INVESTMENT COMPANY INSTITUTE®

2016 INVESTMENT COMPANY Fact Book

A Review of Trends and Activities in the U.S. Investment Company Industry

56th edition

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2015 Facts at a Glance

Total worldwide assets invested in regulated open-end funds*	**$37.2 trillion**
U.S. investment company total net assets	**$18.1 trillion**
Mutual funds	$15.7 trillion
Exchange-traded funds	$2.1 trillion
Closed-end funds	$261 billion
Unit investment trusts	$94 billion
U.S. investment companies' share of:	
U.S. corporate equity	31%
U.S. municipal securities	26%
Commercial paper	40%
U.S. government securities	11%
U.S. household ownership of funds	
Number of households owning funds†	54.9 million
Number of individuals owning funds†	93.1 million
Percentage of households owning funds†	44.1%
Median mutual fund assets of mutual fund–owning households	$120,000
Median number of mutual funds owned	3
U.S. retirement market	
Total retirement market assets	$24.0 trillion
Percentage of households with tax-advantaged retirement savings	60%
IRA and DC plan assets invested in mutual funds	$7.1 trillion
U.S. investment company industry employment	**174,000 employees**

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

† This category represents registered investment companies.

2016
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The Investment Company Institute (ICI) is the national association of U.S. investment companies. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers.

Fifty-sixth edition

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LETTER FROM THE Chief Economist

LETTER FROM CHIEF ECONOMIST BRIAN REID

Recently, I was thinking about a question you may have asked: whether it is more fuel efficient to cool a car during a drive by running its air conditioner or by rolling its windows down and leaving the air conditioner off. The answer, just like many things in life, isn't a simple one. It depends on the car's speed and its design: the faster you're driving, or the more aerodynamic your car, the better off you are rolling up the windows and using the air conditioner.

At ICI, we are often asked questions about complex topics that don't have simple answers. President Harry Truman's famous quip about wanting a "one-handed" economist ("All my economists say, 'On the one hand…on the other hand'") sometimes crosses my mind. And yet, Truman's two-handed economists were doing their jobs when answering questions about complex topics.

We live in a complicated world. Although we strive for one-handed answers when possible, it's not always what our world allows. Sometimes simple answers can be fundamentally wrong and lead to public policies that can do more harm than good.

At ICI, we are fortunate to work for an organization whose members support careful, comprehensive, evidence-based analysis of complex public policy issues.

This winter, ICI published a book authored by one of my colleagues, Peter Brady. *How America Supports Retirement* tackles a complex topic through substantive, painstaking work. Peter challenges the conventional wisdom about who benefits from tax deferral and Social Security, two mechanisms that the federal government uses to help Americans prepare for retirement. As he points out, the combined effect of these two programs is poorly understood, leading to the false notion of an "upside-down" retirement system that benefits only the wealthy.

Discussions of retirement policy often ignore the substantial benefits that Social Security provides to households with low and moderate lifetime incomes. These discussions also focus on the reduction in taxes from tax deferral while ignoring the higher taxes workers will pay in retirement when they draw down their savings or receive income from a defined benefit plan. Peter's innovative work illustrates that "evaluated as a whole, the U.S. retirement system is progressive," with lifetime benefits proportionately higher for workers with lower lifetime earnings.

Why is this holistic approach important? Because "who benefits from the retirement system?" is a complex question, and simple answers can lead to harmful policies. As Peter explains, recent tax proposals could actually make the system less fair. For example, several prominent proposals would further limit employee contributions to retirement plans or change the tax treatment of these contributions. Such changes would disadvantage private-sector workers—who rely more on defined contribution plans than do public-sector workers—as well as workers who save on their own in an IRA or whose employers do not make contributions to their retirement plans.

In another line of substantive ICI research, my colleague Shelly Antoniewicz has shown that the risks of using derivatives are often misunderstood. As she points out, one common misperception is that "funds that use derivatives are leveraged, and therefore are riskier than funds that don't use derivatives." But a fund's use of derivatives does not necessarily translate into leverage. Leverage is a measure of how a fund increases or amplifies the gains or losses that its shareholders are exposed to. As Shelly concludes, a fund that makes greater use of derivatives may be "more risky, less risky, or equally risky as a fund that has no exposure to derivatives."

In addition, derivatives have many benefits for funds and their investors, including hedging risk, enhancing liquidity, managing cash, or gaining or reducing exposure to certain markets or asset classes. Such activities may be more difficult, or costly, or even impossible to execute with direct holdings of securities alone. Therefore, a fund's total exposure to derivatives does not provide a very useful measure of its risks. Indeed, such a simple measure of risk could lead policymakers, regulators, and investors astray.

These two examples of ICI analysis are good reminders that in a complex world, simple answers don't always work. At times the dialogue may frustrate policymakers who want a quick and simple solution, but an informed conversation among legislators, regulators, and stakeholders is necessary to understand the nuances and intricacies of a problem and its solutions. It is our job as economists to use our comprehensive analysis to find answers to questions and to help avoid harmful outcomes.

The 56th *Investment Company Fact Book* is yet another ICI contribution to a discussion that leads to better public policies that affect funds, their investors, and financial markets. I hope that it helps you in your quest to find comprehensive, evidence-based analysis to address today's vexing policy questions. Thank you for your continued interest in our research and publications.

ICI RESEARCH STAFF AND PUBLICATIONS

ICI Senior Research Staff

CHIEF ECONOMIST

Brian Reid leads the Institute's Research Department. The department serves as a source for statistical data on the investment company industry and conducts public policy research on fund industry trends, shareholder demographics, the industry's role in U.S. and international financial markets, and the retirement market. Before joining ICI in 1996, Reid served as an economist at the Federal Reserve Board of Governors. He has a PhD in economics from the University of Michigan and a BS in economics from the University of Wisconsin–Madison.

SENIOR DIRECTOR OF INDUSTRY AND FINANCIAL ANALYSIS

Sean Collins heads ICI's research on the structure of the mutual fund industry, industry trends, and the broader financial markets. Collins, who joined ICI in 2000, is responsible for research on the flows, assets, and fees of mutual funds, as well as a research initiative to better understand the costs and benefits of laws and regulations governing mutual funds. Before joining ICI, Collins was an economist at the Federal Reserve Board of Governors and at the Reserve Bank of New Zealand. 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 RETIREMENT AND INVESTOR RESEARCH

Sarah Holden leads the Institute's research efforts on investor demographics and behavior and retirement and tax policy. Holden, who joined ICI in 1999, heads efforts to track trends in household retirement saving activity and ownership of funds as well as other investments inside and outside retirement accounts. 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.

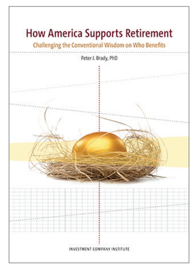
ICI Research Department

The ICI Research Department consists of 39 members, including economists and research analysts. This staff collects and disseminates data for all types of registered investment companies, offering detailed analyses of fund shareholders, the economics of investment companies, and the retirement and education savings markets.

2015 ICI Research and Statistical Publications

ICI is the primary source of analysis and statistical information on the investment company industry. In 2015, the Institute's Research Department released more than 180 statistical reports examining the broader investment company industry as well as specific segments of the industry: money market funds, closed-end funds, exchange-traded funds, and unit investment trusts. In addition to the annual *Investment Company Fact Book*, ICI released 20 research and policy publications in 2015, examining the industry and its shareholders.

Books



In a new ICI book written in 2015, *How America Supports Retirement: Challenging the Conventional Wisdom on Who Benefits*, Senior Economist Peter J. Brady dispels myths about tax deferral and details how the current structure of the U.S. retirement system is progressive and provides benefits to all American workers. Brady's innovative work was highly praised and its findings bear directly on today's pressing policy debates. The book and related materials are available at **www.ici.org/whobenefits**.

The *Investment Company Fact Book* remains one of ICI Research's most visible products—garnering more than 38,000 visits and downloads in 2015. In its 56th edition, this ICI publication continues to provide the public and policymakers with a comprehensive summary of ICI's data and analysis. The *Fact Book* is available at **www.icifactbook.org** in both PDF and HTML formats. The HTML version contains downloadable data for all charts and tables.

Papers

INDUSTRY AND FINANCIAL ANALYSIS

» *The Role and Activities of Authorized Participants of Exchange-Traded Funds*, March 2015

» "The Closed-End Fund Market, 2014," *ICI Research Perspective*, April 2015

» "Regulated Funds, Emerging Markets, and Financial Stability," *ICI Global Research Perspective*, April 2015

INVESTOR RESEARCH

- » "American Views on Defined Contribution Plan Saving," *ICI Research Report*, January 2015
- » "Profile of Mutual Fund Shareholders, 2014," *ICI Research Report*, February 2015
- » "The IRA Investor Profile: Traditional IRA Investors' Activity, 2007–2013," *ICI Research Report*, July 2015
- » "The IRA Investor Profile: Roth IRA Investors' Activity, 2007–2013," *ICI Research Report*, July 2015
- » "Characteristics of Mutual Fund Investors, 2015," *ICI Research Perspective*, November 2015
- » "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015," *ICI Research Perspective*, November 2015

RETIREMENT RESEARCH

- » "The Role of IRAs in U.S. Households' Saving for Retirement, 2014," *ICI Research Perspective*, January 2015
- » "Defined Contribution Plan Participants' Activities, First Three Quarters of 2014," *ICI Research Report*, February 2015
- » "Defined Contribution Plan Participants' Activities, 2014," *ICI Research Report*, April 2015
- » *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at ERISA 403(b) Plans,* June 2015
- » "The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2014," *ICI Research Perspective*, August 2015
- » "Defined Contribution Plan Participants' Activities, First Quarter 2015," *ICI Research Report*, August 2015
- » "What Does Consistent Participation in 401(k) Plans Generate? Changes in 401(k) Account Balances, 2007–2013," *ICI Research Perspective*, September 2015
- » "Who Benefits from the U.S. Retirement System," *ICI Research Perspective*, November 2015
- » "Defined Contribution Plan Participants' Activities, First Half 2015," *ICI Research Report*, November 2015
- » *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2013*, December 2015

*ICI's papers and more are available at **www.ici.org/research.***

Analysis and Commentary: *ICI Viewpoints*

In addition to research papers, ICI staff produce analysis and commentary for the Institute's blog, *ICI Viewpoints*. Below are some examples of the analysis published in 2015. Please visit **www.ici.org/viewpoints** to find these and more.

» The *Wall Street Journal*'s Dangerous Disservice to Investors

» Getting the Numbers Right on Investment Advice for Retirement Savers

» The IMF Is Entitled to Its Opinion, but Not to Its Own Facts

» On Fiduciary Rule, *New York Times* Relies on Fatally Flawed Research

» Correcting a Distorted Picture of Retirement Resources

» The IMF on Asset Management: Which Herd to Follow?

» High-Yield Bond Mutual Fund Flows: Some Perspective

» Changes to Money Market Funds Are Showing Up in Data

» Does Liquidity in ETFs Depend Solely on Authorized Participants?

» *New York Times* Paints False Picture of Funds' Emerging Market Investments

» Why Long-Term Fund Flows Aren't a Systemic Risk: Past Is Prologue

» The IMF Quietly Changes Its Data, but Not Its Views

» The IMF on Asset Management: Handle Empirical Results with Care

» Ignore the IMF's Uninformed Call for a Third Round of Reforms to U.S. Money Market Funds

» Federal Reserve Reverse Repo Facility Helps Stabilize Short-Term Money Markets

» Small Savers at a Loss

» Why Long-Term Fund Flows Aren't a Systemic Risk: Multi-Sector Review Shows the Same Result

» U.S. Bond ETFs Resilient on August 24

» More Unfounded Speculation on Bond ETFs and Financial Stability

» High-Yield Bond ETFs: A Source of Liquidity

Statistical Releases

TRENDS IN MUTUAL FUND INVESTING

» A monthly report that includes mutual fund sales, redemptions, assets, cash positions, exchange activity, and portfolio transactions for the period.

ESTIMATED LONG-TERM MUTUAL FUND FLOWS

» A weekly report that provides aggregate estimates of net new cash flows to equity, hybrid, and bond mutual funds.

MONEY MARKET FUND ASSETS

» A weekly report on money market fund assets by type of fund.

MONTHLY TAXABLE MONEY MARKET FUND PORTFOLIO DATA

» A monthly report based on data contained in SEC Form N-MFP that provides insights into the aggregated holdings of prime and government money market funds and the nature and maturity of security holdings and repurchase agreements.

RETIREMENT MARKET DATA

» A quarterly report that includes individual retirement account and defined contribution plan assets and mutual fund assets held in those accounts by type of fund.

CLOSED-END FUND DATA

» A quarterly report on closed-end fund assets, number of funds, issuance, and number of shareholders.

EXCHANGE-TRADED FUND DATA

» A monthly report that includes assets, number of funds, issuance, and redemptions of ETFs.

UNIT INVESTMENT TRUST DATA

» A monthly report that includes the value and number of new trust deposits by type and maturity.

WORLDWIDE REGULATED OPEN-END FUND DATA

» A quarterly report that includes assets, number of funds, and net sales of funds in countries worldwide.

These and other ICI statistics are available at ***www.ici.org/research/stats****. To subscribe to ICI's statistical releases, visit* ***www.ici.org/pdf/stats_subs_order.pdf.***

Acknowledgments

Publication of the *2016 Investment Company Fact Book* was directed by Chris Plantier, senior economist, and Judy Steenstra, senior director of statistical research, working with Miriam Bridges, editorial director, Candice Gullett, senior copyeditor, and Jodi Weakland, design director. Contributors from ICI's research team who developed and edited analysis, text, and data are Shelly Antoniewicz, Steven Bass, Mike Bogdan, James Duvall, Emily Gallagher, Sheila McDonald, Doug Richardson, Julieth Saenz, Dan Schrass, and Erin Short.

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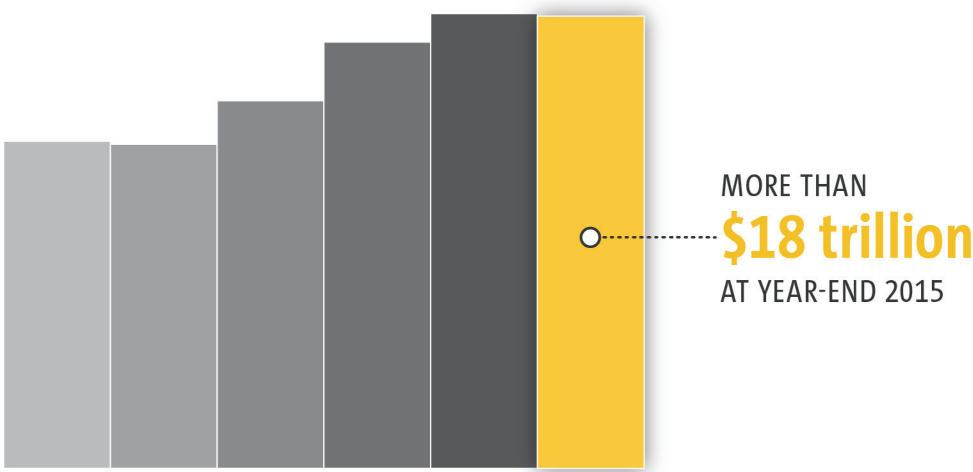
CHAPTER ONE

U.S.-Registered Investment Companies

The largest segment of the asset management business in the United States is made up of registered investment companies. U.S.-registered investment companies play a major role in the U.S. economy and financial markets, and a growing role in global financial markets. These funds managed $18.1 trillion in assets at year-end 2015, largely on behalf of more than 90 million U.S. retail investors. The industry has experienced strong growth over the past quarter century from asset appreciation and strong demand from households due to rising household wealth, the aging U.S. population, and the evolution of employer-based retirement systems. Funds supplied investment capital in securities markets around the world and were among the largest groups of investors in the U.S. stock, commercial paper, and municipal securities markets.

The assets of U.S.-registered investment companies exceeded $18 trillion in 2015 for the second year in a row



This chapter provides a broad overview of U.S.-registered investment companies—mutual funds, closed-end funds, exchange-traded funds, and unit investment trusts—and their sponsors.

Investment Company Assets in 2015

U.S.-registered investment companies* managed $18.1 trillion in assets at year-end 2015 (Figure 1.1), approximately $0.1 trillion less than at year-end 2014. Markets were volatile in 2015, and returns did little to change total net assets in aggregate. International stock markets† posted modest negative returns in dollar terms, for example, contributing to the slight decrease in total net assets of funds invested in equity markets. The poor dollar returns on European stock markets, relative to positive local currency returns, were because of U.S. dollar appreciation against the euro, which lowers the value of equity and bond funds holding unhedged euro-denominated assets.

The U.S. mutual fund and exchange-traded fund (ETF) markets—with $17.8 trillion in assets under management at year-end 2015—remained the largest in the world, accounting for 48 percent of the $37.2 trillion in regulated open-end fund assets worldwide (Figure 1.2).‡

The majority of U.S. mutual fund and ETF assets at year-end 2015 were in long-term funds, with equity funds comprising 56 percent. Within equity funds, domestic funds (those that invest primarily in shares of U.S. corporations) held 41 percent of total assets and world funds (those that invest significantly in shares of non-U.S. corporations) accounted for 15 percent. Bond funds held 21 percent of U.S. mutual fund and ETF assets. Money market funds, hybrid funds, and other funds—such as those that invest primarily in commodities—held the remainder (23 percent).

* The term *investment companies* or *U.S. investment companies* will be used at times throughout this book in place of *U.S.-registered investment companies*. U.S.-registered investment companies are open-end mutual funds, closed-end funds, exchange-traded funds, and unit investment trusts.

† As measured by the MSCI All Country World Daily ex-U.S. Gross Total Return Index.

‡ The International Investment Fund Association has expanded its survey of fund assets globally to include some funds not previously captured. Regulated open-end fund assets outside the United States increased by $3.6 trillion in the fourth quarter of 2014 due to the broader survey; see www.ici.org/research/stats/worldwide/ww_q1_15_explanation.

FIGURE 1.1

Investment Company Total Net Assets by Type

Billions of dollars; year-end, 1998–2015

	Mutual funds[1]	Closed-end funds[2]	ETFs[3]	UITs	Total[4]
1998	5,525	156	16	94	5,790
1999	6,846	147	34	92	7,119
2000	6,965	143	66	74	7,247
2001	6,975	141	83	49	7,248
2002	6,383	159	102	36	6,680
2003	7,402	214	151	36	7,803
2004	8,096	253	228	37	8,614
2005	8,891	276	301	41	9,509
2006	10,398	297	423	50	11,168
2007	12,000	312	608	53	12,974
2008	9,621	184	531	29	10,365
2009	11,113	223	777	38	12,151
2010	11,833	238	992	51	13,114
2011	11,632	242	1,048	60	12,983
2012	13,057	264	1,337	72	14,729
2013	15,051	279	1,675	87	17,091
2014	15,875	289	1,974	101	18,240
2015	15,652	261	2,100	94	18,107

[1] Mutual fund data do not include mutual funds that invest primarily in other mutual funds.

[2] Closed-end fund data include preferred share classes.

[3] ETF data prior to 2001 were provided by Strategic Insight Simfund. ETF data include investment companies not registered under the Investment Company Act of 1940 and exclude ETFs that primarily invest in other ETFs.

[4] Total investment company assets include mutual fund holdings of closed-end funds and ETFs.

Note: Data are for investment companies that report statistical information to the Investment Company Institute. Assets of these companies are 98 percent of investor assets. Components may not add to the total because of rounding.

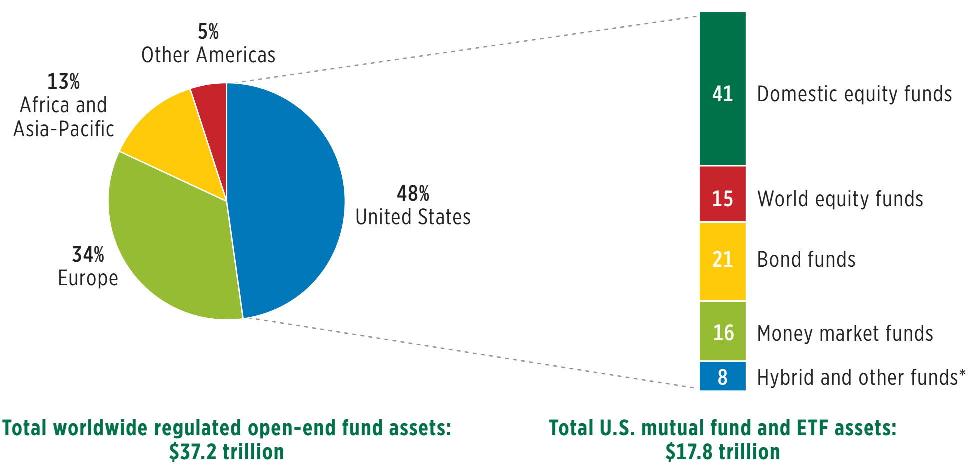
Sources: Investment Company Institute and Strategic Insight Simfund

Mutual funds recorded $102 billion in net outflows in 2015 (Figure 2.3), while other U.S.-registered investment companies posted positive net inflows. On net, investors redeemed $123 billion from long-term mutual funds. Money market funds, by contrast, experienced net inflows of $21 billion. Mutual fund shareholders reinvested $224 billion in income dividends and $364 billion in capital gains distributions that mutual funds paid out during the year. Investor demand for ETFs continued to thrive with net share issuance (including reinvested dividends) totaling $231 billion in 2015 (Figure 3.7). Unit investment trusts (UITs) had new deposits of $66 billion, essentially unchanged from last year, and closed-end funds issued $2 billion in new shares, on net (Figure 4.3).

FIGURE 1.2

The United States Has the World's Largest Regulated Open-End Fund Market

Percentage of total net assets, year-end 2015



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

Note: Regulated open-end funds include mutual funds, exchange-traded funds (ETFs), and institutional funds. Components may not add to 100 percent because of rounding.

Sources: Investment Company Institute and International Investment Funds Association

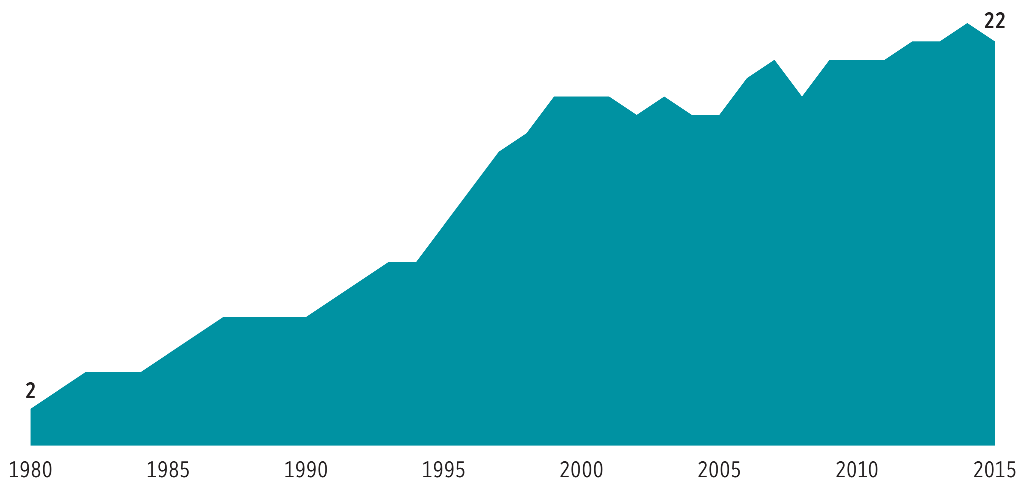
Americans’ Continued Reliance on Investment Companies

Households make up the largest group of investors in funds, and registered investment companies managed 22 percent of household financial assets at year-end 2015 (Figure 1.3). As households have come to rely more on funds over the past decade, their demand for directly held equities and bonds has generally fallen over time (Figure 1.4). For example, from 2009 to 2014, households sold $781 billion, on net, in bonds that they held directly. In contrast, in 2015, households purchased $308 billion of directly held bonds. Bond funds recorded moderate outflows in 2015, with investors redeeming $25 billion. Overall, households invested an additional $187 billion in long-term registered investment companies in 2015. From 2006 to 2015, households invested an annual average of $366 billion, on net, in long-term registered investment companies, with net investments each year except 2008. In contrast, households sold an annual average of $274 billion in directly held equities and bonds, on net.

FIGURE 1.3

Share of Household Financial Assets Held in Investment Companies

Percentage of household financial assets; year-end, 1980–2015



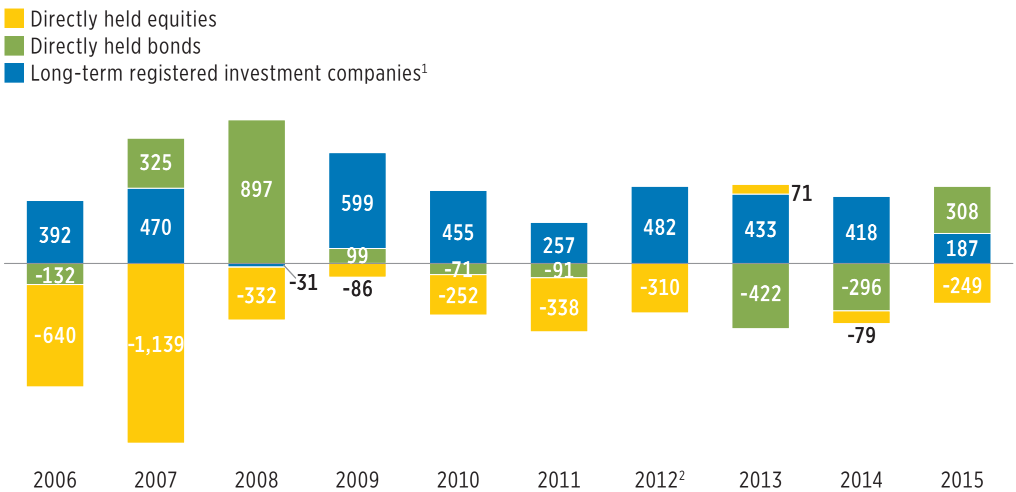
Note: Household financial assets held in registered investment companies include household holdings of ETFs, closed-end funds, UITs, and mutual funds. Mutual funds held in employer-sponsored DC plans, IRAs, and variable annuities are included.

Sources: Investment Company Institute and Federal Reserve Board

FIGURE 1.4

Household Net Investments in Funds, Bonds, and Equities

Billions of dollars, 2006–2015



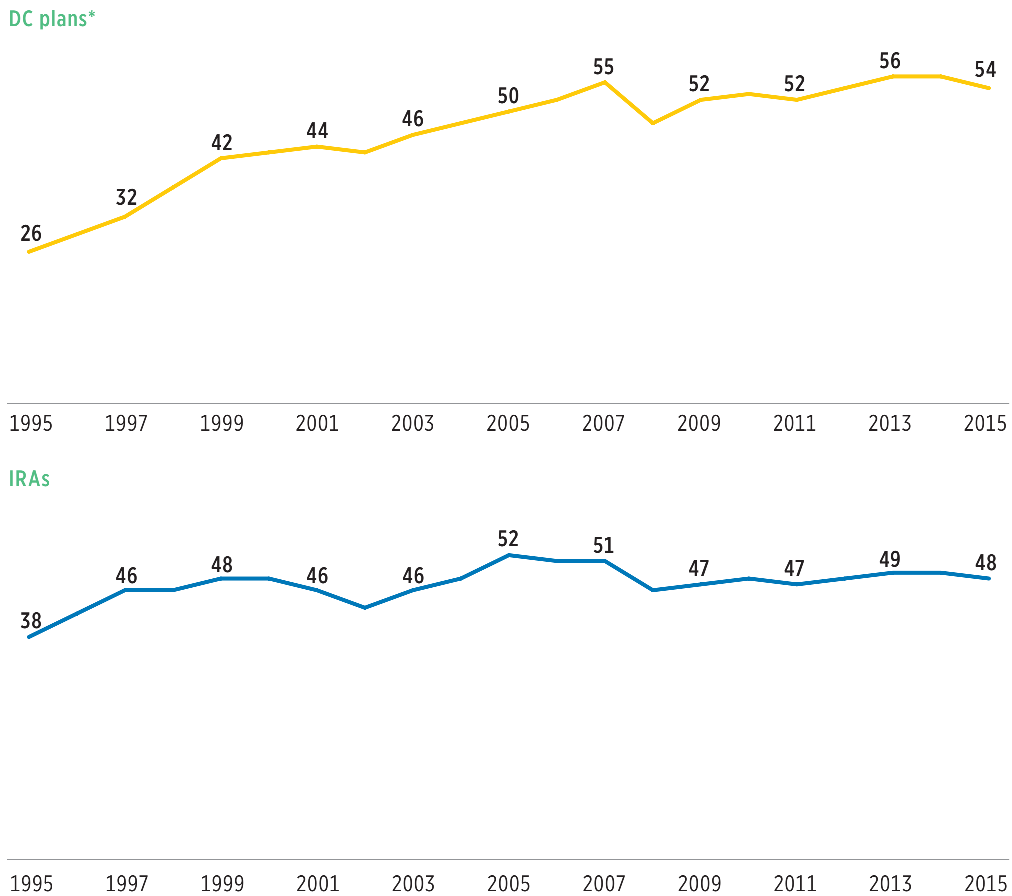
[1] Data for long-term registered investment companies include mutual funds, variable annuities, ETFs, and closed-end funds.
[2] In 2012, directly held bonds had outflows of less than $500 million.
Note: Household net investments include net new cash flow and reinvested dividends.
Sources: Investment 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 during the past two decades. At year-end 2015, households had 9.6 percent of their financial assets in 401(k) and other DC retirement plans, up from 7.6 percent in 1995. Mutual funds managed 54 percent of the assets in these plans in 2015, more than double the 26 percent in 1995 (Figure 1.5). IRAs made up 10.4 percent of household financial assets at year-end 2015, with mutual funds managing 48 percent of IRA assets that year. Mutual funds also managed $1.2 trillion in variable annuities outside retirement accounts, as well as $5.7 trillion of other assets outside retirement accounts.

FIGURE 1.5

Mutual Funds in Household Retirement Accounts

Percentage of retirement assets in mutual funds by type of retirement vehicle, 1995–2015



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

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

Businesses and other institutional investors also rely on funds. Many institutions use money market funds to manage some of their cash and other short-term assets. Nonfinancial businesses held 23 percent of their short-term assets in money market funds at year-end 2015 (Figure 2.17). Institutional investors also have contributed to growing demand for ETFs. Investment managers, including mutual funds and pension funds, use ETFs to invest in markets, to manage liquidity and investor flows, or to hedge their exposures.

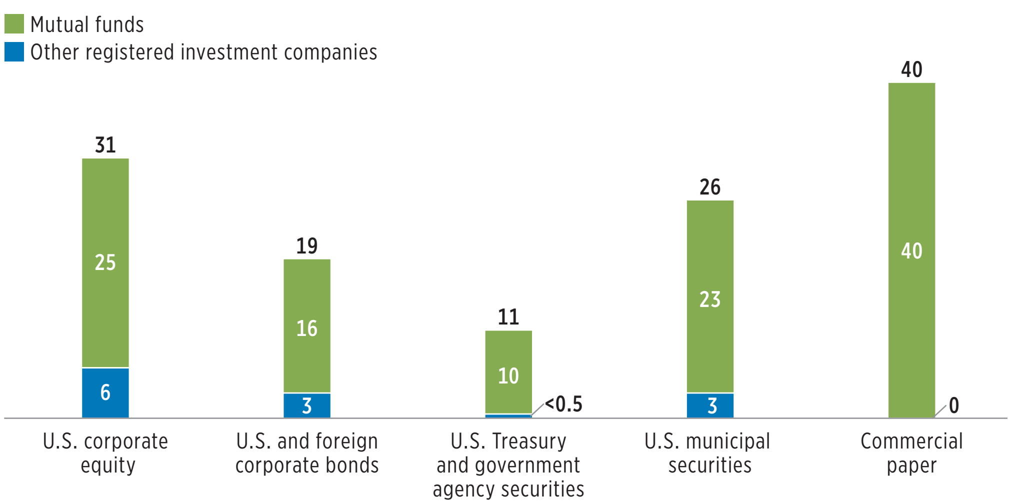
Role of Investment Companies in Financial Markets

Investment companies have been among the largest investors in the domestic financial markets for much of the past 20 years. They held a large portion of the outstanding shares of U.S.-issued equities and money market securities at year-end 2015. Investment companies as a whole were one of the largest groups of investors in U.S. companies that year, holding 31 percent of their outstanding stock at year-end 2015 (Figure 1.6).

FIGURE 1.6

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

Percentage of total market securities held by investment companies, year-end 2015



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

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

Mutual funds remained the largest investors in the U.S. commercial paper market—an important source of short-term funding for major corporations around the world. From year-end 2014 to year-end 2015, mutual funds' share of outstanding commercial paper decreased from 46 to 40 percent (Figure 1.6). Prime money market funds accounted for most of mutual fund commercial paper holdings. Consequently, mutual fund holdings of commercial paper tend to fluctuate with the total net assets in prime money market funds. In 2015, assets in prime money market funds fell $180 billion as these funds adapted to a 2014 SEC rule change that will be fully implemented in October 2016 (see pages 52–53).

At year-end 2015, investment companies held 26 percent of tax-exempt debt issued by U.S. municipalities, a fairly stable share over the past several years (Figure 1.6). Investment companies held 11 percent of U.S. Treasury and government agency securities at year-end 2015. Investment companies' share of outstanding corporate debt securities remained stable at 19 percent at year-end 2015.

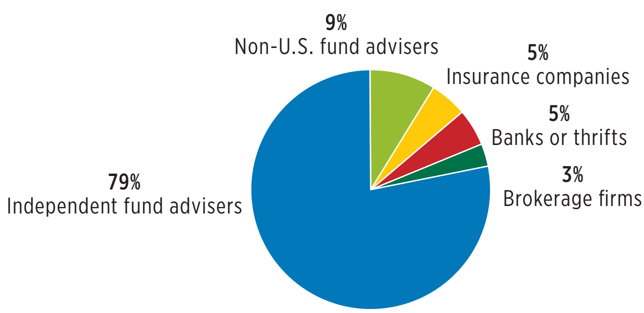
Types of Intermediaries and Number of Investment Companies

A variety of financial services companies offer registered funds in the United States. At year-end 2015, 79 percent of fund complexes were independent fund advisers (Figure 1.7), and these firms managed 67 percent of investment company assets. Other types of fund complexes in the U.S. market include non-U.S. fund advisers, insurance companies, banks, thrifts, and brokerage firms.

