.6	1,675,628
2008	100.0	0.6	40.8	33.2	21.2	3.7	0.5	1,569,652
2009	100.0	0.8	34.9	37.3	20.2	6.5	0.4	2,203,977
2010	100.0	0.9	38.2	39.9	18.1	3.0	-0.1	2,589,174
2011	100.0	0.8	37.9	38.2	17.4	7.4	-1.7	2,842,551
2012	100.0	0.9	37.0	39.5	17.1	6.5	-1.0	3,389,071
2013	100.0	1.1	32.9	43.7	15.3	7.5	-0.4	3,283,718
2014	100.0	1.1	31.3	43.9	16.1	8.4	-0.7	3,458,633
2015	100.0	0.9	32.7	43.6	16.7	6.9	-0.9	3,411,894
2016	100.0	0.7	33.3	43.8	16.3	6.6	-0.8	3,648,048
2017	100.0	0.8	32.8	43.3	15.9	7.4	-0.2	4,065,167
2018	100.0	0.6	34.2	43.5	16.1	6.1	-0.5	4,060,854
2019	100.0	0.7	34.2	42.6	16.7	6.4	-0.5	4,704,130
2020	100.0	0.8	33.0	43.9	16.2	7.1	-0.9	5,213,781
2021	100.0	0.9	32.4	43.4	16.6	6.8	-0.2	5,624,871

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 29

Long-Term Mutual Funds: Paid and Reinvested Dividends by Type of Fund

Millions of dollars, annual

	Paid dividends				Reinvested dividends			
Year	Total	Equity funds	Hybrid funds	Bond funds	Total	Equity funds	Hybrid funds	Bond funds
1984[e]	$7,238	$2,613	$583	$4,042	$4,655	$1,881	$432	$2,342
1985	12,719	3,229	1,098	8,392	7,731	2,321	768	4,642
1986	22,689	6,328	1,499	14,862	13,991	3,706	1,087	9,197
1987	31,708	7,246	1,934	22,528	18,976	4,841	1,476	12,659
1988	31,966	6,554	1,873	23,539	17,494	4,476	1,217	11,801
1989	34,102	10,235	2,165	21,702	20,584	7,119	1,383	12,082
1990	33,156	8,787	2,350	22,018	21,107	6,721	1,717	12,669
1991	35,145	9,007	2,337	23,801	24,264	7,255	1,898	15,111
1992	58,608	17,023	4,483	37,102	30,365	8,845	2,923	18,597
1993	73,178	20,230	6,810	46,137	38,092	12,174	4,239	21,679
1994	61,202	17,279	6,662	37,260	39,116	12,971	4,907	21,238
1995	67,217	22,567	8,856	35,794	46,629	18,286	6,792	21,552
1996	73,018	25,061	9,580	38,377	53,064	21,345	8,031	23,688
1997	79,238	27,597	11,316	40,326	58,192	23,100	9,410	25,682
1998	80,604	25,495	11,104	44,006	59,823	22,377	9,328	28,118
1999	94,999	32,538	12,439	50,022	69,765	27,328	10,543	31,895
2000	87,861	26,975	10,847	50,039	66,058	23,725	9,537	32,797
2001	82,675	21,386	10,361	50,929	62,160	19,248	9,269	33,642
2002	81,936	20,465	9,737	51,734	62,344	18,552	8,775	35,017
2003	85,849	24,356	9,919	51,574	66,827	22,125	8,839	35,863
2004	98,060	34,702	12,186	51,171	78,213	31,421	10,668	36,124
2005	115,407	42,413	16,691	56,303	93,973	38,435	14,579	40,959
2006	143,388	60,109	19,134	64,145	119,001	54,207	16,989	47,805
2007	180,803	77,536	25,057	78,210	151,628	69,573	22,092	59,964
2008	181,817	70,459	26,030	85,327	152,859	63,503	23,044	66,313
2009	167,829	58,777	22,213	86,839	140,211	53,004	19,388	67,819
2010	180,752	62,046	23,277	95,429	152,145	56,241	20,671	75,233
2011	202,210	68,535	29,026	104,649	172,350	62,292	25,630	84,429
2012	215,066	83,072	24,947	107,047	186,362	75,990	22,685	87,686
2013	209,311	84,399	24,232	100,680	183,815	77,879	22,167	83,769
2014	236,871	100,888	30,018	105,964	211,622	93,625	27,762	90,235
2015	242,280	108,108	31,494	102,678	218,410	100,703	29,267	88,441
2016	244,303	115,249	30,425	98,628	221,532	107,517	28,468	85,547
2017	271,196	127,739	33,070	110,387	246,131	119,098	30,948	96,085
2018	311,634	146,342	34,743	130,550	282,205	135,737	32,545	113,923
2019	339,794	163,070	36,531	140,192	306,873	150,435	34,113	122,325
2020	288,024	132,568	32,357	123,099	258,832	122,091	30,083	106,658
2021	313,599	149,379	39,790	124,430	281,329	136,751	36,809	107,769

[e] Portions of the paid dividend totals for equity, hybrid, and bond funds are estimated; the total is not estimated.
Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

DATA SECTION 3

TABLE 30

Long-Term Mutual Funds: Paid and Reinvested Capital Gains by Type of Fund

Millions of dollars, annual

	Paid capital gains				Reinvested capital gains			
Year	Total	Equity funds	Hybrid funds	Bond funds	Total	Equity funds	Hybrid funds	Bond funds
1984[e]	$6,019	$5,247	$553	$219	$5,122	$4,655	$338	$129
1985	4,895	3,699	739	457	3,751	3,091	398	261
1986	17,661	13,942	1,240	2,478	14,275	11,851	778	1,646
1987	22,926	18,603	1,605	2,718	17,816	15,449	1,056	1,312
1988	6,354	4,785	620	948	4,769	3,883	364	522
1989	14,766	12,665	540	1,562	9,710	8,744	348	617
1990	8,017	6,833	443	742	5,515	4,975	255	285
1991	13,917	11,961	861	1,095	9,303	8,242	484	577
1992	22,089	17,294	1,488	3,306	14,906	12,233	1,130	1,542
1993	35,905	27,705	3,496	4,704	25,514	19,954	2,687	2,872
1994	29,744	26,351	2,399	993	24,864	22,038	2,086	740
1995	54,271	50,204	3,322	745	46,866	43,550	2,832	484
1996	100,489	88,212	10,826	1,451	87,416	76,638	9,769	1,009
1997	182,763	160,744	19,080	2,940	164,916	145,358	17,360	2,198
1998	164,989	138,681	21,572	4,737	151,105	127,473	19,698	3,935
1999	237,623	219,483	16,841	1,299	206,508	190,300	15,229	979
2000	325,841	305,994	18,645	1,202	298,429	279,891	17,506	1,032
2001	68,625	60,088	6,104	2,433	64,819	56,965	5,789	2,065
2002	16,097	10,538	907	4,651	14,749	9,838	887	4,024
2003	14,397	7,782	758	5,857	12,956	7,188	703	5,065
2004	54,741	41,581	6,600	6,560	49,896	38,073	6,167	5,655
2005	129,058	113,167	11,895	3,995	117,566	103,208	10,955	3,403
2006	256,915	235,853	18,720	2,342	236,465	217,010	17,509	1,946
2007	413,630	377,673	32,162	3,795	380,915	347,628	30,011	3,277
2008	132,363	110,843	9,786	11,734	123,231	103,761	9,064	10,406
2009	15,300	5,740	771	8,789	13,994	5,418	702	7,874
2010	42,950	15,739	1,290	25,921	38,961	14,785	1,199	22,977
2011	73,177	51,347	5,503	16,327	67,337	48,018	5,275	14,043
2012	100,149	66,732	5,566	27,851	93,317	62,830	5,330	25,157
2013	238,960	201,568	22,847	14,544	227,355	191,733	22,151	13,471
2014	399,366	345,485	40,594	13,288	381,961	329,801	39,630	12,531
2015	379,405	331,038	35,442	12,924	363,833	316,768	34,773	12,292
2016	220,172	197,553	14,543	8,076	213,153	191,139	14,316	7,698
2017	369,613	333,155	32,499	3,960	358,122	322,428	31,887	3,807
2018	510,880	461,401	45,336	4,143	494,546	446,181	44,387	3,978
2019	354,794	317,667	27,298	9,829	342,963	307,083	26,487	9,393
2020	366,897	297,782	30,115	39,000	353,683	286,936	29,199	37,548
2021	821,647	734,745	62,329	24,573	787,380	703,599	60,260	23,521

[e] Portions of the paid capital gains totals for equity, hybrid, and bond funds are estimated; the total is not estimated.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding. Capital gains distributions include long-term and short-term capital gains.

TABLE 31

Long-Term Mutual Funds: Portfolio Purchases, Sales, and Net Purchases by Type of Security

Millions of dollars, annual

	Total portfolio			Common stock			Other securities		
Year	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases
1996	$2,014,471	$1,734,681	$279,790	$1,151,258	$927,261	$223,997	$863,213	$807,420	$55,793
1997	2,380,579	2,104,978	275,601	1,457,383	1,268,979	188,404	923,196	835,999	87,197
1998	2,857,469	2,557,559	299,910	1,761,777	1,597,051	164,727	1,095,692	960,508	135,184
1999	3,434,814	3,221,790	213,024	2,262,359	2,088,332	174,027	1,172,455	1,133,457	38,998
2000	4,917,851	4,691,428	226,423	3,558,646	3,328,033	230,613	1,359,205	1,363,395	-4,190
2001	4,682,606	4,385,924	296,682	2,733,670	2,606,442	127,228	1,948,936	1,779,482	169,454
2002	4,016,226	3,803,575	212,651	2,175,875	2,141,252	34,623	1,840,351	1,662,323	178,028
2003	4,279,139	3,995,890	283,248	2,054,070	1,884,388	169,682	2,225,068	2,111,502	113,567
2004	4,307,465	4,016,592	290,873	2,390,635	2,198,265	192,370	1,916,830	1,818,327	98,503
2005	4,831,622	4,529,560	302,062	2,764,796	2,610,540	154,256	2,066,826	1,919,020	147,806
2006	5,734,401	5,395,034	339,367	3,329,028	3,171,157	157,871	2,405,374	2,223,877	181,496
2007	7,094,402	6,717,330	377,071	3,834,824	3,732,412	102,412	3,259,578	2,984,919	274,659
2008	7,350,812	7,291,437	59,376	3,655,110	3,714,982	-59,872	3,695,702	3,576,455	119,247
2009	6,931,424	6,451,602	479,823	2,644,263	2,542,877	101,386	4,287,162	3,908,724	378,437
2010	7,333,782	6,864,497	469,285	2,809,967	2,751,207	58,761	4,523,815	4,113,290	410,524
2011	8,524,823	8,119,858	404,965	3,026,394	3,027,773	-1,379	5,498,430	5,092,085	406,344
2012	8,185,777	7,598,527	587,250	2,767,061	2,821,887	-54,826	5,418,716	4,776,640	642,076
2013	9,251,121	8,731,530	519,590	3,407,861	3,225,125	182,736	5,843,260	5,506,406	336,854
2014	8,523,525	7,964,268	559,257	3,519,678	3,444,231	75,447	5,003,848	4,520,037	483,810
2015	8,878,790	8,421,767	457,023	3,594,465	3,555,929	38,536	5,284,325	4,865,838	418,487
2016	8,567,188	8,169,078	398,110	3,413,989	3,534,867	-120,878	5,153,199	4,634,211	518,988
2017	9,044,110	8,465,986	578,125	3,470,556	3,616,679	-146,123	5,573,554	4,849,306	724,248
2018	9,497,856	9,025,217	472,639	4,029,701	4,163,685	-133,984	5,468,154	4,861,532	606,623
2019	9,402,753	8,839,117	563,636	3,513,691	3,752,430	-238,739	5,889,062	5,086,688	802,374
2020	11,464,429	11,259,895	204,534	4,162,579	4,663,359	-500,780	7,301,850	6,596,536	705,314
2021	11,953,171	11,114,765	838,406	4,388,994	4,715,850	-326,856	7,564,177	6,398,915	1,165,262

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 32

Equity Mutual Funds: Portfolio Purchases, Sales, and Net Purchases by Type of Security

Millions of dollars, annual

	Total portfolio			Common stock			Other securities		
Year	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases
1996	$1,116,902	$896,639	$220,263	$1,050,880	$832,482	$218,398	$66,022	$64,157	$1,865
1997	1,421,210	1,223,458	197,751	1,352,084	1,166,645	185,439	69,126	56,814	12,312
1998	1,723,409	1,556,960	166,449	1,635,510	1,475,133	160,377	87,899	81,827	6,072
1999	2,232,671	2,049,338	183,333	2,126,719	1,941,307	185,411	105,952	108,031	-2,078
2000	3,513,553	3,256,504	257,049	3,391,531	3,142,910	248,621	122,022	113,595	8,427
2001	2,704,374	2,590,457	113,917	2,568,207	2,461,596	106,611	136,167	128,861	7,305
2002	2,140,466	2,112,381	28,085	2,017,518	1,999,454	18,064	122,949	112,928	10,021
2003	1,965,144	1,822,530	142,614	1,902,448	1,757,922	144,526	62,696	64,608	-1,912
2004	2,278,466	2,110,374	168,091	2,216,669	2,053,424	163,245	61,796	56,950	4,846
2005	2,670,842	2,524,140	146,702	2,591,755	2,452,060	139,695	79,086	72,080	7,007
2006	3,230,084	3,062,769	167,315	3,128,793	2,965,097	163,696	101,292	97,672	3,620
2007	3,759,468	3,657,698	101,770	3,582,008	3,489,479	92,529	177,460	168,219	9,241
2008	3,627,580	3,697,704	-70,123	3,361,218	3,425,898	-64,680	266,362	271,805	-5,443
2009	2,749,327	2,676,020	73,307	2,432,719	2,338,604	94,115	316,608	337,416	-20,808
2010	2,827,239	2,827,772	-533	2,566,902	2,531,582	35,320	260,338	296,191	-35,853
2011	2,907,809	2,936,918	-29,109	2,748,871	2,779,164	-30,293	158,938	157,754	1,184
2012	2,634,374	2,690,895	-56,521	2,494,007	2,566,445	-72,438	140,367	124,450	15,917
2013	3,177,513	2,992,319	185,194	3,041,598	2,875,234	166,365	135,914	117,085	18,829
2014	3,297,755	3,188,113	109,642	3,117,220	3,030,047	87,173	180,535	158,067	22,468
2015	3,381,923	3,305,313	76,610	3,184,777	3,118,269	66,508	197,146	187,044	10,102
2016	3,231,517	3,323,874	-92,357	3,021,825	3,124,596	-102,771	209,691	199,277	10,414
2017	3,335,586	3,394,825	-59,239	3,085,073	3,167,835	-82,762	250,512	226,990	23,523
2018	3,851,742	3,915,240	-63,498	3,605,761	3,685,897	-80,136	245,981	229,343	16,638
2019	3,394,269	3,563,541	-169,272	3,128,707	3,337,978	-209,271	265,562	225,562	39,999
2020	3,871,718	4,340,526	-468,808	3,630,778	4,114,649	-483,871	240,940	225,877	15,063
2021	4,226,555	4,462,707	-236,152	3,897,837	4,196,576	-298,738	328,718	266,131	62,587

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 33

Hybrid Mutual Funds: Portfolio Purchases, Sales, and Net Purchases by Type of Security

Millions of dollars, annual

	Total portfolio			Common stock			Other securities		
Year	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases
1996	$223,905	$201,872	$22,033	$92,485	$88,464	$4,021	$131,420	$113,408	$18,011
1997	255,200	234,816	20,384	98,109	94,976	3,132	157,092	139,839	17,252
1998	282,651	257,096	25,555	115,703	111,401	4,301	166,948	145,694	21,254
1999	296,228	296,836	-607	128,298	138,910	-10,612	167,930	157,926	10,004
2000	308,675	335,254	-26,579	157,997	174,917	-16,920	150,678	160,337	-9,659
2001	357,427	334,013	23,414	155,118	134,256	20,862	202,308	199,757	2,552
2002	340,604	320,551	20,053	145,342	129,192	16,150	195,263	191,359	3,903
2003	360,522	312,045	48,477	137,487	113,780	23,707	223,035	198,265	24,769
2004	404,947	337,214	67,733	163,795	132,966	30,829	241,151	204,248	36,904
2005	397,694	346,259	51,435	165,487	150,166	15,321	232,207	196,094	36,113
2006	408,861	381,374	27,487	191,740	197,120	-5,380	217,122	184,255	32,867
2007	529,026	465,012	64,014	241,633	230,855	10,778	287,393	234,157	53,236
2008	594,039	577,549	16,490	281,755	273,630	8,125	312,284	303,919	8,365
2009	476,778	442,989	33,789	200,766	194,771	5,995	276,012	248,218	27,794
2010	512,564	463,314	49,250	225,191	204,365	20,826	287,374	258,950	28,424
2011	660,464	596,747	63,716	254,665	229,513	25,152	405,799	367,235	38,564
2012	721,488	659,618	61,870	252,700	236,516	16,184	468,788	423,102	45,686
2013	911,886	831,231	80,655	345,324	328,480	16,845	566,562	502,751	63,810
2014	933,624	865,393	68,232	371,983	386,419	-14,436	561,641	478,973	82,668
2015	946,366	911,844	34,523	380,376	404,399	-24,023	565,990	507,445	58,545
2016	882,226	842,717	39,508	354,734	375,439	-20,705	527,492	467,279	60,213
2017	913,169	874,793	38,376	327,232	380,083	-52,851	585,937	494,710	91,227
2018	1,030,556	1,015,413	15,143	382,045	430,642	-48,597	648,511	584,771	63,740
2019	986,298	963,511	22,787	338,478	372,740	-34,261	647,820	590,771	57,049
2020	1,425,356	1,448,000	-22,644	459,694	484,842	-25,148	965,662	963,158	2,504
2021	1,406,085	1,360,539	45,546	397,114	434,371	-37,257	1,008,970	926,168	82,803

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 34

Bond Mutual Funds: Portfolio Purchases, Sales, and Net Purchases by Type of Security

Millions of dollars, annual

	Total portfolio			Common stock			Other securities		
Year	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases
1996	$673,665	$636,170	$37,494	$7,893	$6,316	$1,578	$665,771	$629,855	$35,917
1997	704,169	646,704	57,465	7,190	7,358	-167	696,978	639,346	57,632
1998	851,409	743,503	107,906	10,565	10,516	49	840,845	732,987	107,858
1999	905,914	875,616	30,299	7,342	8,115	-773	898,572	867,501	31,072
2000	1,095,623	1,099,669	-4,046	9,118	10,206	-1,088	1,086,505	1,089,464	-2,958
2001	1,620,805	1,461,454	159,351	10,345	10,589	-245	1,610,461	1,450,864	159,596
2002	1,535,155	1,370,642	164,513	13,015	12,606	409	1,522,140	1,358,036	164,104
2003	1,953,473	1,861,315	92,158	14,135	12,686	1,449	1,939,338	1,848,629	90,709
2004	1,624,053	1,569,004	55,049	10,171	11,875	-1,704	1,613,882	1,557,129	56,753
2005	1,763,087	1,659,162	103,925	7,554	8,314	-760	1,755,533	1,650,847	104,686
2006	2,095,456	1,950,891	144,565	8,495	8,940	-445	2,086,961	1,941,951	145,010
2007	2,805,908	2,594,620	211,288	11,183	12,077	-894	2,794,725	2,582,542	212,182
2008	3,129,193	3,016,184	113,009	12,136	15,453	-3,317	3,117,057	3,000,731	116,326
2009	3,705,319	3,332,592	372,727	10,778	9,502	1,276	3,694,541	3,323,090	371,451
2010	3,993,978	3,573,410	420,568	17,875	15,260	2,615	3,976,103	3,558,150	417,953
2011	4,956,550	4,586,192	370,358	22,858	19,096	3,762	4,933,693	4,567,096	366,596
2012	4,829,915	4,248,014	581,901	20,355	18,926	1,428	4,809,560	4,229,088	580,472
2013	5,161,722	4,907,981	253,741	20,938	21,411	-473	5,140,784	4,886,569	254,214
2014	4,292,146	3,910,762	381,384	30,474	27,764	2,710	4,261,672	3,882,997	378,674
2015	4,550,500	4,204,610	345,890	29,311	33,261	-3,950	4,521,189	4,171,349	349,840
2016	4,453,446	4,002,487	450,959	37,430	34,832	2,598	4,416,016	3,967,655	448,361
2017	4,795,355	4,196,368	598,988	58,251	68,761	-10,511	4,737,105	4,127,607	609,498
2018	4,615,558	4,094,564	520,993	41,895	47,146	-5,251	4,573,662	4,047,418	526,244
2019	5,022,186	4,312,066	710,120	46,506	41,712	4,794	4,975,680	4,270,354	705,326
2020	6,167,355	5,471,369	695,986	72,108	63,869	8,239	6,095,248	5,407,501	687,747
2021	6,320,531	5,291,518	1,029,012	94,042	84,902	9,140	6,226,489	5,206,616	1,019,873

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 35

Money Market Funds: Total Net Assets, Number of Funds, and Number of Share Classes by Type of Fund

Year-end

	Total net assets Millions of dollars				Number of funds				Number of share classes			
		Taxable				Taxable				Taxable		
Year	Total	Government	Prime	Tax-exempt	Total	Government	Prime	Tax-exempt	Total	Government	Prime	Tax-exempt
1996	$901,807	$223,790	$540,146	$137,871	988	277	392	319	1,453	413	592	448
1997	1,058,886	254,223	647,005	157,658	1,013	279	406	328	1,548	442	633	473
1998	1,351,677	312,905	854,061	184,711	1,026	277	410	339	1,626	461	675	490
1999	1,613,058	333,726	1,079,435	199,897	1,043	281	421	341	1,728	488	740	500
2000	1,845,248	367,780	1,243,598	233,869	1,037	274	429	334	1,848	530	797	521
2001	2,285,232	461,631	1,564,520	259,081	1,014	269	420	325	1,945	573	830	542
2002	2,265,075	453,157	1,535,621	276,297	988	259	418	311	2,006	581	882	543
2003	2,039,393	410,041	1,339,061	290,291	972	251	408	313	2,028	571	889	568
2004	1,901,700	379,706	1,209,995	311,999	943	239	399	305	2,047	575	899	573
2005	2,026,820	399,330	1,291,117	336,373	869	221	371	277	2,027	569	893	565
2006	2,338,451	426,838	1,542,584	369,029	847	215	358	274	2,010	577	875	558
2007	3,085,500	760,389	1,857,280	467,832	802	202	342	258	2,002	570	873	559
2008	3,832,232	1,490,204	1,848,349	493,680	782	199	334	249	1,988	583	858	547
2009	3,315,893	1,107,035	1,809,923	398,935	704	180	296	228	1,846	561	769	516
2010	2,803,514	855,021	1,618,488	330,006	652	165	277	210	1,781	544	737	500
2011	2,690,921	970,075	1,429,149	291,697	631	166	264	201	1,729	544	710	475
2012	2,693,169	928,749	1,476,993	287,426	580	158	242	180	1,622	519	655	448
2013	2,717,808	962,009	1,485,187	270,612	555	152	230	173	1,571	508	633	430
2014	2,724,641	1,010,783	1,453,071	260,787	527	148	216	163	1,506	512	588	406
2015	2,754,743	1,226,735	1,273,077	254,931	481	146	190	145	1,427	523	533	371
2016	2,728,137	2,221,873	375,999	130,266	421	230	89	102	1,275	718	285	272
2017	2,847,304	2,260,750	455,428	131,126	382	225	74	83	1,177	700	246	231
2018	3,037,039	2,326,389	565,379	145,271	368	217	70	81	1,128	680	231	217
2019	3,632,000	2,720,402	773,976	137,622	364	211	73	80	1,126	674	240	212
2020	4,333,280	3,684,888	542,898	105,495	340	199	66	75	1,108	674	222	212
2021	4,755,698	4,227,970	440,958	86,770	305	188	57	60	1,061	671	218	172

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 36

Money Market Funds: Total Net Assets by Type of Fund

Millions of dollars, year-end

Year	All money market funds				Retail money market funds				Institutional money market funds			
		Taxable				Taxable				Taxable		
	Total	Government	Prime	Tax-exempt	Total	Government	Prime	Tax-exempt	Total	Government	Prime	Tax-exempt
1996	$901,807	$223,790	$540,146	$137,871	$592,743	$94,786	$387,844	$110,113	$309,064	$129,003	$152,302	$27,758
1997	1,058,886	254,223	647,005	157,658	663,683	100,991	439,946	122,747	395,202	153,232	207,059	34,911
1998	1,351,677	312,905	854,061	184,711	835,623	121,662	571,834	142,126	516,054	191,243	282,227	42,585
1999	1,613,058	333,726	1,079,435	199,897	965,202	132,915	676,502	155,785	647,856	200,812	402,933	44,111
2000	1,845,248	367,780	1,243,598	233,869	1,062,252	151,837	731,699	178,716	782,996	215,943	511,900	55,154
2001	2,285,232	461,631	1,564,520	259,081	1,135,500	169,883	776,132	189,484	1,149,733	291,748	788,388	69,597
2002	2,265,075	453,157	1,535,621	276,297	1,065,333	157,011	716,297	192,025	1,199,743	296,146	819,324	84,272
2003	2,039,393	410,041	1,339,061	290,291	938,595	141,248	606,735	190,612	1,100,798	268,793	732,326	99,679
2004	1,901,700	379,706	1,209,995	311,999	853,187	126,473	534,920	191,794	1,048,514	253,233	675,076	120,205
2005	2,026,820	399,330	1,291,117	336,373	876,493	126,244	546,843	203,406	1,150,327	273,085	744,274	132,968
2006	2,338,451	426,838	1,542,584	369,029	1,008,656	140,483	644,129	224,043	1,329,796	286,354	898,455	144,986
2007	3,085,500	760,389	1,857,280	467,832	1,226,179	185,526	755,324	285,329	1,859,321	574,863	1,101,955	182,503
2008	3,832,232	1,490,204	1,848,349	493,680	1,370,803	289,731	777,860	303,212	2,461,429	1,200,472	1,070,489	190,467
2009	3,315,893	1,107,035	1,809,923	398,935	1,080,913	214,478	631,052	235,383	2,234,981	892,556	1,178,872	163,553
2010	2,803,514	855,021	1,618,488	330,006	958,674	189,694	563,005	205,975	1,844,840	665,327	1,055,482	124,031
2011	2,690,921	970,075	1,429,149	291,697	950,623	203,677	550,496	196,451	1,740,298	766,398	878,654	95,247
2012	2,693,169	928,749	1,476,993	287,426	949,287	205,513	540,799	202,975	1,743,881	723,236	936,194	84,451
2013	2,717,808	962,009	1,485,187	270,612	936,830	205,056	535,512	196,262	1,780,978	756,954	949,674	74,350
2014	2,724,641	1,010,783	1,453,071	260,787	906,906	199,533	517,370	190,003	1,817,735	811,250	935,701	70,784
2015	2,754,743	1,226,735	1,273,077	254,931	941,089	346,765	409,582	184,743	1,813,654	879,970	863,496	70,188
2016	2,728,137	2,221,873	375,999	130,266	986,231	607,323	252,880	126,028	1,741,906	1,614,549	123,119	4,238
2017	2,847,304	2,260,750	455,428	131,126	1,006,896	611,421	269,354	126,121	1,840,407	1,649,329	186,074	5,004
2018	3,037,039	2,326,389	565,379	145,271	1,187,271	703,785	346,184	137,302	1,849,769	1,622,604	219,195	7,969
2019	3,632,000	2,720,402	773,976	137,622	1,369,915	779,603	464,214	126,099	2,262,085	1,940,799	309,763	11,523
2020	4,333,280	3,684,888	542,898	105,495	1,530,025	1,156,091	279,534	94,400	2,803,256	2,528,797	263,364	11,094
2021	4,755,698	4,227,970	440,958	86,770	1,479,542	1,196,683	205,386	77,473	3,276,155	3,031,287	235,571	9,297

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 37

Money Market Funds: Net New Cash Flow[1] by Type of Fund

Millions of dollars, annual

	All money market funds				Retail money market funds[2]				Institutional money market funds[3]			
		Taxable				Taxable				Taxable		
Year	Total	Government	Prime	Tax-exempt	Total	Government	Prime	Tax-exempt	Total	Government	Prime	Tax-exempt
1996	$89,422	$20,572	$58,935	$9,915	$52,940	$6,181	$39,559	$7,200	$36,481	$14,391	$19,376	$2,715
1997	103,465	20,129	69,105	14,231	46,743	4,781	32,204	9,757	56,721	15,348	36,901	4,473
1998	235,460	45,178	167,912	22,370	131,071	15,835	100,508	14,728	104,389	29,343	67,404	7,642
1999	193,661	8,486	174,937	10,238	82,195	-757	73,125	9,827	111,466	9,243	101,812	411
2000	159,371	14,412	118,360	26,599	43,582	504	24,423	18,655	115,789	13,908	93,937	7,944
2001	375,226	86,623	267,263	21,340	36,385	13,580	12,762	10,043	338,841	73,043	254,501	11,297
2002	-45,934	-11,131	-51,056	16,254	-80,065	-10,174	-71,219	1,328	34,131	-957	20,163	14,925
2003	-264,019	-50,998	-222,795	9,774	-151,954	-20,609	-126,437	-4,908	-112,065	-30,389	-96,358	14,682
2004	-156,745	-36,125	-139,213	18,592	-88,770	-15,871	-75,331	2,432	-67,975	-20,254	-63,882	16,160
2005	62,084	13,182	28,008	20,895	2,358	-3,652	-4,781	10,791	59,726	16,834	32,789	10,103
2006	245,163	19,615	200,117	25,432	96,543	9,317	71,069	16,157	148,620	10,297	129,048	9,276
2007	654,286	319,240	251,098	83,948	172,620	38,769	83,232	50,618	481,666	280,471	167,866	33,329
2008	637,695	697,443	-73,243	13,495	114,389	98,267	2,099	14,023	523,307	599,176	-75,341	-528
2009	-539,150	-414,948	-28,571	-95,631	-308,406	-104,057	-136,444	-67,906	-230,744	-310,891	107,873	-27,725
2010	-525,064	-253,927	-201,765	-69,372	-124,197	-25,964	-69,829	-28,404	-400,867	-227,962	-131,937	-40,968
2011	-124,102	107,294	-192,742	-38,654	-1,377	20,461	-12,573	-9,265	-122,725	86,833	-180,169	-29,389
2012	-178	-43,343	47,096	-3,930	-1,195	-781	-7,602	7,187	1,017	-42,563	54,697	-11,117
2013	15,132	29,348	2,568	-16,784	-12,115	-1,143	-4,181	-6,792	27,247	30,491	6,748	-9,993
2014	6,235	48,232	-31,890	-10,107	-30,663	-5,843	-18,335	-6,486	36,898	54,075	-13,556	-3,621
2015	21,462	40,682	-13,719	-5,501	5,270	20,579	-11,153	-4,156	16,192	20,103	-2,566	-1,345
2016	-30,238	850,698	-764,848	-116,088	-70,336	169,635	-161,132	-78,839	40,097	681,063	-603,716	-37,249
2017	106,857	30,088	76,287	483	5,394	-8,376	14,039	-269	101,464	38,464	62,248	752
2018	158,798	42,871	103,288	12,640	165,228	83,003	72,009	10,215	-6,429	-40,132	31,279	2,424
2019	552,692	363,656	197,958	-8,923	164,765	67,155	110,080	-12,469	387,926	296,502	87,878	3,547
2020	690,783	834,512	-110,989	-32,740	156,578	252,562	-63,790	-32,194	534,205	581,950	-47,198	-546
2021	422,148	540,953	-100,073	-18,732	-43,526	46,076	-72,702	-16,900	465,674	494,877	-27,371	-1,832

[1] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

[2] Retail money market funds include those offered through a network of broker-dealers, by fund companies without intermediaries, through variable annuity and variable life insurance contracts, and predominantly to employer-sponsored retirement plans. Fund shares sold to both employer-sponsored retirement plans and institutional investors are not included in this category.

[3] Institutional money market funds include those fund shares sold primarily to institutional investors or institutional accounts. This also includes accounts that are purchased by or through an institution such as an employer, trustee, or fiduciary on behalf of its clients, employees, or owners; employer-sponsored retirement plans; and certain qualified individual investors, which include high net worth individuals and fee-based or wrap account participants.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 38

Money Market Funds: Net New Cash Flow and Components of Net New Cash Flow

Millions of dollars, annual

		Sales			Redemptions		
Year	Net new cash flow[1]	New + exchange	New[2]	Exchange[3]	Regular + exchange	Regular[4]	Exchange[5]
1984	$35,080	$640,021	$620,536	$19,485	$604,941	$586,987	$17,953
1985	-5,293	848,451	826,858	21,592	853,743	831,067	22,676
1986	33,552	1,026,745	978,041	48,704	993,193	948,656	44,537
1987	10,072	1,147,877	1,049,034	98,843	1,137,805	1,062,671	75,133
1988	106	1,130,639	1,066,003	64,636	1,130,534	1,074,346	56,188
1989	64,132	1,359,616	1,296,458	63,158	1,295,484	1,235,527	59,957
1990	23,179	1,461,537	1,389,439	72,098	1,438,358	1,372,764	65,594
1991	6,068	1,841,131	1,778,491	62,640	1,835,063	1,763,106	71,957
1992	-16,006	2,449,766	2,371,925	77,841	2,465,772	2,382,976	82,796
1993	-13,890	2,756,282	2,665,987	90,295	2,770,172	2,673,464	96,707
1994	8,525	2,725,201	2,586,478	138,722	2,716,675	2,599,400	117,275
1995	89,381	3,234,216	3,097,225	136,990	3,144,834	3,001,968	142,866
1996	89,422	4,156,985	3,959,014	197,971	4,067,563	3,868,772	198,791
1997	103,465	5,127,297	4,894,195	233,102	5,023,832	4,783,066	240,767
1998	235,460	6,407,155	6,128,721	278,434	6,171,695	5,901,169	270,526
1999	193,661	8,080,824	7,719,176	361,648	7,887,163	7,540,804	346,359
2000	159,371	9,826,639	9,406,256	420,383	9,667,268	9,256,307	410,962
2001	375,226	11,736,664	11,426,177	310,487	11,361,438	11,064,906	296,531
2002	-45,934	12,008,720	11,712,506	296,214	12,054,654	11,783,124	271,530
2003	-264,019	11,176,438	10,952,511	223,927	11,440,457	11,213,867	226,590
2004	-156,745	10,874,604	10,708,112	166,492	11,031,349	10,861,072	170,277
2005	62,084	12,493,634	12,317,489	176,145	12,431,550	12,260,771	170,779
2006	245,163	15,706,879	15,495,624	211,255	15,461,715	15,269,072	192,643
2007	654,286	21,313,538	21,038,467	275,071	20,659,252	20,407,965	251,287
2008	637,695	24,451,072	24,066,025	385,047	23,813,377	23,496,758	316,618
2009	-539,150	18,683,752	18,489,354	194,399	19,222,902	19,012,386	210,516
2010	-525,064	15,771,387	15,670,167	101,220	16,296,451	16,191,894	104,558
2011	-124,102	15,248,864	15,128,126	120,738	15,372,966	15,259,864	113,102
2012	-178	14,291,619	14,211,202	80,417	14,291,797	14,204,776	87,021
2013	15,132	14,976,592	14,867,963	108,629	14,961,461	14,857,692	103,769
2014	6,235	15,316,582	15,237,910	78,672	15,310,347	15,211,292	99,055
2015	21,462	17,658,517	17,560,966	97,551	17,637,056	17,531,891	105,164
2016	-30,238	18,696,811	18,488,537	208,274	18,727,049	18,527,740	199,309
2017	106,857	17,517,259	17,394,583	122,677	17,410,402	17,287,124	123,278
2018	158,798	20,326,725	20,175,934	150,791	20,167,926	20,044,133	123,794
2019	552,692	22,730,843	22,604,716	126,127	22,178,152	22,060,952	117,200
2020	690,783	28,639,866	28,372,914	266,952	27,949,083	27,731,941	217,142
2021	422,148	29,013,325	28,904,834	108,490	28,591,176	28,471,898	119,278

[1] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

[2] New sales are the dollar value of new purchases of mutual fund shares. This does not include shares purchased through reinvestment of dividends in existing accounts.