FIGURE 1.7

More Than Three-Quarters of Fund Complexes Were Independent Fund Advisers

Percentage of investment company complexes by type of intermediary, year-end 2015



Note: Components do not add to 100 percent because of rounding.

In 2015, 873 fund sponsors from around the world competed in the U.S. market to provide investment management services to fund investors (Figure 1.8). In the 1980s and 1990s, low barriers to entry attracted many new fund sponsors. But in the early 2000s, increased competition among these sponsors and pressure from other financial products reversed that trend. From year-end 2004 to year-end 2009, 248 fund sponsors left the business but just 238 entered, for a net loss of 10 sponsors. Larger fund sponsors acquiring smaller ones, fund sponsors liquidating funds and leaving the business, and several large sponsors selling their fund advisory businesses played a major role in the decline. The percentage of fund companies retaining assets and attracting net new investments generally has been lower since 2000 than in the 1990s, and fell to 38 percent in 2015, its lowest level since 2008 (Figure 1.9).

FIGURE 1.8

Number of Fund Sponsors

2005–2015

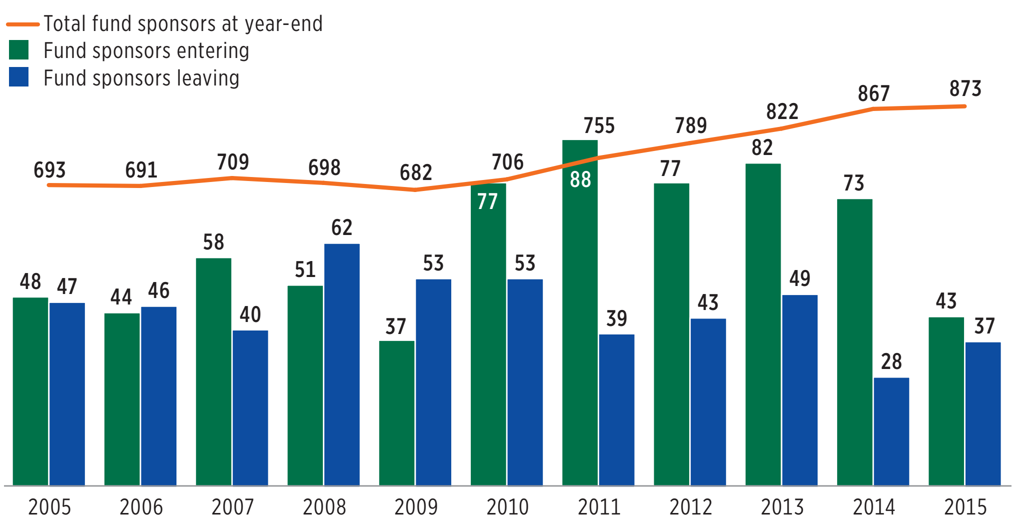
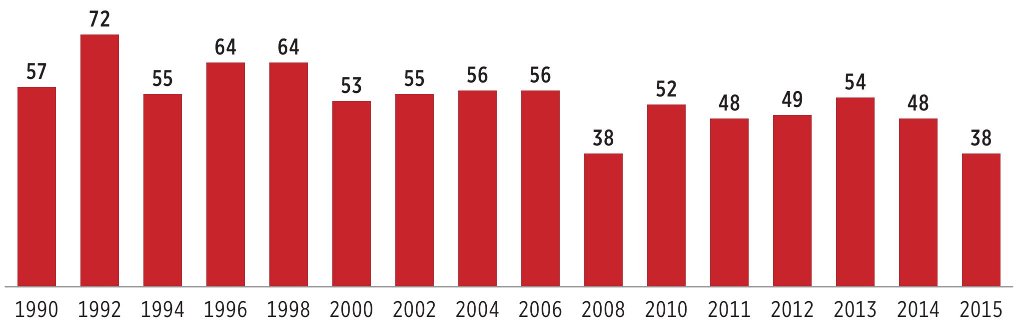


FIGURE 1.9

Fund Complexes with Positive Net New Cash Flow to Long-Term Mutual Funds

Percentage of fund complexes, selected years



This steady turnover and merger activity has contributed to somewhat greater concentration of mutual fund and ETF assets managed by the largest fund complexes. The share of assets managed by the five largest firms rose from 32 percent in 2000 to 45 percent in 2015, and the share managed by the 10 largest firms increased from 44 to 56 percent (Figure 1.10). Much 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 25 percent in 2000 to 19 percent in 2015.

FIGURE 1.10

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

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

	2000	2005	2010	2015
Largest 5 complexes	32	36	42	45
Largest 10 complexes	44	47	55	56
Largest 25 complexes	69	69	74	75

Note: Data include only mutual funds and ETFs registered under the Investment Company Act of 1940. Mutual fund data do not include mutual funds that invest primarily in other mutual funds. ETFs registered as UITs and ETFs that invest primarily in other ETFs are excluded.

Two other factors also contributed to rising industry concentration. First, the growing popularity of index funds increased concentration, because the 10 largest fund complexes manage most of the assets in index mutual funds. Actively managed domestic equity mutual funds incurred outflows for 10 consecutive years, thus reducing market share for middle-tier firms, while index domestic equity funds had inflows in each of these years. Second, strong inflows over the past decade to bond funds (Figure 2.7), which are fewer in number and have fewer fund sponsors than equity mutual funds, helped boost the share of assets managed by large fund complexes that offer bond funds.

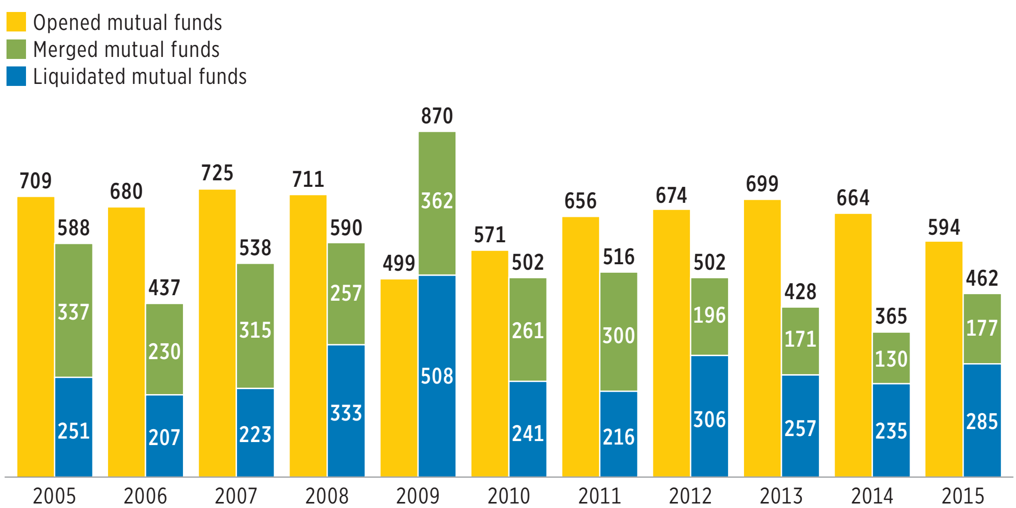
Nevertheless, in recent years, the number of sponsors has risen once again as the economy and financial markets have recovered, with a net increase of 191 from year-end 2009 to year-end 2015 (440 entering and 249 leaving) (Figure 1.8). Many of the entering firms took advantage of the series trust—a cost-effective management solution 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. The series trust allows the sponsor to focus more on managing portfolios and gathering assets, and its operating costs are spread across the funds in the trust.

Macroeconomic conditions and competitive dynamics also affect the number of funds offered in any given year. 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 594 funds opened in 2015, fewer than the year before and less than the 2007 peak of 725 and the 2005–2015 average (Figure 1.11). The rate of fund mergers and liquidations increased significantly from 365 in 2014 to 462 in 2015, leading to the annual net increase being close to the average of the prior 10 years.

FIGURE 1.11

Number of Mutual Funds Entering and Leaving the Industry

2005–2015



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.

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. Units of UITs investing in long-term bonds might remain outstanding, or in circulation, for 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 is dissolved, 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 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 assets were invested in bonds. Equity UITs, however, have grown in popularity over the past two decades. Since 1998, the assets in equity UITs have exceeded the assets in taxable and tax-free bond UITs combined each year except 2002, and constituted 85 percent of the assets in UITs in 2015 (Figure 1.12). The number of trusts outstanding began to fall in the mid-1990s, as sponsors created fewer 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.

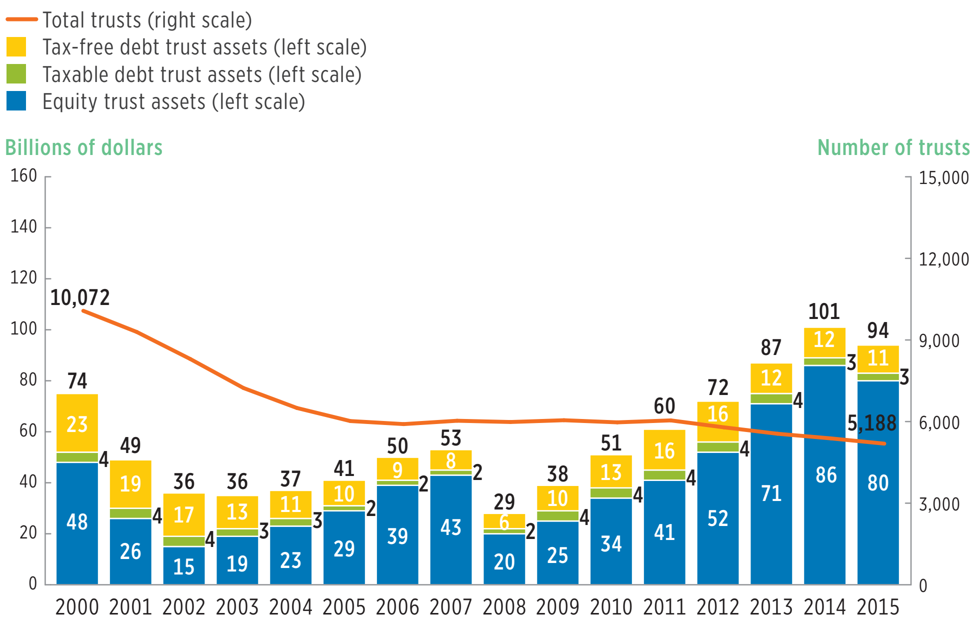
Investors can obtain UIT price quotes from brokerage or investment firms and investment company websites, and some but not all UITs list their prices on NASDAQ's Mutual Fund Quotation Service. Some broker-dealers offer their own trusts or sell trusts offered by nationally recognized independent sponsors. 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 bond and brokerage firms.

Though only some 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.

FIGURE 1.12

Total Net Assets and Number of UITs

Year-end, 2000–2015



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

The total number of investment companies has increased since 2005 (the recent low point), but it remains well below the year-end 2000 peak (Figure 1.13). This largely reflects the sharp decline in UITs in the early 2000s. The number of UITs continued to decline, falling to 5,188 at year-end 2015 from 5,381 at year-end 2014. The number of mutual funds grew in 2015 for the fifth straight year to a total of 9,520 funds. The total number of closed-end funds fell to 558 at year-end 2015, the lowest level since 2002. The number of ETFs grew by 13 percent in 2015, with 183 new ones on net. There were 1,594 ETFs at year-end 2015, double the total number of ETFs at year-end 2009.

FIGURE 1.13

Number of Investment Companies by Type

Year-end, 1997–2015

	Mutual funds*	Closed-end funds	ETFs	UITs	Total
1997	6,778	486	19	11,593	18,876
1998	7,489	491	29	10,966	18,975
1999	8,003	511	30	10,414	18,958
2000	8,370	481	80	10,072	19,003
2001	8,518	489	102	9,295	18,404
2002	8,511	543	113	8,303	17,470
2003	8,426	581	119	7,233	16,359
2004	8,417	618	152	6,499	15,686
2005	8,449	634	204	6,019	15,306
2006	8,721	645	359	5,907	15,632
2007	8,745	662	629	6,030	16,066
2008	8,879	642	728	5,984	16,233
2009	8,611	627	797	6,049	16,084
2010	8,535	624	923	5,971	16,053
2011	8,673	632	1,134	6,043	16,482
2012	8,744	602	1,194	5,787	16,327
2013	8,972	599	1,294	5,552	16,417
2014	9,259	568	1,411	5,381	16,619
2015	9,520	558	1,594	5,188	16,860

* Data include mutual funds that invest primarily in other mutual funds.

Note: Data are for investment companies that report statistical information to the Investment Company Institute. Assets of these companies are 98 percent of investor assets. ETF data prior to 2001 were provided by Strategic Insight Simfund. ETF data include investment companies not registered under the Investment Company Act of 1940 and ETFs that invest primarily in other ETFs.

Sources: Investment Company Institute and Strategic Insight Simfund

Investment Company Employment

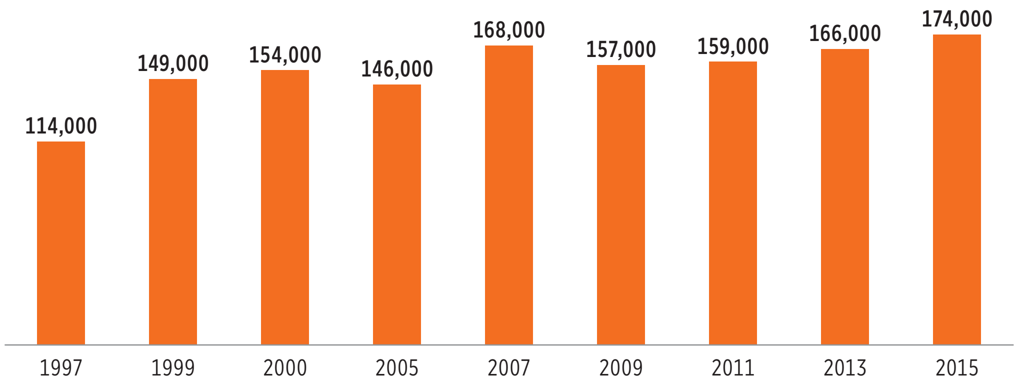
Registered investment companies typically do not have employees—instead, they contract with other businesses to provide services to the fund. Except for UITs, funds in the United States have fund boards that oversee the management of the fund and represent the interests of the fund shareholders. Fund boards must approve all major contracts between the fund and its service providers including the advisory contract with a fund's investment adviser.

Fund sponsors and third-party service providers offer advisory, recordkeeping, administrative, custody, and other services to a growing number of funds and their investors. Fund industry employment in the United States has grown 53 percent since 1997, from 114,000 workers in 1997 to 174,000 workers in 2015 (Figure 1.14).

FIGURE 1.14

Investment Company Industry Employment

*Estimated number of employees of fund sponsors and their service providers, selected years**



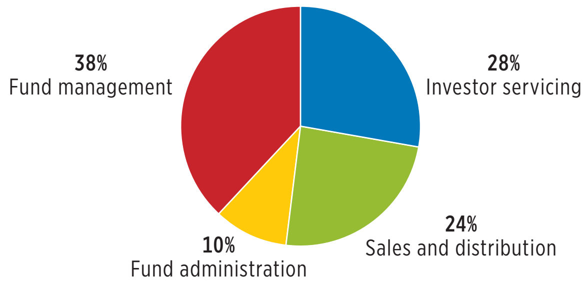
* Years are those in which ICI conducted its employment survey.

Fund investment advisers are one of the prominent providers of services to funds. This group of service providers is responsible for managing the fund's business affairs, ensuring compliance with laws and regulations, overseeing other third-party service providers the fund may rely on, and directing funds' investments by undertaking investment research and determining which securities to buy and sell. The adviser will often undertake trading and security settlement for the fund. In March 2015, 38 percent of the industry worked in support of fund management functions such as investment research, trading and security settlement, information systems and technology, and other corporate management functions (Figure 1.15).

FIGURE 1.15

Investment Company Industry Employment by Job Function

Percentage of employees of fund sponsors and their service providers, March 2015



Total employment: 174,000 employees

The second-largest group of workers (28 percent) provides services to fund investors and their accounts (Figure 1.15). Shareholder account servicing encompasses a wide range of activities to help investors monitor and update their accounts. These employees work in call centers and help shareholders and their financial advisers with questions about investor accounts. They also process applications for account openings and closings. Other services include retirement plan transaction processing, retirement plan participant education, participant enrollment, and plan compliance.

Fund administration, which includes financial and portfolio accounting and regulatory compliance duties, accounted for 10 percent of industry employment (Figure 1.15). Employees performing those services are often affiliated with a fund's investment adviser.

Fund administration encompasses the middle- and back-office functions necessary to operate the fund and includes clerical and fund accounting services, data processing, recordkeeping, internal audits, and compliance and risk management functions. Typically, employees with administration duties are responsible for regulatory and compliance requirements, such as preparing and filing regulatory reports, overseeing fund service providers, preparing and submitting reports to regulators and tax authorities, and producing shareholder reports such as prospectuses and financial statements of the funds. Administration services also help to maintain compliance procedures and internal controls, subject to approval by a fund's board and chief compliance officer.

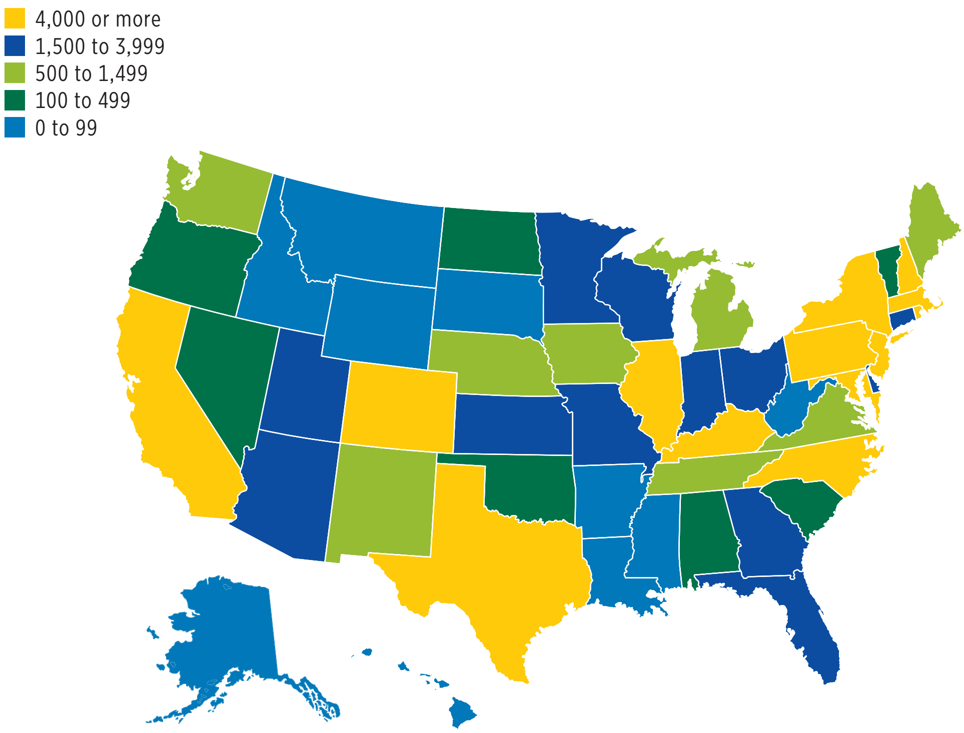
Distribution and sales force personnel together accounted for 24 percent of the workforce (Figure 1.15). Employees in these areas may work in marketing, product development and design, or investor communications, and can include sales support staff, registered representatives, and supermarket representatives.

For many industries, employment tends to be concentrated in locations where the industry began. The same is true for investment companies: those located in Massachusetts and New York, early hubs of investment company operations (Figure 1.16), employ 24 percent of fund industry workers. As the industry has grown, other states—including California, Pennsylvania, and Texas—have become major centers of fund employment. Fund companies in these three states employed one-quarter of U.S. fund industry employees as of March 2015.

FIGURE 1.16

Investment Company Industry Employment by State

Estimated number of employees of fund sponsors and their service providers by state, March 2015



For More Information

» Monthly Trends in Mutual Fund Investing
www.ici.org/research/stats

» Money Market Fund Resource Center
www.ici.org/mmfs

» Yes, Funds Come and Go—Without Government Help
www.ici.org/viewpoints/view_16_resolution

CHAPTER TWO

Recent Mutual Fund Trends

With nearly $16 trillion in assets, the U.S. mutual fund industry remained the largest in the world at year-end 2015. At the same time, investor demand for mutual funds declined in 2015 with net redemptions from mutual funds amounting to $102 billion, or 0.6 percent of 2014 year-end assets. Investor demand for certain types of mutual funds appeared to be driven in large part by an anticipated tightening in monetary policy, declining oil prices, headwinds from China, and expectations of slower global growth. As a result, though money market funds experienced modest net inflows, long-term mutual funds, particularly those most exposed to interest rate risk, the energy sector, and emerging markets, experienced net outflows for the first time since 2008.

World equity funds have had net inflows seven years in a row

$94 billion

OF NET NEW CASH INTO WORLD EQUITY FUNDS IN 2015

This chapter describes recent U.S. mutual fund developments and examines the market factors that affect the demand for equity, bond, hybrid, and money market funds.

Investor Demand for U.S. 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, U.S. households rely on equity, bond, and hybrid mutual funds to meet long-term personal financial objectives such as preparing for retirement. U.S. 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. Changing demographics and investors' reactions to U.S. 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.

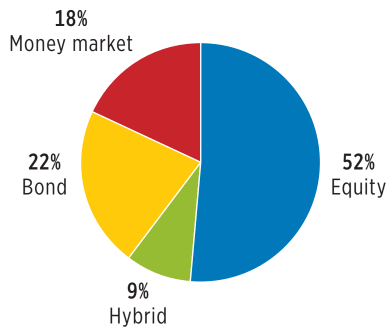
U.S. Mutual Fund Assets

The majority of U.S. mutual fund assets at year-end 2015 were in long-term funds, with equity funds alone comprising 52 percent of total U.S. mutual fund assets (Figure 2.1). Bond funds were the second-largest category, with 22 percent of assets. Money market funds (18 percent) and hybrid funds (9 percent) held the remainder.

FIGURE 2.1

Equity Funds Held More Than Half of Total Mutual Fund Assets

Percentage of total net assets, year-end 2015



Total U.S. mutual fund assets: $15.7 trillion

Note: Components do not add to 100 percent because of rounding.

Investors in U.S. Mutual Funds

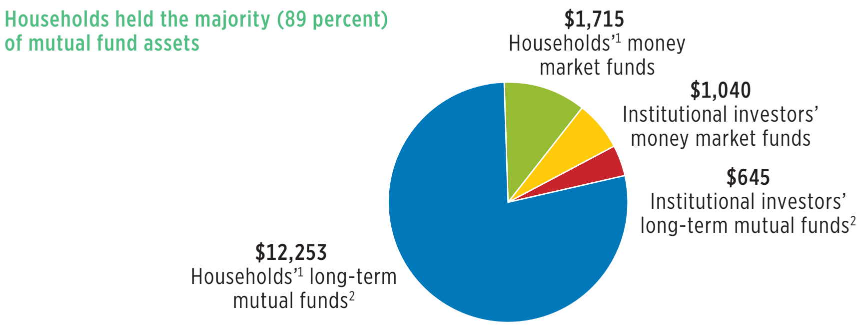
Demand for mutual funds is, in part, related to the types of investors who hold mutual fund shares. Retail investors (i.e., households) held the vast majority (89 percent) of the nearly $16 trillion in mutual fund assets (Figure 2.2). The proportion of long-term mutual fund assets held by retail investors is even higher (95 percent). Retail investors also held substantial money market fund assets ($1.7 trillion), but that amounted to a relatively small share (12 percent) of their total mutual fund assets.

In contrast, institutional investors such as nonfinancial businesses, financial institutions, and nonprofit organizations held a relatively small portion of mutual fund assets. At year-end 2015, institutions held about 11 percent of mutual fund assets (Figure 2.2). One of the primary reasons institutions use mutual funds is to help manage cash balances. Sixty-two percent of the $1.7 trillion that institutions held in mutual funds was in money market funds.

FIGURE 2.2

Institutional and Household Ownership of Mutual Funds

Billions of dollars, year-end 2015



Total mutual fund assets: $15,652 billion
Total long-term mutual fund[2] assets: $12,897 billion
Total money market fund assets: $2,755 billion

[1] 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.

[2] Long-term mutual funds include equity, hybrid, and bond mutual funds.

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

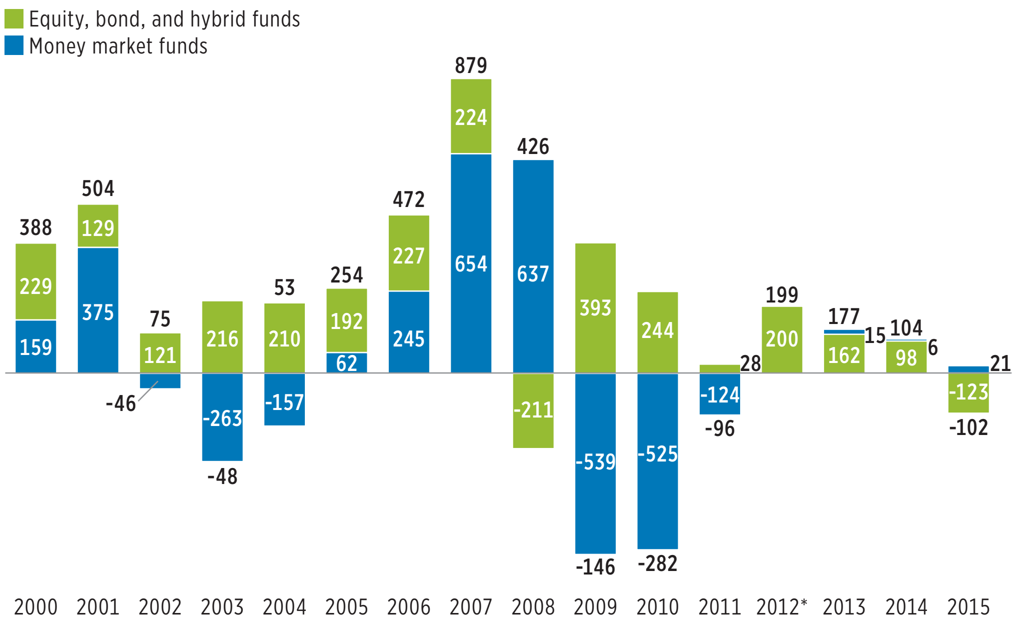
Developments in Mutual Fund Flows

Overall demand for mutual funds as measured by net new cash flow—new fund sales less redemptions plus net exchanges—declined in 2015 (Figure 2.3). Lower demand for equity, hybrid, and bond mutual funds was only partly offset by greater demand for money market funds. Overall, mutual funds had a net cash outflow of $102 billion in 2015, in contrast with a net cash inflow of $104 billion in 2014. In 2015, investors redeemed $123 billion, on net, from long-term funds, and added $21 billion, on net, to money market funds. A number of factors—including a stronger U.S. dollar, falling oil prices, ongoing demographic trends, and increased demand for exchange-traded funds (ETFs)—appeared to influence mutual fund flows in 2015.

FIGURE 2.3

Net New Cash Flow to Mutual Funds

Billions of dollars, 2000–2015



* In 2012, investors withdrew less than $500 million from money market funds.

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

The Global Economy and Financial Markets in 2015

The year 2015 produced an unusual juxtaposition: a growing U.S. economy, but weak or falling profits for many companies in the major stock market indexes. The combination produced lackluster results for investors.

Despite difficulties in certain financial markets, the U.S. economy continued to improve in 2015. U.S. real gross domestic product grew 2.4 percent in 2015, matching the previous year. Unemployment slid from 5.6 percent in December 2014 to 5.0 percent in December 2015, taking the jobless rate to its lowest level since February 2008. Average hourly earnings, which have lagged job growth through most of the recovery, rose 2.6 percent during the year, and total personal income rose 3.9 percent in 2015. Rising wages translated into real buying power as the Consumer Price Index—used as a measure of inflation—rose a mere 0.7 percent for the year, the result mainly of a fall in energy prices. Real retail sales (including food services) rose 1.9 percent for the year and the personal saving rate stayed at 5.0 percent, indicating that consumers used a portion of their income to pay down debt or build assets or both.

Continued progress in jobs and wages prompted the Federal Reserve to increase the federal funds target rate for the first time in nearly a decade. The quarter-point move in short-term rates, which the Fed telegraphed far in advance, had little immediate effect on the market, and the Fed indicated that further increases would be gradual. Remarkably low inflation made that approach easier. The personal consumption expenditures price index rose just 0.7 percent during the year, well below the Fed's target of 2 percent inflation. Also easing the Fed's task, the 10-year Treasury bond finished the year yielding 2.27 percent, barely higher than the 2.17 percent yield at the end of 2014. The low yield on long-term bonds indicated market confidence that inflation would remain low.

Developments abroad overshadowed moderate progress in the U.S. economy. The pace of growth slowed in China, where the government reported the economy grew just 6.9 percent in 2015, down from the double-digit gains seen earlier in the 2000s. Concerns heightened that a more tepid Chinese economy would result in weaker Chinese demand for exports from emerging markets across Asia and Latin America. Europe continued its economic recovery, but at a pace considerably slower than in the United States.

The result was a divergence in monetary policy across the globe. Asian and European central banks eased policies, while the Federal Reserve made it clear that tighter policies were ahead. The divergence in monetary policy favored the U.S. dollar. The Wall Street Journal Dollar Index rose 8.6 percent over the year as a whole. This factor, among others, hindered American exports, slowing manufacturing and lowering reported profits of American companies that do business abroad. Reported 12-month earnings per share for the S&P 500 fell to $87 from $102 in 2014.

The slide in oil prices, from $60 per barrel at the end of May to $37 per barrel at year-end, also rattled markets. In the long run, low oil prices are expected to benefit the U.S. economy, improving the trade balance and leaving consumers with more money to spend. But the more immediate effect was to reduce profits for energy companies. Furthermore, weakness in other industrial commodities—from coal to copper—prompted some speculation that Chinese growth might be even weaker than the official statistics indicated.

All of these factors contributed to a mixed year for global stock markets. Pessimism over China and emerging markets prompted a decline of 11 percent in the U.S. stock market during August and September 2015.* Although the stock market bounced back later in the fall, for the year as a whole, the average large-cap blend domestic equity fund lost 1 percent in total return.† Returns on equity funds that invest primarily in a small-cap stocks (e.g., small-cap blend funds) tend to be more variable; for 2015 as a whole, small-cap blend funds returned -5 percent.‡

Meanwhile, concerns over Federal Reserve policy weighed on bond prices at home and abroad. Worries over falling oil prices and reduced profits and potential defaults in the energy sector pushed down high-yield bond prices because energy-related companies had been significant issuers of high-yield debt in the past few years. In addition, a rising dollar made it more difficult for foreign companies to pay down their dollar-denominated debts. On average, high-yield and emerging market bond funds lost 4 and 6 percent in total return in 2015, respectively.§

Long-Term Mutual Fund Flows

Flows into long-term mutual funds, though correlated with market returns, tend to be moderate as a percentage of assets even during episodes of market turmoil. Several factors may contribute to this phenomenon. One factor is that households (i.e., retail investors) own the vast majority of U.S. long-term mutual fund assets (Figure 2.2). 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 long-term 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 assets in mutual funds are spread across more than 90 million investors and 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 are also 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 group see net outflows, some investors continue to purchase fund shares.

* As measured by the total return on the S&P 500 index.

† As measured by the Morningstar Large Blend fund category total return.

‡ As measured by the Morningstar Small Blend fund category total return.

§ As measured by the Morningstar High Yield Bond fund category total return and Morningstar Emerging Markets Bond fund category total return.

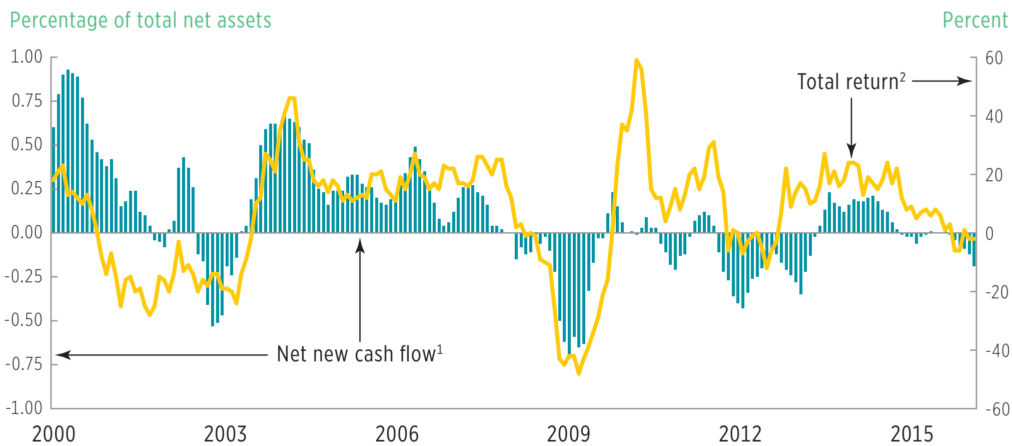
Equity Mutual Funds

Flows to equity funds tend to rise and fall with stock prices (Figure 2.4). The MSCI All Country World Daily Gross Total Return Index, a measure of returns on global stock markets, dropped 2 percent in 2015, on the heels of a 5 percent rise in 2014. At the same time, equity mutual funds experienced outflows totaling $77 billion in 2015, compared with $25 billion in inflows in 2014. Flows to equity funds varied throughout 2015 (Figure 2.5). Equity funds received net inflows of $27 billion in the first three months of the year. As the year progressed, flows waned and turned negative. Indeed, equity funds experienced net outflows of $37 billion in December alone.

FIGURE 2.4

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

Monthly, 2000–2015



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

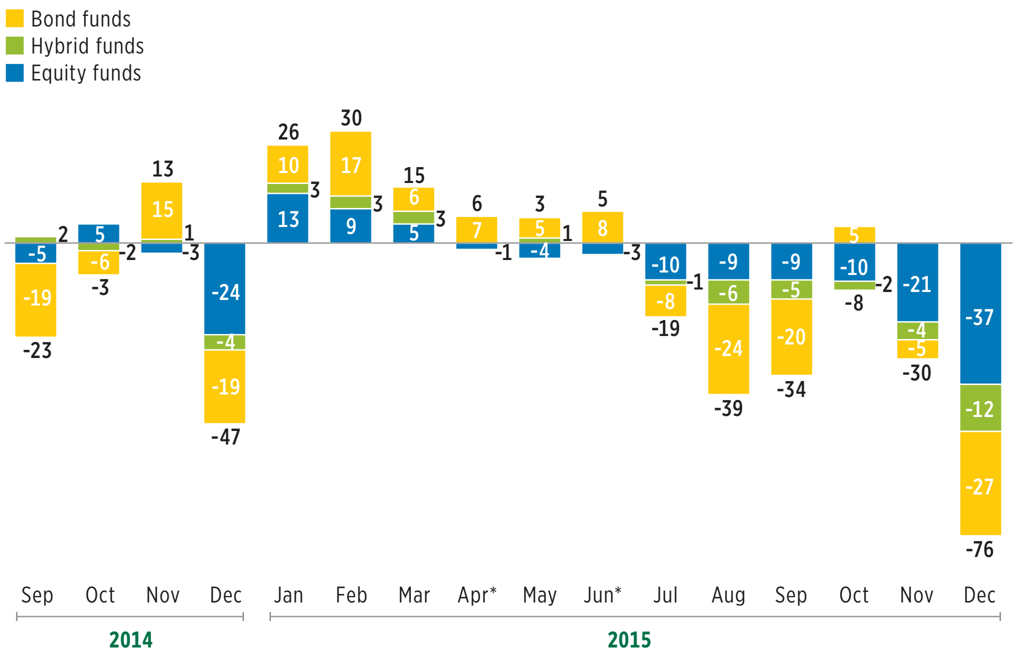
[2] The total return on equities is measured as the year-over-year percent change in the MSCI All Country World Daily Gross Total Return Index.

Sources: Investment Company Institute, Morgan Stanley Capital International, and Bloomberg

FIGURE 2.5

Net New Cash Flow to Long-Term Mutual Funds

Billions of dollars, September 2014–December 2015



* In April 2015, investors added $275 million to hybrid funds; in June 2015, investors added $42 million to hybrid funds.
Note: Components may not add to the total because of rounding.

Outflows from equity funds in the second half of the year likely were related to a combination of greater market volatility and increasing demand for ETFs. The Chicago Board Options Exchange Volatility Index (VIX), which tracks the volatility of the S&P 500 index, is a widely used measure of market risk. Values greater than 30 typically reflect a high degree of investor fear and values less than 20 are associated with a period of market calm. During the first seven months of 2015, the daily VIX averaged 15 and peaked at 22. By comparison, during the volatile months of August and September 2015, the VIX averaged 22 and peaked at 41 in August.

In addition, some portion of assets may have shifted from equity mutual funds into equity ETFs, particularly late in the year. As discussed in chapter 3, the demand for ETFs has been very robust over the past several years. Outflows from domestic equity mutual funds totaled $57 billion in the last three months of 2015, alone accounting for nearly three-quarters of the year's outflows from equity funds. Over the same three months, net issuance of domestic equity ETF shares totaled $58 billion.

Also, investors in the United States increasingly have diversified their portfolios toward equity mutual funds that invest primarily in foreign markets (world equity funds). Over the past 10 years, domestic equity mutual funds experienced net outflows totaling $834 billion. In the same period, world equity funds received net inflows of $643 billion. In 2015, despite a stronger U.S. dollar, this pattern continued. World equity funds received $94 billion of net new cash while domestic equity funds experienced net outflows of $171 billion.

The strong demand for world equity funds over the past decade reflects a number of factors. One significant factor is that investors have responded to the relative returns realized in domestic versus overseas markets. Between 2003 and 2010, international stocks* performed better than domestic stocks,† returning an average of 13 percent per year compared with 8 percent for domestic stocks. Since 2010, U.S. stocks have significantly outperformed international stocks. Some market commentators, however, have advised investors that lower prices on international stocks relative to earnings could signal that international stocks will outperform U.S. stocks in coming years. And, in 2015, lower profits among U.S. corporations, especially at energy companies and firms with large overseas sales, ended a multiyear run-up in U.S. stock prices. This likely encouraged investors to rebalance portfolios that had become more heavily weighted toward domestic stocks.

A related factor is that some types of funds, such as target date mutual funds (discussed in more detail on page 43), rebalance portfolios automatically as part of an asset allocation strategy. The assets in funds offering asset allocation strategies have grown considerably over the past decade. These funds typically hold higher weights in foreign equities and bonds than many U.S. investors had traditionally allocated to foreign investments. In addition, as the U.S. domestic equity market rose over the past few years, these kinds of asset allocation funds naturally rebalanced their portfolios away from domestic stocks toward foreign stocks.

* As measured by the MSCI All Country World Daily ex-U.S. Gross Total Return Index.

† As measured by the Wilshire 5000 Total Return Index (float-adjusted).

Asset-Weighted Turnover Rate

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

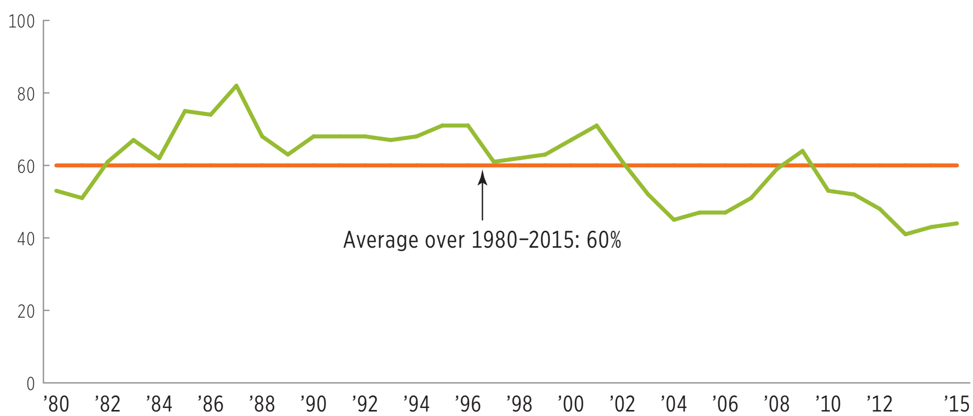
To analyze the turnover rate that shareholders actually experience in their funds, it is important to identify those funds in which shareholders tend to concentrate their assets. Neither a simple average nor a median takes into account where fund assets are concentrated. An asset-weighted average gives more weight to funds with large amounts of assets, and accordingly, indicates the average portfolio turnover actually experienced by fund shareholders. In 2015, the asset-weighted annual turnover rate experienced by equity fund investors was 44 percent, well below the average of the past 36 years.

Investors tend to own equity funds with relatively low turnover rates. In 2015, about 52 percent of equity fund assets were in funds with portfolio turnover rates of less than 30 percent. This reflects the propensity for funds with below-average turnover to attract shareholder dollars.

FIGURE 2.6

Turnover Rate Experienced by Equity Fund Investors

1980–2015



Note: The turnover rate is an asset-weighted average. Data exclude mutual funds available as investment choices in variable annuities.

Sources: Investment Company Institute, Center for Research in Security Prices, and Strategic Insight Simfund

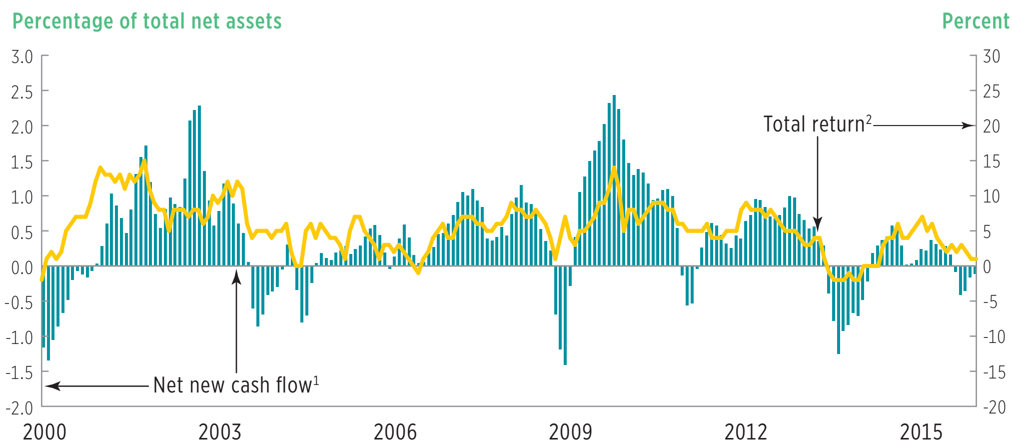
Bond Mutual Funds

Bond fund flows are typically correlated with the performance of bonds (Figure 2.7), which, in turn, is largely driven by the U.S. interest rate environment. A moderate increase in long-term interest rates during the second quarter of the year, coupled with expectations that the Fed would raise short-term interest rates before year-end, contributed to a decline in bond prices. This lowered the total return on bonds for the year.

FIGURE 2.7

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

Monthly, 2000–2015



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

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

Sources: Investment Company Institute, Citigroup, and Bloomberg

Demand for bond funds fell in the second half of 2015 in response to falling performance of bond investments. For example, during the first half of 2015, investment grade bond funds attracted $30 billion in net new cash. In contrast, during the second half of the year, investors redeemed $31 billion. For all bond fund categories, after investing $43 billion in 2014, investors redeemed $25 billion in 2015. Nonetheless, this outflow was relatively small—representing only 0.7 percent of the total assets of bond funds as of year-end 2014.

Outflows from certain categories of bond funds were more notable. Worries over a slowdown in China, the credit quality of energy and commodities-related companies, and the impact of higher future interest rates on bond values contributed to net redemptions from high-yield bond funds totaling $37 billion in 2015, amounting to 9.8 percent of their year-end 2014 assets. Outflows from high-yield bond funds were greatest in December, amounting to $15 billion. Early in that month came an announcement by Third Avenue Management LLC that it had suspended redemptions in one of its mutual funds. This particular fund had experienced outflows for more than a year. To protect the interests of the fund's investors, the U.S. Securities and Exchange Commission (SEC) issued an order allowing the fund to suspend redemptions and proceed with an orderly liquidation of its remaining assets.

Also in December 2015, world bond funds (which typically hold a mix of bonds denominated in U.S. dollars and foreign currencies) experienced outflows of $13 billion, or 3 percent of assets. These flows were, in part, attributable to the Fed's quarter-point interest rate hike on December 16. Higher interest rates in the United States put upward pressure on the U.S. dollar, in turn reducing dollar returns on bonds denominated in foreign currencies and making it more expensive for foreign companies to pay off their dollar-denominated debts.

Since the 2007–2009 financial crisis, some observers have expressed concerns that outflows from bond funds could pose challenges for fixed-income markets. There are many reasons to believe such concerns are overstated.

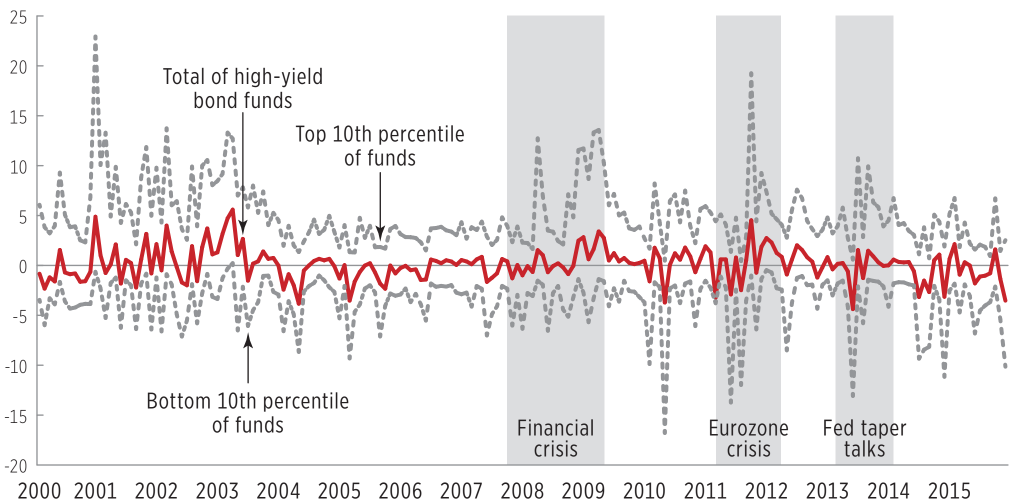
First, though U.S. bond mutual fund assets have risen in the past decade, bond mutual fund assets were only 9.4 percent of the U.S. bond market at year-end 2015, up from 6.7 percent at year-end 2005. This means that about 90 percent of the U.S. bond market is held by investors outside of mutual funds. Furthermore, some of the outflows from bond mutual funds likely reflect growing investor interest in other types of pooled investment vehicles with exposure to bonds. Notably, ETFs that invest in bonds had net issuance of $55 billion in 2015. And, though high-yield bond mutual funds had net redemptions, net issuance of high-yield bond ETFs was $1.8 billion, or 4 percent of the year-end 2014 assets of high-yield bond ETFs.

Second, though some high-yield bond funds at times have had substantial outflows, other high-yield funds have had inflows (Figure 2.8). Thus, outflows at one fund, even substantial outflows that the fund must meet by selling securities, are unlikely to significantly affect bond markets if other high-yield funds are at the same time buying the same or similar securities.

FIGURE 2.8

Modest Outflows from High-Yield Bond Funds Even During Times of Market Stress

Net new cash flow as a percentage of assets; monthly, February 2000–December 2015



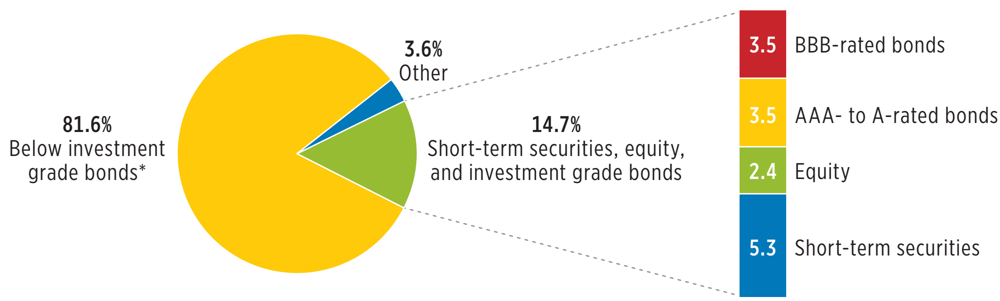
Note: Data exclude high-yield bond funds designated as floating-rate funds. Data also exclude funds with less than $10 million in total net assets, mutual funds that invest primarily in other mutual funds, and data for funds in any fund month where a merger or liquidation takes place. One observation for the top 10th percentile of funds in January 2001 is hidden to preserve the scale.

Third, bond funds have a range of tools they use to meet redemptions. For instance, a long-term fund can often accommodate the vast majority of its redemptions through sales of new fund shares to other investors. At almost any time, some investors will be redeeming out of a given long-term fund while others will be purchasing new fund shares. When redemptions exceed sales of fund shares, bond funds can sell bonds or reduce their holdings of short-term securities. Bond funds, especially high-yield, municipal, and international bond funds, may choose to hold more short-term assets (e.g., Treasury bills) or other highly liquid securities (e.g., common stocks and investment grade bonds) to help meet redemptions. As Figure 2.9 shows, high-yield bond funds as a group held 14.7 percent of their assets in securities that are generally easy to liquidate: 5.3 percent in short-term securities, 2.4 percent in equities, and 7.0 percent in investment grade bonds.

FIGURE 2.9

High-Yield Bond Fund Holdings by Selected Asset Categories

Percentage of all high-yield bond fund assets, December 2015



* Below investment grade bonds include unrated bonds.

Note: Data include funds Morningstar classifies as high-yield bond funds. Short-term securities are those classified by Morningstar as cash. Data exclude derivatives positions. Components may not add to the total because of rounding.

Source: Morningstar

Funds also use derivatives to help manage flows. Derivatives can be more liquid than their physical counterparts. Regulations require funds to segregate liquid assets to support their derivatives positions. These segregated liquid assets provide a ready source of liquidity to meet redemptions. This is especially true for many so-called liquid alternative funds, which are explicitly designed to allow frequent investor trading and do so in large measure through derivatives.

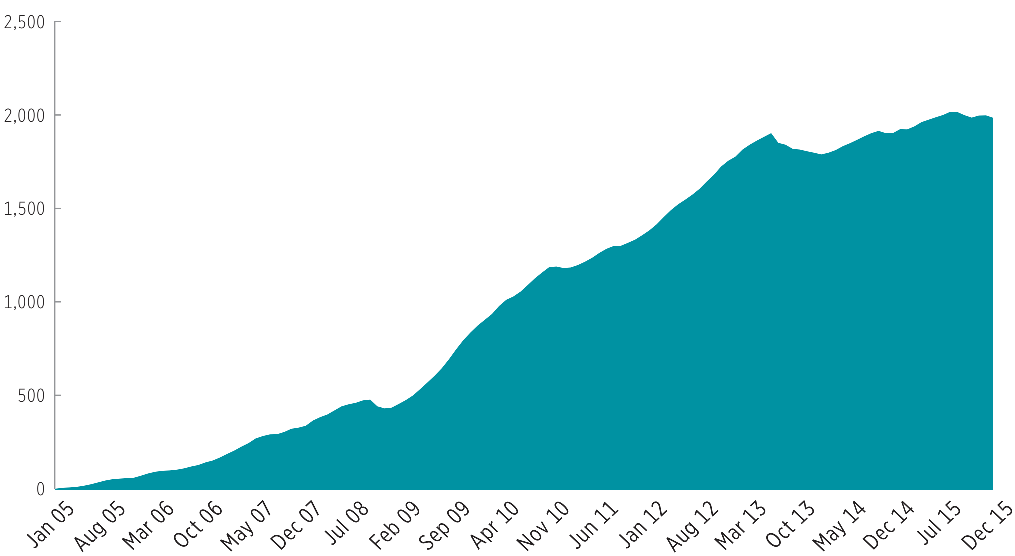
Finally, funds manage their liquidity according to both fund and investor characteristics. For example, funds with more variable flows tend to hold a greater proportion of their portfolios in liquid assets. When a fund's adviser expects the fund to have more variable flows, the fund is likely to hold more cash, liquid securities, securities that generate cash (e.g., through coupon payments or prepayments of principal), and highly liquid derivatives.

Despite several periods of market turmoil, bond funds have experienced inflows through most of the past decade. Bond funds have received $2 trillion in net inflows and reinvested dividends since 2005 (Figure 2.10). A number of factors have helped sustain this long-term demand for bond funds.

FIGURE 2.10

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

Cumulative flows to bond mutual funds, billions of dollars; monthly, 2005–2015



Note: Bond mutual fund flows include net new cash flow and reinvested dividends. Data exclude mutual funds that invest primarily in other mutual funds.

Demographics influence the demand for bond funds. Older investors tend to have higher 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 of Baby Boomers has boosted flows to bond funds. Although bond funds experienced outflows in 2015, they were likely mitigated, in part, by the demographic factors boosting bond fund flows over the past decade.

The continued popularity of target date mutual funds also likely helped to limit outflows from bond funds in 2015. Target date mutual 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 away from equities toward fixed-income investments, including bonds. Target date mutual funds usually invest through a fund-of-funds approach, meaning they primarily hold and invest in shares of other equity and bond mutual funds. Over the past 10 years, target date mutual funds have garnered inflows of $477 billion. In 2015, target date mutual funds had net inflows of $66 billion and ended the year with assets of $763 billion. The growing 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. Also, following the adoption of the Pension Protection Act of 2006, the use of target date funds as default investments for DC plans increased (see chapter 7).

Hybrid Mutual Funds

Hybrid mutual funds have seen inflows every year in the past decade except 2008 and 2015. Hybrid funds, sometimes called asset allocation funds or balanced funds, invest in a mix of stocks and bonds. The fund's prospectus may specify the asset allocation that the fund seeks to maintain, such as investing approximately 60 percent of the fund's assets in equities and 40 percent in 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 the fund's asset allocation more in line with prospectus objectives, which could be necessary following capital gains or losses in the stock or bond markets.

Hybrid funds have become an increasingly popular way to help investors achieve a managed, balanced portfolio of stocks and bonds. Over the past 10 years, investors have added $258 billion in net new cash flow to these funds. In 2015, however, investors redeemed a modest $21 billion (or 1.5 percent of prior year-end assets).

Outflows in 2015 from hybrid funds were concentrated in "flexible portfolio" funds, which have the flexibility to hold any proportion of stocks, bonds, cash, and commodities, both in the United States and overseas. In many ways, the 2008 crisis led investors to broaden their portfolios and lower the correlation of their investments with the market or limit downside risk. Flexible portfolio funds can help investors achieve those goals. As a result, flexible portfolio funds saw net inflows of $88 billion in the six years following 2008. After a long bull market, however, and comparably lower returns in funds offering downside protection, investors redeemed $21 billion (or 6.1 percent of prior year-end assets), on net, from flexible portfolio hybrid funds in 2015.

The Growth of Other Investment Products

Some of the outflows from long-term mutual funds in 2015 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.

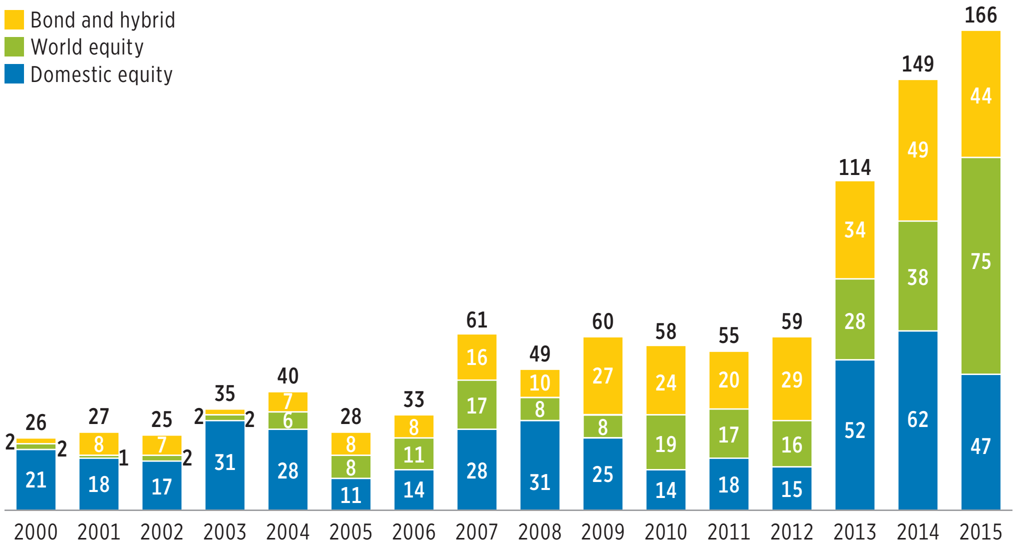
In 2015, index mutual funds—which hold all (or a representative sample) of the securities on a specified index—remained popular with investors. Of households that owned mutual funds, 32 percent owned at least one equity index mutual fund in 2015. As of year-end 2015, 406 index mutual funds managed total net assets of $2.2 trillion. Demand for index mutual funds remained strong in 2015, with investors adding $166 billion in net new cash flow to these funds (Figure 2.11). Of the new money that flowed to index mutual funds, 28 percent was invested in funds tied to domestic stock indexes, 45 percent went to funds tied to world stock indexes, and another 26 percent was invested in funds tied to bond or hybrid indexes.

Index equity mutual funds accounted for the bulk of index mutual fund assets at year-end 2015. Eighty-one percent of index mutual fund assets were invested in funds that track the S&P 500 or other domestic or international stock indexes (Figure 2.12). Mutual funds indexed to the S&P 500 managed 31 percent of all assets invested in index mutual funds. The share of assets invested in index equity mutual funds relative to all equity mutual funds' assets moved up to 22 percent in 2015 (Figure 2.13).

FIGURE 2.11

Net New Cash Flow to Index Mutual Funds

Billions of dollars, 2000–2015

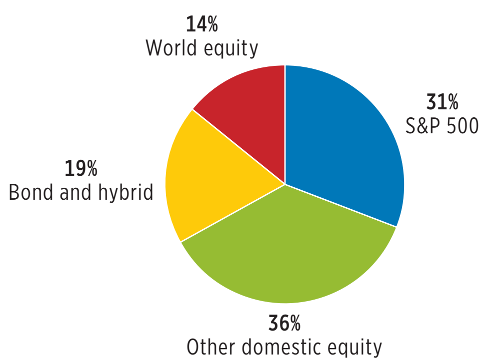


Note: Components may not add to the total because of rounding.

FIGURE 2.12

Funds Indexed to the S&P 500 Held 31 Percent of Index Mutual Fund Assets

Percentage of total net assets, year-end 2015

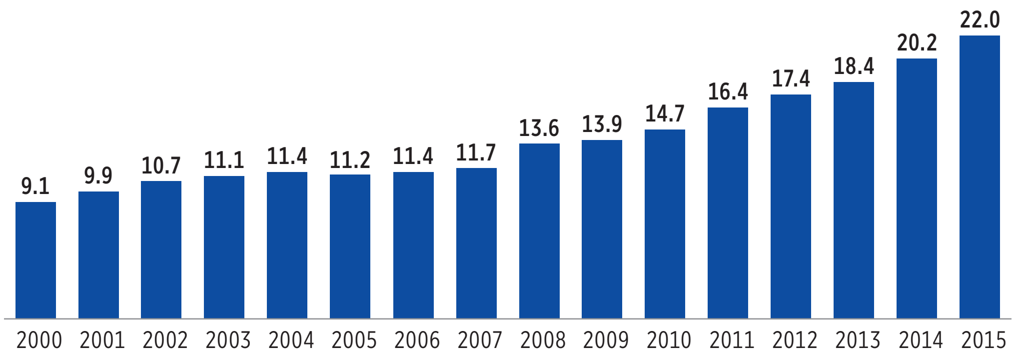


Total index mutual fund assets: $2.2 trillion

FIGURE 2.13

Index Equity Mutual Funds' Share Continued to Rise

Percentage of equity mutual funds' total net assets, 2000–2015



Index domestic equity mutual funds and index-based ETFs have particularly benefited from the investor trend toward more index-oriented investment products. From 2007 through 2015, index domestic equity mutual funds and ETFs received $1.2 trillion in net new cash and reinvested dividends (Figure 2.14). Index-based domestic equity ETFs have grown particularly quickly—attracting almost twice the flows of index domestic equity mutual funds since 2007. In contrast, actively managed domestic equity mutual funds experienced a net outflow of $835 billion (despite including reinvested dividends) from 2007 to 2015.

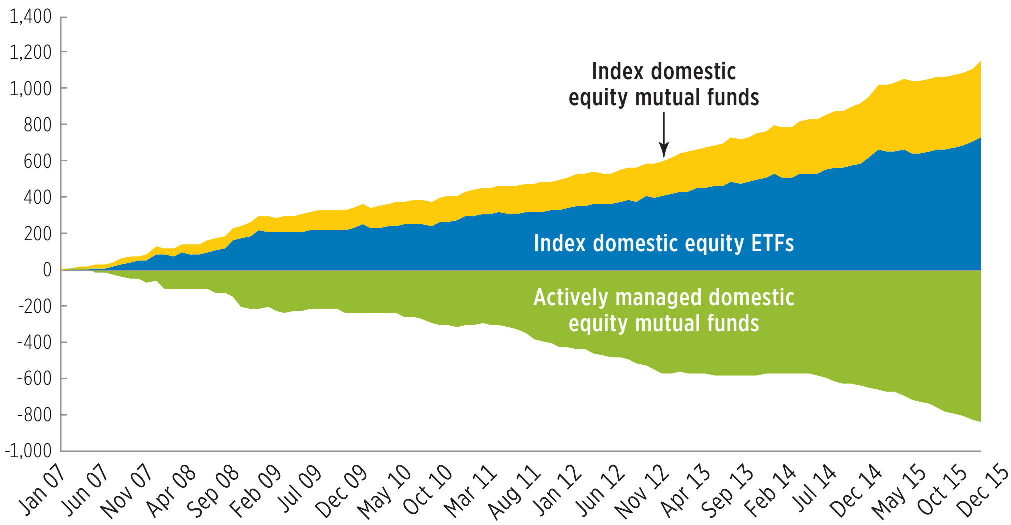
CITs are an alternative to mutual funds for DC plans. Like mutual funds, CITs pool the assets of investors and (either actively or passively) invest those assets according to a particular strategy. Much like institutional share classes of mutual funds, CITs generally require substantial minimum investment thresholds. Unlike mutual funds, which are regulated under the Investment Company Act of 1940, CITs are regulated under banking laws, which can reduce their compliance costs as compared to mutual funds.

More retirement plan sponsors have begun offering CITs as options in 401(k) plan lineups. As Figure 2.15 demonstrates, this trend has translated into a growing share of assets held in CITs by 401(k) plans with 100 participants or more. That share increased from 6 percent in 2000 to an estimated 16 percent in 2014. This most recent expansion is owed, in part, to growth in target date fund CITs.

FIGURE 2.14

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

Cumulative flows to and net share issuance of domestic equity mutual funds and index ETFs, billions of dollars; monthly, January 2007–December 2015

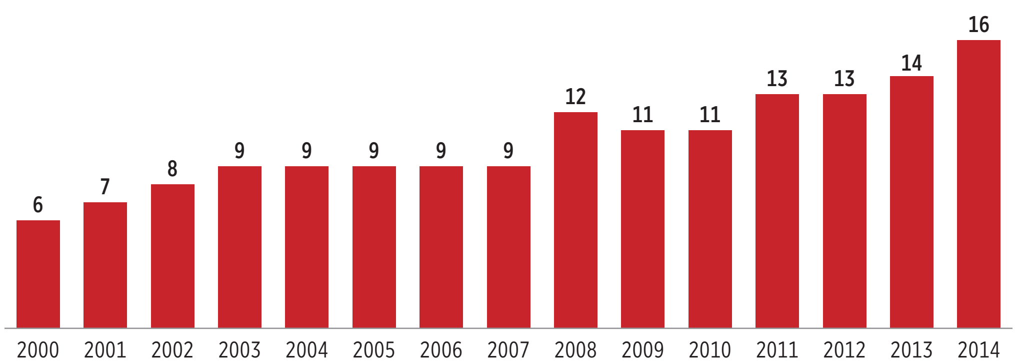


Note: Equity mutual fund flows include net new cash flow and reinvested dividends. Data exclude mutual funds that invest primarily in other mutual funds.

FIGURE 2.15

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, 2000–2014



Note: Assets exclude Direct Filing Entity (DFE) assets that are reinvested in collective investment trusts. Data prior to 2014 come from the Department of Labor Form 5500 Research Files. Data for 2014 are preliminary, based on Department of Labor 2014 Form 5500 Latest Data Sets.

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

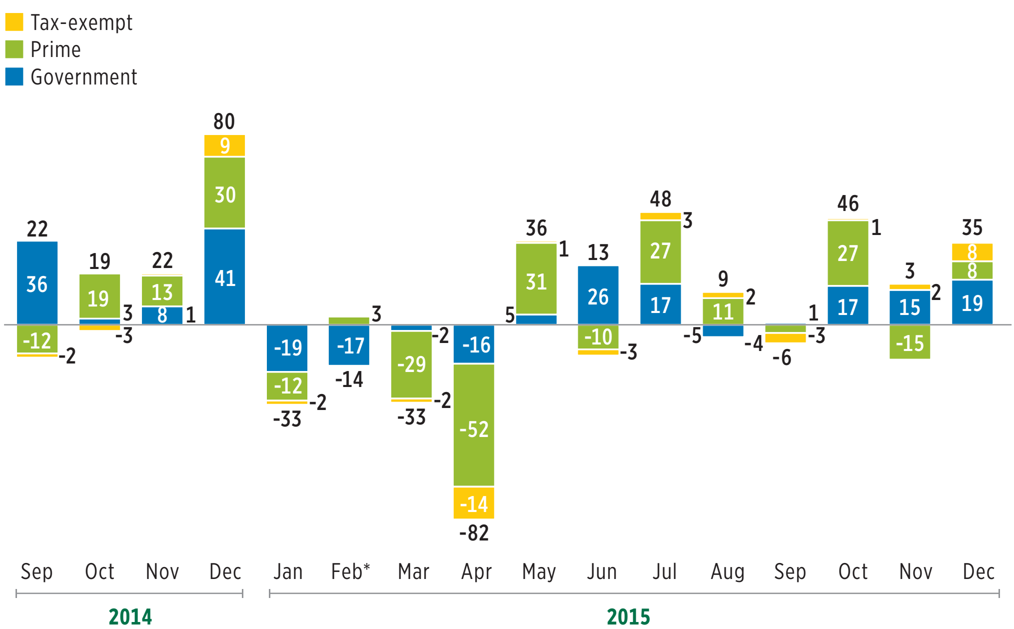
Demand for Money Market Funds

In 2015, money market funds received a modest $21 billion in net inflows. Like demand for long-term funds, however, demand for money market funds fluctuated in 2015. In particular, money market funds experienced outflows in the first four months of 2015, with investors redeeming $162 billion, on net (Figure 2.16). Tax payments by corporations in mid-March and individuals in mid-April were likely key drivers behind these redemptions. Outflows abated and money market funds received net inflows of $183 billion over the last eight months of the year. About half of these flows went to government money market funds.

FIGURE 2.16

Net New Cash Flow to Money Market Funds

Billions of dollars, September 2014–December 2015



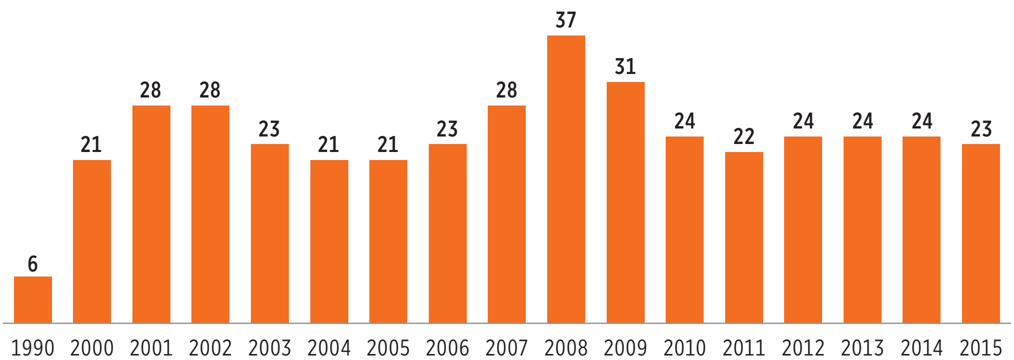
* In February 2015, investors withdrew $429 million from tax-exempt money market funds.
Note: Components may not add to the total because of rounding.