[3] Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group.

[4] Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares.

[5] Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

DATA SECTION 4

TABLE 39

Money Market Funds: Paid and Reinvested Dividends by Type of Fund

Millions of dollars, annual

	Paid dividends			Reinvested dividends		
Year	Total	Taxable money market funds	Tax-exempt money market funds	Total	Taxable money market funds	Tax-exempt money market funds
1984	$16,435	$15,435	$1,000	$13,730	$13,061	$669
1985	15,708	14,108	1,600	12,758	11,760	998
1986	14,832	12,432	2,400	11,514	9,981	1,533
1987	15,654	12,833	2,821	11,946	10,136	1,810
1988	21,618	17,976	3,642	15,692	13,355	2,337
1989	28,619	24,683	3,936	23,050	20,294	2,756
1990	30,258	26,448	3,810	26,282	23,226	3,056
1991	28,604	25,121	3,483	22,809	19,998	2,811
1992	20,280	17,197	3,083	14,596	12,567	2,029
1993	18,991	15,690	3,302	11,615	10,007	1,607
1994	23,737	20,504	3,233	16,739	14,626	2,113
1995	37,038	32,855	4,183	27,985	24,873	3,111
1996	42,555	38,446	4,108	31,516	28,448	3,068
1997	48,842	44,184	4,658	37,979	34,425	3,554
1998	57,371	52,160	5,211	43,440	39,577	3,863
1999	69,002	63,227	5,775	50,646	46,600	4,046
2000	98,218	90,157	8,061	72,770	66,889	5,881
2001	79,306	73,360	5,946	56,366	51,948	4,418
2002	32,251	29,397	2,854	22,033	19,940	2,093
2003	17,041	15,124	1,917	11,313	9,915	1,398
2004	18,390	15,899	2,491	11,889	10,080	1,809
2005	50,186	43,547	6,638	32,803	27,951	4,852
2006	96,422	85,017	11,405	61,488	53,268	8,220
2007	127,905	113,177	14,729	82,456	71,937	10,519
2008	93,841	82,711	11,130	61,122	53,442	7,680
2009	18,619	16,590	2,030	11,035	9,999	1,037
2010	7,161	6,708	453	4,447	4,196	252
2011	5,237	4,888	349	3,261	3,074	187
2012	6,618	6,345	273	4,212	4,068	144
2013	8,020	7,794	226	5,206	5,089	117
2014	7,565	7,323	242	5,000	4,876	124
2015	7,907	7,703	204	5,328	5,223	105
2016	8,618	8,262	356	5,367	5,169	198
2017	18,503	17,722	781	10,349	9,931	418
2018	42,307	40,739	1,569	22,965	22,145	820
2019	61,382	59,673	1,709	32,894	32,009	885
2020	17,499	16,647	851	9,241	8,806	435
2021	4,080	3,843	237	2,076	1,957	119

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 40

Taxable Government Money Market Funds: Asset Composition as a Percentage of Total Net Assets

Year-end

Year	Total net assets Millions of dollars	US Treasury bills	Other Treasury securities	US government agency issues	Repurchase agreements	Certificates of deposit	Eurodollar CDs	Commercial paper	Bank notes[1]	Corporate notes[2]	Other assets[3]	Average maturity Days
1996	$223,790	17.7%	18.5%	25.4%	35.2%	0.0%	0.1%	0.7%	0.0%	–	2.4%	49
1997	254,223	15.2	17.6	25.1	37.8	0.1	0.0	1.2	0.1	–	2.9	50
1998	312,905	14.3	17.7	30.4	33.4	0.3	0.0	1.7	0.1	0.2%	2.0	52
1999	333,726	17.1	13.0	37.1	28.2	0.1	0.0	1.4	0.1	1.1	1.9	48
2000	367,780	14.2	10.1	32.0	37.9	0.0	0.0	1.6	0.1	1.2	2.9	45
2001	461,631	19.2	9.2	34.5	31.7	0.2	0.0	0.5	0.0	1.5	3.3	55
2002	453,157	20.5	6.4	33.2	35.5	0.1	0.0	0.5	0.0	1.7	2.1	52
2003	410,041	20.0	7.2	33.8	36.3	0.3	0.0	0.9	0.0	1.8	-0.3	52
2004	379,706	21.4	4.9	34.5	35.9	0.2	0.0	0.9	0.1	0.8	1.2	36
2005	399,330	15.8	4.4	28.1	50.0	0.0	0.0	0.2	0.1	0.8	0.5	27
2006	426,838	14.9	4.1	21.5	58.6	0.1	0.0	0.5	0.0	0.1	0.3	32
2007	760,389	16.3	5.1	24.1	53.7	0.3	0.0	0.2	0.0	0.0	0.2	31
2008	1,490,204	30.5	6.2	36.2	26.8	0.0	0.0	0.1	0.1	0.2	-0.1	48
2009	1,107,035	25.6	6.0	35.4	30.6	0.0	0.0	1.0	0.2	0.3	0.7	47
2010	855,021	22.9	8.5	33.3	33.0	0.0	0.0	0.9	0.1	0.4	0.9	47
2011	970,075	23.2	13.2	28.9	31.6	0.0	0.0	1.0	0.1	0.4	1.5	45
2012	928,749	25.6	12.6	26.7	33.0	0.0	0.0	0.7	0.0	0.1	1.4	46
2013	962,009	27.1	14.3	29.4	27.9	0.0	0.0	0.3	0.0	0.1	0.8	48
2014	1,010,783	21.2	13.5	31.3	34.7	0.1	0.0	0.5	0.0	0.1	-1.2	44
2015	1,226,735	17.2	17.2	32.8	32.2	0.0	0.0	0.0	0.0	0.1	0.4	40
2016	2,221,873	17.8	16.8	30.5	33.0	0.0	0.0	0.1	0.0	0.0	1.7	46
2017	2,260,750	19.4	10.5	30.0	39.0	0.0	0.0	0.0	0.0	0.0	1.1	33
2018	2,326,389	23.6	12.0	27.4	38.6	0.0	0.0	0.0	0.0	0.0	-1.7	31
2019	2,720,402	21.4	15.1	27.2	36.1	0.0	0.0	0.0	0.0	0.0	0.2	38
2020	3,684,888	48.5	11.1	17.0	23.5	0.0	0.0	0.0	0.0	0.0	0.0	49
2021	4,227,970	25.5	14.5	9.0	51.2	0.0	0.0	0.0	0.0	0.0	-0.3	35

[1] Prior to 1994, bank notes are included in other assets.

[2] Prior to 1998, corporate notes are included in other assets.

[3] Other assets include banker's acceptances, municipal securities, and cash reserves.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to 100 percent because of rounding.

TABLE 41

Taxable Prime Money Market Funds: Asset Composition as a Percentage of Total Net Assets

Year-end

Year	Total net assets Millions of dollars	US Treasury bills	Other Treasury securities	US government agency issues	Repurchase agreements	Certificates of deposit	Eurodollar CDs	Commercial paper	Bank notes[1]	Corporate notes[2]	Other assets[3]	Average maturity Days
1996	$540,146	0.5%	1.6%	9.0%	5.1%	12.8%	4.3%	51.0%	2.3%	–	13.5%	56
1997	647,005	0.4	0.5	5.4	5.3	14.7	3.7	52.0	3.2	–	14.8	57
1998	854,061	0.4	0.8	9.6	4.6	13.0	3.6	48.7	3.9	5.8%	9.6	58
1999	1,079,435	0.3	0.3	6.8	4.8	12.8	3.9	49.2	3.1	8.4	10.4	49
2000	1,243,598	0.3	0.1	5.9	3.9	11.7	6.6	50.9	3.6	10.5	6.5	53
2001	1,564,520	0.4	0.3	12.3	6.0	14.9	7.3	41.7	1.5	11.1	4.5	58
2002	1,535,621	1.3	0.3	11.8	8.1	13.8	7.0	40.1	1.4	12.0	4.2	54
2003	1,339,061	1.4	0.3	14.9	8.1	11.6	5.1	35.6	2.0	16.2	4.6	59
2004	1,209,995	0.3	0.1	12.0	8.5	14.1	5.7	33.9	2.6	17.9	4.9	41
2005	1,291,117	0.6	0.1	4.1	11.8	14.5	6.0	38.5	2.3	17.9	4.0	38
2006	1,542,584	0.1	0.2	2.9	9.9	13.9	4.4	39.6	2.2	21.6	5.2	49
2007	1,857,280	0.8	0.2	3.1	11.3	15.2	5.5	36.9	4.0	16.7	6.3	44
2008	1,848,349	1.9	0.5	12.7	8.4	21.5	4.7	34.1	3.1	9.3	3.8	47
2009	1,809,923	2.3	1.3	8.9	8.3	31.6	5.5	28.1	2.9	6.4	4.8	50
2010	1,618,488	2.7	1.9	7.8	12.8	28.6	6.7	24.3	3.2	6.2	5.8	44
2011	1,429,149	3.1	3.8	9.2	13.5	28.4	3.1	24.6	2.7	4.5	7.1	40
2012	1,476,993	3.4	4.2	6.9	16.8	29.5	3.0	23.1	3.5	3.5	6.1	45
2013	1,485,187	2.2	4.3	5.7	15.7	33.3	2.3	23.9	2.7	4.2	5.7	46
2014	1,453,071	2.1	2.6	5.1	20.9	35.7	1.7	23.0	1.6	3.9	3.5	44
2015	1,273,077	1.9	2.8	5.1	23.9	34.7	0.9	23.4	2.0	3.0	2.3	31
2016	375,999	5.1	2.0	0.2	18.0	38.6	0.5	26.8	0.3	1.1	7.4	34
2017	455,428	5.2	0.6	0.7	16.5	39.2	0.8	32.5	0.8	0.8	2.9	30
2018	565,379	7.2	0.3	1.0	21.5	33.7	0.3	33.4	0.5	0.8	1.2	30
2019	773,976	5.0	0.6	1.8	25.7	33.2	1.0	30.0	0.8	0.7	1.3	34
2020	542,898	6.5	4.9	0.4	26.3	25.8	0.1	30.9	0.2	0.6	4.2	43
2021	440,958	0.4	0.4	0.1	36.6	26.4	0.1	31.0	0.1	0.5	4.0	41

[1] Prior to 1994, bank notes are included in other assets.
[2] Prior to 1998, corporate notes are included in other assets.
[3] Other assets include banker's acceptances, municipal securities, and cash reserves.
Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to 100 percent because of rounding.

TABLE 42

Active and Index Mutual Funds: Total Net Assets

Millions of dollars, year-end

	Active funds				Index funds				
		Equity				Equity			
						Domestic			
Year	Total	Domestic	World	Hybrid and bond	Total	S&P 500	Other	World	Hybrid and bond
1993	$1,476,839	$603,409	$112,849	$760,581	$27,805	$19,790	$3,338	$1,281	$3,396
1994	1,511,747	664,955	159,099	687,693	32,573	22,752	3,863	2,095	3,863
1995	2,001,233	1,004,386	193,659	803,189	57,042	41,744	6,442	2,846	6,009
1996	2,520,727	1,355,714	281,075	883,938	97,759	73,856	11,241	4,124	8,538
1997	3,231,978	1,870,505	341,039	1,020,434	170,302	129,857	21,221	5,329	13,895
1998	3,899,397	2,349,060	383,675	1,166,662	264,998	201,791	35,051	7,962	20,193
1999	4,834,039	3,107,557	572,058	1,154,425	386,653	283,831	63,386	13,130	26,307
2000	4,726,650	3,024,385	551,225	1,151,041	384,039	267,596	76,875	12,644	26,923
2001	4,313,234	2,623,951	432,899	1,256,384	370,535	244,905	78,121	11,128	36,381
2002	3,787,694	2,002,274	358,318	1,427,101	327,417	197,648	72,766	11,050	45,952
2003	4,904,066	2,731,660	516,789	1,655,616	455,293	269,322	116,850	18,218	50,903
2004	5,637,529	3,160,276	687,966	1,789,287	554,044	312,115	153,530	28,236	60,163
2005	6,243,185	3,423,764	912,929	1,906,491	618,699	327,178	178,211	42,792	70,518
2006	7,309,318	3,873,226	1,293,787	2,142,306	747,468	369,591	228,340	66,647	82,889
2007	8,054,981	4,041,605	1,622,851	2,390,525	854,713	384,127	268,314	95,695	106,577
2008	5,163,824	2,307,274	845,407	2,011,142	619,474	246,056	184,876	67,871	120,672
2009	6,952,214	2,978,298	1,210,576	2,763,340	836,161	319,615	266,136	92,507	157,903
2010	8,003,549	3,351,436	1,414,004	3,238,110	1,017,532	365,375	336,669	122,751	192,736
2011	7,838,893	3,120,253	1,230,812	3,487,828	1,094,489	366,191	368,755	121,445	238,098
2012	9,041,074	3,453,604	1,447,221	4,140,249	1,311,867	417,538	452,583	161,212	280,534
2013	10,586,567	4,511,467	1,812,681	4,262,420	1,734,869	557,113	657,116	215,545	305,095
2014	11,087,726	4,790,777	1,833,277	4,463,672	2,054,679	648,571	789,955	242,924	373,228
2015	10,684,838	4,555,135	1,795,149	4,334,554	2,208,151	654,067	833,231	302,890	417,964

	Active funds					Index funds					
		Equity					Equity				
							Domestic				
Year	Total	Domestic	World	Hybrid	Bond	Total	S&P 500	Other	World	Hybrid	Bond
2016	$10,983,316	$4,641,389	$1,791,760	$1,367,561	$3,182,606	$2,630,826	$763,748	$1,006,430	$363,714	$31,492	$465,442
2017	12,534,516	5,259,934	2,289,271	1,507,930	3,477,381	3,368,178	938,945	1,279,013	524,195	38,239	587,787
2018	11,339,085	4,650,627	1,910,156	1,345,970	3,432,333	3,321,397	908,059	1,241,532	506,039	37,246	628,521
2019	13,365,283	5,612,489	2,282,623	1,532,473	3,937,699	4,279,511	1,187,236	1,639,270	640,731	45,843	766,431
2020	14,740,102	6,287,782	2,549,558	1,566,544	4,336,218	4,809,675	1,345,586	1,890,739	642,979	52,807	877,563
2021	16,464,982	7,223,640	2,773,205	1,806,302	4,661,836	5,743,778	1,689,283	2,343,943	685,124	62,393	963,034

Note: Prior to 2016, separate data for hybrid and bond funds are not available. Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the totals because of rounding.

TABLE 43

Active and Index Mutual Funds: Net New Cash Flow

Millions of dollars, annual

	Active funds				Index funds				
		Equity				Equity			
						Domestic			
Year	Total	Domestic	World	Hybrid and bond	Total	S&P 500	Other	World	Hybrid and bond
1993	$235,621	$83,873	$37,940	$113,808	$6,428	$3,994	$953	$501	$980
1994	71,812	67,891	43,812	-39,890	3,348	1,871	515	436	525
1995	110,393	103,022	11,000	-3,630	11,815	8,820	1,038	512	1,446
1996	205,418	147,780	46,483	11,155	24,780	18,447	3,192	1,033	2,108
1997	236,147	158,823	37,028	40,296	34,847	25,208	5,230	818	3,591
1998	194,318	109,857	5,955	78,505	46,140	30,484	8,992	1,568	5,096
1999	107,619	122,149	8,986	-23,515	61,613	37,141	17,033	2,241	5,197
2000	205,317	235,961	56,229	-86,874	25,611	10,038	11,431	1,664	2,477
2001	104,283	38,542	-24,423	90,165	26,735	8,720	9,252	1,181	7,582
2002	97,098	-41,741	-5,786	144,626	25,256	5,102	11,869	1,669	6,616
2003	181,211	88,866	22,163	70,183	35,234	14,225	16,544	2,199	2,266
2004	169,924	72,502	65,922	31,499	40,130	11,051	16,766	5,661	6,651
2005	164,046	5,518	98,455	60,073	27,877	-934	12,348	8,456	8,007
2006	194,068	-17,691	140,249	71,510	32,758	-7,349	21,358	10,674	8,074
2007	163,000	-96,271	124,821	134,449	61,138	-1,736	29,487	16,915	16,473
2008	-259,583	-180,515	-74,695	-4,373	48,624	6,943	24,060	7,697	9,924
2009	333,334	-52,187	21,644	363,877	59,779	7,636	17,057	7,951	27,135
2010	185,520	-95,228	37,145	243,603	57,508	-1,009	15,174	19,076	24,268
2011	-27,130	-151,297	-13,593	137,760	54,740	-6,621	24,264	17,202	19,895
2012	141,031	-174,185	-8,987	324,203	58,983	-7,325	22,261	15,523	28,525
2013	48,508	-33,908	112,771	-30,356	114,198	4,562	47,457	28,309	33,870
2014	-49,797	-121,365	46,359	25,209	149,133	11,528	50,110	38,403	49,092
2015	-285,536	-216,791	18,976	-87,721	165,852	15,413	31,704	74,932	43,802

	Active funds					Index funds					
		Equity					Equity				
							Domestic				
Year	Total	Domestic	World	Hybrid	Bond	Total	S&P 500	Other	World	Hybrid	Bond
2016	-$390,172	-$319,936	-$68,390	-$44,007	$42,161	$197,057	$29,885	$55,193	$44,975	$2,211	$64,795
2017	-151,255	-306,008	21,284	-30,698	164,167	222,877	7,698	62,188	55,192	2,269	95,529
2018	-501,867	-308,127	-68,687	-91,434	-33,619	155,895	14,505	42,837	62,557	243	35,753
2019	-227,122	-317,878	-82,823	-49,800	223,379	128,521	2,083	13,593	23,272	598	88,975
2020	-383,266	-368,652	-118,052	-83,802	187,240	-100,360	-47,604	-54,531	-55,334	-46	57,154
2021	-100,285	-376,681	-1,731	-14,770	292,897	41,389	-35,231	-7,324	-14,244	1,616	96,572

Note: Prior to 2016, separate data for hybrid and bond funds are not available. Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the totals because of rounding.

TABLE 44

Active and Index Mutual Funds: Number of Funds

Year-end

	Active funds				Index funds				
		Equity				Equity			
						Domestic			
Year	Total	Domestic	World	Hybrid and bond	Total	S&P 500	Other	World	Hybrid and bond
1993	3,544	1,226	300	2,018	70	39	15	6	10
1994	4,280	1,403	416	2,461	82	43	17	7	15
1995	4,641	1,545	521	2,575	87	48	18	7	14
1996	5,153	1,819	661	2,673	105	60	22	7	16
1997	5,530	2,082	756	2,692	132	72	27	12	21
1998	6,126	2,497	874	2,755	156	84	39	15	18
1999	6,519	2,838	925	2,756	196	94	61	20	21
2000	6,826	3,089	1,025	2,712	271	118	101	26	26
2001	6,969	3,358	1,053	2,558	285	124	111	24	26
2002	6,922	3,447	988	2,487	313	128	128	28	29
2003	6,814	3,386	897	2,531	321	124	138	30	29
2004	6,768	3,375	859	2,534	328	123	150	28	27
2005	6,776	3,389	882	2,505	322	115	151	29	27
2006	6,917	3,456	960	2,501	342	118	164	33	27
2007	6,863	3,387	1,022	2,454	354	118	166	37	33
2008	6,873	3,361	1,096	2,416	360	113	172	42	33
2009	6,583	3,148	1,118	2,317	360	104	163	49	44
2010	6,520	3,041	1,142	2,337	368	102	173	50	43
2011	6,559	2,976	1,209	2,374	385	102	181	57	45
2012	6,635	2,946	1,222	2,467	375	94	178	58	45
2013	6,785	2,923	1,288	2,574	375	87	183	58	47
2014	7,015	2,955	1,355	2,705	386	85	195	58	48
2015	7,227	2,981	1,427	2,819	407	84	207	63	53

	Active funds					Index funds					
		Equity					Equity				
							Domestic				
Year	Total	Domestic	World	Hybrid	Bond	Total	S&P 500	Other	World	Hybrid	Bond
2016	7,225	2,938	1,450	715	2,122	421	83	209	71	7	51
2017	7,125	2,889	1,429	727	2,080	452	82	226	78	8	58
2018	7,225	2,909	1,441	770	2,105	494	80	247	88	9	70
2019	7,079	2,817	1,417	761	2,084	494	78	247	89	9	71
2020	6,796	2,671	1,372	709	2,044	493	77	249	87	9	71
2021	6,680	2,603	1,363	690	2,024	496	78	249	87	9	73

Note: Prior to 2016, separate data for hybrid and bond funds are not available. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 45

Active and Index Mutual Funds: Number of Share Classes

Year-end

	Active funds				Index funds				
		Equity				Equity			
						Domestic			
Year	Total	Domestic	World	Hybrid and bond	Total	S&P 500	Other	World	Hybrid and bond
1993	4,479	1,502	379	2,598	74	43	15	6	10
1994	6,340	1,955	620	3,765	96	54	17	10	15
1995	7,517	2,360	834	4,323	110	63	19	11	17
1996	8,754	2,944	1,144	4,666	143	86	25	11	21
1997	10,235	3,705	1,428	5,102	205	115	38	21	31
1998	11,829	4,665	1,744	5,420	252	145	55	25	27
1999	13,160	5,541	1,933	5,686	321	161	98	31	31
2000	14,374	6,325	2,245	5,804	465	217	167	43	38
2001	15,505	7,278	2,453	5,774	517	234	200	43	40
2002	16,363	7,931	2,456	5,976	578	247	229	53	49
2003	16,661	8,035	2,310	6,316	601	245	251	56	49
2004	17,345	8,464	2,302	6,579	633	254	277	55	47
2005	17,860	8,715	2,438	6,707	647	250	287	62	48
2006	18,524	9,050	2,702	6,772	697	255	320	70	52
2007	18,833	9,101	2,944	6,788	734	257	330	83	64
2008	19,483	9,277	3,287	6,919	755	258	336	96	65
2009	19,000	8,771	3,435	6,794	768	239	323	107	99
2010	19,320	8,631	3,592	7,097	786	233	331	121	101
2011	19,675	8,567	3,808	7,300	866	240	367	144	115
2012	20,149	8,532	3,900	7,717	881	227	379	153	122
2013	20,943	8,605	4,118	8,220	892	214	394	156	128
2014	21,819	8,765	4,400	8,654	919	212	432	148	127
2015	22,674	8,947	4,646	9,081	974	211	464	161	138

	Active funds					Index funds					
		Equity					Equity				
							Domestic				
Year	Total	Domestic	World	Hybrid	Bond	Total	S&P 500	Other	World	Hybrid	Bond
2016	22,860	8,950	4,746	2,170	6,994	996	210	464	174	14	134
2017	22,902	8,915	4,697	2,217	7,073	1,053	205	496	189	15	148
2018	22,832	8,829	4,701	2,279	7,023	1,072	194	513	186	15	164
2019	22,398	8,593	4,637	2,242	6,926	1,065	194	505	190	15	161
2020	21,712	8,208	4,502	2,125	6,877	1,072	194	506	191	16	165
2021	21,332	8,045	4,470	2,052	6,765	1,066	195	504	180	17	170

Note: Prior to 2016, separate data for hybrid and bond funds are not available. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 46

Alternative Strategy Mutual Funds: Total Net Assets, Net New Cash Flow, Number of Funds, and Number of Share Classes

Year	Total	Equity funds: Domestic	Equity funds: World	Hybrid funds	Bond funds: Multisector	Bond funds: World	Total	Equity funds: Domestic	Equity funds: World	Hybrid funds	Bond funds: Multisector	Bond funds: World
	Total net assets Millions of dollars, year-end						Net new cash flow* Millions of dollars, annual					
2007	$41,491	$20,331	$1,149	$18,619	$1,392	–	-$780	$445	-$47	-$632	-$546	–
2008	31,276	17,097	431	12,574	1,174	–	-1,237	-1,011	-446	208	12	–
2009	58,317	24,432	3,355	28,892	1,638	–	21,025	7,241	2,572	10,789	424	–
2010	112,951	32,620	1,776	55,078	1,796	$21,680	36,448	7,295	726	14,930	241	$13,256
2011	129,167	33,729	3,987	64,171	2,136	25,143	15,838	-3,747	954	14,798	420	3,412
2012	148,873	41,045	3,897	80,421	2,145	21,366	12,026	6,088	822	4,358	-46	803
2013	220,211	50,193	6,666	110,367	1,862	51,124	64,028	9,804	2,054	23,493	116	28,560
2014	239,457	58,766	7,920	102,491	2,288	67,993	22,443	6,959	1,298	-1,093	123	15,156
2015	227,366	51,931	10,907	110,334	2,337	51,857	-15,162	-5,646	2,618	3,030	-186	-14,978
2016	212,653	49,201	10,349	115,615	1,968	35,520	-23,366	-4,446	-742	198	-445	-17,930
2017	225,544	54,213	12,561	122,297	2,294	34,179	-1,859	440	824	-1,056	313	-2,380
2018	198,072	46,466	10,512	103,542	7,491	30,060	-20,741	-5,407	-960	-12,141	1,611	-3,845
2019	188,544	47,385	7,834	96,551	10,091	26,684	-24,545	-3,182	-3,149	-15,468	2,055	-4,802
2020	173,210	43,148	6,910	90,246	10,553	22,354	-17,440	-4,066	-1,263	-7,531	107	-4,687
2021	214,188	55,580	7,872	114,728	15,128	20,880	25,513	8,581	280	13,906	4,173	-1,428
	Number of funds Year-end						Number of share classes Year-end					
2007	180	125	16	21	18	–	424	294	35	54	41	–
2008	204	138	22	27	17	–	499	320	58	80	41	–
2009	208	132	24	34	18	–	507	300	65	98	44	–
2010	243	139	24	52	20	8	645	330	72	157	48	38
2011	301	149	39	79	23	11	800	350	103	238	52	57
2012	337	154	35	111	23	14	903	361	85	340	52	65
2013	364	153	42	130	23	16	1,012	366	104	412	48	82
2014	437	167	52	159	26	33	1,243	408	145	502	64	124
2015	489	177	57	188	29	38	1,357	422	157	576	66	136
2016	477	179	61	175	30	32	1,318	423	172	535	70	118
2017	473	185	56	175	27	30	1,295	429	146	538	64	118
2018	498	187	64	191	30	26	1,319	428	164	565	69	93
2019	469	180	55	184	29	21	1,242	401	138	554	68	81
2020	415	159	51	156	29	20	1,098	343	128	482	68	77
2021	388	148	47	147	27	19	1,009	312	112	448	64	73

* Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

Note: Alternative strategy mutual funds in this table are funds that employ alternative investment approaches like long/short, market neutral, leveraged, inverse, or commodity strategies to meet their investment objectives. Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 47

Emerging Market Debt Mutual Funds: Total Net Assets, Net New Cash Flow, Number of Funds, and Number of Share Classes

Year	Total net assets Millions of dollars, year-end	Net new cash flow* Millions of dollars, annual	Number of funds Year-end	Number of share classes Year-end
2000	$2,319	-$297	23	47
2001	2,129	-412	24	50
2002	2,585	311	22	46
2003	4,297	691	19	43
2004	5,543	635	19	43
2005	7,590	1,245	18	42
2006	12,962	2,193	23	60
2007	16,966	2,275	28	79
2008	13,589	257	31	98
2009	19,739	2,016	33	104
2010	37,888	14,902	36	126
2011	45,009	12,568	48	165
2012	75,322	19,891	66	217
2013	64,668	-4,701	88	291
2014	58,881	-5,627	103	351
2015	44,812	-10,721	97	355
2016	51,046	502	108	408
2017	66,377	6,936	105	398
2018	63,383	-1,868	104	387
2019	65,813	-5,267	100	356
2020	62,735	-4,790	95	341
2021	66,603	5,791	96	343

* Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

Note: Emerging market debt funds in this table are funds that invest primarily in debt from underdeveloped regions of the world. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 48

Floating-Rate High-Yield Bond Mutual Funds: Total Net Assets, Net New Cash Flow, Number of Funds, and Number of Share Classes

Year	Total net assets Millions of dollars, year-end	Net new cash flow* Millions of dollars, annual	Number of funds Year-end	Number of share classes Year-end
2000	$17,059	-$48	14	28
2001	15,717	-2,617	21	54
2002	10,892	-4,442	20	50
2003	12,815	334	19	47
2004	21,960	7,650	22	60
2005	25,396	2,228	24	68
2006	31,745	5,723	22	79
2007	29,903	-2,303	27	94
2008	15,812	-7,078	29	115
2009	26,365	4,444	29	112
2010	45,292	15,158	31	122
2011	58,228	10,612	37	151
2012	75,117	10,918	40	164
2013	139,492	59,628	50	194
2014	117,323	-21,826	51	198
2015	93,085	-22,059	54	215
2016	104,898	3,450	59	226
2017	119,128	10,493	64	249
2018	116,086	-2,242	69	261
2019	87,436	-35,327	71	261
2020	63,991	-21,761	71	268
2021	102,146	33,975	66	252

* Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

Note: Floating-rate high-yield funds in this table are funds that invest in income-producing senior loans, floating-rate loans, and other floating-rate debt securities, which typically are of below investment grade quality. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 49

Funds of Funds:[1] Total Net Assets, Net New Cash Flow, Number of Funds, and Number of Share Classes

	Total net assets Millions of dollars, year-end				Net new cash flow[2] Millions of dollars, annual			
Year	Total	Equity	Hybrid	Bond	Total	Equity	Hybrid	Bond
2008	$472,491	$45,919	$425,307	$1,265	$60,642	$5,764	$54,422	$457
2009	684,822	59,653	623,135	2,035	70,389	4,195	65,449	745
2010	921,053	86,517	825,135	9,402	118,984	5,423	111,113	2,448
2011	1,041,680	86,156	939,799	15,726	120,262	3,525	111,869	4,868
2012	1,278,164	99,794	1,150,267	28,102	93,827	-2,637	85,595	10,869
2013	1,567,900	137,549	1,392,299	38,051	108,709	12,888	85,467	10,354
2014	1,699,316	136,527	1,515,535	47,254	67,189	11,868	50,451	4,869
2015	1,725,338	146,016	1,525,301	54,021	55,904	8,983	35,709	11,213
2016	1,870,404	160,229	1,653,257	56,918	15,082	-2,457	17,293	245
2017	2,211,547	193,759	1,950,942	66,846	29,428	1,116	21,195	7,117
2018	2,116,116	206,134	1,830,477	79,505	32,619	35,716	-14,857	11,759
2019	2,557,818	266,325	2,194,910	96,583	23,741	12,163	-742	12,321
2020	2,894,956	376,261	2,402,861	115,835	-51,074	12,654	-69,649	5,921
2021	3,240,963	458,788	2,633,372	148,802	29,591	26,480	-30,012	33,122

Year	Number of funds Year-end				Number of share classes Year-end			
2008	845	123	712	10	2,786	310	2,449	27
2009	950	131	809	10	3,056	325	2,714	17
2010	984	147	824	13	3,140	348	2,773	19
2011	1,088	157	910	21	3,401	356	3,002	43
2012	1,153	164	959	30	3,711	405	3,231	75
2013	1,256	174	1,048	34	3,976	412	3,475	89
2014	1,329	175	1,113	41	4,210	415	3,689	106
2015	1,400	179	1,182	39	4,525	439	3,980	106
2016	1,438	174	1,223	41	4,639	433	4,100	106
2017	1,395	167	1,187	41	4,650	421	4,136	93
2018	1,529	184	1,292	53	5,076	443	4,526	107
2019	1,477	170	1,252	55	4,938	404	4,422	112
2020	1,398	163	1,179	56	4,677	394	4,161	122
2021	1,406	164	1,190	52	4,734	399	4,217	118

[1] Funds of funds are mutual funds that invest primarily in other mutual funds.
[2] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.
Note: Components may not add to the total because of rounding.