Institutions rely more heavily on money market mutual funds to manage their cash today than they did in the early 1990s. For example, in 2008, U.S. nonfinancial businesses held 37 percent of their cash balances in money market funds, up from just 6 percent in 1990 (Figure 2.17). Though this portion has declined since the 2007–2009 financial crisis, it remains substantial, measuring 23 percent in 2015. Part of this demand reflects the outsourcing of institutions' cash management activities to asset managers. Depending on the amount of cash an institutional client wishes to invest and how the client wants the assets managed, it may invest in a money market fund or, alternatively, in a separate account—an account wholly owned by the institutional investor and managed on its behalf by an asset manager. Institutional money market funds—used by businesses, pension funds, state and local governments, and other large-account investors—had net inflows of $16 billion in 2015, following a net inflow of $37 billion in 2014 (Figure 2.18).

FIGURE 2.17

Money Market Funds Managed 23 Percent of U.S. Businesses' Short-Term Assets in 2015

Percent; year-end, selected years



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

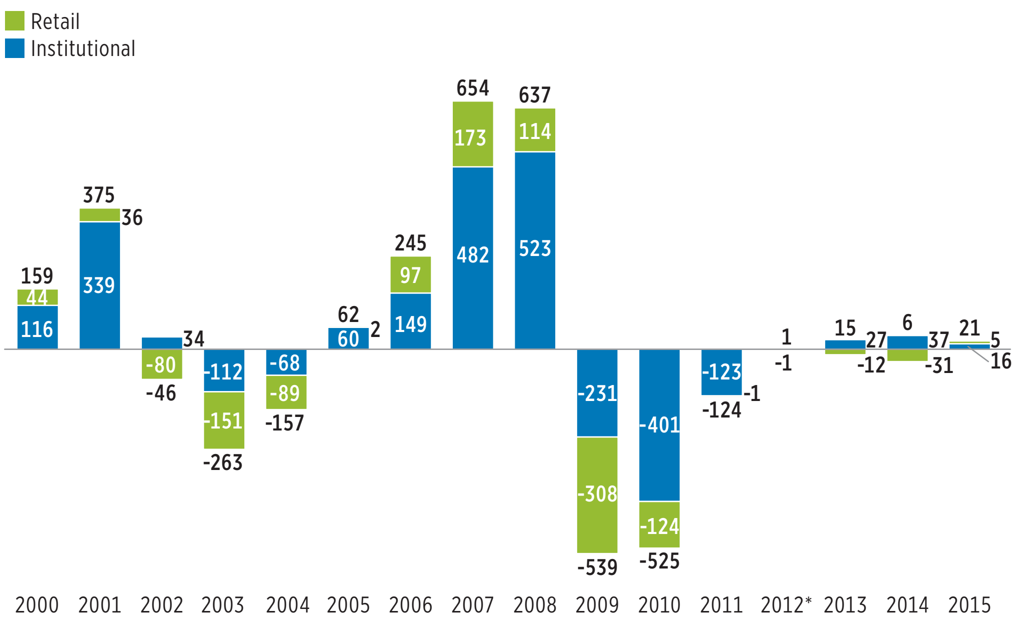
Sources: Investment Company Institute and Federal Reserve Board

Individual investors tend to withdraw cash from money market funds when the difference between yields on money market funds and interest rates on bank deposits narrows or becomes negative. Because of Federal Reserve monetary policy, short-term interest rates remained near zero through most of 2015. Yields on money market funds, which track short-term open market instruments such as Treasury bills, also hovered near zero and remained below yields on money market deposit accounts offered by banks (Figure 2.19). Retail money market funds, which principally are sold to individual investors, saw a small net inflow of $5 billion in 2015, following a net outflow of $31 billion in 2014 (Figure 2.18).

FIGURE 2.18

Net New Cash Flow to Retail and Institutional Money Market Funds

Billions of dollars, 2000–2015



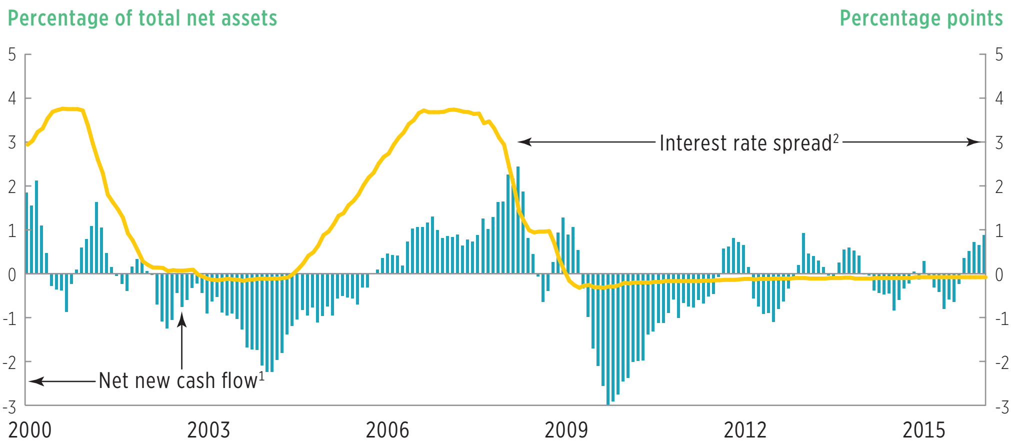
* In 2012, investors added $1 billion to institutional money market funds and withdrew $1 billion from retail money market funds. On net, investors withdrew less than $500 million from money market funds.

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

FIGURE 2.19

Net New Cash Flow to Taxable Retail Money Market Funds Is Related to Interest Rate Spread

Monthly, 2000–2015



[1] Net new cash flow is the percentage of previous month-end taxable retail money market fund assets, plotted as a six-month moving average.

[2] The interest rate spread is the difference between the taxable retail money market fund yield and the average interest rate on money market deposit accounts.

Sources: Investment Company Institute, iMoneyNet, and Bank Rate Monitor

Recent Reforms to Money Market Funds

The SEC has amended Rule 2a-7, a regulation governing money market funds, several times since 1983, placing greater limits on the maturity and credit quality of the securities that these funds are allowed to hold, adding diversification requirements, requiring minimum levels of liquidity for the funds, and expanding required disclosure. In response to the 2007–2009 financial crisis, the SEC significantly reformed Rule 2a-7 in 2010. Among other things, these reforms required money market funds to hold a certain amount of liquidity and imposed stricter maturity limits.

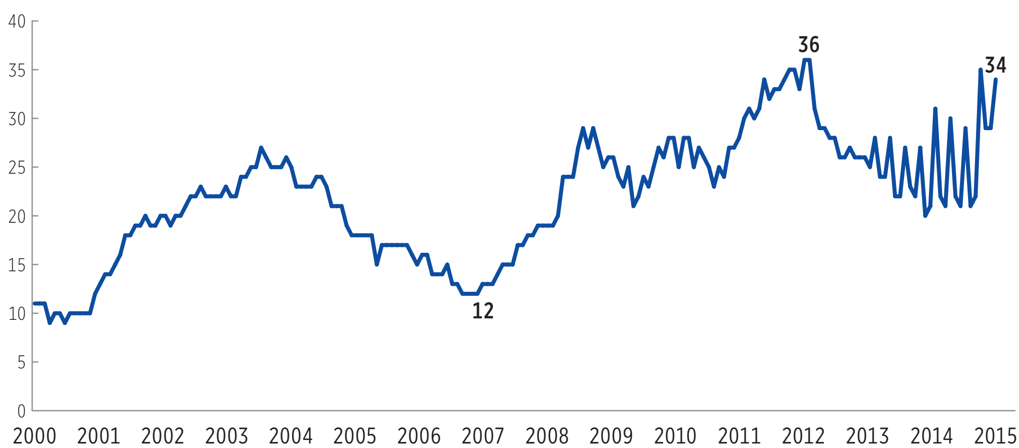
One outcome of these provisions is that prime funds have become more like government money market funds. To a significant degree, prime funds adjusted to the SEC's 2010 amendments to Rule 2a-7 by adding to their holdings of Treasury and agency securities. They also boosted their assets in repurchase agreements (repos). A repo can be thought of as a short-term collateralized loan, such as to a bank or other financial intermediary. Repos are collateralized—typically by Treasury and agency securities—to ensure that the loan is repaid. Prime fund holdings of Treasury and agency securities and repos have risen substantially as a share of portfolios, from 12 percent in spring 2007 to a peak of 36 percent in fall 2012 (Figure 2.20). In December 2015, this share was 34 percent of prime fund assets, still more than double the value before the financial crisis and subsequent reforms.

In July 2014, the SEC adopted additional rules for money market funds, precluding the use of amortized cost accounting by institutional funds that invest more than one-half of 1 percent of

FIGURE 2.20

Prime Money Market Fund Holdings of Treasury and Agency Securities and Repurchase Agreements

Percentage of prime funds' total net assets; month-end, 2000–2015



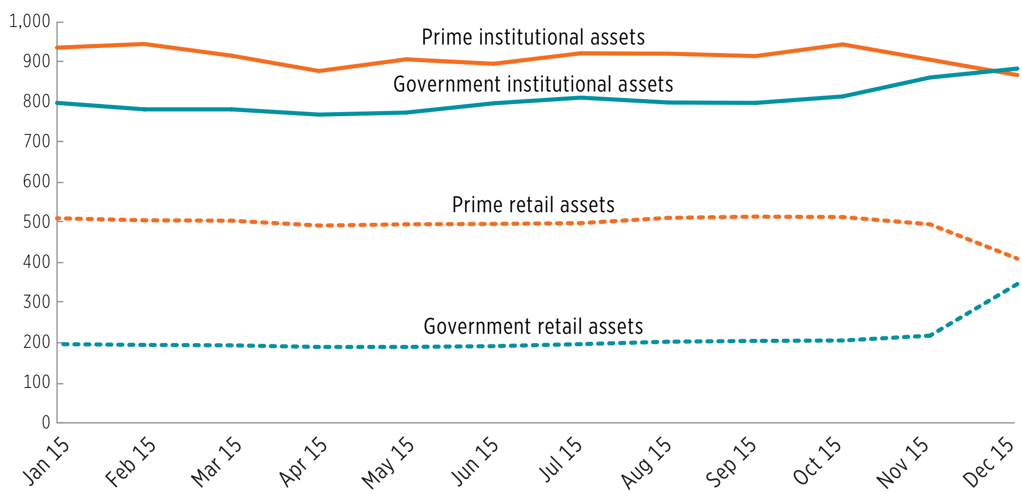
their assets in nongovernment securities, and by requiring that such funds price their shares to the nearest one-hundredth of a cent (i.e., float their NAVs [net asset values]). Additionally, under the July 2014 rules, nongovernment money market fund boards can impose liquidity fees and gates (temporary halt redemptions) when a fund's weekly liquid assets fall below 30 percent of its total net assets (the regulatory minimum). The July 2014 rules also include additional diversification, disclosure, and stress testing requirements, as well as updated reporting by money market funds.

Because the new rules will not be fully implemented until late 2016, it is not yet clear how the reforms will affect investor demand for money market funds. In late 2015, however, some money market fund sponsors altered their product offerings on the view that demand for prime money market funds, both from institutional and retail investors, will decline once the July 2014 rules are fully implemented. In late 2015, a total of $188 billion in assets migrated from prime funds into government funds through mergers with existing funds or through changes in funds' investment strategies. As a result of these and other factors, the total net assets of institutional and retail classes of prime money market funds fell by $77 billion and $103 billion, respectively, during the last two months of 2015. As expected, these reductions were offset by growth in the assets of government money market funds (Figure 2.21). By the end of 2015, assets in prime funds were at their lowest level since 2004 and assets in government funds were at their highest level since 2008.

FIGURE 2.21

Assets Migrated from Prime Funds into Government Funds in 2015

Billions of dollars; monthly, 2015



The Federal Reserve's Overnight Reverse Repo Facility

In 2013, anticipating the need to begin absorbing excess liquidity from the financial system, the Federal Reserve introduced a program of fixed-rate, full-allotment, overnight, and term reverse repos. The introduction and expansion of the Fed's reverse repo facilities over the past three years has greatly increased the central bank's role as a repo counterparty.

Through these facilities, money market funds (and other market participants) engage with the Fed in overnight or term repos. At the end of 2015, the Federal Reserve was the repo counterparty for 54 percent of the $718 billion in repurchase agreements entered into by taxable money market funds. This share has risen from 29 percent at the end of 2013, the year the program began.

The rise, however, reflects a strong seasonal pattern. Money market fund repurchase agreements with the Fed tend to spike at quarter-ends, in large part because of changes in bank regulations, especially in Europe. Historically, European banks have been major repo counterparties with money market funds. Due to regulatory changes, however, European banks have generally become less willing to borrow from U.S. money market funds, especially at the end of the quarter. In such instances, money market funds, seeking to remain fully invested at quarter-ends, have engaged in repurchase agreements with the Fed. This explains the seesaw pattern that emerges in 2014 and 2015 (Figure 2.20).

2014 Fund Reclassification

To reflect changes in the marketplace, ICI modernized its investment objective (IOB) classifications for open-end mutual funds in 2014.

ICI reports data on open-end mutual funds at several levels. At the macro level, the ICI data categories—domestic equity, world equity, taxable bond, municipal bond, hybrid, taxable money market, and tax-exempt money market funds—have remained the same.

The update reclassified the categories at a more detailed level. This means that there is a break in the time series for some of the data in *Fact Book*.

Learn More

- » 2014 Mutual Fund Reclassification FAQs
- » Mutual Fund Investment Objective Definitions

Available at www.ici.org/iob_update.

For More Information

» Money Market Fund Resource Center
www.ici.org/mmfs

» Changes to Money Market Funds Are Showing Up in Data
www.ici.org/viewpoints/view_15_mmf_changes

» Understanding the Risks of Bond Mutual Funds: Are They Right for Me?
www.ici.org/faqs

» Why Long-Term Fund Flows Aren't a Systemic Risk: Past Is Prologue
www.ici.org/viewpoints/view_15_fund_flow_01

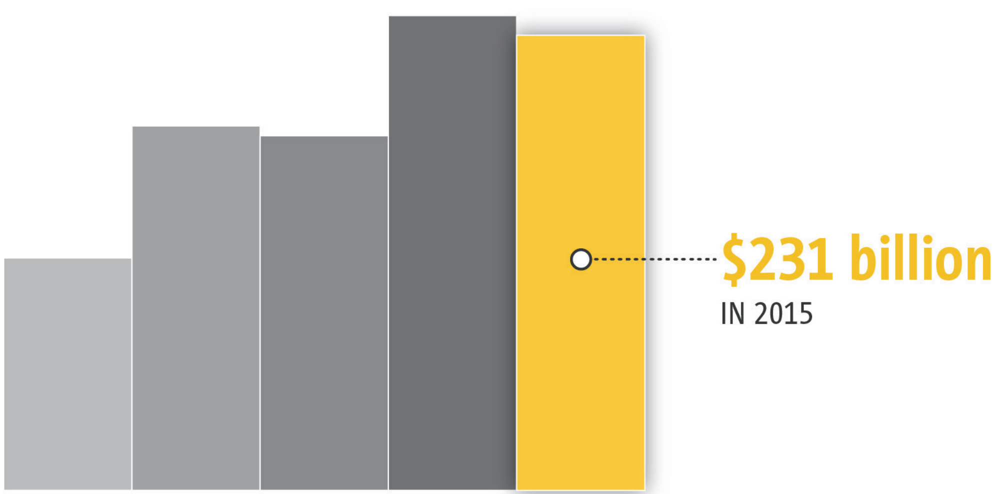
» High-Yield Bond Mutual Fund Flows: Some Perspective
www.ici.org/viewpoints/view_15_hybf_flows

CHAPTER THREE

Exchange-Traded Funds

For investors seeking to gain or shed exposure to broad market indexes, particular sectors or geographical regions, or specific rules-based investment strategies, ETFs are a convenient, cost-effective tool. 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, nearly $1.6 trillion of net new ETF shares have been issued. With the increase in demand, sponsors have offered more ETFs with a greater variety of investment objectives. With $2.1 trillion in assets, the U.S. ETF industry remained the largest in the world at year-end 2015. Though ETFs share some basic characteristics with mutual funds, there are key operational and structural differences between the two types of investment products.

ETF net share issuance remained near record high in 2015



This chapter provides an overview of exchange-traded funds (ETFs)—how they are created, how they differ from mutual funds, how they trade, the demand by investors for ETFs, and the characteristics of ETF-owning households.

What Is an ETF?

An 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. In the United States, most ETFs are structured as open-end investment companies, like mutual funds, and 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.

ETFs have been available as an investment product for more than 20 years in the United States. The Securities and Exchange Commission (SEC) approved the first ETF—a broad-based domestic equity fund tracking the S&P 500 index—in 1993. Until 2008, the SEC only approved 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 of or an inverse (or a multiple of an inverse) of their indexes.

In early 2008, the SEC granted approval to several fund sponsors to offer fully transparent, actively managed ETFs meeting certain requirements. Each business day, these actively managed ETFs must disclose on their publicly available websites the identities and weightings of the component securities and other assets held by the ETF. 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 adviser to an actively managed mutual fund, creates a unique mix of investments to meet a particular investment objective and policy. At year-end 2015, 134 actively managed ETFs—with nearly $28 billion in assets—were registered with the SEC as investment companies.

ETFs and Mutual Funds

An ETF is a registered investment company that is similar to a mutual fund because it offers investors a proportionate share in a pool of stocks, bonds, and other assets. Like a mutual fund, an ETF is required to post the mark-to-market net asset value (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, 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 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 U.S. stock exchanges typically close. In contrast, the price of an ETF share is 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—is calculated as of 4:00 p.m. eastern time.

U.S. ETF Assets

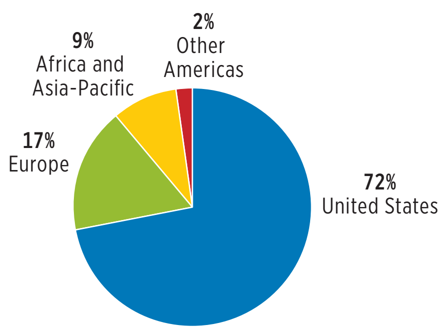
The U.S. ETF market—with 1,594 funds and $2.1 trillion in assets under management at year-end 2015—remained the largest in the world, accounting for 72 percent of the $2.9 trillion in ETF assets worldwide (Figure 3.1 and Figure 3.2).

The vast majority of assets in U.S. ETFs are in funds registered with and regulated by the SEC under the Investment Company Act of 1940 (Figure 3.2). At year-end 2015, about 2 percent of assets were held in ETFs that are not registered with or regulated by the SEC under the Investment Company Act of 1940 (non–1940 Act ETFs); these ETFs 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.

FIGURE 3.1

The United States Has the Largest ETF Market

Percentage of total net assets, year-end 2015



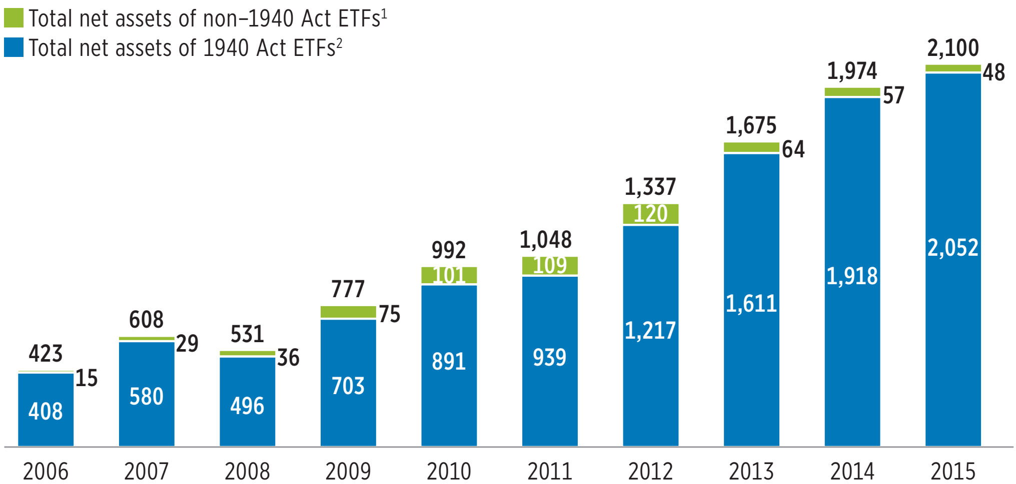
Total worldwide ETF assets: $2.9 trillion

Sources: Investment Company Institute and ETFGI

FIGURE 3.2

Total Net Assets and Number of ETFs

Billions of dollars; year-end, 2006–2015



Number of ETFs									
359	629	728	797	923	1,134	1,194	1,294	1,411	1,594

[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 ETFs that invest primarily in other ETFs are excluded from the totals. Components may not add to the total because of rounding.

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. Index-based ETFs track their target index in various ways. Many early ETFs tracked traditional indexes, mostly those weighted by market capitalization. More-recently launched index-based ETFs 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 value, growth, or dividend payments—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.

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 sample its index by investing in a representative sample of securities in the target index. Representative sampling is a practical solution for ETFs that track indexes containing thousands of securities (such as broad-based or total stock market indexes) that have restrictions on ownership or transferability (certain foreign securities) or that are difficult to obtain (some fixed-income securities).

The sponsor of an actively managed ETF also 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

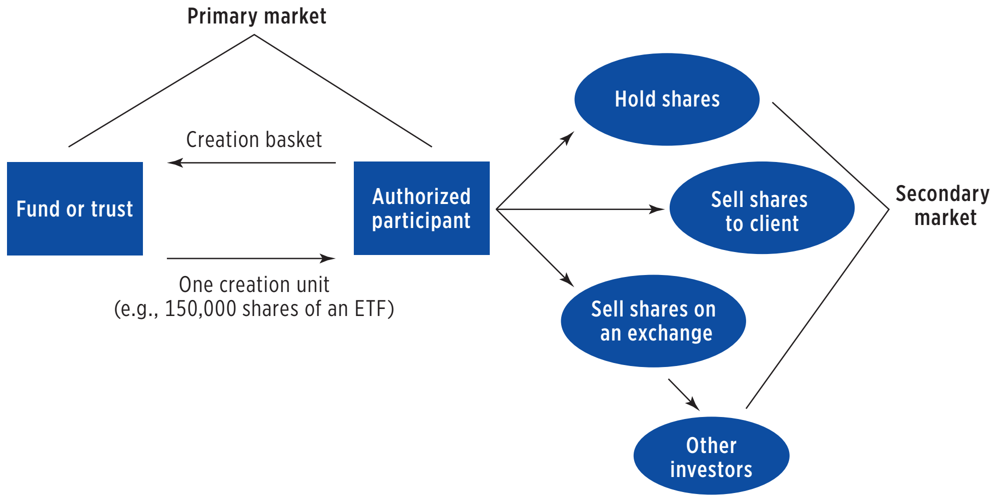
The creation or redemption of ETF shares is categorized as primary market activity. The creation/redemption mechanism in the ETF structure allows the number of shares outstanding in an ETF to expand or contract based on demand (Figure 3.3). Each business day, ETFs are required to publish the creation and redemption baskets for the next trading day. The creation/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, but, 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 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 64), 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 ETF. The ETF may permit or require an AP to substitute cash for some or all of the securities or assets in the creation basket, particularly 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 and/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 3.3

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. Any 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 ETF. In return, the AP receives the daily redemption basket of securities, cash, and/or other assets. The total value of the redemption basket 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.

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 U.S.-registered, self-clearing broker-dealers that can process all required trade submission, clearance, and settlement transactions on their own account, as well as full participating members of the National Securities Clearing Corporation and the Depository Trust Company.

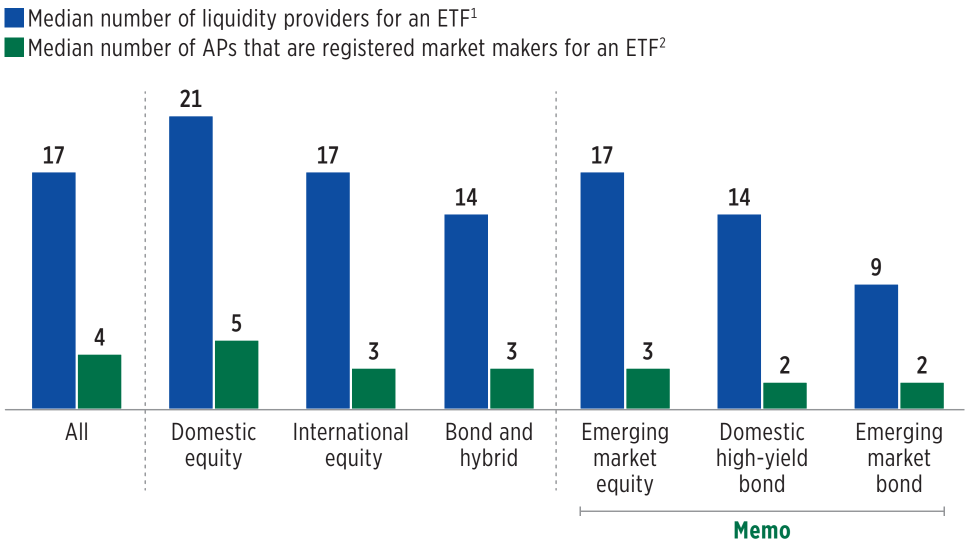
APs play a key role in the primary market for ETF shares because they are the only investors allowed to interact directly with the fund. APs do not receive compensation from an ETF or its sponsor and have no legal obligation to create or redeem the ETF's shares. APs typically derive their compensation from acting as dealers in ETF shares and 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.

Some APs also play another role in the ETF ecosystem by acting as registered market makers in ETF shares that trade on an exchange. Secondary market trading of ETFs, however, does not rely solely on these APs. In fact, a host of other entities provide liquidity—two-sided (buy and sell) quotes—in ETF shares other than APs. These other entities also help facilitate trading of ETF shares in the secondary market. Domestic equity ETFs have the most liquidity providers (Figure 3.4). But other types of ETFs—such as emerging market equity, domestic high-yield bond, and emerging market bond—also have multiple liquidity providers in the secondary market.

FIGURE 3.4

There Are Many ETF Liquidity Providers in the Secondary Market

December 2014



[1] For the purposes of the survey, *liquidity provider* was defined as an entity that regularly provides two-sided quotes in an ETF's shares.

[2] A registered market maker is registered with a particular exchange to provide two-sided markets in an ETF's shares.

Source: Investment Company Institute, *The Role and Activities of Authorized Participants of Exchange-Traded Funds*

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 an ETF's shares at a price that approximates the ETF's 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 through established relationships of the components of the ETF's portfolio with published indexes, financial or macroeconomic variables, or other indicators—enables investors to observe and attempt to profit from discrepancies between the ETF's share price and its underlying value during the trading day. ETFs contract with third parties (typically market data vendors) to calculate an estimate of an ETF's underlying value. This calculation, often called the intraday indicative value (IIV), is based on the prior day's portfolio holdings and is disseminated at regular intervals during the trading day (typically every 15 seconds). Some market participants also can make this assessment in real time using their own computer programs and proprietary data feeds.

When there are discrepancies between an ETF's share 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 and/or sell the underlying securities. The increased demand for the ETF should raise its share price and the sales of the underlying securities should lower their share 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 and/or buy the underlying securities. These actions should reduce the ETF share price and/or raise the price of the underlying securities, bringing the price of the ETF and the market value of its underlying securities closer together.

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 share price and its underlying value occurs, APs (for 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 (for 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 ETF short sales. These market participant actions, commonly described as arbitrage opportunities, help keep the market-determined price of an ETF's shares close to its underlying value.

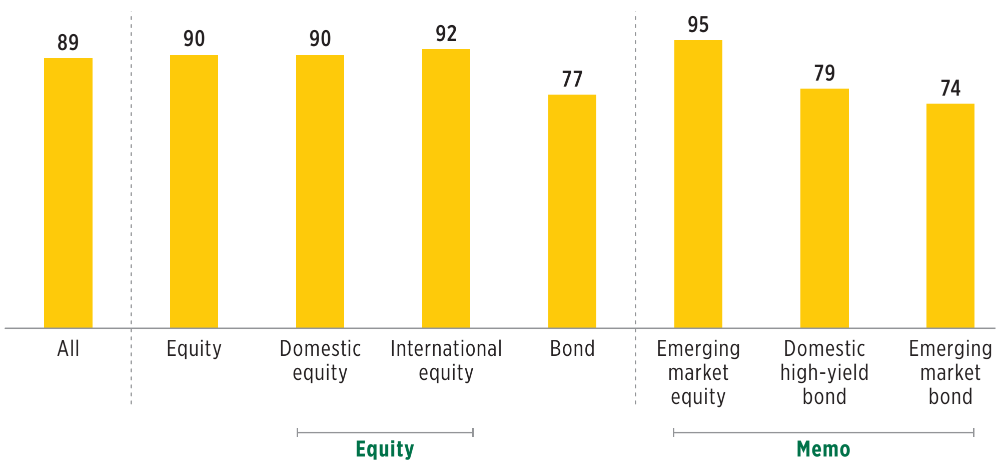
Secondary Market Trading in ETF Shares

ETF investors trading in the secondary market (e.g., on an exchange) do not interact with the ETF directly and do not create transactions in the underlying securities, because only the ETF shares are changing hands. Although many large institutional investors can access ETFs in both the primary and secondary markets, most retail investors only access ETFs in the secondary market. Most ETF investors trading in the secondary market generally are not motivated by arbitrage (i.e., the desire to make a profit from the difference between the market price of the ETF and its underlying value). Across all ETFs, investors make greater use of the secondary market (trading ETF shares) than the primary market (creations and redemptions of ETF shares through an AP). On average, 89 percent of the total daily activity in ETFs occurs on the secondary market (Figure 3.5). Even for ETFs with narrower investment objectives—such as emerging market equity, domestic high-yield bond, and emerging market bond—the bulk of the trading occurs on the secondary market (95 percent, 79 percent, and 74 percent, respectively). On average, secondary market trading is a smaller proportion (77 percent) of total trading for bond ETFs than for equity ETFs (90 percent). Because bond ETFs are a growing segment of the industry, many small bond ETFs tend to have less-established secondary markets. As they increase their assets under management, the secondary market for bond ETFs is likely to deepen naturally.

FIGURE 3.5

Most ETF Activity Occurs on the Secondary Market

Percentage of secondary market activity[1] relative to total activity;[2] daily, January 3, 2013–December 31, 2015



[1] Secondary market activity is measured as average daily dollar volume of ETF shares traded in each category over the 756 daily observations in the sample.

[2] Total activity is measured as the sum of primary market and secondary market activity. Primary market activity is computed as daily creations or redemptions for each ETF, which are estimated by multiplying the daily change in shares outstanding by the daily NAV from Bloomberg. Aggregate daily creations and redemptions are computed by adding creations and the absolute value of redemptions across all ETFs in each investment objective each day. Average daily creations and redemptions are the average of the aggregate daily creations and redemptions over the 756 daily observations in the sample.

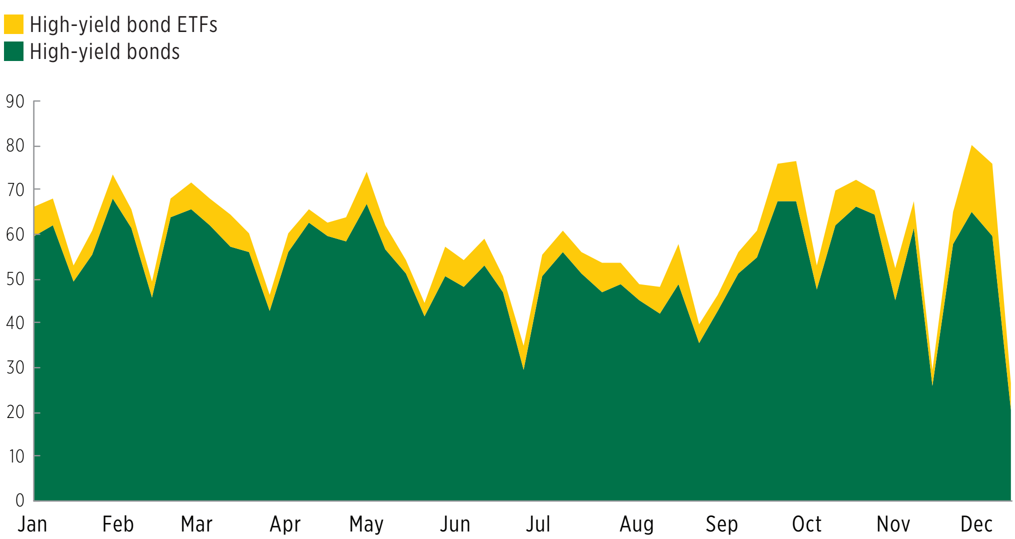
Sources: Investment Company Institute and Bloomberg

ETF secondary market trading also can act as a source of liquidity to the broader financial markets. In December 2015, the high-yield bond market experienced periods of stress, as market participants reassessed the risks of this sector and sent prices for many such bonds tumbling. During that stressed time, high-yield bond ETFs added substantial liquidity to the underlying high-yield bond market (Figure 3.6). At the height of the turmoil, trading in both high-yield bonds and high-yield bond ETFs surged—the average weekly value traded of high-yield bond ETFs was $15.7 billion, while average weekly transaction volume in high-yield bonds was $62.3 billion. Secondary market trading of high-yield bond ETFs added 25 percent ($15.7 billion/$62.3 billion) to weekly liquidity in the high-yield market during this tumultuous period. In comparison, in the other weeks of the year, secondary market trading of high-yield bond ETFs and transaction volume in high-yield bonds averaged $5.4 billion and $53.0 billion, respectively—meaning that high-yield bond ETFs generally added 10 percent ($5.4 billion/$53.0 billion) to liquidity in the high-yield bond market. As investors sought to shed or gain exposure, depending on their risk appetites and expectations of future returns, high-yield bond ETFs provided them with an efficient means of transferring risk while limiting the impact on the underlying high-yield bond market.

FIGURE 3.6

High-Yield Bond ETFs Added Liquidity to the High-Yield Bond Market

Secondary market trading; billions of dollars; weekly, 2015



Note: Data exclude high-yield bond ETFs designated as floating rate.
Sources: Investment Company Institute, Bloomberg, and FINRA TRACE

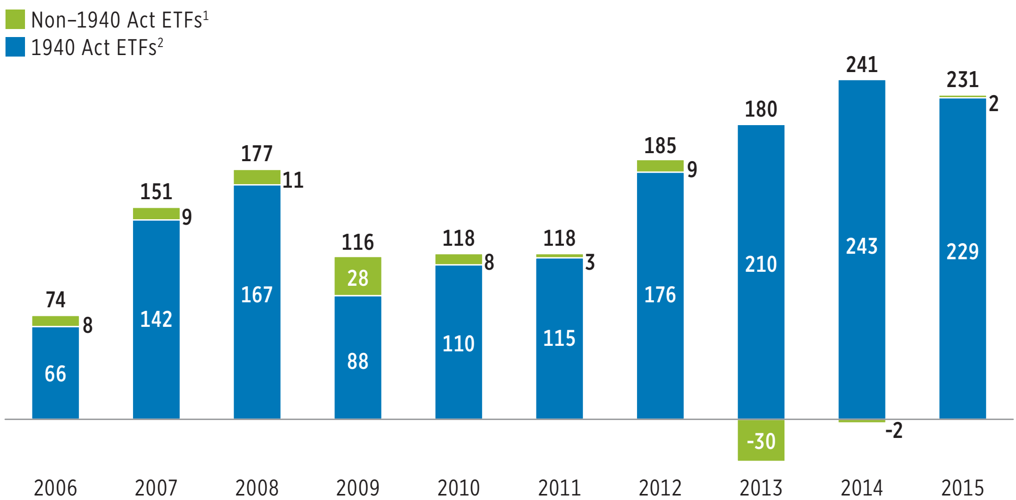
Demand for ETFs

In the past decade, demand for ETFs has increased 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. Assets in ETFs accounted for about 12 percent of total net assets managed by investment companies at year-end 2015. Net issuance of ETF shares was at a near-record pace of $231 billion in 2015 (Figure 3.7).

FIGURE 3.7

Net Issuance of ETF Shares

Billions of dollars, 2006–2015



[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.

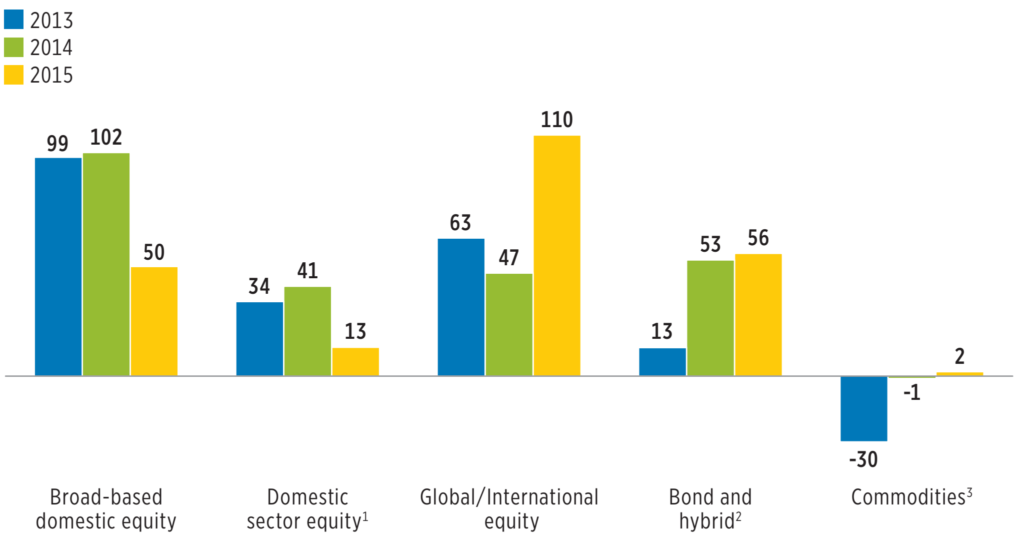
Note: Data for ETFs that invest primarily in other ETFs are excluded from the totals. Components may not add to the total because of rounding.

Overall net issuance of ETF shares remained strong in 2015, despite lackluster performance in domestic and international stock and bond markets. Global and international equity ETFs saw net issuance of $110 billion in 2015, up substantially from $47 billion in 2014 (Figure 3.8). Net issuance of bond and hybrid ETFs remained steady at $56 billion in 2015 compared with $53 billion in 2014. Broad-based domestic equity ETFs had positive net issuance ($50 billion) in 2015, though at half their pace in 2014. Declines in energy prices likely tempered demand for domestic sector equity ETFs, which had $13 billion in net share issuance, down from $41 billion in 2014. Commodity ETFs had net issuance of $2 billion in 2015, compared with net redemptions of $1 billion in 2014.

FIGURE 3.8

Net Issuance of ETF Shares by Investment Classification

Billions of dollars, 2013–2015



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

[2] Bond ETFs represented 98 percent of flows in the bond and hybrid category in 2015.

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

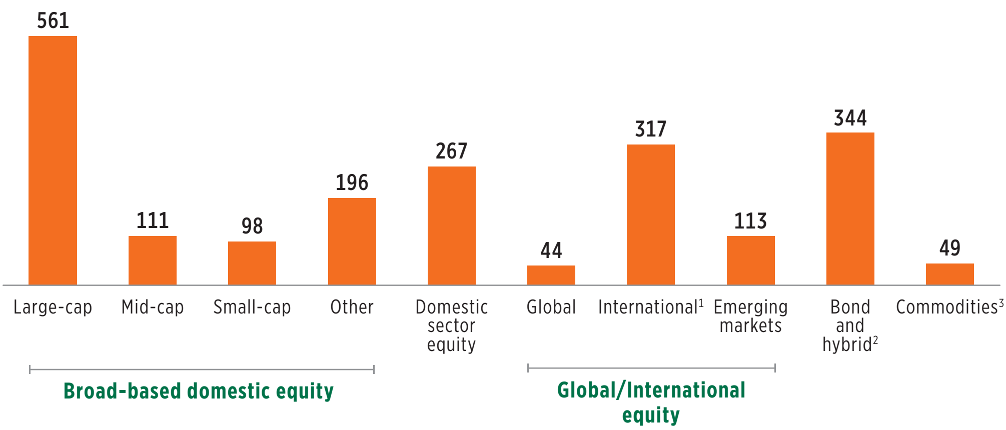
Note: Data for ETFs that invest primarily in other ETFs are excluded from the totals.

ETFs have been available for more than 20 years, and in that time, large-cap domestic equity ETFs have accounted for the largest proportion of all ETF assets—27 percent, or $561 billion, at year-end 2015 (Figure 3.9). Strong investor demand over the past seven years has made global/international equity ETFs the second-largest category with 23 percent ($475 billion) of all ETF assets. Bond and hybrid ETFs accounted for 16 percent ($344 billion) of all ETF assets.

FIGURE 3.9

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

Billions of dollars, year-end 2015



[1] This category includes international, regional, and single country ETFs.

[2] Bond ETFs represented 99 percent of the assets in the bond and hybrid category in 2015.

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

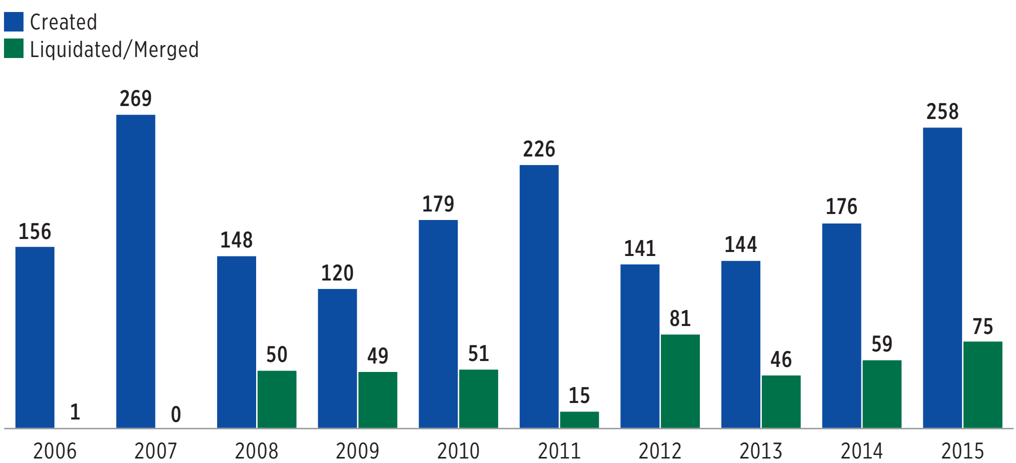
Note: Data for ETFs that invest primarily in other ETFs are excluded from the totals.

Increased investor demand for ETFs led to a rapid increase in the number of ETFs created by fund sponsors in the past decade (Figure 3.10). In the past decade, 1,817 ETFs were created—the peak years came in 2007, with 269 new funds, and 2015, with 258 new funds. Few ETFs had been liquidated until 2008 when market pressures appeared and sponsors began liquidating ETFs that had failed to gather sufficient assets. Liquidations occurred primarily among ETFs tracking virtually identical indexes, those focusing on specialty or niche indexes, or those using alternative weighting methodologies. In 2012, the number of ETF liquidations jumped to 81 as two sponsors exited the index-based ETF market. In 2015, ETF liquidations rose to 75, as several sponsors eliminated some small domestic equity and bond ETFs from their lineups.

FIGURE 3.10

Number of ETFs Entering and Leaving the Industry

2006–2015



Note: ETF data include ETFs not registered under the Investment Company Act of 1940 but exclude ETFs that invest primarily in other ETFs.

Characteristics of ETF-Owning Households

An estimated 6.2 million, or 5 percent of, U.S. households held ETFs in mid-2015. Of households that owned mutual funds, an estimated 10 percent also owned ETFs. ETF-owning households tended to include affluent investors who owned a range of equity and fixed-income investments. In mid-2015, 93 percent of ETF-owning households also owned equity mutual funds, individual stocks, or variable annuities (Figure 3.11). Sixty-two percent of households that owned ETFs also held bond mutual funds, bonds, or fixed annuities. In addition, 42 percent of ETF owning households owned investment real estate.

FIGURE 3.11

ETF-Owning Households Held a Broad Range of Investments

Percentage of ETF-owning households holding each type of investment, mid-2015

Equity mutual funds, individual stocks, or variable annuities (total)	**93**
Bond mutual funds, individual bonds, or fixed annuities (total)	**62**
Mutual funds (total)	**90**
Equity	88
Bond	50
Hybrid	45
Money market	58
Individual stocks	**71**
Individual bonds	**24**
Fixed or variable annuities	**29**
Investment real estate	**42**

Note: Multiple responses are included.

Some characteristics of retail ETF owners 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 and to own at least one defined contribution (DC) retirement plan account (Figure 3.12). ETF-owning households, however, also exhibit some characteristics that distinguish them from other households. For example, ETF-owning households tended to have higher education levels and greater household financial assets; they also were more likely to own an individual retirement account (IRA) than households that own mutual funds and those that own individual stocks.

FIGURE 3.12

Characteristics of ETF-Owning Households

Mid-2015

	All U.S. households	Households owning ETFs	Households owning mutual funds	Households owning individual stocks
Median				
Age of head of household[1]	51	51	51	52
Household income[2]	$50,500	$110,000	$87,500	$100,000
Household financial assets[3]	$75,000	$375,000	$200,000	$300,000
Percentage of households				
Household primary or co-decisionmaker for saving and investing				
Married or living with a partner	58	75	71	69
Widowed	9	5	6	8
Four-year college degree or more	32	65	51	54
Employed (full- or part-time)	59	71	71	69
Retired from lifetime occupation	28	27	26	29
Household owns				
IRA(s)	32	75	61	62
DC retirement plan account(s)	46	74	84	69

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

[2] Total reported is household income before taxes in 2014.

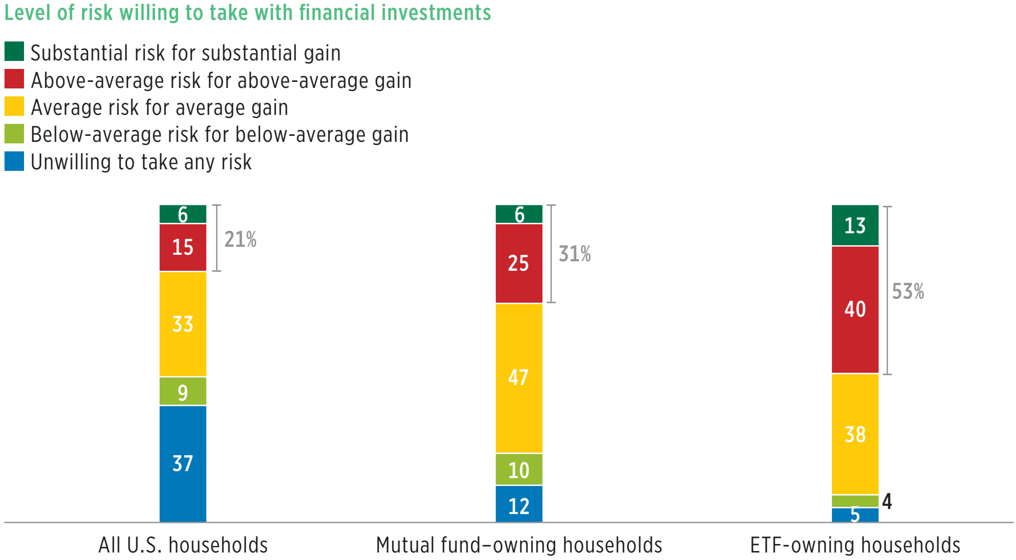
[3] Household financial assets include assets in employer-sponsored retirement plans but exclude the household's primary residence.

ETF-owning households also exhibit more willingness to take investment risk (Figure 3.13). Fifty-three percent of ETF-owning households were willing to take substantial or above-average investment risk for substantial or above-average gain in 2015, compared with 21 percent of all U.S. households and 31 percent of mutual fund–owning households. This result may be explained by the predominance of equity ETFs, which make up 81 percent of ETF total net assets (Figure 3.9). Investors who are more willing to take investment risk may be more likely to invest in equities.

FIGURE 3.13

ETF-Owning Households Are Willing to Take More Investment Risk

Percentage of all U.S. households, mutual fund–owning households, and ETF-owning households, mid-2015



For More Information

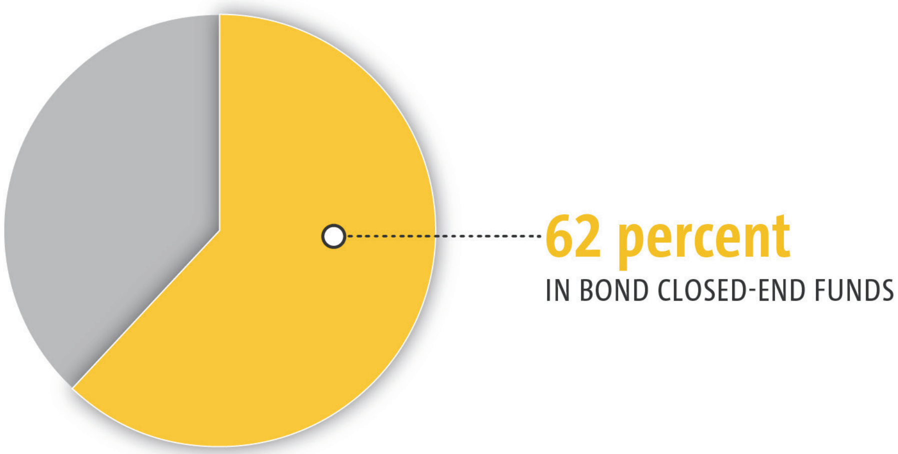
- » Exchange-Traded Funds Resource Center
  www.ici.org/etf_resources
- » The Creation and Redemption Process and Why It Matters
  www.ici.org/viewpoints/view_12_etfbasics_creation
- » "Understanding Exchange-Traded Funds: How ETFs Work"
  www.ici.org/perspective
- » *The Role and Activities of Authorized Participants of Exchange-Traded Funds*
  www.ici.org/research/reports
- » High-Yield Bond ETFs: A Source of Liquidity
  www.ici.org/viewpoints/view_15_hybf_etf
- » U.S. Bond ETFs Resilient on August 24
  www.ici.org/viewpoints/view_15_aug24_bond_etfs
- » Does Liquidity in ETFs Depend Solely on Authorized Participants?
  www.ici.org/viewpoints/view_15_aps_etfs
- » Plenty of Players Provide Liquidity for ETFs
  www.ici.org/viewpoints/view_14_ft_etf_liquidity
- » ETFs Don't Move the Market—Information Does
  www.ici.org/viewpoints/view_14_bond_etfs

CHAPTER FOUR

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.

More than 60 percent of closed-end fund total assets were in bond funds at year-end 2015



This chapter describes recent closed-end fund developments in the United States and provides a profile of the U.S. households that own them.

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. Preferred shares differ from common shares in that preferred shareholders are paid dividends but do not share in the gains and losses of the fund. 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.

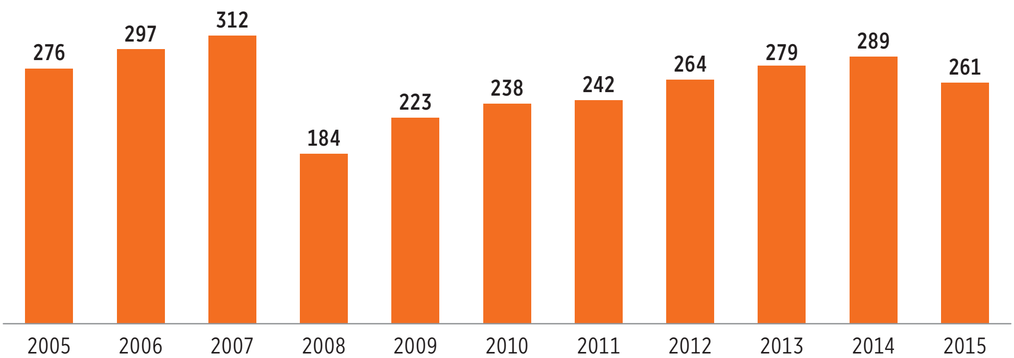
Total Assets of Closed-End Funds

At year-end 2015, 558 closed-end funds had total assets of $261 billion (Figure 4.1). The number of closed-end funds available to investors remains below its peak of 662 at the end of 2007 due to the effects of mergers, liquidations, and conversions. Total assets at year-end 2015 were down 10 percent ($28 billion) from year-end 2014 and remain below the 2007 peak of $312 billion. Several factors have limited the growth in both the assets and the number of closed-end funds in recent years. First, fewer closed-end funds launched in 2015 than in recent years. Second, several closed-end funds have repurchased shares through tender offers over the past few years, reducing the number of outstanding shares and the size of assets under management. Third, a few closed-end funds have liquidated each year and others have converted into open-end mutual funds or exchange-traded funds (ETFs). Finally, closed-end fund preferred share assets declined during the financial crisis of 2007–2009.

FIGURE 4.1

Total Assets of Closed-End Funds Were $261 Billion at Year-End 2015

Billions of dollars; year-end, 2005–2015



Number of closed-end funds

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
634	645	662	642	627	624	632	602	599	568	558

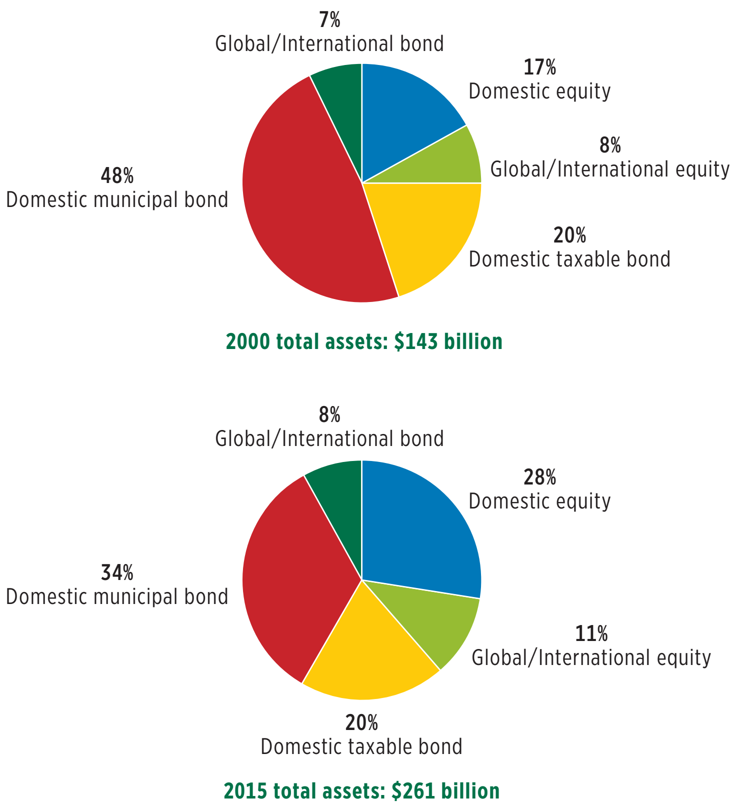
Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2015"

Historically, bond funds have accounted for a large share of assets in closed-end funds. At year-end 2000, 74 percent of all closed-end fund assets were held in bond funds with the remainder held in equity funds (Figure 4.2). At year-end 2015, assets in bond closed-end funds were $161 billion, or 62 percent of closed-end fund assets. Equity closed-end fund assets totaled $100 billion, or 38 percent of closed-end fund assets. These relative shares have shifted, in part because cumulative net issuance of equity closed-end fund shares has exceeded that of bond fund shares over the past nine years. In addition, total returns on U.S. stocks* averaged 5.6 percent annually from year-end 2000 to year-end 2015, while total returns on bonds† averaged 5.0 percent annually.

FIGURE 4.2

Equity Funds' Growing Share of the Closed-End Fund Market

Percentage of closed-end fund total assets, year-end 2000 and 2015



Note: Components may not add to 100 percent because of rounding.
Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2015"

* As measured by the Wilshire 5000 Total Return Index (float-adjusted).

† As measured by the Citigroup Broad Investment Grade Bond Index.

Net Issuance of Closed-End Funds

Net issuance of closed-end fund shares decreased to $1.7 billion in 2015 from $4.9 billion in 2014, as investor demand for equity closed-end funds waned (Figure 4.3). Net issuance of equity closed-end funds fell to $1.2 billion in 2015 from $4.3 billion in 2014, and demand for bond closed-end funds edged down to $486 million from $578 million in 2014. For the first time since 2007, net issuance of global/international equity closed-end funds accounted for the bulk of the equity fund net issuance.

FIGURE 4.3

Closed-End Fund Net Share Issuance[1]

Millions of dollars, 2007–2015[2]

		Equity			Bond			
	Total	Total	Domestic	Global/ International	Total	Domestic taxable	Domestic municipal	Global/ International
2007	$28,369	$24,608	$4,949	$19,659	$3,761	$1,966	-$880	$2,675
2008	-22,298	-8,739	-7,052	-1,687	-13,560	-6,770	-6,089	-700
2009	-3,259	-2,520	-2,366	-154	-739	-788	-238	287
2010	5,430	2,054	1,995	59	3,376	1,900	1,119	357
2011	6,018	4,466	3,206	1,260	1,551	724	825	2
2012	11,385	2,953	2,840	113	8,432	3,249	3,102	2,081
2013	13,677	3,554	4,097	-543	10,123	3,921	-220	6,423
2014	4,891	4,314	3,819	494	578	266	523	-212
2015	1,676	1,190	148	1,043	486	678	-87	-104

[1] 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). A positive number indicates that gross issuance exceeded gross redemptions. A negative number indicates that gross redemptions exceeded gross issuance.

[2] Data are not available for years prior to 2007.

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

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2015"

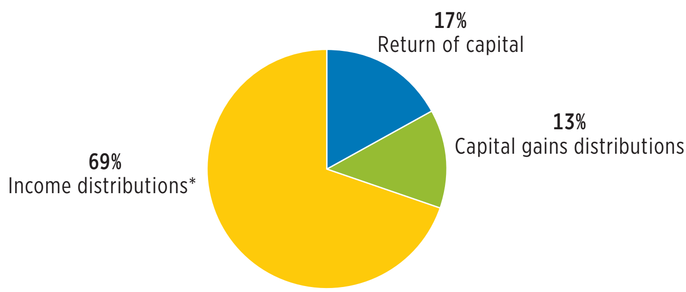
Closed-End Fund Distributions

In 2015, closed-end funds distributed $16.8 billion to shareholders (Figure 4.4). Closed-end funds may make distributions to shareholders from three possible sources: income from interest and dividends, realized capital gains, and return of capital. Income from interest and dividends made up 69 percent of closed-end fund distributions, with the majority of income distributions paid by bond closed-end funds. Return of capital comprised 17 percent of closed-end fund distributions, and capital gains distributions accounted for 13 percent.

FIGURE 4.4

Closed-End Fund Distributions

Percentage of closed-end fund distributions, 2015



Total closed-end fund distributions: $16.8 billion

* Income distributions include payments from interest and dividends.

Note: Components do not add to 100 percent because of rounding.

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2015"

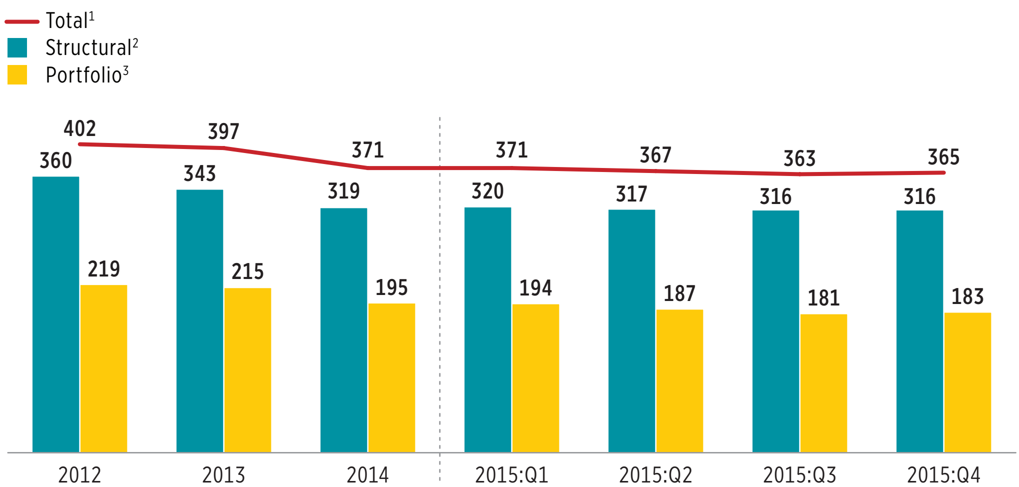
Closed-End Fund Leverage

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 2015, at least 365 funds, accounting for 65 percent of closed-end funds, were using structural leverage, certain types of portfolio leverage (tender option bonds or reverse repurchase agreements), or both as a part of their investment strategy (Figure 4.5).

FIGURE 4.5

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

Number of funds; end of period, 2012–2014, 2015:Q1–2015:Q4



[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 stock.

[3] Portfolio leverage 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.

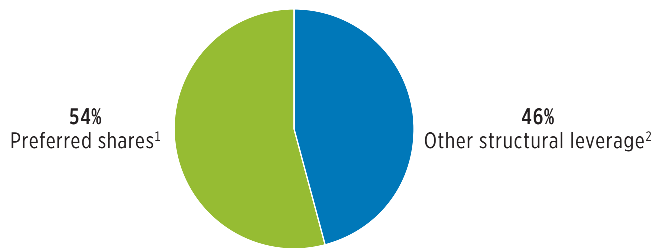
Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2015"

Structural leverage, the most common type of 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 and issuing debt and preferred shares. At the end of 2015, 316 funds had a total of $49.3 billion in structural leverage, with a little more than half (54 percent) of those assets from preferred shares (Figure 4.6). Forty-six percent of closed-end fund structural leverage was other structural leverage. The average leverage ratio* across those closed-end funds employing structural leverage was 26.0 percent at year-end 2015. Among closed-end funds employing structural leverage, the average leverage ratio for bond funds was somewhat higher (27.3 percent) than that of equity funds (22.0 percent).

FIGURE 4.6

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

Percentage of closed-end fund structural leverage, year-end 2015



Total closed-end fund structural leverage: $49.3 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. Preferred stock differs from common stock in that preferred shareholders are paid income and capital gains distributions, but do not share in the gains and losses in the value of the fund's shares.

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

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2015"

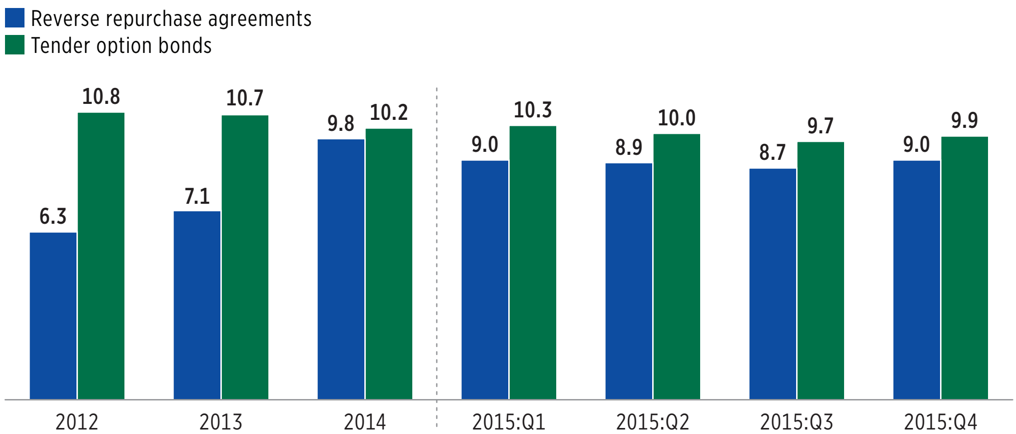
* The *leverage ratio* is the ratio of the amount of preferred shares and other structural leverage to the sum of the amount of common assets, preferred shares, and other structural leverage.

Portfolio leverage results from particular portfolio investments, such as certain types of derivatives, reverse repurchase agreements, and tender option bonds. At the end of 2015, 183 closed-end funds had $18.9 billion outstanding in reverse repurchase agreements and tender option bonds (Figure 4.7).

FIGURE 4.7

Use of Portfolio Leverage

Billions of dollars; end of period, 2012–2014, 2015:Q1–2015:Q4



Note: Portfolio leverage 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, 2015"

Characteristics of Households Owning Closed-End Funds

An estimated 3.4 million U.S. households owned closed-end funds in 2015. These households tended to include affluent investors who owned a range of equity and fixed-income investments. In 2015, 92 percent of households owning closed-end funds also owned equity mutual funds, individual stocks, or variable annuities (Figure 4.8). Seventy-three percent of households that owned closed-end funds also held bonds, bond mutual funds, or fixed annuities. In addition, 51 percent of these households owned investment real estate.

Because a large number of households that owned closed-end funds also owned stocks and mutual funds, the characteristics of closed-end fund owners were similar in many respects to those of stock and mutual fund owners. For instance, households that owned closed-end funds (like stock- and mutual fund–owning households) tended to be headed by college-educated individuals and had household incomes above the national median (Figure 4.9).

Nonetheless, households that owned closed-end funds exhibited certain characteristics distinguishing them from mutual fund–owning households. For example, households with closed-end funds tended to have greater household financial assets (Figure 4.9). Also, 39 percent of households owning closed-end funds were retired from their lifetime occupations, making them more likely to be retired than households owning mutual funds.

FIGURE 4.8

Closed-End Fund Investors Owned a Broad Range of Investments

Percentage of closed-end fund–owning households holding each type of investment, mid-2015

Equity mutual funds, individual stocks, or variable annuities (total)	**92**
Bond mutual funds, individual bonds, or fixed annuities (total)	**73**
Mutual funds (total)	**83**
Equity	78
Bond	54
Hybrid	51
Money market	61
Individual stocks	**72**
Individual bonds	**39**
Fixed or variable annuities	**42**
Investment real estate	**51**

Note: Multiple responses are included.

Source: *ICI Research Perspective*, "The Closed-End Fund Market, 2015"

FIGURE 4.9

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

Mid-2015

	All U.S. households	Households owning closed-end funds	Households owning mutual funds	Households owning individual stocks
Median				
Age of head of household[1]	51	53	51	52
Household income[2]	$50,500	$87,500	$87,500	$100,000
Household financial assets[3]	$75,000	$250,000	$200,000	$300,000
Percentage of households				
Household primary or co-decisionmaker for saving and investing				
Married or living with a partner	58	66	71	69
Widowed	9	6	6	8
Four-year college degree or more	32	53	51	54
Employed (full- or part-time)	59	68	71	69
Retired from lifetime occupation	28	39	26	29
Household owns				
IRA(s)	32	63	61	62
DC retirement plan account(s)	46	69	84	69

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

[2] Total reported is household income before taxes in 2014.

[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, 2015"

For More Information

» Closed-End Fund Resource Center
www.ici.org/cef

» "The Closed-End Fund Market, 2015"
www.ici.org/perspective

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

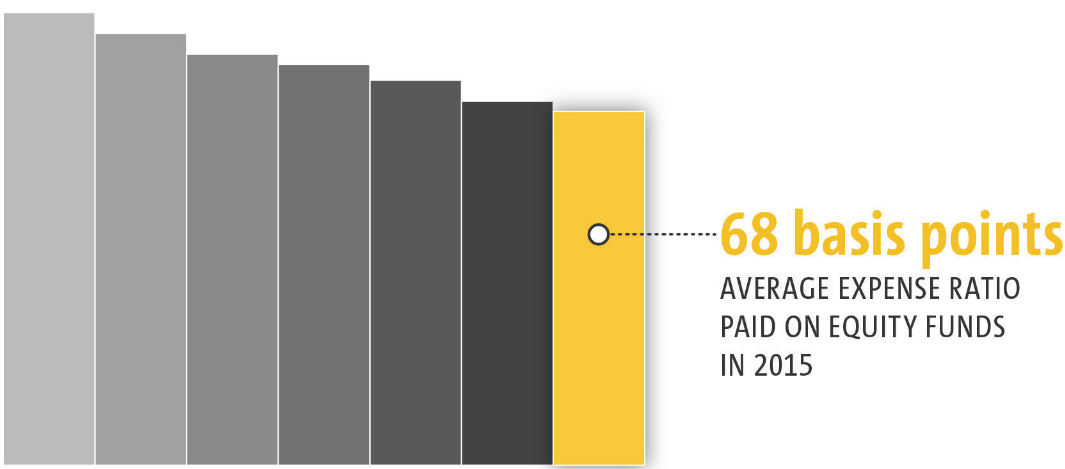
» Frequently Asked Questions About Closed-End Funds and Their Use of Leverage
www.ici.org/cef/background/faqs_closed_end

CHAPTER FIVE

Mutual 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 expenses paid by mutual fund investors have fallen substantially over time. For example, on an asset-weighted basis, average expense ratios for equity funds fell from 99 basis points in 2000 to 68 basis points in 2015, a 31 percent decline.