TABLE 50

Funds of Funds:[1] Components of Net New Cash Flow[2]

Millions of dollars, annual

	Sales											
	New + exchange				New[3]				Exchange[4]			
Year	Total	Equity	Hybrid	Bond	Total	Equity	Hybrid	Bond	Total	Equity	Hybrid	Bond
2008	$212,130	$26,231	$185,116	$783	$182,517	$21,955	$159,843	$719	$29,613	$4,276	$25,273	$64
2009	191,494	20,559	169,870	1,064	172,415	19,080	152,313	1,021	19,079	1,479	17,557	43
2010	291,683	22,583	265,949	3,152	266,449	21,382	241,933	3,134	25,235	1,201	24,016	18
2011	352,223	22,331	322,136	7,756	324,491	21,220	295,536	7,734	27,732	1,111	26,600	21
2012	333,141	20,859	296,537	15,745	307,138	19,495	272,308	15,335	26,003	1,364	24,229	410
2013	402,535	34,946	349,664	17,924	362,477	32,349	312,547	17,581	40,058	2,597	37,117	343
2014	409,286	37,272	355,947	16,067	368,698	35,356	317,738	15,605	40,588	1,916	38,210	462
2015	455,329	41,988	386,441	26,900	403,115	40,030	336,729	26,356	52,214	1,958	49,712	544
2016	407,993	35,416	355,931	16,646	370,392	33,721	320,552	16,119	37,601	1,695	35,379	527
2017	461,610	40,863	396,362	24,386	416,598	38,375	354,431	23,792	45,012	2,487	41,931	594
2018	557,520	89,338	427,420	40,762	501,093	86,257	374,713	40,123	56,427	3,081	52,707	639
2019	530,288	67,547	418,234	44,507	477,044	65,364	367,681	44,000	53,243	2,183	50,553	507
2020	625,393	102,875	455,049	67,469	559,271	99,666	393,629	65,976	66,122	3,209	61,420	1,493
2021	880,306	140,675	651,118	88,513	774,645	136,954	549,988	87,703	105,661	3,721	101,130	810

	Redemptions											
	Regular + exchange				Regular[5]				Exchange[6]			
Year	Total	Equity	Hybrid	Bond	Total	Equity	Hybrid	Bond	Total	Equity	Hybrid	Bond
2008	$151,488	$20,468	$130,694	$326	$121,039	$17,208	$103,554	$277	$30,449	$3,260	$27,140	$49
2009	121,105	16,365	104,421	319	102,853	14,958	87,599	296	18,252	1,406	16,822	24
2010	172,699	17,160	154,836	703	150,704	15,760	134,246	698	21,995	1,400	20,590	6
2011	231,960	18,805	210,268	2,887	203,859	17,323	183,657	2,879	28,101	1,482	26,610	8
2012	239,314	23,496	210,942	4,876	214,017	21,996	187,354	4,667	25,297	1,500	23,587	209
2013	293,826	22,059	264,197	7,571	260,663	20,563	232,805	7,295	33,163	1,495	31,393	276
2014	342,098	25,404	305,496	11,198	290,923	24,027	255,920	10,976	51,175	1,377	49,576	222
2015	399,425	33,005	350,732	15,687	340,271	30,979	293,980	15,312	59,154	2,026	56,752	376
2016	392,912	37,873	338,638	16,400	346,391	35,741	294,654	15,996	46,521	2,131	43,985	405
2017	432,182	39,747	375,167	17,268	378,287	37,388	324,041	16,857	53,895	2,358	51,126	411
2018	524,902	53,622	442,277	29,002	454,341	51,063	374,807	28,471	70,561	2,559	67,470	531
2019	506,547	55,385	418,976	32,186	445,920	52,670	361,400	31,851	60,626	2,715	57,576	335
2020	676,468	90,221	524,698	61,548	591,667	85,586	445,278	60,802	84,800	4,635	79,419	746
2021	850,716	114,194	681,131	55,391	743,765	110,807	578,588	54,369	106,951	3,387	102,542	1,022

[1] Funds of funds are mutual funds that invest primarily in other mutual funds.
[2] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.
[3] New sales are the dollar value of new purchases of mutual fund shares. This does not include shares purchased through reinvestment of dividends in existing accounts.
[4] Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group.
[5] Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares.
[6] Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group.
Note: Components may not add to the total because of rounding.

DATA SECTION 5

TABLE 51

Inflation-Protected and TIPS Mutual Funds: Total Net Assets, Net New Cash Flow, Number of Funds, and Number of Share Classes

Year	Total	Inflation-protected[1]	TIPS[2]	Total	Inflation-protected[1]	TIPS[2]
		Total net assets Millions of dollars, year-end			Net new cash flow[3] Millions of dollars, annual	
2010	$108,539	$98,326	$10,213	$9,277	$7,346	$1,931
2011	133,437	120,065	13,372	11,421	9,900	1,522
2012	150,447	137,116	13,331	7,333	8,289	-956
2013	108,266	95,942	12,324	-31,499	-31,383	-115
2014	107,432	92,360	15,072	-3,096	-5,869	2,773
2015	105,832	86,206	19,627	-1,025	-5,821	4,796
2016	112,516	90,706	21,810	2,194	821	1,373
2017	127,310	99,630	27,680	11,034	5,487	5,548
2018	129,118	95,717	33,401	3,357	-2,232	5,590
2019	146,802	99,766	47,036	7,391	-3,572	10,963
2020	167,197	112,862	54,336	7,801	4,076	3,726
2021	211,724	140,350	71,374	33,365	20,776	12,589
Year		Number of funds Year-end			Number of share classes Year-end	
2010	60	50	10	202	170	32
2011	64	52	12	219	183	36
2012	69	56	13	236	197	39
2013	70	57	13	244	205	39
2014	66	56	10	234	205	29
2015	69	59	10	260	230	30
2016	68	58	10	254	226	28
2017	67	56	11	262	234	28
2018	65	52	13	249	219	30
2019	64	50	14	241	209	32
2020	59	45	14	221	189	32
2021	62	45	17	224	187	37

[1] Inflation-protected funds are funds that invest in inflation-protected or inflation-indexed securities other than TIPS (Treasury inflation-protected securities).

[2] TIPS funds invest in Treasury inflation-protected securities, which are backed by the US government and provide protection against inflation, as measured by the Consumer Price Index, while the interest rate remains fixed.

[3] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 52

Mutual Funds by Market Capitalization: Total Net Assets and Net New Cash Flow by Type of Fund

Millions of dollars

Total net assets
Year-end

Year	Growth funds: Small cap	Growth funds: Mid cap	Growth funds: Large cap	Growth funds: Multi cap	Value funds: Small cap	Value funds: Mid cap	Value funds: Large cap	Value funds: Multi cap	Blend funds: Small cap	Blend funds: Mid cap	Blend funds: Large cap	Blend funds: Multi cap
2008	$67,773	$92,956	$225,621	$275,756	$78,536	$88,564	$339,460	$111,339	$71,867	$108,421	$636,952	$493,320
2009	94,830	128,691	295,499	365,059	104,213	121,026	416,722	140,989	96,987	148,065	816,907	632,496
2010	116,796	160,228	328,298	397,948	130,432	146,329	456,871	159,686	120,735	181,381	922,811	687,874
2011	107,062	146,730	327,840	354,990	120,523	135,549	435,514	156,211	116,873	171,441	911,538	629,798
2012	115,862	161,673	386,105	377,274	133,265	153,001	476,669	175,461	144,896	191,343	1,033,016	698,073
2013	165,727	213,811	508,540	490,623	175,869	209,709	603,072	243,433	207,615	264,980	1,390,132	906,831
2014	158,834	212,629	555,462	506,673	170,461	222,084	642,732	273,493	208,371	286,573	1,606,271	964,255
2015	153,411	200,729	564,488	507,198	145,762	200,521	575,491	258,300	196,747	278,292	1,618,811	924,934
2016	158,591	186,963	525,467	499,648	171,304	224,303	628,797	285,492	235,096	303,366	1,833,827	950,050
2017	193,242	220,219	640,860	594,227	180,191	242,552	673,248	335,859	258,022	342,489	2,227,823	1,123,371
2018	185,147	205,584	618,427	547,362	139,739	191,639	576,735	283,762	228,443	292,452	2,123,526	1,019,934
2019	236,014	266,398	773,551	683,132	161,996	231,083	674,309	343,283	273,378	355,303	2,735,329	1,251,254
2020	311,892	340,928	1,004,316	886,325	162,432	221,383	660,115	325,181	296,152	401,948	3,047,748	1,388,249
2021	315,759	354,192	1,131,329	991,526	197,397	269,347	811,646	377,509	338,924	473,702	3,741,454	1,679,108

Net new cash flow*
Annual

Year	Growth funds: Small cap	Growth funds: Mid cap	Growth funds: Large cap	Growth funds: Multi cap	Value funds: Small cap	Value funds: Mid cap	Value funds: Large cap	Value funds: Multi cap	Blend funds: Small cap	Blend funds: Mid cap	Blend funds: Large cap	Blend funds: Multi cap
2008	-$4,211	-$10,517	-$14,153	-$11,156	-$1,936	-$8,764	-$18,821	-$15,187	-$7,642	-$13,303	-$3,504	-$31,175
2009	1,857	-1,318	-9,446	-9,268	1,123	2,485	-7,468	-3,438	1,383	-695	3,507	-16,832
2010	-1,783	-1,301	-12,770	-19,322	1,313	371	-13,515	-2,275	150	-465	-10,068	-29,813
2011	-5,469	-6,882	6,596	-33,785	-4,981	-4,838	-18,594	-34	-472	-5,487	-12,351	-42,344
2012	-6,430	-5,600	1,615	-38,508	-8,699	-7,281	-24,416	-10,692	-6,223	-5,568	-15,974	-41,273
2013	3,136	-3,007	-11,953	-17,109	-3,930	2,881	-20,912	14,457	7,768	8,045	24,285	-11,461
2014	-10,104	-15,242	-16,485	-28,696	-10,199	-3,929	-21,164	9,045	-7,551	-2,008	40,937	-23,574
2015	-2,921	-11,627	-16,759	-22,499	-13,983	-7,278	-43,290	-5,801	-4,088	-1,541	4,402	-43,780
2016	-10,460	-21,643	-47,458	-33,741	-7,329	-7,417	-24,656	-6,419	-361	-10,513	23,078	-62,681
2017	-4,979	-9,192	-30,498	-33,970	-8,705	-10,534	-53,245	-1,749	-7,551	-12,449	10,319	-48,947
2018	905	-4,456	-20,329	-34,279	-14,771	-20,033	-43,916	-16,176	-3,887	-16,532	-4,688	-38,178
2019	-7,520	-5,449	-35,428	-32,393	-9,450	-10,717	-48,513	-14,284	-13,172	-18,901	-29,994	-48,172
2020	-11,929	-14,456	-44,157	-43,368	-8,194	-17,579	-35,376	-32,974	-19,787	-20,354	-124,424	-75,532
2021	-19,361	-24,318	-69,673	-51,696	-11,030	-11,133	-26,151	-25,913	-12,756	-6,338	-103,821	-55,586

* Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 53

Mutual Funds by Market Capitalization: Number of Funds and Number of Share Classes by Type of Fund

Year-end

	Number of funds											
	Growth funds				Value funds				Blend funds			
Year	Small cap	Mid cap	Large cap	Multi cap	Small cap	Mid cap	Large cap	Multi cap	Small cap	Mid cap	Large cap	Multi cap
2008	235	246	348	207	221	202	393	203	186	147	489	251
2009	212	221	331	190	201	190	368	190	177	138	463	243
2010	206	208	317	181	196	186	356	192	171	132	457	233
2011	203	199	311	169	203	183	338	201	173	138	439	226
2012	198	190	301	164	209	181	328	212	167	134	419	224
2013	191	181	289	165	205	178	320	215	179	129	412	227
2014	188	180	290	160	213	188	323	220	188	127	413	232
2015	182	180	288	160	214	190	322	215	200	133	420	233
2016	181	174	268	158	213	189	321	207	202	134	413	236
2017	179	165	264	155	210	187	322	208	201	133	401	231
2018	178	163	273	160	213	189	320	198	207	137	408	235
2019	178	168	264	156	204	185	303	189	196	133	399	230
2020	170	163	250	149	200	176	284	173	187	129	387	226
2021	168	164	247	140	194	172	279	167	179	133	380	221

	Number of share classes											
	Growth funds				Value funds				Blend funds			
Year	Small cap	Mid cap	Large cap	Multi cap	Small cap	Mid cap	Large cap	Multi cap	Small cap	Mid cap	Large cap	Multi cap
2008	650	697	1,006	545	595	563	1,107	551	471	400	1,301	706
2009	605	637	959	527	559	529	1,023	503	450	377	1,248	716
2010	579	613	919	518	560	540	1,023	516	431	354	1,235	699
2011	590	596	908	491	582	544	993	545	436	375	1,223	695
2012	581	572	895	472	598	550	955	571	438	371	1,182	706
2013	560	559	879	482	593	555	947	602	478	359	1,182	731
2014	560	560	892	462	610	593	978	624	521	348	1,208	735
2015	549	567	908	463	626	602	997	608	569	348	1,237	766
2016	574	562	848	465	645	608	1,008	585	597	372	1,219	771
2017	597	547	822	471	643	615	1,002	619	602	369	1,189	759
2018	585	533	825	489	624	612	987	565	601	364	1,184	754
2019	583	537	788	476	614	591	942	559	571	356	1,162	729
2020	562	524	763	460	604	563	891	516	544	349	1,134	720
2021	557	539	750	445	585	550	879	508	514	355	1,123	699

Note: Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 54

Sector Mutual Funds: Total Net Assets and Net New Cash Flow by Type of Fund

Millions of dollars

	Total net assets Year-end								
Year	Consumer	Financial	Health	Natural resources	Precious metals	Real estate	Technology/ Telecom	Utilities	Other sectors
2000	$1,042	$16,087	$45,921	$2,885	$1,143	$11,675	$103,853	$22,908	$3,917
2001	1,290	13,901	40,545	2,355	1,314	13,509	62,302	17,744	2,940
2002	1,096	10,885	30,087	2,175	2,486	17,744	31,275	11,275	2,082
2003	1,436	13,138	36,803	3,237	4,227	31,652	46,922	13,481	2,412
2004	1,631	12,917	40,147	5,789	4,270	49,925	42,403	19,201	2,974
2005	1,405	11,837	45,398	11,972	7,003	59,158	34,366	28,390	3,189
2006	1,928	12,269	44,744	14,588	9,875	81,329	32,879	34,589	3,950
2007	2,147	8,518	43,967	22,050	12,066	53,738	34,169	45,669	4,826
2008	1,776	4,857	31,337	9,907	7,836	33,503	16,331	23,229	1,766
2009	2,439	5,941	32,440	17,380	14,901	44,126	27,610	30,309	2,986
2010	3,113	6,286	32,507	22,714	23,065	55,120	30,738	33,332	4,597
2011	3,546	4,548	35,884	20,797	17,102	60,155	26,680	34,785	3,906
2012	4,675	5,901	44,105	21,712	15,338	75,340	28,570	35,400	5,001
2013	6,431	9,285	74,767	30,696	6,811	77,363	41,486	40,149	8,173
2014	7,017	9,415	103,447	36,630	6,019	104,288	45,358	41,556	8,969
2015	9,514	10,222	124,538	28,988	4,487	101,459	47,088	32,516	7,006
2016	8,962	12,025	93,121	39,256	6,882	105,701	46,956	38,543	8,014
2017	8,946	14,099	104,465	37,720	7,277	111,353	62,450	35,539	9,727
2018	7,925	10,600	101,961	29,472	3,780	94,209	57,421	29,000	6,633
2019	9,354	10,816	116,209	28,880	5,368	115,765	80,264	32,202	7,722
2020	11,230	8,692	135,174	17,651	7,242	105,174	115,462	26,535	7,134
2021	12,944	13,568	141,862	22,179	6,194	149,549	133,585	30,519	8,995

	Net new cash flow* Annual								
Year	Consumer	Financial	Health	Natural resources	Precious metals	Real estate	Technology/ Telecom	Utilities	Other sectors
2000	-$122	-$534	$9,256	$248	-$214	$339	$43,837	$1,201	-$187
2001	254	-962	236	-169	-29	429	-4,466	-953	-198
2002	11	-1,603	-2,895	-73	484	3,612	-6,207	-2,076	-288
2003	9	-940	-767	336	447	5,177	65	-292	-145
2004	3	-1,535	-387	1,435	398	7,048	-6,165	1,571	148
2005	-209	-1,586	836	3,471	1,027	3,000	-8,541	3,311	121
2006	29	-1,017	-4,137	769	736	4,395	-4,452	556	-49
2007	94	-2,617	-3,378	1,662	-152	-15,282	-2,742	1,992	257
2008	209	96	-3,026	-206	769	1,791	-3,865	-3,412	-488
2009	82	-457	-3,163	1,764	2,253	492	1,768	250	386
2010	101	-626	-2,407	1,493	2,330	1,746	-1,391	-848	724
2011	262	-885	478	1,152	-1,359	1,018	-2,346	701	-286
2012	544	56	1,385	460	112	4,490	-1,515	-1,994	173
2013	794	859	8,582	5,451	-1,433	315	1,972	-1,409	977
2014	47	-256	7,645	5,776	-166	5,279	85	3,783	91
2015	2,235	978	11,007	-688	-37	-4,552	288	-2,585	-1,510
2016	-913	49	-17,602	3,053	325	-771	-3,953	-1,155	154
2017	-1,481	208	-8,496	-2,489	-108	-6,603	-932	-5,234	74
2018	-429	-1,311	-4,071	-2,972	-505	-11,439	-2,858	-4,043	-1,411
2019	-657	-2,471	-10,306	-3,811	87	-3,303	-1,659	-2,446	-461
2020	-588	-1,532	-3,743	-4,349	581	-4,182	-1,326	-2,580	-867
2021	-291	2,209	-6,168	-1,464	-313	2,500	-5,443	-1,434	360

* Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

Note: Sector funds are funds that invest solely in companies that operate in related fields or specific industries. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 55

Sector Mutual Funds: Number of Funds and Number of Share Classes by Type of Fund

Year-end

Number of funds									
Year	Consumer	Financial	Health	Natural resources	Precious metals	Real estate	Technology/ Telecom	Utilities	Other sectors
2000	7	34	38	17	12	74	132	34	16
2001	9	41	57	16	11	75	152	40	17
2002	12	42	63	14	12	79	143	35	19
2003	11	38	58	15	12	91	123	33	19
2004	14	40	59	16	12	94	114	34	20
2005	14	41	53	17	12	93	103	32	19
2006	18	40	57	19	13	97	107	38	23
2007	19	40	52	19	12	96	98	39	25
2008	19	38	48	20	12	92	88	41	22
2009	19	36	41	19	12	90	79	37	23
2010	19	35	38	20	12	87	74	35	21
2011	19	32	34	24	11	83	69	33	21
2012	20	33	35	26	12	84	66	36	24
2013	19	32	35	30	12	87	68	41	24
2014	19	31	34	34	12	87	67	37	24
2015	19	31	34	42	12	90	67	39	24
2016	19	30	34	42	12	89	67	39	23
2017	20	30	34	44	11	89	67	38	23
2018	20	31	37	47	11	89	71	39	23
2019	20	31	39	38	12	86	71	37	23
2020	18	30	38	36	11	83	67	34	27
2021	18	29	38	34	11	83	66	32	27