Expense ratios paid by equity fund investors have fallen for six consecutive years



Mutual fund investors, like investors in all financial products, pay for the services they receive. This chapter provides an overview of mutual fund expenses and fees.

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 5.1). In 2000, equity fund investors incurred expense ratios of 99 basis points, on average, or 99 cents for every $100 invested.† By 2015, that average had fallen to 68 basis points, a decline of 31 percent. Hybrid and bond fund expense ratios also have declined. The average hybrid fund expense ratio fell from 89 basis points in 2000 to 77 basis points in 2015, a reduction of 13 percent. In addition, the average bond fund expense ratio fell from 76 basis points in 2000 to 54 basis points in 2015, a decline of 29 percent.

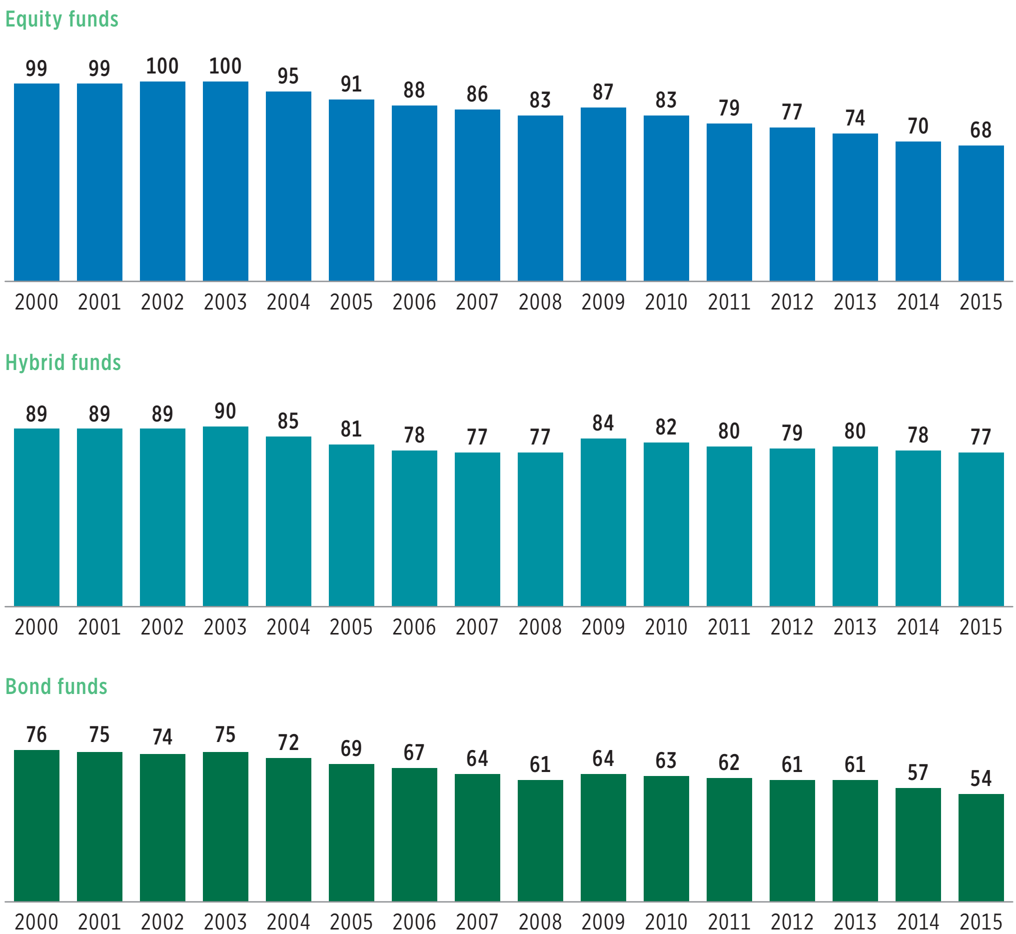
* In this chapter, unless otherwise noted, average expense ratios are calculated on an asset-weighted basis, which gives more weight to funds with greater assets. It reflects where investors are actually putting their assets, and thus better reflects the actual expenses, fees, or performance experienced by investors than does a simple average (weighting each fund or share class equally). ICI's fee research uses asset-weighted averages to summarize the expenses and fees that shareholders pay through mutual 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 each fund's expense ratio by its year-end assets.

† Basis points simplify percentages written in decimal form. A basis point equals one-hundredth of 1 percent (0.01 percent), so 100 basis points equals 1 percentage point. When applied to $1.00, 1 basis point equals $0.0001; 100 basis points equals one cent ($0.01).

FIGURE 5.1

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

Basis points, 2000–2015



Note: Expense ratios are measured as asset-weighted averages. Data exclude mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other mutual funds.

Sources: Investment Company Institute and Lipper

Understanding the Decline in Fund Expense Ratios

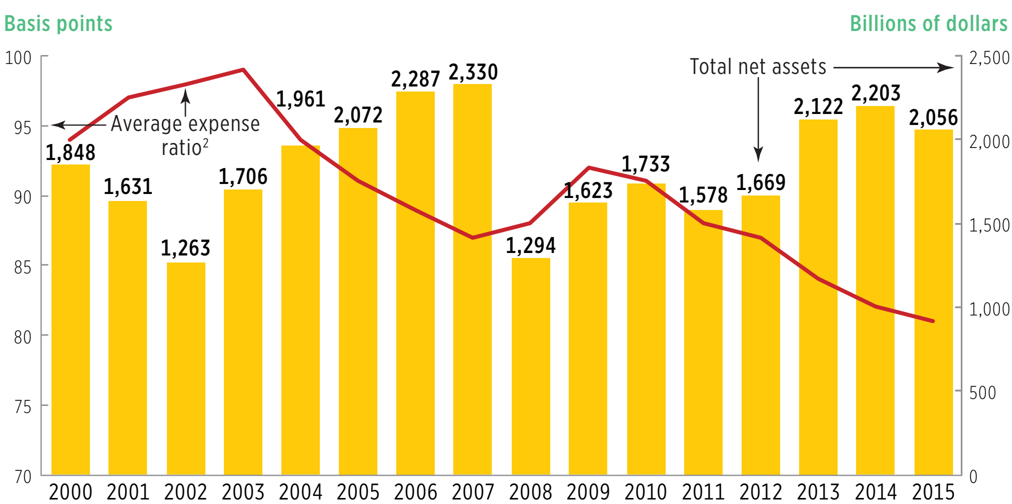
Several factors help account for the steep drop in expense ratios. First, expense ratios often vary inversely with fund assets. Some fund costs included in expense ratios—such as transfer agency fees, accounting and audit fees, and directors' fees—are more or less fixed in dollar terms. That means that 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 (Figure 5.2).

Another factor in the decline of the average expense ratios of long-term funds is the shift toward no-load share classes,* 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 Mutual Fund Load Fees on page 102).

FIGURE 5.2

Mutual Fund Expense Ratios Tend to Fall as Fund Assets Rise

Share classes of 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 mutual funds that invest primarily in other mutual funds.

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

Sources: Investment Company Institute and Lipper

* See page 101 for a description of no-load share classes.

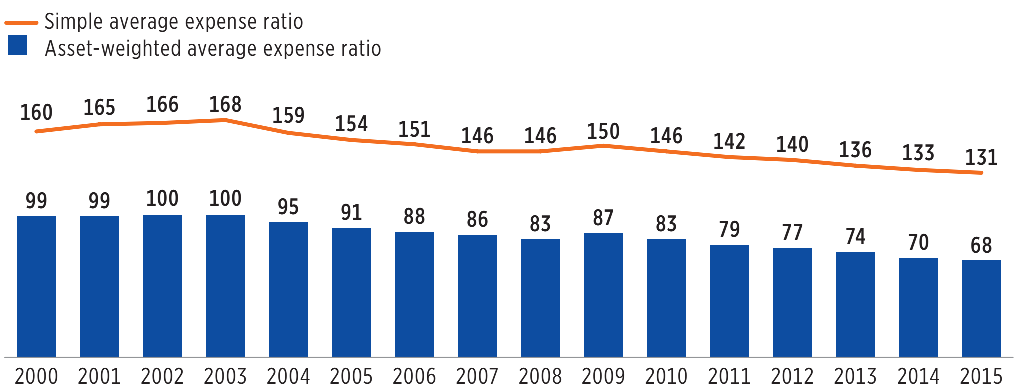
Mutual fund expense ratios also have fallen because of economies of scale and competition. Investor demand for mutual fund services has increased dramatically in recent years. From 1990 to 2015, the number of households owning mutual funds more than doubled—from 23.4 million to 53.6 million. All else equal, this sharp increase in demand would tend to boost fund expense ratios. Any such tendency, however, was mitigated by downward pressure on expense ratios—from competition among existing fund sponsors, new fund sponsors entering the industry, competition from products such as exchange-traded funds (ETFs) (see chapter 3), and economies of scale resulting from the growth in fund assets.

Finally, shareholders tend to invest in funds with below-average expense ratios (Figure 5.3). The simple average expense ratio of equity funds (the average for all equity funds offered for sale) was 131 basis points in 2015. The asset-weighted average expense ratio for equity funds (the average shareholders actually paid) was far lower—just 68 basis points.

FIGURE 5.3

Fund Shareholders Paid Below-Average Expense Ratios for Equity Funds

Basis points, 2000–2015



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

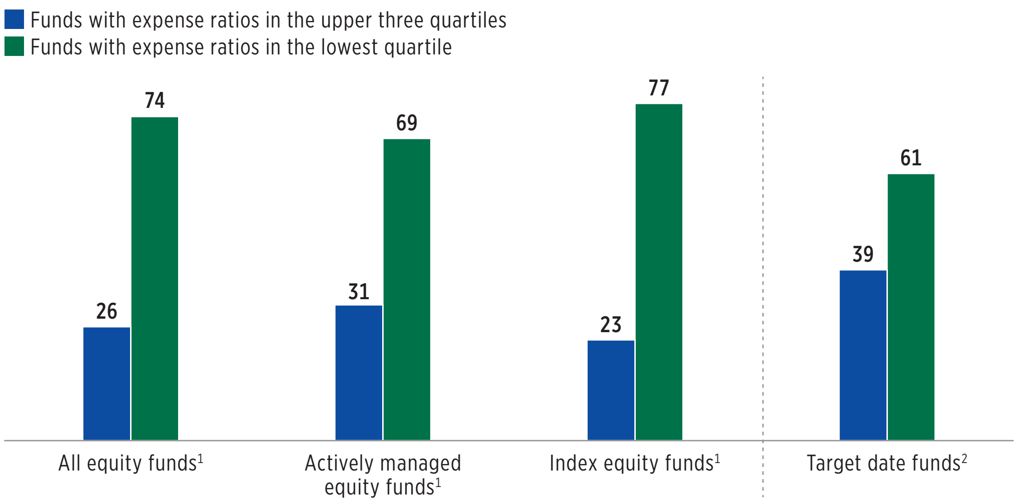
Sources: Investment Company Institute and Lipper

Another way to illustrate this tendency is to examine how investors allocate their assets across funds. At year-end 2015, equity funds with expense ratios in the lowest quartile held 74 percent of equity funds' total net assets, while those with expense ratios in the upper three quartiles held only 26 percent (Figure 5.4). This pattern holds for actively managed equity funds, index equity funds, and target date funds (funds that adjust their portfolios, typically toward fixed income, as the fund approaches and passes its target date). Index equity funds with expense ratios in the lowest quartile held 77 percent of index equity fund assets at year-end 2015.

FIGURE 5.4

Assets Are Concentrated in Lower-Cost Funds

Percentage of total net assets, 2015



[1] Data exclude mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other mutual funds.

[2] Data include mutual funds that invest primarily in other mutual funds, but exclude mutual funds available as investment choices in variable annuities. Ninety-seven percent of these funds invest primarily in other mutual funds.

Sources: Investment Company Institute and Lipper

Index Mutual Fund Expenses

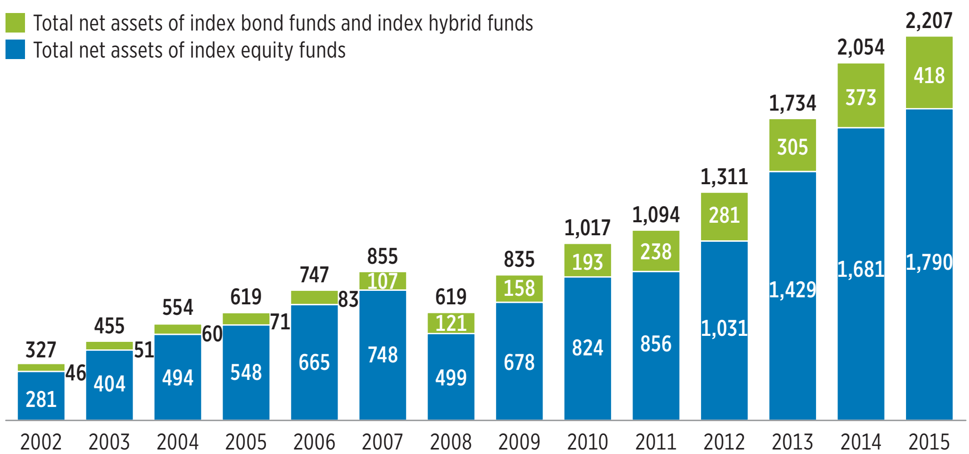
Growth in index mutual funds has contributed to the decline in equity and bond fund expense ratios.* Index fund assets have grown substantially in recent years, from $327 billion in 2002 to $2.2 trillion in 2015 (Figure 5.5). Investor demand for index bond funds and index hybrid funds has grown in the past few years, but as of December 2015, 81 percent of index fund assets were invested in index equity funds.

Index funds tend to have lower-than-average expense ratios for several reasons. The first is their approach to portfolio management. An index fund generally seeks to mimic the returns on a given 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.

FIGURE 5.5

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

Billions of dollars, 2002–2015



Number of index funds

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
313	321	328	322	343	354	360	357	365	382	372	371	383	406

Note: Data exclude mutual funds that invest primarily in other mutual funds. Components may not add to the total because of rounding.

* Unless otherwise noted, the discussion and figures in this section exclude exchange-traded funds (ETFs), which are examined separately in chapter 3.

By contrast, under an active management approach, managers have discretion to increase or reduce their exposure to the sectors or securities in their investment mandates. This approach offers investors the chance to enjoy superior returns. It also, however, entails more-intensive analysis of securities or sectors, which can be costly.

A second reason index funds tend to have below-average expense ratios is their investment focus. Historically, the assets of index equity funds have been concentrated most heavily in “large-cap blend” funds that target U.S. large-cap indexes, notably the S&P 500. Assets of actively managed funds, on the other hand, have been divided among stocks of varying levels of market capitalization, international regions, or specialized business sectors. Managing portfolios of mid- or small-cap, international, or sector stocks is generally acknowledged to be more expensive than managing portfolios of U.S. large-cap stocks.

Third, index funds are larger on average than actively managed funds, which helps reduce fund expense ratios through economies of scale. In 2015, the average index equity fund had $5.1 billion in assets, more than triple the $1.4 billion for the average actively managed equity fund.

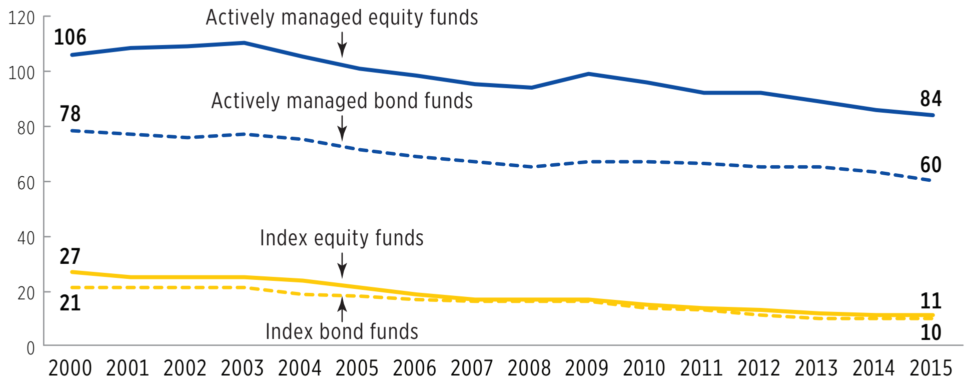
Finally, index fund investors who hire financial professionals might pay for that service out of pocket, rather than through the fund’s expense ratio. Actively managed funds more frequently bundle those costs in the fund’s expense ratio, through a 12b-1 fee.

These reasons, among others, help explain why index funds generally have lower expense ratios than actively managed funds. Note, however, that both index and actively managed funds have contributed to the decline in mutual funds’ overall average expense ratios shown in Figure 5.1. The average expense ratios incurred by investors in both index and actively managed funds have fallen—and by similar amounts. From 2000 to 2015, the average expense ratio of index equity funds fell 16 basis points, similar to the decline of 22 basis points in the expenses of actively managed equity funds (Figure 5.6). Over the same period, the average expense ratio of index bond funds and actively managed bond funds fell 11 basis points and 18 basis points, respectively.

FIGURE 5.6

Expense Ratios of Actively Managed and Index Funds

Basis points, 2000–2015



Note: Expense ratios are measured as asset-weighted averages. Data exclude mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other mutual funds.

Sources: Investment Company Institute and Lipper

In part, the downward trend in the average expense ratios of both index and actively managed funds reflects investors' tendency to buy lower-cost funds. Investor demand for index funds is concentrated in the very lowest-cost funds. In 2015, for example, 69 percent of index equity fund assets were held in funds with expense ratios that were among the lowest 10 percent of all index equity funds. This phenomenon is not unique to index funds, however; the proportion of assets in the lowest-cost actively managed funds is also high.

Understanding Differences in the Expense Ratios of Mutual Funds

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, fund assets, and payments to intermediaries.

Fund Investment Objective

Fund expense ratios vary by investment objective (Figure 5.7). For example, bond and money market funds tend to have lower expense ratios than equity funds. Among equity 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, fund expense ratios can vary considerably. For example, 10 percent of equity funds that focus on growth stocks have expense ratios of 74 basis points or less, while the top 10 percent have expense ratios of 199 basis points or more. This variation reflects, among other things, the fact that some growth funds focus more on small- or mid-cap stocks and others focus more on large-cap stocks. This is important because portfolios of small- and mid-cap stocks tend to cost more to manage.

FIGURE 5.7

Expense Ratios for Selected Investment Objectives

Basis points, 2015

Investment objective	10th percentile	Median	90th percentile	Asset-weighted average	Simple average
Equity funds[1]	**71**	**124**	**205**	**68**	**131**
Growth	74	119	199	81	126
Sector	78	135	215	78	140
Value	71	115	194	77	123
Blend	45	105	188	44	109
World	85	135	218	82	143
Hybrid funds[1]	**70**	**123**	**206**	**77**	**134**
Bond funds[1]	**48**	**85**	**165**	**54**	**97**
Taxable	46	89	170	54	98
Municipal	50	79	158	55	93
Money market funds[1]	**5**	**9**	**21**	**13**	**11**
Memo:					
Target date funds[2]	**45**	**90**	**153**	**55**	**94**
Index equity funds[1]	**8**	**45**	**158**	**11**	**71**

[1] Data exclude mutual funds available as investment choices in variable annuities and mutual funds that invest primarily in other mutual funds.

[2] Data include mutual funds that invest primarily in other mutual funds, but exclude mutual funds available as investment choices in variable annuities. Ninety-seven percent of these funds invest primarily in other mutual funds.

Note: Data include index mutual funds but exclude exchange-traded funds.

Sources: Investment Company Institute and Lipper

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 professional 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 U.S. Securities and Exchange Commission adopted Rule 12b-1 under the Investment Company Act of 1940, 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 their broker) 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.

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 (25 basis points). Front-end load shares are used in employer-sponsored retirement plans sometimes, but fund sponsors typically waive the sales load for purchases made through such retirement plans. Additionally, front-end load fees often decline as the size of an investor's initial purchase rises (called *breakpoint discounts*), 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 advisers 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 no front-end load or CDSL, and have a 12b-1 fee of 0.25 percent (25 basis points) or less. Originally, no-load share classes were sold directly by mutual fund sponsors to investors. Now, investors can purchase no-load funds through employer-sponsored retirement plans, discount brokerage firms, and bank trust departments, as well as directly from mutual fund sponsors. 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, 78 percent own fund shares through investment professionals (Figure 6.10). 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 advisers has changed significantly, moving away from front-end loads toward asset-based fees. One important outcome of the changing distribution structure has been a marked decline in load fees paid by mutual fund investors. The maximum front-end load fee that shareholders might pay for investing in mutual funds has changed little since 1990 (Figure 5.8). But front-end load fees that investors actually paid have declined markedly, from nearly 4 percent in 1990 to around 1 percent in 2015. This in part reflects the increasing role of mutual funds in helping investors save for retirement. Funds that normally charge front-end load fees often waive load fees on purchases made through defined contribution (DC) plans, such as 401(k) plans. Also, front-end load funds offer volume discounts, waiving or reducing load fees for large initial or cumulative purchases (see Mutual Fund Fee Structures on page 100).

FIGURE 5.8

Front-End Sales Loads That Investors Pay Are Well Below the Maximum Front-End Sales Loads That Funds Charge

Percentage of purchase amount, selected years

	Maximum front-end sales load[1]			Average front-end sales load that investors actually paid[2]		
	Equity	Hybrid	Bond	Equity	Hybrid	Bond
1990	5.0	5.0	4.6	3.9	3.8	3.5
1995	4.8	4.7	4.1	2.5	2.4	2.1
2000	5.2	5.1	4.2	1.4	1.4	1.1
2005	5.3	5.3	4.0	1.3	1.3	1.0
2010	5.4	5.2	3.9	1.0	1.0	0.8
2015	5.4	5.2	3.8	1.1	1.0	0.7

[1] The maximum front-end sales load is a simple average of the highest front-end load that funds may charge as set forth in their prospectuses.

[2] The simple average front-end sales load that investors actually paid is the total front-end sales loads that funds collected divided by the total maximum loads that the funds could have collected based on their new sales that year. This ratio is then multiplied by each fund's maximum sales load. The resulting value is then averaged across all funds.

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

Sources: Investment Company Institute, Lipper, and Strategic Insight Simfund

Another important element in the changing distribution structure of mutual funds has been a 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 market shares of front-end and back-end load share classes have declined in recent years, while those in no-load share classes have increased substantially. For example, from year-end 2006 to year-end 2015, front-end and back-end load share classes had net outflows totaling $823 billion (Figure 5.9); in addition, their share of long-term mutual fund assets fell from 28 percent to 16 percent (Figure 5.10).

FIGURE 5.9

Most Net New Cash Flow Was in No-Load Institutional Share Classes

Billions of dollars, 2006–2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All long-term mutual funds	**$227**	**$224**	**-$211**	**$393**	**$244**	**$28**	**$200**	**$162**	**$98**	**-$123**
Load	**18**	**-2**	**-156**	**9**	**-62**	**-129**	**-77**	**-69**	**-173**	**-131**
Front-end[1]	44	18	-105	2	-56	-100	-67	-56	-159	-102
Back-end[2]	-47	-42	-39	-24	-27	-23	-16	-11	-9	-7
Level[3]	22	25	-13	31	21	-6	6	-2	-4	-22
Other[4]	(*)	(*)	(*)	(*)	(*)	(*)	-1	(*)	(*)	(*)
Unclassified[5]	-1	-2	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
No-load[6]	**156**	**165**	**-59**	**328**	**265**	**170**	**300**	**271**	**339**	**77**
Retail	71	59	-90	143	55	-46	21	39	112	8
Institutional	85	106	30	185	210	215	279	232	226	69
Variable annuities	**24**	**25**	**-26**	**29**	**8**	**-21**	**-26**	**-51**	**-65**	**-67**
"R" share classes[7]	**29**	**37**	**30**	**27**	**33**	**9**	**3**	**11**	**-4**	**-2**

[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] All other load share classes not classified as front-end load, back-end load, or level load.

[5] 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

Note: Components may not add to the totals because of rounding. Data exclude mutual funds that invest primarily in other mutual funds.

Sources: Investment Company Institute and Lipper

FIGURE 5.10

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

Billions of dollars, 2006–2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All long-term mutual funds	**$8,060**	**$8,914**	**$5,788**	**$7,797**	**$9,030**	**$8,941**	**$10,364**	**$12,333**	**$13,151**	**$12,897**
Load	**2,630**	**2,795**	**1,722**	**2,185**	**2,352**	**2,176**	**2,362**	**2,652**	**2,615**	**2,454**
Front-end[1]	2,027	2,190	1,374	1,750	1,882	1,751	1,893	2,148	2,116	2,000
Back-end[2]	241	204	102	98	78	50	39	32	24	15
Level[3]	340	379	237	328	381	367	417	459	468	429
Other[4]	15	10	7	8	8	7	11	10	7	8
Unclassified[5]	8	13	2	2	4	2	2	2	1	2
No-load[6]	**4,073**	**4,588**	**3,073**	**4,255**	**5,091**	**5,224**	**6,262**	**7,598**	**8,383**	**8,361**
Retail	2,799	3,091	1,957	2,666	3,069	2,991	3,469	4,148	4,645	4,593
Institutional	1,274	1,496	1,116	1,589	2,022	2,233	2,794	3,450	3,738	3,767
Variable annuities	**1,225**	**1,346**	**854**	**1,130**	**1,291**	**1,251**	**1,400**	**1,632**	**1,674**	**1,599**
"R" share classes[7]	**132**	**186**	**139**	**226**	**296**	**290**	**339**	**451**	**479**	**483**

[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] All other load share classes not classified as front-end load, back-end load, or level load.

[5] 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.

Note: Components may not add to the totals because of rounding. Data exclude mutual funds that invest primarily in other mutual funds.

Sources: Investment Company Institute and Lipper

By contrast, no-load share classes have seen net inflows and rising assets over the past 10 years. No-load share classes have accumulated the bulk of the inflows to long-term funds in the past decade. At year-end 2015, no-load share classes accounted for 65 percent of long-term fund assets, up from 51 percent in 2006.

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 DC 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.

Services and Expenses in 401(k) Plans

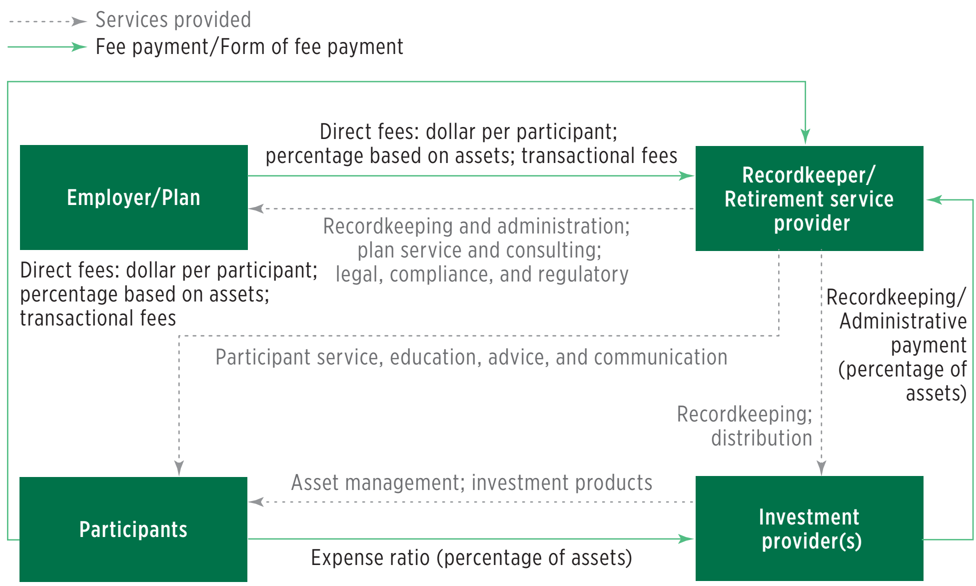
Two competing economic pressures confront employers: the need to attract and retain quality workers with competitive compensation packages and the need to keep their products and services competitively priced. In deciding whether to offer 401(k) plans to their workers, employers must decide if the benefits of offering a plan (in attracting and retaining quality workers) outweigh the costs of providing the plan and plan services. These costs are both the contributions the employer may make to an employee's 401(k) account and the costs associated with setting up and administering the 401(k) plan on an ongoing basis.

To provide and maintain 401(k) plans, regulations require employers to obtain a variety of administrative, participant-focused, regulatory, and compliance services. Employers offering 401(k) plans typically hire service providers to operate these plans, and these providers charge fees for their services.

As with any employee benefit, the employer generally determines how the costs of providing the benefit will be shared between the employer and employee. 401(k) plan fees can be paid directly by the plan sponsor (the employer), directly by the plan participant (the employee), indirectly by the participant through fees or other reductions in returns paid to the investment provider, or by some combination of these methods (Figure 5.11).

FIGURE 5.11

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



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

Source: *ICI Research Perspective*, "The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2014"

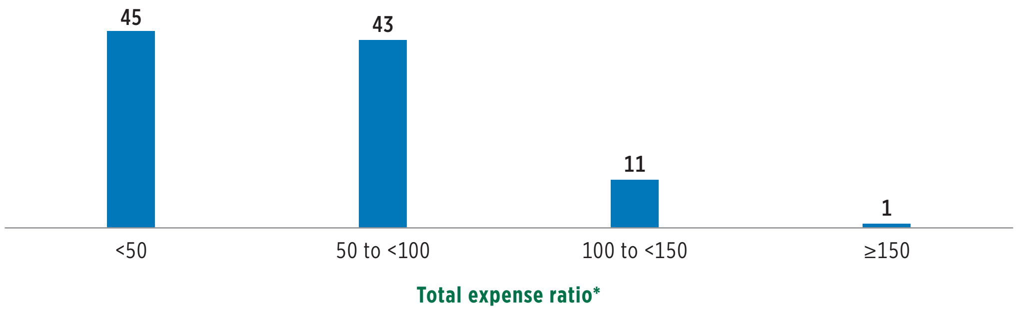
One key driver of 401(k) plan fees is plan size. A Deloitte/ICI study of 361 DC plans in 2013 created and analyzed a comprehensive plan fee measure, the "all-in fee." The study found that plans with more participants and larger average account balances tended to have lower all-in fees than plans with fewer participants and smaller average account balances. This observed effect likely results in part from fixed costs required to start up and run the plan, much of which are driven by legal and regulatory requirements. It appears that economies of scale are gained as a plan grows because these fixed costs can be spread across more participants, a larger asset base, or both. Plans with a higher percentage of their assets in equity investments tended to have higher all-in fees, reflecting the higher expense ratios associated with equity investing compared with fixed-income investing. The study also examined types of service providers, automatic enrollment, the number of investment options, and variables relating to plans' relationships with their service providers—but found little impact on fees. In addition, a BrightScope/ICI study of 2013 data for nearly 33,000 401(k) plans also found that plans with more assets had lower total plan cost than those with less assets.

Sixty percent of 401(k) assets at year-end 2015 were invested in mutual funds. Participants in 401(k) plans holding mutual funds tend to invest in lower-cost funds and funds with below-average portfolio turnover. Both characteristics help to keep down the costs of investing in mutual funds through 401(k) plans. For example, at year-end 2014, 45 percent of 401(k) equity mutual fund assets were in funds that had total annual expense ratios of less than 50 basis points, and another 43 percent had expense ratios between 50 and 100 basis points (Figure 5.12). On an asset-weighted basis, the average total expense ratio incurred on 401(k) participants' holdings of equity mutual funds through their 401(k) plans was 54 basis points in 2014, less than the asset-weighted average total expense ratio of 70 basis points for equity mutual funds industrywide. Similarly, equity mutual funds held in 401(k) accounts tend to have lower turnover in their portfolios. The asset-weighted average turnover rate of equity funds held in 401(k) accounts was 34 percent in 2014, less than the industrywide asset-weighted average of 43 percent.

FIGURE 5.12

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

Percentage of 401(k) equity mutual fund assets, 2014



* The total expense ratio, expressed in basis points, includes fund operating expenses and any 12b-1 fees.

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

Sources: Investment Company Institute and Lipper. See *ICI Research Perspective*, "The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2014."

For More Information

» Data on average expense ratios for equity, hybrid, and bond mutual funds
www.ici.org/pressroom/news/16_news_trends_expenses

» "Trends in the Expenses and Fees of Mutual Funds, 2013"
www.ici.org/perspective

» "The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2014"
www.ici.org/perspective

» *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2013*
www.ici.org/pubs/research/reports

» *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at ERISA 403(b) Plans*
www.ici.org/pubs/research/reports

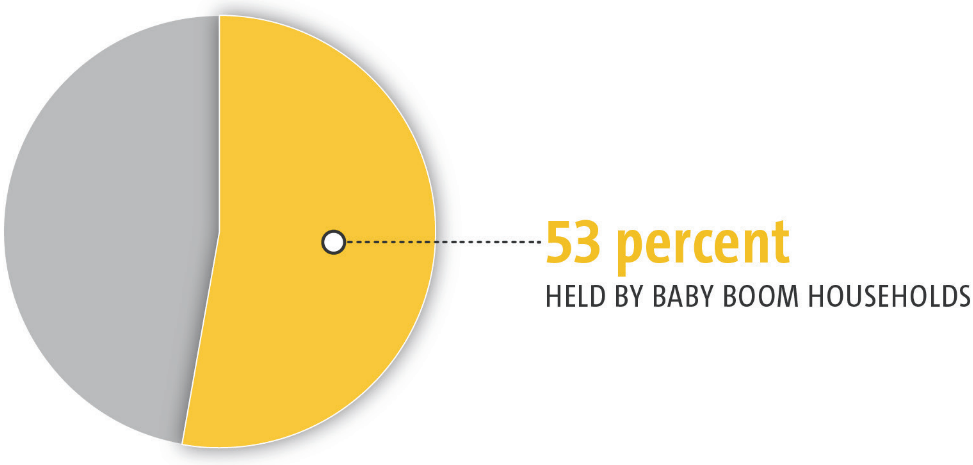
» *Inside the Structure of Defined Contribution/401(k) Plan Fees, 2013*
www.ici.org/pubs/research/reports

CHAPTER SIX

Characteristics of Mutual Fund Owners

The percentage of U.S. households owning mutual funds grew eightfold in the 1980s and 1990s, and has held steady for the past 15 years, averaging about 45 percent since 2000. In mid-2015, 43 percent of all U.S. households owned mutual funds. The estimated 91 million people who owned mutual funds in mid-2015 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 fund companies directly, fund supermarkets, or discount brokers. About half of Baby Boom households owned mutual funds in mid-2015. They accounted for 40 percent of mutual fund–owning households and held 53 percent of households' mutual fund assets.