Number of share classes									
Year	Consumer	Financial	Health	Natural resources	Precious metals	Real estate	Technology/ Telecom	Utilities	Other sectors
2000	12	73	91	29	20	151	283	75	23
2001	17	88	145	28	22	156	345	89	25
2002	22	92	171	25	25	171	345	91	28
2003	19	85	155	32	27	213	288	88	28
2004	27	92	159	33	28	237	277	91	29
2005	26	95	137	37	28	240	259	94	27
2006	33	93	147	40	31	246	265	107	37
2007	41	95	132	46	35	252	248	113	42
2008	42	91	124	51	38	246	218	116	33
2009	42	80	101	49	38	246	199	104	41
2010	42	79	97	53	39	246	190	96	36
2011	43	72	80	70	34	238	184	89	36
2012	47	73	83	80	37	241	182	100	43
2013	41	72	83	92	35	256	188	109	44
2014	41	70	80	101	35	266	181	96	40
2015	39	70	80	135	35	281	180	101	39
2016	37	72	79	136	33	275	178	101	36
2017	39	74	78	141	31	271	181	101	36
2018	39	78	86	149	33	272	189	102	37
2019	41	79	101	128	37	270	191	97	39
2020	37	74	98	119	32	259	183	86	47
2021	37	73	101	117	32	259	179	83	47

Note: Sector funds invest solely in companies that operate in related fields or specific industries. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 56

Target Date and Lifestyle Mutual Funds:[1] Total Net Assets, Net New Cash Flow, Number of Funds, and Number of Share Classes

	Total net assets Millions of dollars, year-end			Net new cash flow[2] Millions of dollars, annual			Number of funds Year-end			Number of share classes Year-end		
Year	Total	Target date[3]	Lifestyle[4]	Total	Target date[3]	Lifestyle[4]	Total	Target date[3]	Lifestyle[4]	Total	Target date[3]	Lifestyle[4]
1997	$14,314	$1,133	$13,181	$4,138	$128	$4,010	77	9	68	141	14	127
1998	25,413	4,158	21,255	6,013	1,097	4,916	110	14	96	199	20	179
1999	34,753	6,492	28,261	4,927	1,318	3,609	130	16	114	239	26	213
2000	39,716	8,215	31,501	7,583	3,553	4,030	146	21	125	279	36	243
2001	45,467	11,761	33,706	7,696	3,884	3,812	147	22	125	351	67	284
2002	49,425	14,433	34,992	8,095	3,768	4,327	171	22	149	431	67	364
2003	81,733	25,374	56,359	19,040	7,252	11,788	192	42	150	499	105	394
2004	129,170	43,135	86,035	28,336	12,851	15,485	241	81	160	740	248	492
2005	202,062	70,476	131,585	57,182	22,122	35,059	325	124	201	1,131	449	682
2006	303,656	113,807	189,849	66,805	33,101	33,704	423	181	242	1,562	770	792
2007	420,912	182,973	237,939	91,919	56,211	35,708	495	246	249	1,834	1,038	796
2008	335,491	159,900	175,591	54,444	41,917	12,527	614	339	275	2,217	1,369	848
2009	486,605	255,655	230,950	52,116	43,441	8,674	644	380	264	2,353	1,516	837
2010	603,991	339,836	264,155	48,609	44,425	4,184	639	378	261	2,330	1,494	836
2011	637,927	375,881	262,046	40,468	41,552	-1,084	677	413	264	2,491	1,623	868
2012	773,388	480,800	292,588	50,272	52,932	-2,660	683	429	254	2,601	1,753	848
2013	976,850	618,061	358,789	55,255	52,941	2,314	763	492	271	2,934	2,034	900
2014	1,098,026	702,702	395,324	41,671	44,588	-2,918	816	542	274	3,086	2,176	910
2015	1,135,315	762,789	372,526	52,766	66,349	-13,582	869	599	270	3,266	2,353	913
2016	1,258,736	886,686	372,050	41,159	64,929	-23,770	913	641	272	3,393	2,469	924
2017	1,513,594	1,115,751	397,843	38,379	67,581	-29,202	882	630	252	3,388	2,503	885
2018	1,448,117	1,100,876	347,242	22,068	53,141	-31,073	931	683	248	3,673	2,809	864
2019	1,777,463	1,395,537	381,926	29,420	57,560	-28,139	915	677	238	3,610	2,789	821
2020	1,984,916	1,586,812	398,103	-35,831	-7,486	-28,345	868	631	237	3,412	2,616	796
2021	2,228,778	1,806,891	421,888	-13,804	9,782	-23,586	894	657	237	3,512	2,707	805

[1] Categories include data for funds that invest primarily in other funds.

[2] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

[3] A target date fund is designed to satisfy investors' investment objectives by a particular target date, which is usually included in the name of the fund. These funds invest in a mix of asset classes and typically rebalance their portfolios to become more conservative and income producing as the fund approaches and passes its target date.

[4] A lifestyle fund maintains a predetermined risk level and generally uses words such as "conservative," "moderate," or "aggressive" in its name to indicate its risk level.

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

DATA SECTION 5

TABLE 57

Target Date and Lifestyle Mutual Funds:[1] Components of Net New Cash Flow[2]

Millions of dollars, annual

	Sales						Redemptions					
	New[3]			Exchange[4]			Regular[5]			Exchange[6]		
Year	Total	Target date[7]	Lifestyle[8]	Total	Target date[7]	Lifestyle[8]	Total	Target date[7]	Lifestyle[8]	Total	Target date[7]	Lifestyle[8]
1997	$5,580	$453	$5,127	$1,067	$0	$1,067	$1,763	$325	$1,438	$746	$0	$746
1998	8,853	1,175	7,679	2,782	1,335	1,448	3,557	589	2,968	2,066	823	1,243
1999	10,660	1,712	8,948	3,142	1,682	1,460	6,099	909	5,190	2,776	1,167	1,609
2000	15,032	3,796	11,236	4,620	2,530	2,089	8,296	1,306	6,990	3,772	1,467	2,305
2001	15,408	4,624	10,784	4,179	2,519	1,660	8,510	1,601	6,909	3,381	1,658	1,723
2002	18,235	5,171	13,064	3,691	2,288	1,403	10,901	2,180	8,721	2,930	1,511	1,419
2003	27,581	7,984	19,597	5,321	3,368	1,953	11,038	2,383	8,655	2,824	1,717	1,107
2004	41,670	16,261	25,409	8,713	5,398	3,315	17,571	6,113	11,458	4,477	2,696	1,781
2005	77,129	26,503	50,625	11,647	7,618	4,029	25,921	8,467	17,454	5,673	3,532	2,141
2006	89,517	39,781	49,736	17,113	11,123	5,990	31,240	12,448	18,792	8,586	5,356	3,230
2007	137,678	76,013	61,665	23,456	17,011	6,445	56,645	28,346	28,300	12,570	8,468	4,102
2008	127,548	78,570	48,978	22,099	16,120	5,979	73,889	38,397	35,492	21,314	14,376	6,938
2009	118,488	80,350	38,138	15,172	11,554	3,618	68,215	39,410	28,805	13,329	9,053	4,277
2010	149,987	107,631	42,356	20,606	16,623	3,983	104,959	67,392	37,567	17,025	12,437	4,588
2011	172,552	131,665	40,887	22,271	17,914	4,356	132,011	90,813	41,198	22,343	17,215	5,129
2012	182,816	143,661	39,155	19,667	15,988	3,680	133,104	92,090	41,014	19,107	14,626	4,481
2013	217,811	171,396	46,415	30,989	25,301	5,687	167,030	121,606	45,424	26,514	22,150	4,364
2014	240,323	186,214	54,109	33,593	28,093	5,500	187,366	129,061	58,306	44,879	40,658	4,221
2015	279,536	239,289	40,247	45,530	40,479	5,051	220,966	166,823	54,143	51,333	46,596	4,737
2016	279,449	241,381	38,068	35,211	30,891	4,320	230,522	169,536	60,986	42,979	37,806	5,172
2017	315,949	286,073	29,876	37,968	33,235	4,733	268,363	209,194	59,169	47,176	42,534	4,642
2018	337,834	309,630	28,204	47,688	42,895	4,792	302,023	243,083	58,940	61,431	56,301	5,130
2019	333,493	305,810	27,683	46,820	42,301	4,519	297,972	242,376	55,596	52,920	48,175	4,745
2020	349,234	316,689	32,545	56,201	50,264	5,937	369,120	309,566	59,554	72,146	64,873	7,273
2021	510,511	476,479	34,032	95,786	90,470	5,315	522,484	465,190	57,294	97,617	91,977	5,639

[1] Categories include data for funds that invest primarily in other funds.
[2] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.
[3] New sales are the dollar value of new purchases of mutual fund shares. This does not include shares purchased through reinvestment of dividends in existing accounts.
[4] Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group.
[5] Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares.
[6] Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group.
[7] A target date fund is designed to satisfy investors' investment objectives by a particular target date, which is usually included in the name of the fund. These funds invest in a mix of asset classes and typically rebalance their portfolios to become more conservative and income producing as the fund approaches and passes its target date.
[8] A lifestyle fund maintains a predetermined risk level and generally uses words such as "conservative," "moderate," or "aggressive" in its name to indicate its risk level.
Note: Components may not add to the total because of rounding.

TABLE 58

Variable Annuity Mutual Funds: Total Net Assets, Net New Cash Flow, and Number of Funds

	Total net assets Millions of dollars, year-end				Net new cash flow* Millions of dollars, annual				Number of funds Year-end			
Year	Total	Equity	Hybrid and bond	Money market	Total	Equity	Hybrid and bond	Money market	Total	Equity	Hybrid and bond	Money market
1997	$473,331	$364,286	$92,571	$16,474	$40,468	$33,743	$6,316	$410	937	535	323	79
1998	615,152	474,961	116,337	23,853	44,252	27,853	10,359	6,040	1,161	702	377	82
1999	818,712	656,759	128,221	33,732	38,580	30,747	-455	8,288	1,350	866	403	81
2000	816,766	652,387	131,341	33,037	48,465	58,318	-7,791	-2,063	1,559	1,049	430	80
2001	741,998	558,512	138,731	44,756	21,374	4,755	7,931	8,687	1,735	1,238	408	89
2002	638,928	438,598	152,260	48,070	-1,066	-12,627	11,234	327	1,897	1,385	420	92
2003	837,408	619,012	182,744	35,652	29,735	34,966	6,919	-12,150	1,885	1,362	435	88
2004	973,911	738,444	202,106	33,361	33,505	33,592	2,595	-2,683	1,881	1,351	443	87
2005	1,072,894	822,105	217,090	33,699	16,404	13,254	4,450	-1,299	1,882	1,356	443	83
2006	1,266,690	975,362	249,135	42,192	29,558	16,878	7,178	5,501	1,922	1,389	452	81
2007	1,397,953	1,052,793	292,437	52,723	31,640	1,631	22,758	7,251	1,895	1,364	453	78
2008	928,217	598,560	254,686	74,971	-6,509	-30,780	4,733	19,538	1,889	1,368	442	79
2009	1,185,483	791,759	336,428	57,296	9,581	-3,518	31,905	-18,806	1,818	1,303	442	73
2010	1,338,049	886,358	403,138	48,554	-2,723	-25,434	32,421	-9,711	1,767	1,256	441	70
2011	1,296,815	800,053	447,917	48,845	-21,538	-48,351	26,705	107	1,726	1,221	442	63
2012	1,439,048	875,135	519,981	43,932	-31,969	-55,387	28,550	-5,132	1,718	1,196	462	60
2013	1,666,420	1,050,628	576,000	39,792	-53,844	-61,406	10,201	-2,638	1,727	1,181	489	57
2014	1,707,189	1,065,283	604,783	37,124	-67,139	-58,550	-5,925	-2,665	1,723	1,151	516	56
2015	1,633,839	1,006,611	588,184	39,043	-65,079	-53,824	-13,061	1,806	1,699	1,127	519	53
2016	1,671,381	1,027,989	607,500	35,892	-81,080	-64,881	-13,880	-2,320	1,675	1,103	529	43
2017	1,824,022	1,156,365	635,461	32,196	-116,180	-89,793	-22,520	-3,867	1,672	1,094	535	43
2018	1,627,967	1,001,289	588,372	38,305	-118,652	-87,351	-36,983	5,681	1,723	1,130	551	42
2019	1,850,367	1,178,558	636,530	35,279	-128,337	-95,541	-29,156	-3,640	1,715	1,115	558	42
2020	1,982,934	1,284,701	657,394	40,839	-128,429	-103,431	-30,382	5,383	1,641	1,068	533	40
2021	2,145,020	1,408,123	701,740	35,157	-172,688	-137,443	-29,669	-5,577	1,625	1,052	533	40

* Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.

Note: This category includes mutual funds offered through variable annuity and variable life insurance contracts. Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 59

Variable Annuity Mutual Funds: Components of Net New Cash Flow[1]

Millions of dollars, annual

	Sales								Redemptions							
	New[2]				Exchange[3]				Regular[4]				Exchange[5]			
Year	Total	Equity	Hybrid and bond	Money market	Total	Equity	Hybrid and bond	Money market	Total	Equity	Hybrid and bond	Money market	Total	Equity	Hybrid and bond	Money market
1997	$105,219	$67,005	$15,290	$22,923	$24,210	$13,017	$2,348	$8,846	$65,375	$33,408	$9,905	$22,061	$23,586	$12,871	$1,417	$9,298
1998	141,460	83,456	23,224	34,780	37,134	18,964	5,502	12,668	99,142	54,025	14,963	30,153	35,199	20,542	3,403	11,254
1999	212,005	130,891	22,002	59,112	40,818	22,080	2,985	15,753	174,368	100,372	22,268	51,728	39,875	21,853	3,174	14,849
2000	334,926	222,937	20,125	91,863	36,326	22,822	1,852	11,652	287,216	166,174	27,481	93,561	35,571	21,267	2,288	12,017
2001	346,078	197,776	33,674	114,628	31,716	15,928	5,185	10,604	325,797	191,027	27,582	107,189	30,623	17,922	3,346	9,356
2002	342,105	183,693	48,156	110,256	34,171	16,428	7,160	10,583	343,917	194,173	38,802	110,942	33,425	18,574	5,281	9,570
2003	282,544	169,038	54,378	59,128	28,791	15,307	5,944	7,541	253,156	136,059	46,629	70,468	28,444	13,320	6,774	8,351
2004	261,716	170,082	46,592	45,042	26,407	14,397	5,711	6,300	228,278	136,344	44,382	47,552	26,340	14,543	5,325	6,472
2005	246,396	162,387	48,220	35,789	19,598	10,599	3,403	5,595	230,118	148,067	44,472	37,579	19,472	11,666	2,702	5,105
2006	280,053	191,694	51,513	36,846	22,318	10,823	3,425	8,070	250,470	173,262	44,348	32,859	22,344	12,376	3,412	6,555
2007	343,148	218,037	73,775	51,336	37,045	19,701	8,247	9,097	317,002	215,663	55,851	45,488	31,550	20,444	3,413	7,694
2008	379,753	197,960	93,625	88,169	25,445	11,112	5,114	9,220	389,892	227,288	90,460	72,145	21,816	12,564	3,546	5,706
2009	312,091	150,896	99,668	61,528	22,650	14,589	3,767	4,294	302,381	154,620	69,530	78,231	22,778	14,382	1,999	6,397
2010	337,018	164,907	139,147	32,964	17,325	6,755	6,742	3,828	339,488	188,579	108,508	42,401	17,578	8,517	4,959	4,102
2011	330,997	144,559	150,218	36,221	16,262	6,816	6,865	2,582	352,546	189,885	125,761	36,900	16,251	9,840	4,616	1,795
2012	309,635	128,110	152,949	28,576	14,231	10,720	2,102	1,410	340,748	181,600	125,324	33,824	15,087	12,616	1,178	1,293
2013	296,629	142,687	123,195	30,748	23,171	14,353	5,960	2,859	348,825	201,524	112,434	34,867	24,819	16,922	6,520	1,377
2014	257,555	132,918	96,435	28,202	9,559	4,669	1,574	3,316	324,111	189,801	103,266	31,044	10,142	6,335	668	3,139
2015	267,072	137,145	97,566	32,361	16,398	6,576	6,187	3,635	332,542	190,548	110,906	31,089	16,007	6,998	5,907	3,102
2016	268,830	124,425	111,315	33,090	12,088	4,949	3,995	3,145	350,396	187,806	126,550	36,040	11,603	6,448	2,640	2,515
2017	203,050	109,670	64,468	28,912	13,401	7,210	2,936	3,256	319,333	197,930	88,557	32,846	13,298	8,743	1,367	3,189
2018	232,435	124,345	70,747	37,343	18,629	10,921	3,683	4,026	351,008	210,479	107,943	32,586	18,707	12,137	3,469	3,102
2019	213,343	105,718	73,596	34,029	11,534	6,458	2,357	2,719	340,964	198,906	103,916	38,143	12,250	8,812	1,193	2,245
2020	366,298	145,054	170,398	50,846	12,032	5,740	3,185	3,107	494,785	245,094	202,523	47,169	11,974	9,131	1,443	1,401
2021	267,068	142,701	82,943	41,424	15,630	13,270	2,131	230	445,323	284,890	113,912	46,522	10,063	8,524	830	709

[1] Net new cash flow is the dollar value of new sales minus redemptions, combined with net exchanges.
[2] New sales are the dollar value of new purchases of mutual fund shares. This does not include shares purchased through reinvestment of dividends in existing accounts.
[3] Exchange sales are the dollar value of mutual fund shares switched into funds within the same fund group.
[4] Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares.
[5] Exchange redemptions are the dollar value of mutual fund shares switched out of funds and into other funds within the same fund group.
Note: This category includes mutual funds offered through variable annuity and variable life insurance contracts. Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 60