More than half of household mutual fund assets were held by Baby Boomers in 2015



This chapter takes an in-depth look at the characteristics of mutual fund–owning households, examines where they hold their mutual funds, and explores their attitudes on investment risk and mutual fund investing.

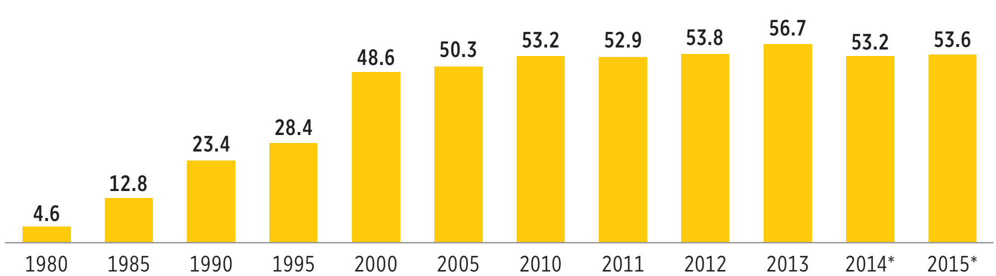
Individual and Household Ownership of Mutual Funds

In mid-2015, an estimated 91 million individual investors owned mutual funds—and at year-end, these investors held 89 percent of total mutual fund assets (Figure 2.2), directly or through retirement plans. Household ownership of mutual funds has remained relatively steady since 2000. Altogether, 43 percent of U.S. households—or about 53.6 million—owned mutual funds in mid-2015, slightly less than the 2000–2015 average of about 45 percent (Figure 6.1). Mutual funds were a major component of many U.S. households' financial holdings in mid-2015. Among households owning mutual funds, the median amount invested in mutual funds was $120,000 (Figure 6.2). Seventy-one percent of individuals heading households that owned mutual funds were married or living with a partner, more than half were college graduates, and more than seven in 10 worked full- or part-time.

FIGURE 6.1

43 Percent of U.S. Households Owned Mutual Funds in 2015

Millions of U.S. households owning mutual funds, selected years



Percentage of U.S. households owning mutual funds

5.7	14.7	25.1	28.7	45.7	44.4	45.3	44.1	44.4	46.3	43.3	43.0

* The survey methodology was changed to a dual frame sample of cell phones and landlines in 2014.

Sources: Investment Company Institute and U.S. Census Bureau. See *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015."

FIGURE 6.2

Characteristics of Mutual Fund Investors

Mid-2015

How many people own mutual funds?

90.9 million individuals

53.6 million U.S. households

Who are they?

51 is the median age of the head of household

71 percent are married or living with a partner

51 percent are college graduates

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

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

40 percent are Baby Boomers (born 1946 to 1964)

32 percent are Generation X (born 1965 to 1980)

16 percent are Millennial Generation (born 1981 to 2004)*

$87,500 is the median household income

What do they own?

$200,000 is the median household financial assets

$120,000 is the median mutual fund assets

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

61 percent own IRAs

84 percent own DC retirement plan accounts

3 mutual funds is the median number owned

88 percent own equity funds

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

61 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?

91 percent are saving for retirement

50 percent are saving for emergencies

49 percent hold mutual funds to reduce taxable income

24 percent are saving for education

* The Millennial Generation is aged 11 to 34 in 2015; survey respondents, however, must be 18 or older.

Sources: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015"; *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2015"; and *ICI Research Report*, "Profile of Mutual Fund Shareholders, 2015"

Mutual Fund Ownership by Age and Income

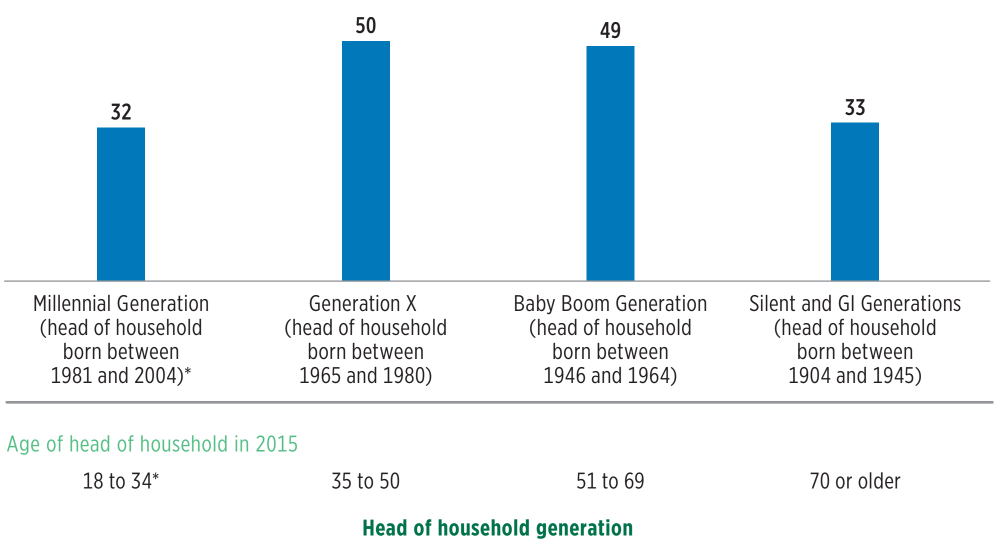
Mutual fund–owning households span all generations, but members of the Baby Boom Generation and Generation X had the highest mutual fund ownership rates in mid-2015. Forty-nine percent of households headed by a Baby Boomer (head of household born between 1946 and 1964) and half of households headed by a member of Generation X (born between 1965 and 1980) owned mutual funds in mid-2015 (Figure 6.3). Thirty-two percent of Millennial Generation households (born between 1981 and 2004) and 33 percent of Silent and GI Generation households (born between 1904 and 1945) owned mutual funds in mid-2015.

Among mutual fund–owning households in mid-2015, 40 percent were headed by members of the Baby Boom Generation, 32 percent were headed by members of Generation X, 16 percent were headed by members of the Millennial Generation, and 12 percent were headed by members of the Silent and GI Generations (Figure 6.4). Heads of mutual fund–owning households had a median age of 51 years (Figure 6.2).

FIGURE 6.3

Incidence of Mutual Fund Ownership Is Greatest Among the Baby Boom Generation and Generation X

Percentage of U.S. households within each generation group, mid-2015



* The Millennial Generation is aged 11 to 34 in 2015; 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.

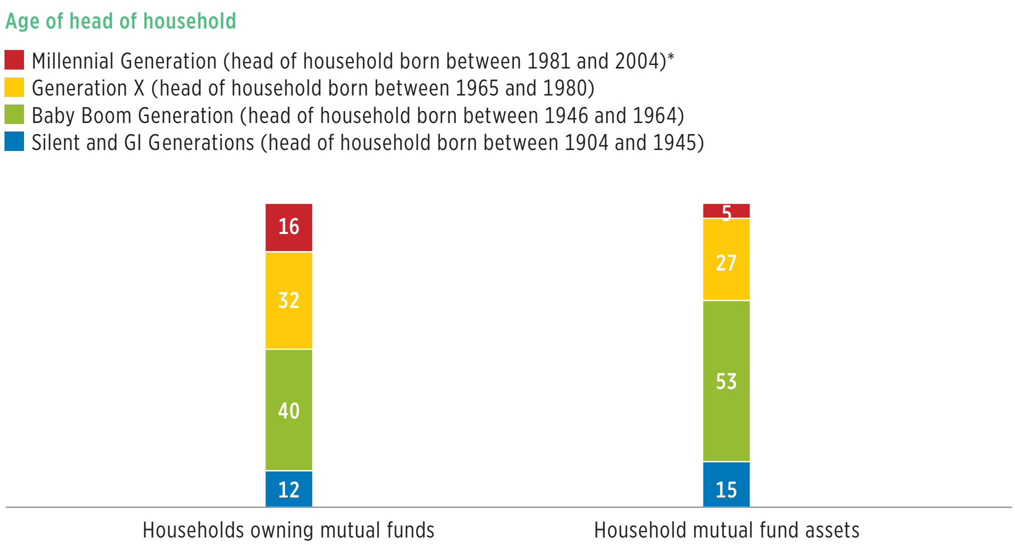
Sources: Investment Company Institute and U.S. Census Bureau. See *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2015."

Not only were Baby Boomers the largest shareholder group in mid-2015, they also held the largest percentage of households' mutual fund assets, at 53 percent (Figure 6.4). Households headed by members of Generation X (27 percent), the Silent and GI Generations (15 percent), and the Millennial Generation (5 percent) held the rest. This pattern of asset ownership reflects the fact that Millennials are younger and have not had as much time to save as Baby Boom households that are in their peak earning and saving years.

FIGURE 6.4

The Baby Boom Generation Is the Largest Shareholder Group and Holds More Than Half of Household Mutual Fund Assets

Percentage of mutual fund–owning households and household mutual fund assets by generation, mid-2015



* The Millennial Generation is aged 11 to 34 in 2015; 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.

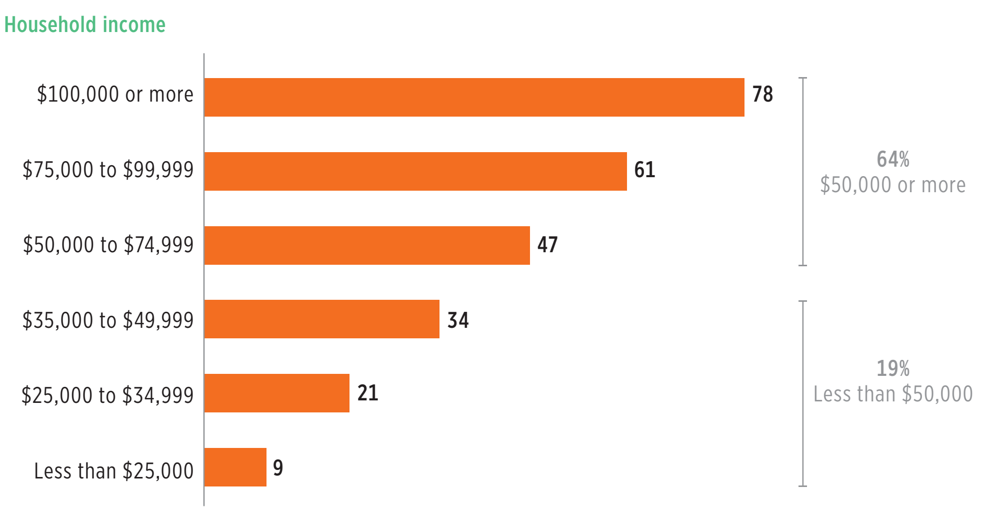
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2015"

Households with higher annual incomes are more likely to own mutual funds than those with lower annual incomes. In mid-2015, 64 percent of U.S. households with annual income of $50,000 or more owned mutual funds, compared with 19 percent of households with annual income of less than $50,000 (Figure 6.5). In fact, lower-income households tend to have less savings than higher-income households. The typical household with less than $50,000 in annual income had only $10,000 in savings and investments, while the typical household with annual income of $50,000 or more held $200,000 in savings and investments.

FIGURE 6.5

Ownership of Mutual Funds Increases with Household Income

Percentage of U.S. households within each income group, mid-2015



Note: Total reported is household income before taxes in 2014.

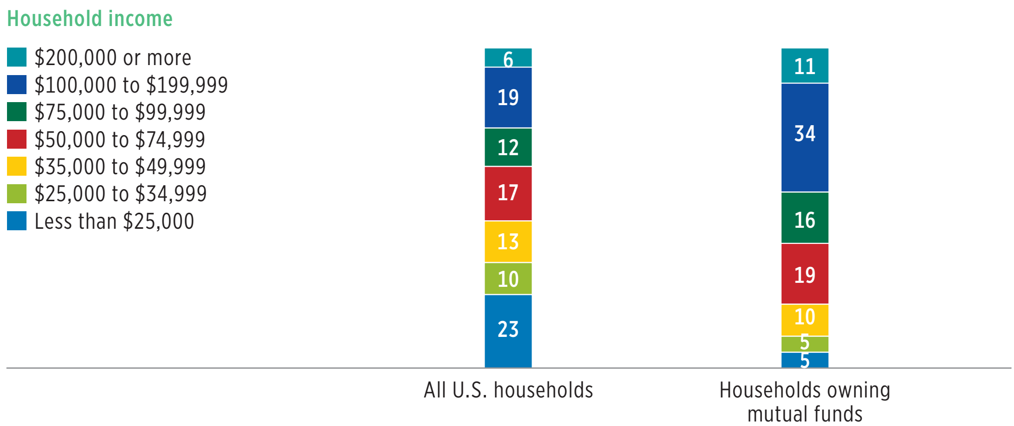
Sources: Investment Company Institute and U.S. Census Bureau. See *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015."

U.S. households owning mutual funds had a range of annual incomes in mid-2015: 20 percent had annual income of less than $50,000; 19 percent had between $50,000 and $74,999; 16 percent had between $75,000 and $99,999; and the remaining 45 percent had $100,000 or more (Figure 6.6). The median income of mutual fund–owning households in mid-2015 was $87,500 (Figure 6.2).

FIGURE 6.6

Most Households That Own Mutual Funds Have Moderate Incomes

Percent distribution of all U.S. households and households owning mutual funds by household income, mid-2015



Note: Total reported is household income before taxes in 2014.

Sources: Investment Company Institute and U.S. Census Bureau. See *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015."

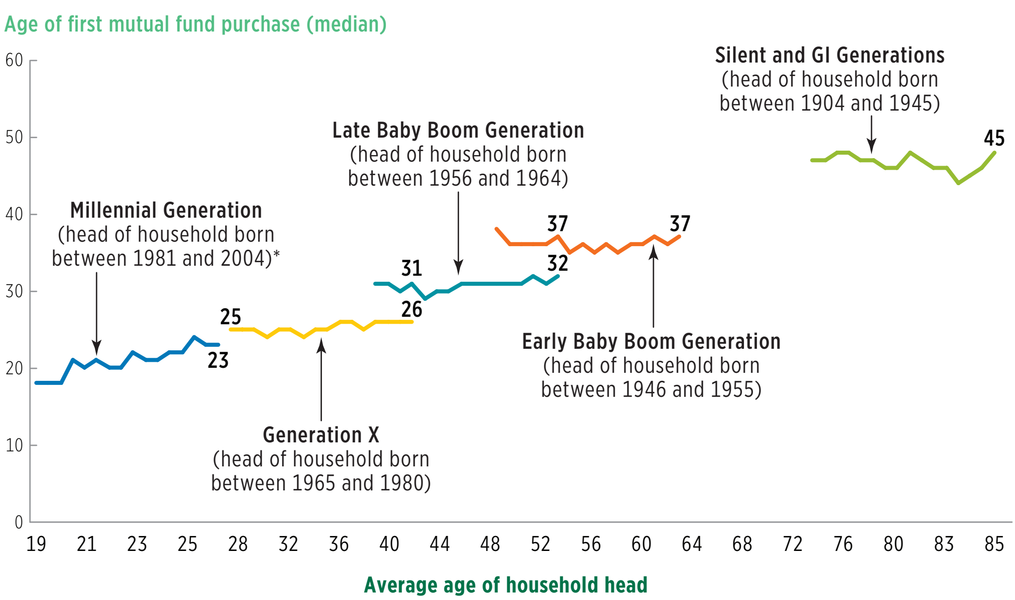
Households' First Mutual Fund Purchase

Younger generations tend to start investing in mutual funds earlier than older generations did. For example, in 2015, when they were aged 18 to 34, the median age of first mutual fund purchase was 23 for households in the Millennial Generation (Figure 6.7). By comparison, Generation X households made their first mutual fund purchase at age 25 when they were aged 20 to 35 in 2000. Similarly, in 2015, when Generation X households were aged 35 to 50, their median age of first mutual fund purchase was 26, while in 2003, when late Baby Boomers were aged 39 to 47, their median age of first mutual fund purchase was 31. Finally, in 2015, when they were aged 51 to 59, the median age of first mutual fund purchase was 32 for households in the late Baby Boom Generation, while in 2005, when households in the early Baby Boom Generation were aged 50 to 59, their median age of first mutual fund purchase was 37. This pattern reflects the expansion of mutual fund investing, especially as it occurs in employer-sponsored retirement plans.

FIGURE 6.7

Younger Generations Purchased First Mutual Fund Earlier Than Older Generations

Median age of household head when first mutual fund purchase was made by generation group, 2000–2015



* The Millennial Generation is aged 11 to 34 in 2015; 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. Average age of the household head is the average age of the generation group at the time of the survey.

Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2015"

As 401(k) and other employer-sponsored defined contribution (DC) retirement plans have grown more popular, the percentage of households that make their first foray into mutual fund investing inside these plans has increased. Among the households that bought their first mutual fund shares in 2010 or later, 67 percent did so inside an employer-sponsored retirement plan (Figure 6.8). Among those that bought their first mutual fund shares before 1990, only 57 percent did so inside an employer-sponsored retirement plan.

FIGURE 6.8

Employer-Sponsored Retirement Plans Are Increasingly the Source of First Mutual Fund Purchase

Percentage of U.S. households owning mutual funds, mid-2015

	Year of household's first mutual fund purchase						Memo: all mutual fund–owning households
	Before 1990	1990 to 1994	1995 to 1999	2000 to 2004	2005 to 2009	2010 or later	
Source of first mutual fund purchase							
Inside employer-sponsored retirement plan	57	64	66	65	64	67	63
Outside employer-sponsored retirement plan	43	36	34	35	36	33	37

Note: 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, 2015"

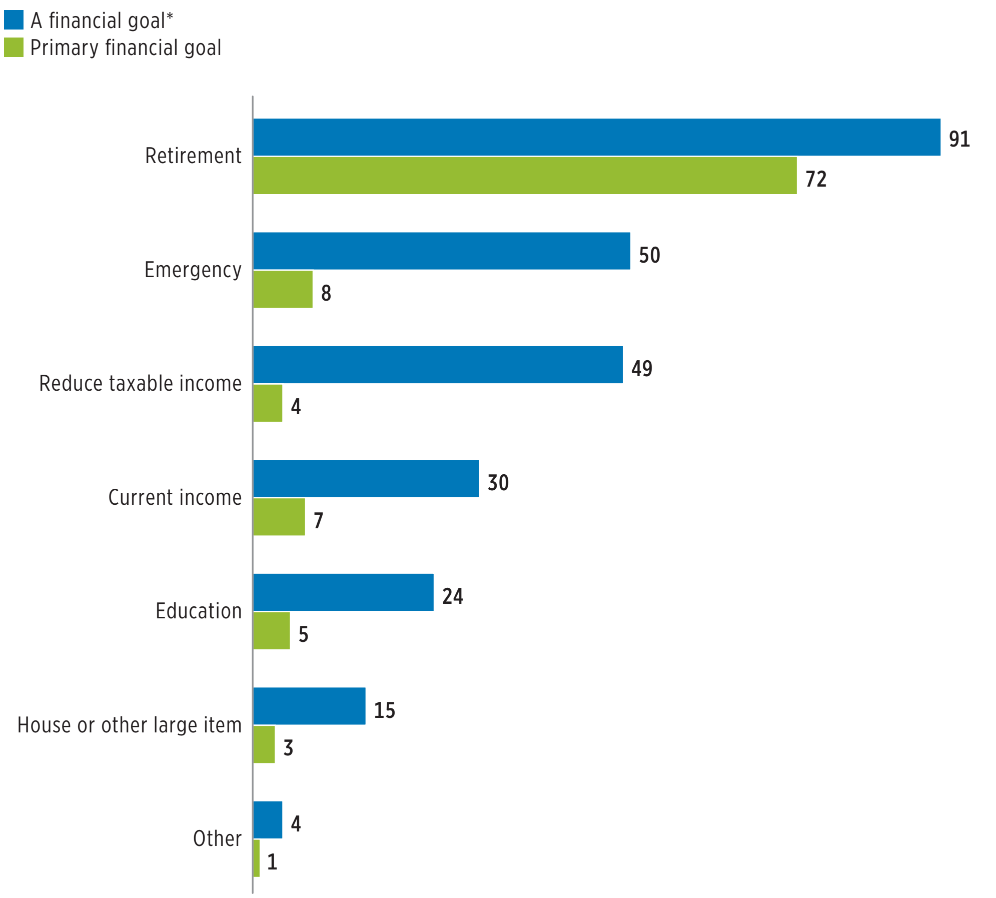
Savings Goals of Mutual Fund Investors

Mutual funds play a key role in the long- and short-term savings goals of U.S. households. In mid-2015, 91 percent of mutual fund–owning households indicated that saving for retirement was one of their financial goals, and 72 percent said it was their primary financial goal (Figure 6.9). Retirement, however, is not the only financial goal for mutual fund–owning households—50 percent reported saving for emergencies as a goal; 49 percent reported reducing taxable income as a goal; and 24 percent reported saving for education as a goal.

FIGURE 6.9

Majority of Mutual Fund Investors Focus on Retirement

Percentage of U.S. households owning mutual funds, mid-2015



* Multiple responses are included.

Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2015"

Where Investors Own Mutual Funds

The importance that mutual fund–owning households place on retirement saving is reflected in where they own their funds—95 percent of these households held mutual fund shares inside employer-sponsored retirement plans, individual retirement accounts (IRAs), and other tax-advantaged accounts in mid-2015. It also is 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, DC retirement plan and IRA assets held in equity, bond, and hybrid mutual funds totaled $6.8 trillion at year-end 2015, or 53 percent of those funds' total net assets industrywide. By contrast, DC retirement plan and IRA assets in money market funds totaled just $356 billion, or 13 percent of those funds' total net assets industrywide.

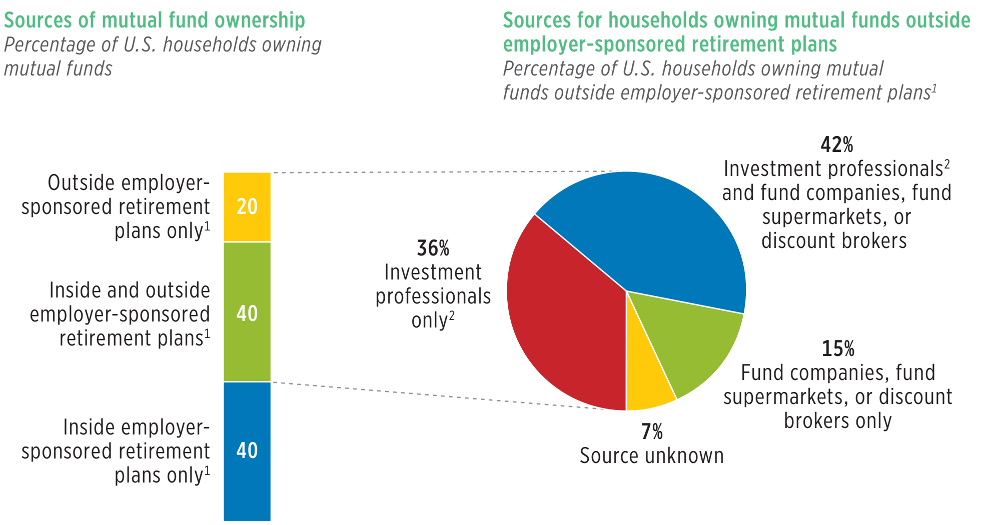
In mid-2015, 80 percent of mutual fund–owning households held funds inside employer-sponsored retirement plans, with 40 percent owning funds only inside such plans (Figure 6.10). Sixty percent of mutual fund–owning households held funds outside employer-sponsored retirement accounts, with 20 percent owning funds only outside such plans. For mutual fund–owning households without funds in employer-sponsored retirement plans, 56 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 mid-2015, 78 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 6.10). Thirty-six percent of these households owned funds purchased solely with the help of an investment professional, and another 42 percent owned funds purchased from investment professionals and from fund companies directly, fund supermarkets, or discount brokers. Fifteen percent solely owned funds purchased from fund companies directly, fund supermarkets, or discount brokers.

FIGURE 6.10

80 Percent of Mutual Fund–Owning Households Held Shares Inside Employer-Sponsored Retirement Plans

Mid-2015



[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.

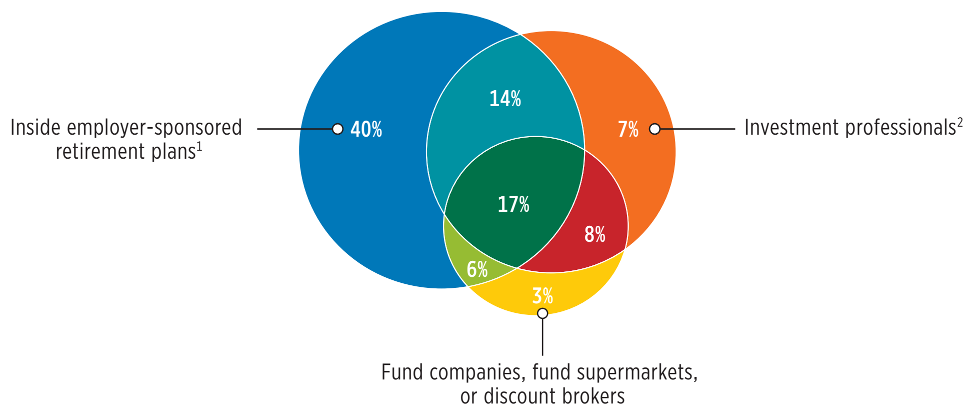
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2015"

In mid-2015, nearly half of mutual fund–owning households held mutual funds through multiple sources: 14 percent held mutual funds both inside employer-sponsored retirement plans and through investment professionals; 6 percent held mutual funds both inside employer-sponsored retirement plans and from fund companies directly, fund supermarkets, or discount brokers; and 8 percent held mutual funds through investment professionals and from fund companies directly, fund supermarkets, or discount brokers (Figure 6.11). Seventeen percent owned mutual funds through all three source categories. Another 3 percent owned funds inside and outside employer-sponsored retirement plans, without specifying their outside purchase source. When owning funds through only one source category, the most common source was employer-sponsored retirement plans, at 40 percent.

FIGURE 6.11

Nearly Half of Mutual Fund–Owning Households Held Shares Through Multiple Sources

Percentage of U.S. households owning mutual funds, mid-2015



[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.

Note: Components do not add to 100 percent because 5 percent of mutual fund–owning households owned mutual funds outside of employer-sponsored retirement plans but did not indicate which source was used to purchase funds. Of this 5 percent, 3 percent owned funds both inside and outside employer-sponsored retirement plans and 2 percent owned funds only outside of employer-sponsored retirement plans.

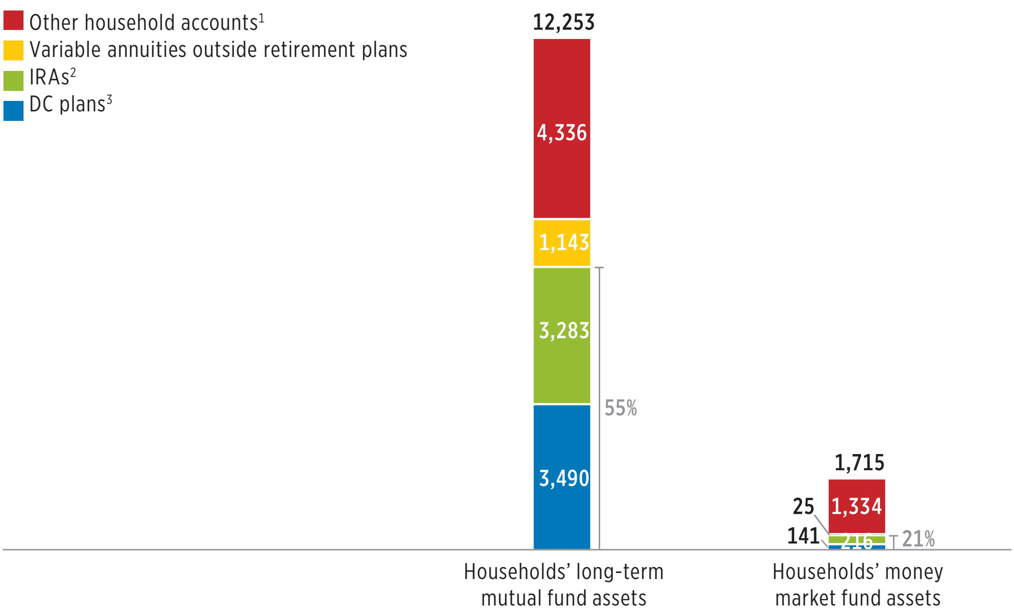
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2015"

At year-end 2015, mutual funds held in DC plans and IRAs accounted for $7.1 trillion, or 30 percent, of the $24.0 trillion U.S. retirement market. The $7.1 trillion made up 46 percent of total mutual fund assets at year-end 2015. DC plans and IRAs held 53 percent of total net assets in long-term mutual funds, but a much smaller share of total net assets in money market funds (13 percent). Similarly, mutual funds held in DC plans and IRAs accounted for 55 percent of household long-term mutual funds but only 21 percent of household money market funds (Figure 6.12).

FIGURE 6.12

Households' Mutual Fund Assets by Type of Account

Billions of dollars, year-end 2015



[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, Keoghs, and other DC plans without 401(k) features.

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

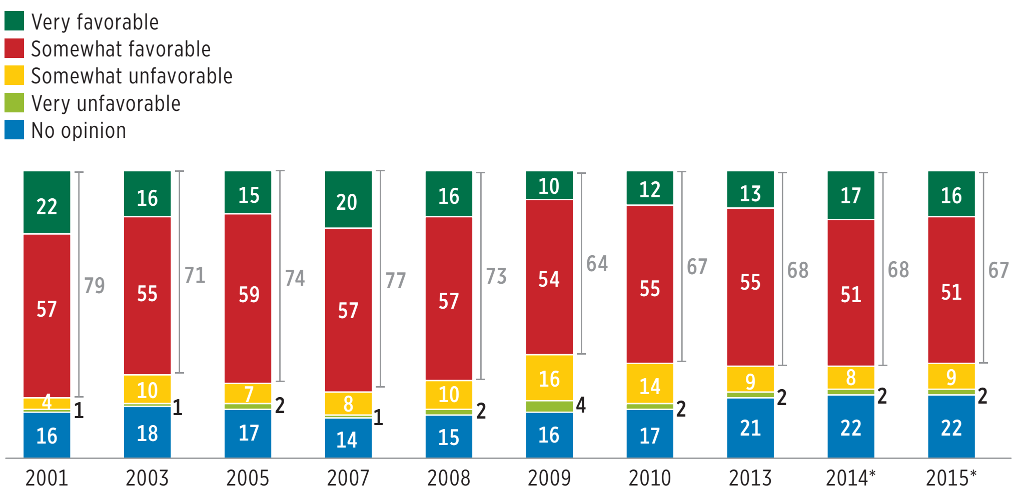
Shareholder Sentiment, Willingness to Take Investment Risk, and Confidence

Each year, ICI surveys U.S. households about a variety of topics, including shareholder sentiment. In mid-2015, 67 percent of mutual fund–owning households familiar with mutual fund companies had "very" or "somewhat" favorable impressions of fund companies, nearly the same as in 2014 (Figure 6.13). The share of mutual fund–owning households with "very" favorable impressions of fund companies remained relatively stable at 16 percent.