Mutual Funds: Total Net Assets Held in Individual and Institutional Accounts

Millions of dollars, year-end

Year	Total	Equity funds	Hybrid funds	Bond funds	Money market funds
Total					
2003	$7,398,752	$3,652,839	$447,530	$1,258,989	$2,039,393
2004	8,093,274	4,342,123	552,250	1,297,200	1,901,700
2005	8,888,704	4,884,874	621,477	1,355,533	2,026,820
2006	10,395,237	5,831,591	731,503	1,493,693	2,338,451
2007	11,995,194	6,412,592	821,474	1,675,628	3,085,500
2008	9,615,530	3,651,483	562,162	1,569,652	3,832,232
2009	11,104,268	4,867,132	717,266	2,203,977	3,315,893
2010	11,824,596	5,590,236	841,672	2,589,174	2,803,514
2011	11,624,303	5,207,456	883,375	2,842,551	2,690,921
2012	13,046,110	5,932,158	1,031,712	3,389,071	2,693,169
2013	15,039,245	7,753,922	1,283,797	3,283,718	2,717,808
2014	15,867,047	8,305,505	1,378,267	3,458,633	2,724,641
2015	15,647,732	8,140,471	1,340,623	3,411,894	2,754,743
2016	16,342,280	8,567,041	1,399,053	3,648,048	2,728,137
2017	18,749,998	10,291,358	1,546,169	4,065,167	2,847,304
2018	17,697,521	9,216,412	1,383,216	4,060,854	3,037,039
2019	21,276,794	11,362,348	1,578,316	4,704,130	3,632,000
2020	23,883,057	12,716,645	1,619,351	5,213,781	4,333,280
2021	26,964,459	14,715,195	1,868,695	5,624,871	4,755,698
Individual accounts					
2003	$6,550,988	$3,463,087	$435,096	$1,166,076	$1,486,729
2004	7,201,792	4,093,108	536,248	1,203,913	1,368,522
2005	7,800,523	4,576,081	600,435	1,233,422	1,390,585
2006	9,095,808	5,436,665	704,116	1,356,239	1,598,787
2007	10,388,177	5,985,978	792,338	1,518,062	2,091,800
2008	7,863,575	3,403,396	544,131	1,425,187	2,490,860
2009	9,288,818	4,499,716	693,427	2,007,495	2,088,180
2010	10,058,143	5,128,286	808,130	2,338,152	1,783,575
2011	9,932,770	4,776,211	844,542	2,577,932	1,734,085
2012	11,235,441	5,445,595	989,491	3,066,544	1,733,812
2013	13,057,873	7,150,391	1,225,976	2,954,818	1,726,689
2014	13,753,319	7,646,265	1,318,258	3,104,943	1,683,853
2015	13,517,349	7,477,025	1,282,847	3,055,286	1,702,190
2016	14,178,627	7,875,755	1,340,486	3,273,368	1,689,018
2017	16,323,643	9,451,776	1,482,320	3,635,644	1,753,904
2018	15,373,799	8,459,241	1,328,730	3,650,405	1,935,423
2019	18,585,584	10,460,885	1,521,256	4,258,204	2,345,239
2020	20,753,879	11,744,630	1,564,023	4,739,352	2,705,875
2021[p]	23,329,151	13,598,820	1,805,316	5,118,596	2,806,419
Institutional accounts*					
2003	$847,764	$189,752	$12,435	$92,913	$552,664
2004	891,482	249,015	16,002	93,287	533,178
2005	1,088,181	308,793	21,042	122,111	636,235
2006	1,299,429	394,925	27,386	137,454	739,664
2007	1,607,017	426,614	29,136	157,567	993,700
2008	1,751,955	248,087	18,031	144,465	1,341,372
2009	1,815,451	367,416	23,839	196,482	1,227,714
2010	1,766,452	461,950	33,542	251,021	1,019,939
2011	1,691,533	431,245	38,832	264,619	956,837
2012	1,810,668	486,563	42,221	322,527	959,357
2013	1,981,371	603,531	57,822	328,900	991,119
2014	2,113,728	659,240	60,010	353,690	1,040,788
2015	2,130,384	663,446	57,776	356,608	1,052,554
2016	2,163,652	691,285	58,567	374,680	1,039,120
2017	2,426,354	839,582	63,849	429,524	1,093,399
2018	2,323,722	757,171	54,486	410,449	1,101,616
2019	2,691,210	901,463	57,061	445,926	1,286,761
2020	3,129,178	972,015	55,328	474,429	1,627,406
2021[p]	3,635,308	1,116,375	63,379	506,275	1,949,279

* Institutional accounts include accounts purchased by an institution, such as a business, financial, or nonprofit organization. Institutional accounts do not include primary accounts of individuals issued by a broker-dealer.

[p] Data are preliminary.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

DATA SECTION 6

TABLE 61

Mutual Funds: Total Net Assets of Institutional Investors by Type of Institution and Type of Fund

Millions of dollars, year-end

Year		Total	Business corporations	Financial institutions[1]	Nonprofit organizations	Other[2]
2010	**Total**	**$1,766,452**	**$740,808**	**$515,832**	**$153,123**	**$356,690**
	Equity	461,950	120,794	108,714	48,861	183,580
	Hybrid	33,542	10,953	10,186	4,262	8,142
	Bond	251,021	53,920	54,883	33,426	108,791
	Money market	1,019,939	555,140	342,048	66,574	56,177
2011	**Total**	**1,691,533**	**681,719**	**488,420**	**146,203**	**375,191**
	Equity	431,245	102,053	95,377	45,129	188,685
	Hybrid	38,832	12,042	11,390	4,795	10,606
	Bond	264,619	51,793	57,984	36,221	118,621
	Money market	956,837	515,830	323,670	60,058	57,278
2012	**Total**	**1,810,668**	**684,190**	**519,321**	**152,047**	**455,111**
	Equity	486,563	108,745	98,475	51,482	227,861
	Hybrid	42,221	11,235	13,949	5,186	11,851
	Bond	322,527	59,297	68,777	40,304	154,149
	Money market	959,357	504,912	338,120	55,074	61,251
2013	**Total**	**1,981,371**	**745,297**	**548,806**	**165,521**	**521,748**
	Equity	603,531	135,702	121,468	63,996	282,364
	Hybrid	57,822	15,135	17,240	7,431	18,015
	Bond	328,900	58,967	70,699	35,563	163,670
	Money market	991,119	535,492	339,399	58,530	57,698
2014	**Total**	**2,113,728**	**799,795**	**579,821**	**180,703**	**553,409**
	Equity	659,240	157,545	125,421	65,242	311,031
	Hybrid	60,010	15,821	18,065	7,170	18,955
	Bond	353,690	69,078	79,370	39,071	166,171
	Money market	1,040,788	557,351	356,964	69,220	57,253
2015	**Total**	**2,130,384**	**824,562**	**578,888**	**182,830**	**544,103**
	Equity	663,446	159,408	127,671	62,301	314,066
	Hybrid	57,776	16,633	19,185	7,621	14,336
	Bond	356,608	72,159	86,100	38,294	160,054
	Money market	1,052,554	576,361	345,932	74,614	55,647
2016	**Total**	**2,163,652**	**719,886**	**660,427**	**196,079**	**587,261**
	Equity	691,285	162,501	129,394	61,745	337,645
	Hybrid	58,567	15,530	19,635	8,401	15,001
	Bond	374,680	78,008	90,439	40,098	166,136
	Money market	1,039,120	463,847	420,959	85,835	68,479
2017	**Total**	**2,426,354**	**833,429**	**744,843**	**211,381**	**636,702**
	Equity	839,582	198,165	169,238	72,575	399,605
	Hybrid	63,849	16,566	21,400	9,631	16,252
	Bond	429,524	86,154	119,636	42,147	181,586
	Money market	1,093,399	532,543	434,568	87,029	39,259
2018	**Total**	**2,323,722**	**751,323**	**790,213**	**215,925**	**566,261**
	Equity	757,171	176,540	160,815	66,352	353,464
	Hybrid	54,486	12,031	19,046	9,160	14,248
	Bond	410,449	81,249	121,016	43,701	164,483
	Money market	1,101,616	481,503	489,336	96,712	34,065
2019	**Total**	**2,691,210**	**916,163**	**894,659**	**274,988**	**605,400**
	Equity	901,463	220,358	198,246	95,944	386,915
	Hybrid	57,061	12,903	18,789	10,898	14,470
	Bond	445,926	93,039	136,385	54,088	162,413
	Money market	1,286,761	589,862	541,239	114,057	41,603
2020	**Total**	**3,129,178**	**1,088,789**	**1,146,352**	**321,005**	**573,031**
	Equity	972,015	260,008	243,414	106,891	361,702
	Hybrid	55,328	13,070	18,362	12,165	11,731
	Bond	474,429	103,634	162,863	61,077	146,855
	Money market	1,627,406	712,077	721,713	140,872	52,743
2021[p]	**Total**	**3,635,308**	**1,259,643**	**1,382,903**	**356,013**	**636,748**
	Equity	1,116,375	320,425	279,165	125,415	391,369
	Hybrid	63,379	15,845	19,534	15,532	12,469
	Bond	506,275	110,313	176,988	66,807	152,167
	Money market	1,949,279	813,060	907,217	148,259	80,743

[1] Financial institutions include credit unions, accounts of banks not held as fiduciaries, insurance companies, and other financial organizations.

[2] Other institutional investors include state and local governments, funds holding mutual fund shares, and other institutional accounts not classified.

[p] Data are preliminary.

Note: Data for funds that invest primarily in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 62

Taxable Money Market Funds: Total Net Assets of Institutional Investors by Type of Institution and Type of Fund

Millions of dollars, year-end

Year		Total	Business corporations	Financial institutions[1]	Nonprofit organizations	Other[2]
2003	**Total**	**$515,134**	**$270,469**	**$194,252**	**$32,211**	**$18,202**
	Institutional funds	428,443	220,562	173,539	22,473	11,870
	Retail funds	86,691	49,907	20,713	9,738	6,333
2004	**Total**	**486,612**	**277,235**	**161,810**	**28,909**	**18,659**
	Institutional funds	406,634	228,594	146,520	18,934	12,586
	Retail funds	79,979	48,641	15,290	9,975	6,073
2005	**Total**	**578,538**	**322,944**	**197,002**	**32,896**	**25,696**
	Institutional funds	485,039	270,892	172,215	23,666	18,266
	Retail funds	93,499	52,052	24,788	9,229	7,430
2006	**Total**	**677,610**	**388,596**	**221,779**	**37,856**	**29,379**
	Institutional funds	581,580	324,089	208,179	26,698	22,613
	Retail funds	96,030	64,507	13,600	11,158	6,766
2007	**Total**	**916,501**	**514,367**	**294,432**	**57,470**	**50,232**
	Institutional funds	804,418	444,130	273,626	43,408	43,254
	Retail funds	112,082	70,237	20,806	14,062	6,977
2008	**Total**	**1,253,699**	**736,035**	**377,962**	**74,803**	**64,899**
	Institutional funds	1,129,758	659,901	350,944	60,631	58,281
	Retail funds	123,941	76,134	27,018	14,171	6,618
2009	**Total**	**1,150,656**	**668,516**	**356,992**	**68,124**	**57,025**
	Institutional funds	1,052,584	606,631	336,161	57,764	52,029
	Retail funds	98,072	61,885	20,831	10,360	4,996
2010	**Total**	**961,045**	**513,038**	**328,890**	**65,252**	**53,865**
	Institutional funds	872,602	459,592	307,203	56,442	49,365
	Retail funds	88,443	53,446	21,687	8,809	4,500
2011	**Total**	**909,996**	**481,122**	**314,508**	**58,686**	**55,680**
	Institutional funds	822,855	428,513	292,479	50,999	50,864
	Retail funds	87,141	52,610	22,029	7,687	4,815
2012	**Total**	**911,741**	**468,745**	**328,348**	**53,961**	**60,686**
	Institutional funds	835,786	422,874	309,051	47,368	56,492
	Retail funds	75,955	45,871	19,297	6,593	4,194
2013	**Total**	**946,812**	**500,390**	**331,652**	**57,568**	**57,202**
	Institutional funds	875,277	452,859	317,151	55,082	50,186
	Retail funds	71,535	47,531	14,501	2,486	7,017
2014	**Total**	**997,505**	**522,774**	**350,393**	**67,706**	**56,632**
	Institutional funds	928,544	476,948	336,690	65,017	49,889
	Retail funds	68,961	45,826	13,703	2,689	6,743
2015	**Total**	**1,010,203**	**542,704**	**339,108**	**73,426**	**54,965**
	Institutional funds	944,012	499,770	326,717	70,402	47,124
	Retail funds	66,192	42,934	12,391	3,024	7,842
2016	**Total**	**1,034,203**	**463,475**	**417,196**	**85,122**	**68,409**
	Institutional funds	969,587	421,179	407,309	81,578	59,521
	Retail funds	64,617	42,296	9,888	3,545	8,888
2017	**Total**	**1,089,781**	**532,239**	**432,063**	**86,325**	**39,155**
	Institutional funds	1,026,576	490,083	423,287	82,819	30,387
	Retail funds	63,205	42,155	8,776	3,506	8,768
2018	**Total**	**1,096,498**	**480,725**	**486,100**	**95,703**	**33,971**
	Institutional funds	1,005,658	435,568	454,371	91,702	24,016
	Retail funds	90,840	45,156	31,728	4,001	9,954
2019	**Total**	**1,280,943**	**588,560**	**537,818**	**113,090**	**41,475**
	Institutional funds	1,194,904	546,305	509,773	109,173	29,653
	Retail funds	86,039	42,256	28,045	3,917	11,822
2020	**Total**	**1,619,099**	**711,348**	**715,569**	**139,824**	**52,358**
	Institutional funds	1,509,166	661,542	677,824	134,411	35,390
	Retail funds	109,933	49,806	37,745	5,414	16,968
2021[p]	**Total**	**1,941,666**	**812,453**	**901,611**	**147,070**	**80,532**
	Institutional funds	1,789,524	744,303	838,981	142,835	63,405
	Retail funds	152,141	68,150	62,630	4,234	17,127

[1] Financial institutions include credit unions, accounts of banks not held as fiduciaries, insurance companies, and other financial organizations.

[2] Other institutional investors include state and local governments, funds holding mutual fund shares, and other institutional accounts not classified.

[p] Data are preliminary.

Note: Institutional funds are sold primarily to institutional investors or institutional accounts. This includes accounts that are purchased by an institution, such as a business, financial, or nonprofit organization. Retail funds are sold primarily to individual investors and include variable annuity mutual funds. Data for funds that invest in other mutual funds were excluded from the series. Components may not add to the total because of rounding.

TABLE 63

Mutual Funds: DC Plan Assets and Estimated Net New Cash Flow by Type of Fund

Billions of dollars

	Total net assets Year-end						Estimated net new cash flow Annual					
		Equity funds						Equity funds				
Year	Total	Domestic	World	Hybrid funds	Bond funds	Money market funds	Total	Domestic	World	Hybrid funds	Bond funds	Money market funds
1997	$775	$527	$56	$73	$58	$60	$67	$45	$11	$7	$6	-$2
1998	993	688	67	91	72	76	77	44	4	6	11	11
1999	1,292	914	109	102	76	92	69	44	8	2	4	11
2000	1,283	884	115	108	80	96	85	68	22	-1	-3	-1
2001	1,225	788	96	118	104	119	90	39	2	12	19	18
2002	1,100	630	85	114	139	132	77	26	6	7	27	12
2003	1,421	865	124	154	155	122	50	37	7	13	4	-11
2004	1,654	1,015	172	194	163	110	72	40	21	22	2	-13
2005	1,876	1,104	229	253	178	112	95	13	27	45	10	(*)
2006	2,218	1,245	334	324	192	124	91	-5	47	36	6	8
2007	2,486	1,297	421	400	217	152	93	-29	35	51	13	22
2008	1,703	753	222	306	224	198	32	-40	-15	30	17	40
2009	2,187	980	321	425	290	170	41	-11	12	33	36	-29
2010	2,501	1,128	369	518	341	146	35	-11	7	35	29	-26
2011	2,467	1,067	320	553	373	154	18	-40	-2	38	15	7
2012	2,841	1,208	376	663	440	154	36	-37	-3	39	38	(*)
2013	3,467	1,616	476	807	418	149	57	14	26	37	-15	-5
2014	3,694	1,756	490	872	437	140	17	-17	24	17	2	-10
2015	3,629	1,689	501	886	412	141	-39	-66	25	23	-21	(*)
2016	3,841	1,774	513	985	440	130	-59	-87	-5	31	12	-10
2017	4,533	2,055	686	1,171	496	123	-5	-88	30	25	36	-7
2018	4,176	1,852	591	1,107	493	133	-64	-80	2	7	-1	8
2019	5,113	2,293	733	1,359	583	146	-22	-99	-2	22	45	11
2020	5,668	2,584	762	1,488	651	183	-227	-153	-91	-48	29	36
2021	6,368	3,060	778	1,673	694	164	-170	-120	-48	-25	42	-19

(*) = between -$500 million and $500 million

Note: Data for funds that invest primarily in other mutual funds are included in the series. Components may not add to the total because of rounding.

TABLE 64

Mutual Funds: IRA Assets and Estimated Net New Cash Flow by Type of Fund

Billions of dollars

	Total net assets Year-end						Estimated net new cash flow Annual					
		Equity funds						Equity funds				
Year	Total	Domestic	World	Hybrid funds	Bond funds	Money market funds	Total	Domestic	World	Hybrid funds	Bond funds	Money market funds
1997	$785	$442	$79	$84	$90	$89	$67	$54	$8	$5	$7	-$6
1998	996	586	93	98	105	114	90	50	6	3	12	19
1999	1,272	796	137	102	106	131	65	53	2	-1	1	10
2000	1,262	780	135	103	107	136	64	68	14	-9	-6	-4
2001	1,202	698	111	109	131	153	69	33	-2	9	20	10
2002	1,088	547	93	110	174	164	56	3	(*)	10	34	9
2003	1,386	747	131	161	196	151	50	30	4	24	7	-15
2004	1,596	860	176	218	204	138	60	19	20	37	-1	-14
2005	1,780	931	231	263	210	144	64	3	24	34	2	1
2006	2,142	1,066	324	340	233	179	110	5	36	31	11	27
2007	2,435	1,124	410	408	269	224	124	-14	33	45	24	36
2008	1,692	652	220	288	259	273	-5	-44	-17	1	14	41
2009	2,114	832	307	372	374	229	24	-18	3	14	69	-44
2010	2,418	947	368	443	456	204	41	-18	11	26	47	-26
2011	2,409	893	313	494	496	213	24	-39	-11	45	21	9
2012	2,752	1,008	354	581	591	217	38	-32	-15	28	53	5
2013	3,322	1,356	444	715	577	230	90	23	24	44	-14	12
2014	3,524	1,477	456	788	584	219	20	-11	16	37	-11	-10
2015	3,493	1,457	461	784	575	216	4	-18	16	9	(*)	-3
2016	3,708	1,546	461	833	623	244	-35	-56	-17	-10	20	29
2017	4,279	1,795	601	940	703	240	-13	-68	16	-9	54	-5
2018	3,994	1,646	514	860	709	266	-55	-47	-8	-32	9	23
2019	4,820	2,050	624	1,001	830	315	(*)	-67	-16	-21	59	45
2020	5,455	2,304	757	1,062	941	391	-27	-142	24	-42	57	76
2021	6,210	2,769	852	1,197	1,026	366	16	-53	17	-5	81	-25

(*) = between -$500 million and $500 million

Note: Data for funds that invest primarily in other mutual funds are included in the series. Components may not add to the total because of rounding.

TABLE 65

Worldwide Regulated Open-End Funds: Total Net Assets

Millions of US dollars, year-end

	2015	2016	2017	2018	2019	2020	2021
World	**$38,242,893**	**$40,632,798**	**$49,289,701**	**$46,683,982**	**$54,862,820**	**$63,035,057**	**$71,052,979**
Americas	**19,618,037**	**21,176,268**	**24,884,360**	**23,630,957**	**28,626,064**	**32,312,216**	**37,530,927**
Argentina	16,435	20,189	29,213	15,902	13,796	22,366	34,562
Brazil	743,530	1,060,904	1,238,039	1,211,436	1,333,617	1,154,476	1,231,450
Canada	954,305	1,080,632	1,292,023	1,163,469	1,412,987	1,603,913	1,918,162
Chile	39,898	46,214	54,744	52,497	59,089	71,509	59,709
Costa Rica	2,533	2,297	2,446	2,119	2,610	3,177	3,628
Mexico	105,940	92,429	109,449	109,729	123,269	124,356	128,444
Trinidad and Tobago	6,983	6,781	7,426	7,131	7,697	N/A	N/A
United States	17,748,413	18,866,822	22,151,020	21,068,674	25,672,999	29,332,419	34,154,972
Europe	**13,732,581**	**14,112,401**	**17,725,155**	**16,476,656**	**18,811,567**	**21,756,109**	**23,326,418**
Austria	151,199	150,939	179,198	165,036	182,076	208,846	221,592
Belgium	92,115	84,294	109,190	96,260	107,366	118,989	140,363
Bulgaria	440	548	770	822	913	1,026	1,383
Croatia	1,975	2,571	2,982	2,977	3,409	2,960	3,242
Cyprus	N/A	248	1,581	2,803	3,578	4,172	6,576
Czech Republic	7,812	8,901	12,823	12,514	15,123	18,693	20,702
Denmark	111,509	116,910	145,837	138,232	151,253	177,180	190,528
Finland	88,351	93,757	110,998	100,005	110,191	126,968	143,215
France	1,832,073	1,880,335	2,313,588	2,074,766	2,202,190	2,536,411	2,527,382
Germany	1,799,754	1,893,722	2,312,051	2,198,505	2,488,705	2,904,419	2,968,443
Greece	4,292	4,111	5,390	4,744	6,328	7,051	8,064
Hungary	14,825	14,582	16,983	15,486	14,591	15,215	14,709
Ireland	2,052,437	2,197,533	2,873,630	2,772,568	3,424,577	4,079,118	4,607,231
Italy	207,867	203,384	260,385	236,504	239,513	259,836	258,819
Liechtenstein	44,938	45,624	54,674	50,871	60,130	67,216	76,690
Luxembourg	3,817,201	3,901,304	4,988,625	4,654,017	5,301,228	6,103,325	6,636,453
Malta	3,808	2,739	3,437	3,180	3,658	3,343	3,930
Netherlands	729,096	771,988	923,269	858,681	960,230	1,110,000	1,029,066
Norway	102,526	113,957	138,737	138,053	151,216	175,013	205,108
Poland	32,286	29,572	41,450	39,769	40,205	42,983	41,408

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TABLE 65 CONTINUED

Worldwide Regulated Open-End Funds: Total Net Assets

Millions of US dollars, year-end

	2015	2016	2017	2018	2019	2020	2021
Portugal	14,685	13,149	15,361	13,572	14,839	18,047	20,509
Romania	5,038	5,072	5,827	4,726	5,263	4,941	5,171
Russia	1,383	2,099	3,207[a]	N/A	N/A	N/A	N/A
Slovakia	6,202	6,205	7,889	7,563	8,329	9,612	10,669
Slovenia	2,448	2,528	3,106	2,750	3,279	3,848	4,763
Spain	274,715	280,826	351,307	324,856	340,883	370,066	389,221
Sweden	279,977	286,412	355,957	336,156	412,641	518,243	609,506
Switzerland	457,162	475,838	558,769	530,976	653,328	749,333	835,188
Turkey	12,887	12,277	13,185	7,407	17,294	17,699	20,403
United Kingdom	1,583,580	1,510,976	1,914,949	1,682,857	1,889,231	2,101,556	2,326,084
Asia and Pacific	**4,770,207**	**5,198,307**	**6,498,424**	**6,421,374**	**7,247,743**	**8,780,919**	**9,998,669**
Australia	1,545,426	1,791,800	2,149,932	1,941,424	2,192,564	2,452,917	2,618,040
China	1,263,130	1,227,540	1,688,981	1,768,597	1,890,624	2,655,130	3,530,077
Chinese Taipei	63,147	61,773	72,835	78,938	128,498	155,702	172,246
India	168,186	216,805	307,387	296,868	345,602	402,140	495,906
Japan	1,335,924	1,470,910	1,759,449	1,804,509	2,064,166	2,392,869	2,414,976
Korea, Rep. of	343,293	370,600	451,886	463,144	538,215	615,076	643,277
New Zealand	41,908	48,623	57,441	59,364	78,447	93,811	109,208
Pakistan	4,164	5,360	4,591	3,653	4,018	5,778	6,230
Philippines	5,029	4,896	5,922	4,877	5,609	7,496	8,709
Africa	**122,068**	**145,822**	**181,762**	**154,995**	**177,446**	**185,813**	**196,965**
South Africa	122,068	145,822	181,762	154,995	177,446	185,813	196,965

[a] Year-end data are not available. Data are as of September.

N/A = not available

Note: Components may not add to the total because of rounding. Regulated open-end funds include mutual funds, exchange-traded funds (ETFs), and institutional funds. ETFs are included in China beginning in 2015. New Zealand and Trinidad and Tobago include home- and foreign-domiciled funds. Funds of funds are excluded except where noted. Croatia, Cyprus, France, India, Ireland, Japan, Luxembourg, Netherlands, Norway, Romania, Slovakia, Spain, and Turkey include funds of funds, but do not provide separate data on funds of funds.

Source: International Investment Funds Association (IIFA)

TABLE 66

Worldwide Regulated Open-End Funds: Number of Funds

Year-end

	2015	2016	2017	2018	2019	2020	2021
World	**106,060**	**110,120**	**113,227**	**118,271**	**122,551**	**125,703**	**131,808**
Americas	**24,995**	**25,691**	**26,563**	**27,707**	**28,726**	**30,290**	**33,039**
Argentina	346	420	487	544	577	550	640
Brazil	8,783	9,224	9,774	10,257	11,099	12,905	15,249
Canada	3,046	3,089	3,169	3,404	3,524	3,574	3,594
Chile	2,500	2,539	2,673	2,726	2,820	2,819	2,892
Costa Rica	65	67	67	71	66	60	65
Mexico	499	524	553	575	553	550	548
Trinidad and Tobago	44	44	45	54	54	N/A	N/A
United States	9,712	9,784	9,795	10,076	10,033	9,832	10,051
Europe	**53,212**	**53,513**	**54,842**	**56,001**	**56,955**	**57,753**	**58,986**
Austria	1,596	1,575	1,580	1,603	1,554	1,600	1,641
Belgium	1,164	962	890	701	587	526	448
Bulgaria	104	110	116	123	121	118	126
Croatia	85	89	94	96	99	96	93
Cyprus	N/A	30	46	69	84	126	166
Czech Republic	128	129	147	159	170	177	190
Denmark	532	558	565	599	621	664	481
Finland	371	372	380	404	389	402	398
France	11,122	10,952	10,860	10,804	10,715	10,802	10,915
Germany	5,604	5,678	5,863	6,149	6,392	6,705	7,067
Greece	139	135	146	175	180	193	196
Hungary	316	306	306	298	286	287	306
Ireland	6,201	6,470	6,831	7,285	7,646	7,948	8,363
Italy	713	760	832	866	912	906	912
Liechtenstein	1,184	1,287	1,367	1,566	1,713	1,900	2,193
Luxembourg	14,108	14,211	14,728	14,898	14,808	14,590	14,445
Malta	130	126	140	142	128	122	125
Netherlands	1,015	1,014	991	931	962	967	862
Norway	700	720	754	865	1,047	836	836
Poland	391	423	428	440	511	561	591

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TABLE 66 CONTINUED

Worldwide Regulated Open-End Funds: Number of Funds

Year-end

	2015	2016	2017	2018	2019	2020	2021
Portugal	171	152	131	136	134	132	135
Romania	74	75	74	78	81	81	86
Russia	340	296	284[a]	N/A	N/A	N/A	N/A
Slovakia	88	87	87	86	94	90	96
Slovenia	109	102	98	98	98	80	77
Spain	2,238	2,342	2,332	2,584	2,651	2,657	2,742
Sweden	471	496	519	528	522	526	542
Switzerland	860	858	918	887	915	916	973
Turkey	387	396	387	398	401	566	795
United Kingdom	2,871	2,802	2,948	3,033	3,134	3,179	3,186
Asia and Pacific	**26,526**	**29,396**	**30,196**	**32,996**	**35,260**	**35,974**	**38,073**
Australia							
China	2,558	3,564	4,361	4,957	5,683	6,770	8,103
Chinese Taipei	602	653	714	774	893	896	909
India	804	795	807	831	927	974	1,039
Japan	9,820	10,915	11,662	12,294	12,863	13,429	14,145
Korea, Rep. of	11,918	12,626	11,828	13,258	13,967	13,014	12,887
New Zealand	609	615	587	629	656	608	699
Pakistan	160	171	177	192	204	218	226
Philippines	55	57	60	61	67	65	65
Africa	**1,327**	**1,520**	**1,626**	**1,567**	**1,610**	**1,686**	**1,710**
South Africa	1,327	1,520	1,626	1,567	1,610	1,686	1,710

[a] Year-end data are not available. Data are as of September.

N/A = not available

Note: Regulated open-end funds include mutual funds, exchange-traded funds (ETFs), and institutional funds. ETFs are included in China beginning in 2015. New Zealand and Trinidad and Tobago include home- and foreign-domiciled funds. Funds of funds are excluded except where noted. Croatia, Cyprus, France, India, Ireland, Japan, Luxembourg, Netherlands, Norway, Romania, Slovakia, Spain, and Turkey include funds of funds, but do not provide separate data on funds of funds.

Source: International Investment Funds Association (IIFA)

TABLE 67

Worldwide Regulated Open-End Funds: Net Sales

Millions of US dollars, annual

	2015	2016	2017	2018	2019	2020	2021
World	**$1,991,930**	**$1,219,960**	**$2,719,726**	**$1,053,387**	**$2,169,899**	**$2,638,487**	**$3,944,759**
Americas	**469,747**	**392,968**	**1,093,165**	**507,936**	**1,243,433**	**1,108,625**	**1,984,018**
Argentina	4,421	3,248	7,018	-1,641	-2,799	14,907	7,631
Brazil	13,531	33,568	86,648	22,893	51,230	27,293	190,975
Canada	95,126	65,000	84,526	53,699	66,204	88,089	199,749
Chile	983	3,269	3,422	5,618	9,145	1,077	-1,623
Costa Rica	427	-511[a]	N/A	N/A	N/A	N/A	N/A
Mexico	-1,226	782	5,612	-1,706	3,012	1,146	5,150
Trinidad and Tobago	-23	17	10	37	234	N/A	N/A
United States	356,508	287,595	905,929	429,036	1,116,407	976,113	1,582,136
Europe	**738,833**	**476,007**	**1,013,035**	**305,327**	**542,595**	**746,059**	**1,025,572**
Austria	3,198	-370	3,510	256	4,302	6,511	17,426
Belgium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bulgaria	(*)	112	116	60	89	28	298
Croatia	249	1,295	-1,969	128	302	-711	478
Cyprus	N/A	45	80	1,293	263	149	2,033
Czech Republic	1,426	1,170	1,417	924	1,641	589	1,990
Denmark	5,945	7,362	5,467	6,719	2,911	8,443	9,930
Finland	7,888	3,437	2,306	-2,989	-419	1,704	10,141
France	24,945	31,991	51,883	-18,345	-39,948	84,008	-11,622
Germany	149,783	108,464	112,770	107,852	110,983	117,600	175,679
Greece	-444	-242	-73	-88	583	107	1,222
Hungary	226	-715	-41	8	-1,031	349	541
Ireland	127,605	154,311	335,902	113,484	317,248	272,045	354,447
Italy	11,339	9,908	22,900	3,357	-9,768	-2,499	7,985
Liechtenstein	993	-448	2,682	1,172	3,991	1,537	5,081
Luxembourg	331,873	110,662	348,648	113,193	148,719	173,565	467,060
Malta	-267	-568	152	76	130	-81	154
Netherlands	-5,826	13,004	-2,340	-19,986	-39,780	29,765	-183,183
Norway	1,733	4,639	9,399	3,994	5,414	5,766	16,345
Poland	465	-1,656	3,467	458	839	477	1,958

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TABLE 67 CONTINUED

Worldwide Regulated Open-End Funds: Net Sales

Millions of US dollars, annual

	2015	2016	2017	2018	2019	2020	2021
Portugal	-94	-844	255	-1,054	782	1,347	2,856
Romania	378	80	59	-888	454	-747	558
Russia	35	238	917[b]	N/A	N/A	N/A	N/A
Slovakia	420	104	622	260	354	320	1,350
Slovenia	86	15	41	-9	87	179	571
Spain	26,866	15,728	23,479	10,072	1,795	1,523	30,135
Sweden	8,136	2,317	9,385	6,086	11,978	8,284	19,766
Switzerland	31,736	17,466	20,418	15,171	38,476	20,787	42,459
Turkey	-160	748	395	-2,409	7,762	-213	7,124
United Kingdom	10,299	-2,246	61,188	-33,468	-25,562	15,227	42,790
Asia and Pacific	**775,461**	**339,954**	**603,409**	**233,252**	**375,271**	**771,176**	**929,421**
Australia	N/A	N/A	N/A	N/A	N/A	N/A	N/A
China	467,137	122,744	395,965	8,545	140,251	566,560	679,284
Chinese Taipei	7,124	-3,597	-503	11,770	32,589	8,270	10,273
India	33,195	42,892	40,465	18,051	33,177	29,031	35,858
Japan	235,590	138,354	157,018	158,912	99,329	149,127	147,080
Korea, Rep. of	29,190	35,337	6,336	32,912	65,188	10,250	51,551
New Zealand	2,966	3,839	3,104	3,706	3,841	5,126	3,113
Pakistan	-68	264	536	-182	558	1,602	812
Philippines	327	121	488	-462	338	1,210	1,450
Africa	**7,889**	**11,031**	**10,117**	**6,872**	**8,600**	**12,627**	**5,748**
South Africa	7,889	11,031	10,117	6,872	8,600	12,627	5,748

[a] Data are only for October through December.

[b] Data are only for January through September.

(*) = between -$0.5 million and $0.5 million

N/A = not available

Note: Net sales is a calculation of total sales minus total redemptions plus net exchanges. Components may not add to the total because of rounding. Regulated open-end funds include mutual funds, exchange-traded funds (ETFs), and institutional funds. ETFs are included in China beginning in 2015. New Zealand and Trinidad and Tobago include home- and foreign-domiciled funds. Funds of funds are excluded except where noted. Croatia, Cyprus, France, India, Ireland, Japan, Luxembourg, Netherlands, Norway, Romania, Slovakia, Spain, and Turkey include funds of funds, but do not provide separate data on funds of funds.

Source: International Investment Funds Association (IIFA)

DATA SECTION 8

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