FIGURE 6.13

Most Shareholders View the Mutual Fund Industry Favorably

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



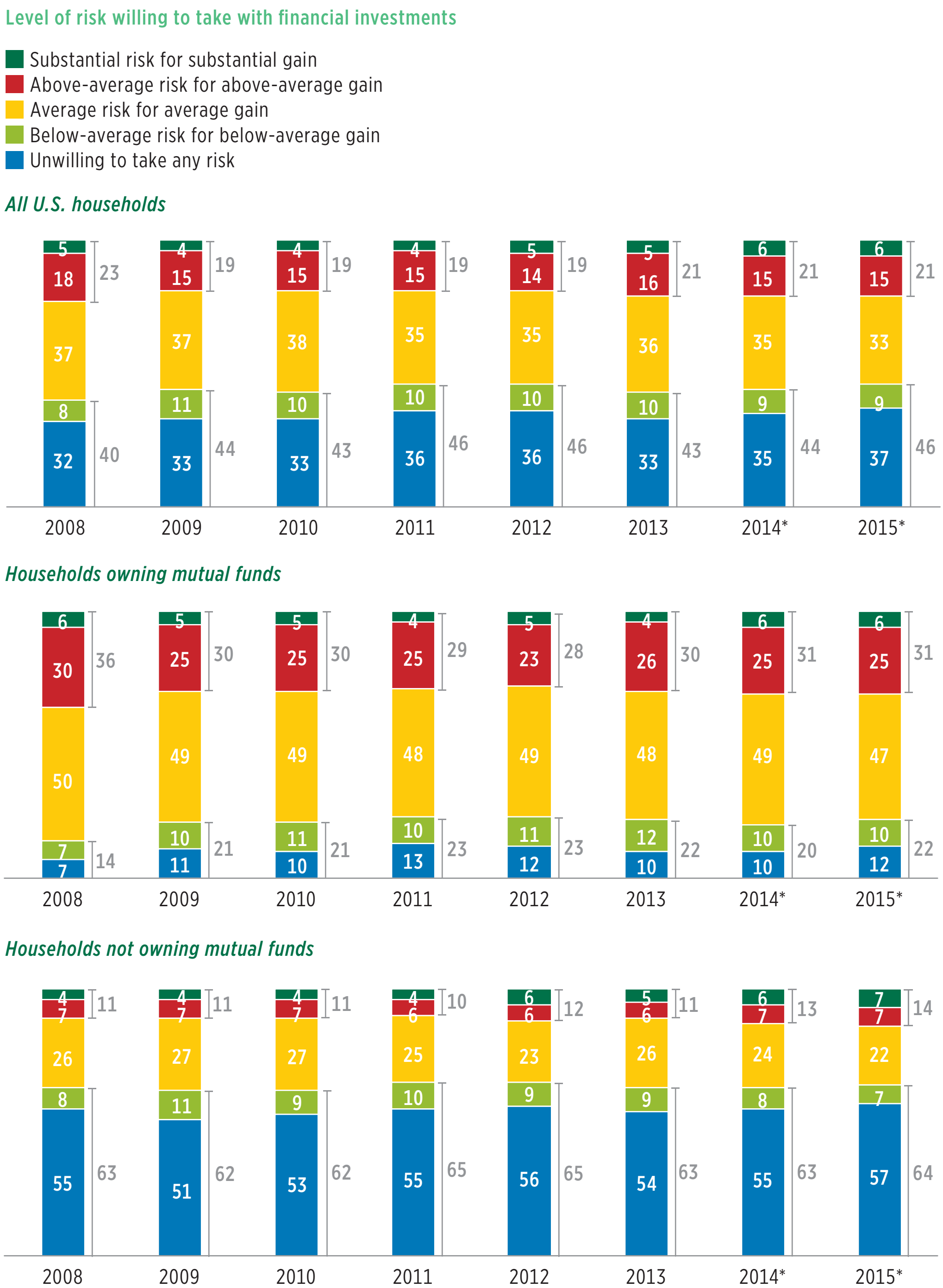
* The survey methodology was changed to a dual frame sample of cell phones and landlines in 2014.
Source: *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015"

Among all U.S. households, the percentage willing to take above-average or substantial investment risk tends to move with stock market performance. U.S. households tend to become less tolerant of investment risk following periods of poor stock market performance. For example, willingness to take above-average or substantial investment risk fell from 23 percent in mid-2008, during the 2007–2009 financial crisis, to 19 percent in mid-2009 (Figure 6.14). Not until mid-2013, more than four years after the stock market bottomed out, did willingness to take investment risk begin to rebound.

FIGURE 6.14

Households' Willingness to Take Investment Risk

Percentage of U.S. households by mutual fund ownership status, 2008–2015



* The survey methodology was changed to a dual frame sample of cell phones and landlines in 2014.

Sources: Investment Company Institute and U.S. Census Bureau. See *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015."

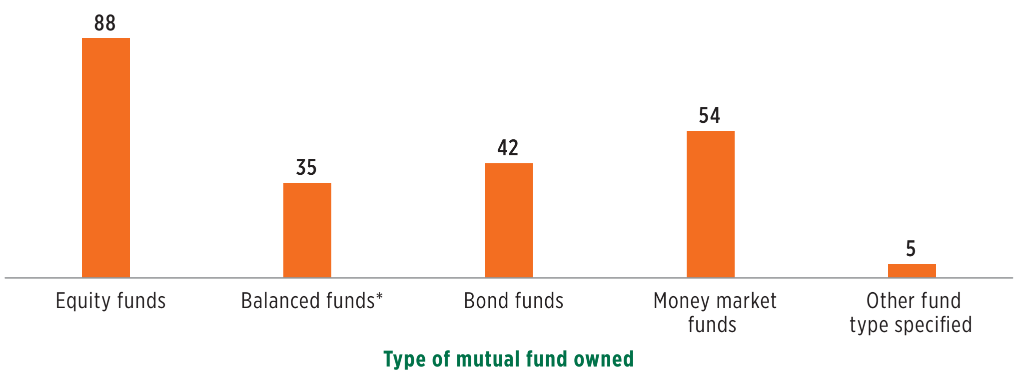
Households owning mutual funds are far more willing to take investment risk than other households. In mid-2015, 31 percent of households owning mutual funds were willing to take above-average or substantial investment risk, more than twice the 14 percent of households not owning mutual funds (Figure 6.14).

Mutual fund–owning households tend to have a larger appetite for investment risk, and this is reflected in the types of mutual funds they own. Equity funds were the most commonly owned type of mutual fund in mid-2015, held by 88 percent of mutual fund–owning households (Figure 6.15). In addition, 35 percent owned balanced funds, 42 percent owned bond funds, and 54 percent owned money market funds.

FIGURE 6.15

Equity Funds Are the Most Commonly Owned Type of Mutual Fund

Percentage of U.S. households owning mutual funds, mid-2015



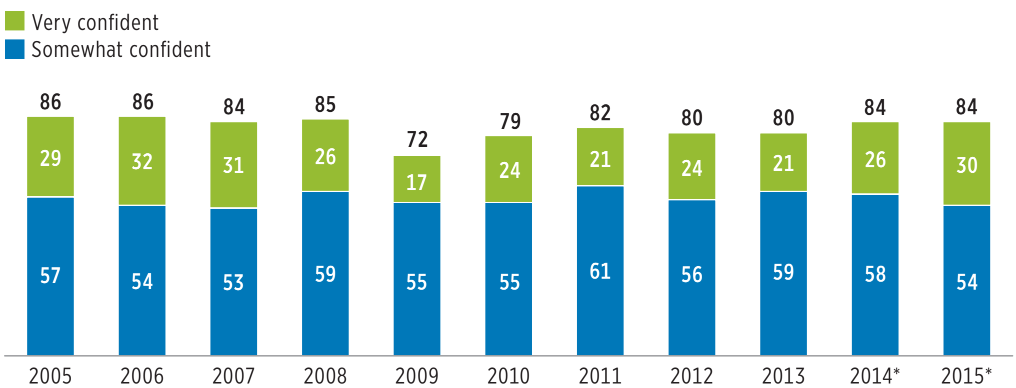
* The Investment Company Institute classifies this fund category as *hybrid* in its data.
Note: Multiple responses are included.
Source: *ICI Research Perspective*, "Characteristics of Mutual Fund Investors, 2015"

Mutual fund–owning households' confidence that mutual funds are helping them reach their financial goals declined in the wake of the financial crisis. In mid-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 85 percent the year before (Figure 6.16). From mid-2010 through mid-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. In mid-2014, confidence increased to 84 percent of mutual fund–owning households and remained there in mid-2015, with 30 percent saying they were "very" confident that mutual funds could help them meet their financial goals.

FIGURE 6.16

More Than Eight in 10 Mutual Fund–Owning Households Have Confidence in Mutual Funds

Percentage of mutual fund–owning households by level of confidence that mutual funds can help them meet their investment goals, 2005–2015



* The survey methodology was changed to a dual frame sample of cell phones and landlines in 2014.

Note: This question was not included in the survey prior to 2005. 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, 2015"

Shareholder Use of the Internet

An overwhelming majority of mutual fund–owning households have Internet access. In mid-2015, 91 percent of U.S. households owning mutual funds had Internet access (Figure 6.17), up from 68 percent in 2000 (the first year for which ICI collected data on shareholder access to the Internet). 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 6.17

Internet Access Is Nearly Universal Among Mutual Fund–Owning Households

Percentage of U.S. households with Internet access, mid-2015

	All U.S. households	Mutual fund–owning households	Households with DC plans[1]
Age of head of household[2]			
Younger than 35	86	93	90
35 to 49	85	95	94
50 to 64	78	92	91
65 or older	59	84	79
Education level			
High school diploma or less	61	82	79
Some college or associate's degree	83	92	92
College or postgraduate degree	91	95	95
Household income[3]			
Less than $50,000	61	79	74
$50,000 to $99,999	88	93	92
$100,000 to $149,999	95	95	97
$150,000 or more	92	96	96
Total	**77**	**91**	**90**

[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 2014.

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

Sources: Investment Company Institute and U.S. Census Bureau. See *ICI Research Perspective*, "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015."

For More Information

» "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2015"
www.ici.org/perspective

» "Characteristics of Mutual Fund Investors, 2015"
www.ici.org/perspective

» "Profile of Mutual Fund Shareholders, 2015"
www.ici.org/pubs/research/reports

» Correcting a Distorted Picture of Retirement Resources
www.ici.org/viewpoints/view_15_epi_retirement_resources

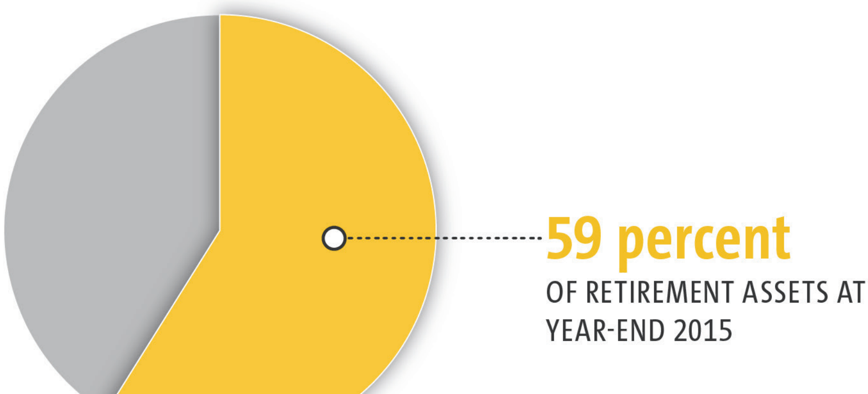
» Small Savers at a Loss
www.ici.org/viewpoints/view_15_dol_small_savers

CHAPTER SEVEN

Retirement and Education Savings

National policies that have created or enhanced tax-advantaged savings accounts have proven integral to helping Americans prepare for retirement and other long-term savings goals. Because many Americans use mutual funds in tax-advantaged accounts to reach these goals, ICI studies the U.S. retirement market; the investors who use IRAs, 401(k) plans, 529 plans, and other tax-advantaged savings vehicles; and the role of funds in the retirement and education savings markets.

DC plans and IRAs comprised 59 percent of retirement assets at year-end 2015



This chapter analyzes the U.S. retirement market; describes the investors who use IRAs, 401(k) plans, 529 plans, and other tax-advantaged savings vehicles; and explores the role of mutual funds in U.S. households' efforts to save for retirement and education.

The U.S. 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. But Americans' retirement resources are best thought of as a five-layer pyramid.

Retirement Resource Pyramid

The retirement resource pyramid has five layers, which draw from government programs, compensation deferred until retirement, and other savings (Figure 7.1):

» Social Security

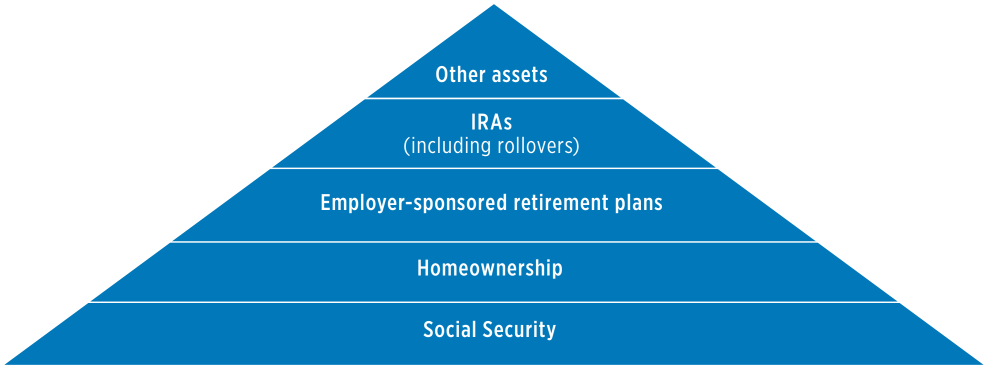
» homeownership

» 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

FIGURE 7.1
Retirement Resource Pyramid



Source: Investment Company Institute, *The Success of the U.S. Retirement System*

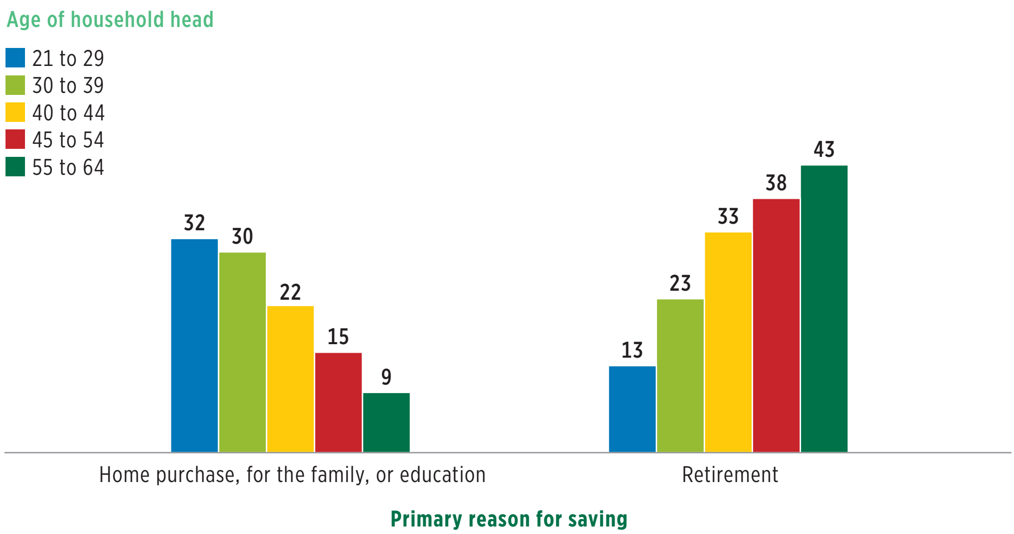
Though the importance of each layer differs by household, together they have enabled recent generations of retirees, on average, to maintain their standard of living in retirement.

The construction of each household's pyramid varies with age and income. Younger households are more likely to save primarily for reasons other than retirement, such as a home purchase, family needs, or education (Figure 7.2). 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. Lower-income households also focus less on saving for retirement, reflecting the fact that Social Security benefits replace a higher share of pre-retirement earnings for workers with lower lifetime earnings.

FIGURE 7.2

Primary Reason for Household Saving Changes with Age

Percentage of households by age of household head, 2013



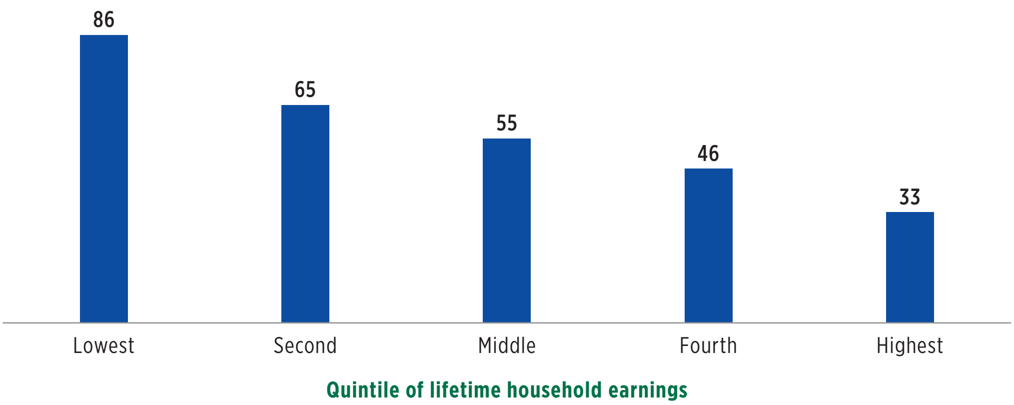
Source: Investment Company Institute tabulations of the 2013 Federal Reserve Board Survey of Consumer Finances. See *ICI Research Perspective*, "Supplemental Tables: Who Gets Retirement Plans and Why, 2013."

Social Security, the base of the U.S. retirement resource pyramid, is the largest 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 (6.2 percent paid by employees and 6.2 percent paid by employers) up to a maximum taxable earnings amount ($118,500 in 2015). 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. For individuals born in the 1960s who claim benefits at age 65, the Congressional Budget Office (CBO) projects that mean first-year Social Security benefits will replace 86 percent of average inflation-indexed lifetime earnings for retired workers in the lowest 20 percent of households ranked by lifetime earnings (Figure 7.3). The mean replacement rate drops to 65 percent for workers in the second quintile of households, and then declines more slowly as lifetime household earnings increase. Even for workers in the the top 20 percent, Social Security benefits are projected to replace a considerable portion (33 percent) of earnings.

FIGURE 7.3

Social Security Benefit Formula Is Highly Progressive

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



Note: For each worker, 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 at 67, benefits would increase by about 15 percent.

Source: Congressional Budget Office, *The 2015 Long-Term Projections for Social Security: Supplemental Data*

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 access this resource simply by living in their homes rent-free.

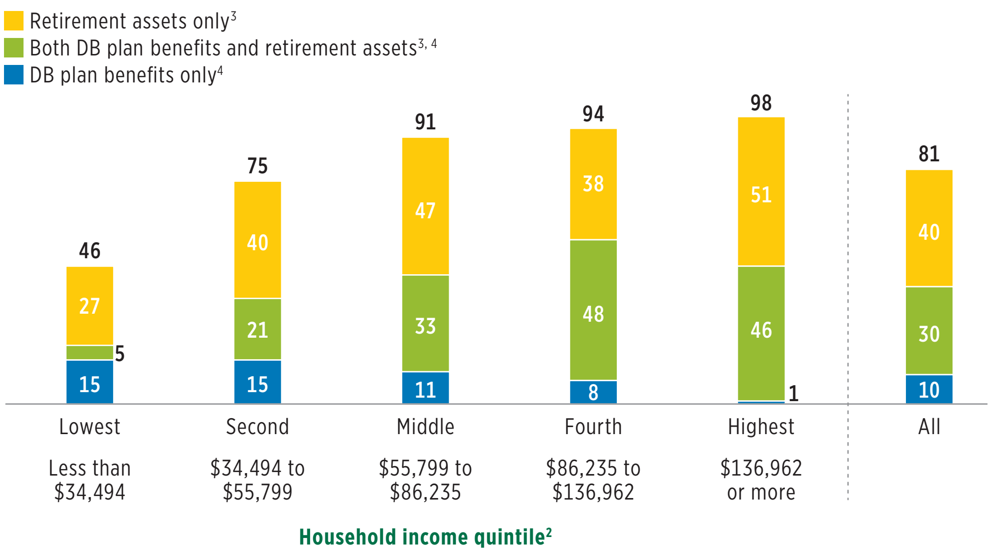
Employer-sponsored retirement plans and IRAs, which complement Social Security benefits and are important resources for households regardless of income or wealth, increase in importance for households for whom Social Security replaces a smaller share of earnings. In 2013, about eight out of 10 near-retiree households had accrued benefits in employer-sponsored retirement plans—DB and DC plans sponsored by private-sector and government employers—or IRAs (Figure 7.4).

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 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.

FIGURE 7.4

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] 2013



[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 2012.

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

[4] 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.

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

Source: Investment Company Institute tabulations of the 2013 Federal Reserve Board Survey of Consumer Finances

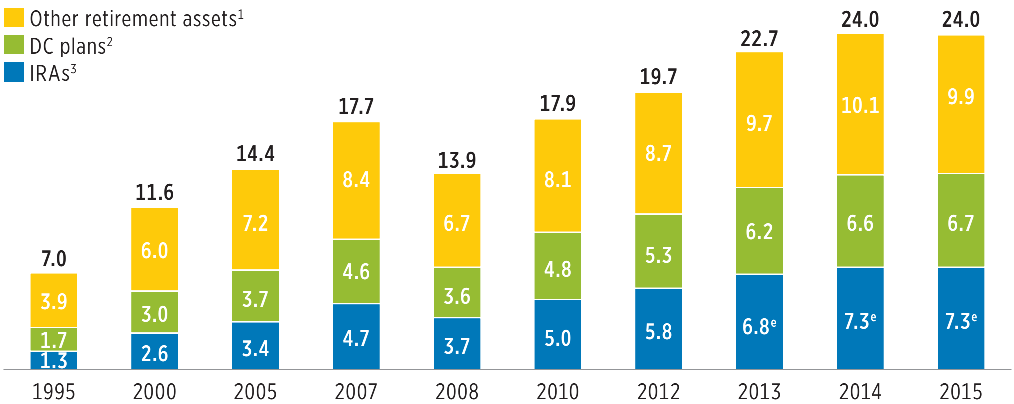
Snapshot of U.S. Retirement Market Assets

Employer-sponsored retirement plans (DB and DC plans sponsored by private-sector and government employers), IRAs (including rollovers), and annuities play an important role in the U.S. retirement system, with assets totaling $24.0 trillion at year-end 2015, about the same level as at year-end 2014 (Figure 7.5). The largest components of retirement assets were IRAs and employer-sponsored DC plans, holding $7.3 trillion and $6.7 trillion, respectively, at year-end 2015 (Figure 7.6). Other employer-sponsored plans include private-sector DB pension funds ($2.9 trillion), state and local government DB retirement plans ($3.6 trillion), and federal government DB plans ($1.5 trillion). In addition, annuity reserves outside of retirement plans were $1.9 trillion at year-end 2015.

FIGURE 7.5

U.S. Total Retirement Market Assets

Trillions of dollars; year-end, selected years



[1] *Other retirement assets* includes private-sector DB plans; federal, state, and local DB plans; and all fixed and variable annuity reserves at life insurance companies less annuities held by IRAs, 403(b) plans, 457 plans, and private pension funds. Some of these annuity reserves represent assets of individuals held outside retirement plan arrangements and IRAs; however, information to separate out such reserves is not available. Because ICI estimates of annuities held in IRAs, 457 plans, and 403(b) plans are netted from the Federal Reserve Board's financial accounts' annuities (life insurance pension fund reserves) figure and reported in their respective categories by ICI, ICI reports a lower annuities total than in the financial accounts. Federal pension plans include U.S. Treasury security holdings of the civil service retirement and disability fund, the military retirement fund, the judicial retirement funds, the Railroad Retirement Board, and the foreign service retirement and disability fund. These plans also include securities held in the National Railroad Retirement Investment Trust.

[2] DC plans include private employer-sponsored DC plans (including 401(k) plans), 403(b) plans, 457 plans, and the Federal Employees Retirement System (FERS) Thrift Savings Plan (TSP).

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

[e] Data are estimated.

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

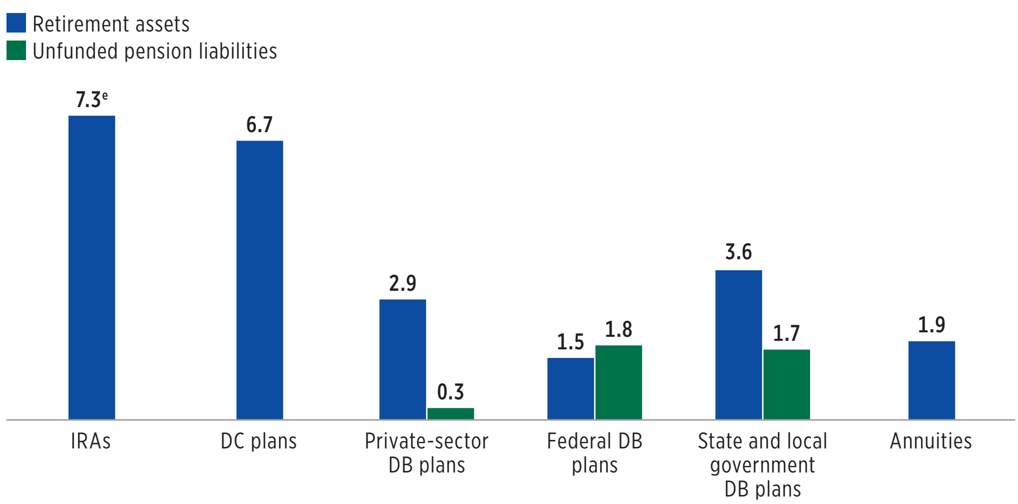
Sources: Investment Company Institute, Federal Reserve Board, Department of Labor, National Association of Government Defined Contribution Administrators, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division. See Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015."

Retirement assets include individual account–based savings (e.g., IRAs and DC plans) and assets held in DB plans. Traditional DB plans promise to pay benefits in retirement typically based on salary and years of service, and assets held in those plans represent funding for those promised benefits. Some DB plans do not have sufficient funding to cover promised benefits that households have a legal right to expect; the total unfunded liabilities of DB plans were $3.8 trillion at year-end 2015 (Figure 7.6). Underfunding is more pronounced in government-sector pension plans. As of year-end 2015, private-sector DB plans had $2.9 trillion in assets and only $0.3 trillion in unfunded liabilities. On the other hand, state and local government DB plans had $3.6 trillion in assets and $1.7 trillion in unfunded liabilities, and federal DB plans had $1.5 trillion in assets and $1.8 trillion in unfunded liabilities.

FIGURE 7.6

Total U.S. Retirement Assets and Unfunded Pension Liabilities

Trillions of dollars, year-end 2015



[e] Data are estimated.

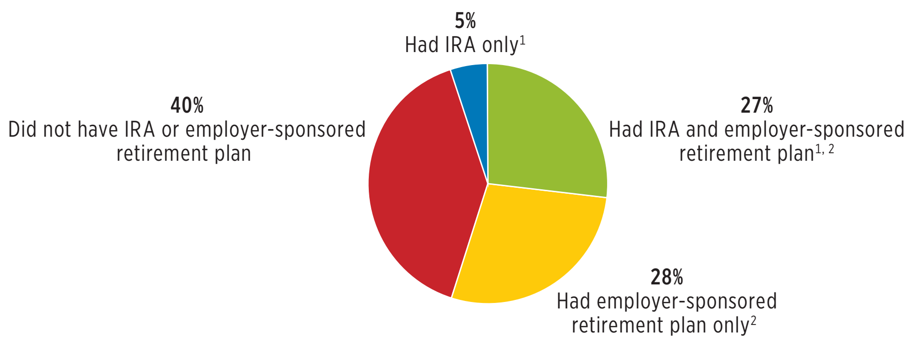
Sources: Investment Company Institute, Federal Reserve Board, National Association of Government Defined Contribution Administrators, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division. See Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015."

Ownership of retirement accumulations is widespread; 60 percent of U.S. households (or 75 million) reported that they had employer-sponsored retirement plans, IRAs, or both in mid-2015 (Figure 7.7). Fifty-five percent of U.S. 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-two percent reported having assets in IRAs, and 27 percent had both IRAs and employer-sponsored retirement plans. The households in this snapshot represent a wide range of ages—from younger than 35 to age 65 or older—and so, they are at different points in the life cycle of saving. Focus on retirement savings tends to increase with age; for example, about eight out of 10 near-retiree households have retirement accumulations (Figure 7.4).

FIGURE 7.7

Many U.S. Households Have Tax-Advantaged Retirement Savings

Percentage of U.S. households, mid-2015



Total number of U.S. households: 124.6 million

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

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

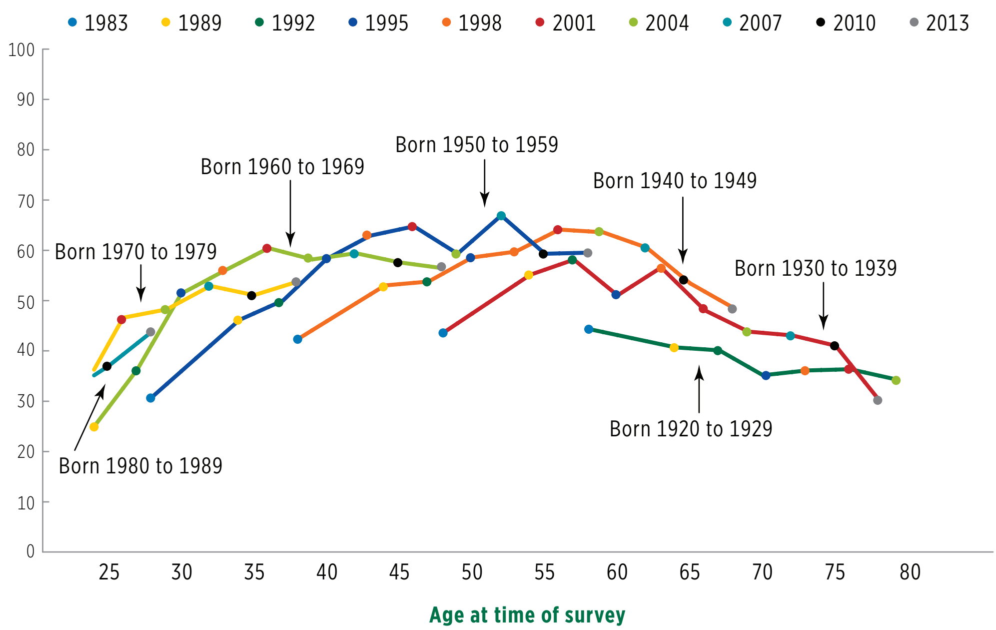
Sources: Investment Company Institute and U.S. Census Bureau. See *ICI Research Perspective*, "The Role of IRAs in U.S. Households' Saving for Retirement, 2015."

Ownership of IRA and DC plan assets has tended to increase with each successive generation of workers, although recent data suggest that ownership rates may have stabilized. For example, in 1983, when they were 44 to 53 years of age, 44 percent of households born in the 1930s owned IRAs or DC plan accounts (Figure 7.8). By comparison, households born a decade later had a 56 percent ownership rate when they were 44 to 53 years old in 1993; and, among households born in the 1950s, 62 percent had IRAs or DC plan accounts when they were 44 to 53 years old in 2003. Earlier in their careers, the 1960s birth cohort appeared to be continuing the trend of increased ownership. In 2013, however, when they were 44 to 53 years old, 57 percent of households born in the 1960s owned IRAs or DC plan accounts. Recent experience could indicate that long-term growth in ownership has stabilized, or it could reflect a temporary pause in the long-term trend caused by the weak economy.

FIGURE 7.8

Rates of IRA or Defined Contribution Plan Ownership

Percentage of U.S. households owning IRAs or DC plans by decade in which household heads were born, 1983–2013



Note: Age is the average age of the 10-year birth cohort at the time of the survey. The 10-year birth cohorts are defined using the age of the head of household.

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

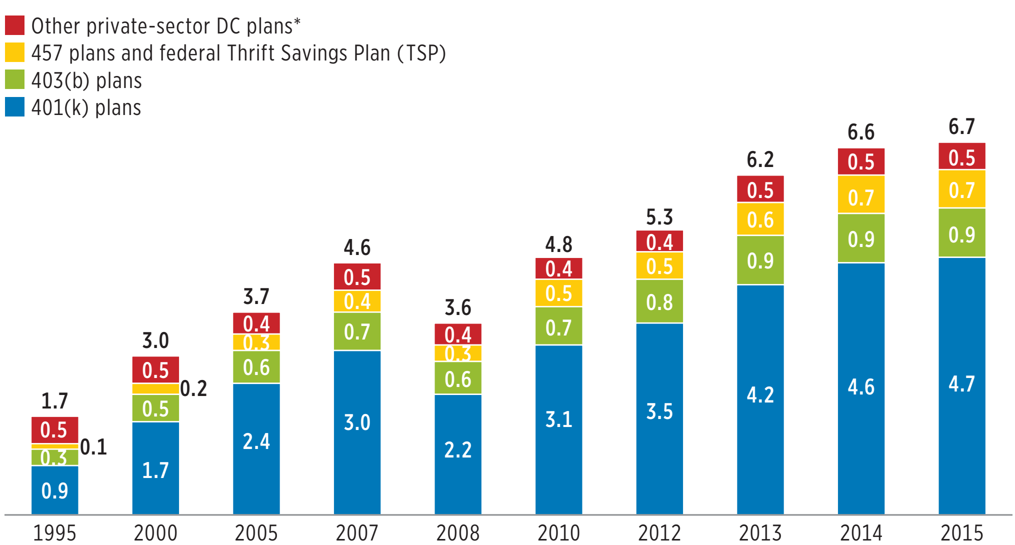
Defined Contribution Retirement Plans

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 other types of employer-sponsored retirement plans over the last three decades, increasing from 26 percent of employer plan assets in 1985 to 46 percent at year-end 2015. At the end of 2015, employer-sponsored DC plans—which include 401(k) plans, 403(b) plans, 457 plans, the federal Thrift Savings Plan (TSP), Keoghs, and other private-sector DC plans—held an estimated $6.7 trillion in assets (Figure 7.9). With $4.7 trillion in assets at year-end 2015, 401(k) plans held the largest share of employer-sponsored DC plan assets. 403(b) plans, which are similar to 401(k) plans, and which allow employees of educational institutions and certain nonprofit organizations to receive deferred compensation, held another $0.9 trillion in assets. In addition, 457 plans—which allow employees of state and local governments and certain tax-exempt organizations to receive deferred compensation—and the Federal Employees Retirement System (FERS) TSP held a total of $0.7 trillion. Other private-sector DC plans without 401(k) features held the remaining $0.5 trillion.

FIGURE 7.9

Defined Contribution Plan Assets by Type of Plan

Trillions of dollars; year-end, selected years



* *Other private-sector DC plans* includes Keoghs and other private-sector DC plans (profit-sharing, stock bonus, and money purchase) without 401(k) features.

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

Sources: Investment Company Institute, Federal Reserve Board, Department of Labor, National Association of Government Defined Contribution Administrators, and American Council of Life Insurers. See Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015."

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

Plan Design

Employers who sponsor a 401(k) plan have the option to include features in the plan, 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. In 2013, analysis of large 401(k) plans found that nearly nine in 10 (86 percent) made employer contributions of some type (Figure 7.10). More than seven in 10 large 401(k) plans had loans outstanding* and nearly a quarter included automatic enrollment in plan year 2013. An analysis of large 403(b) plans found that they are similarly likely to have employer contributions but less likely to have loans outstanding or automatic enrollment.

When designing 401(k) plans, employers tend to select a combination of features that their employees are likely to value. In 2013, more than four in 10 large 401(k) plans had both employer contributions and participant loans outstanding, making this the most common combination of plan features. The next most common plan design was employer contributions only, offered in 21 percent of plans, followed by 18 percent having all three features—employer contributions, automatic enrollment, and outstanding loans. Only 3 percent did not offer employer contributions, did not have participant loans outstanding, and did not automatically enroll participants.

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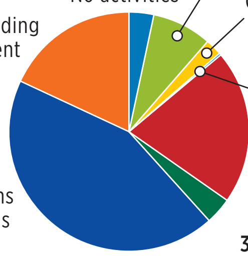
* Although the availability of a loan feature is not reported on Form 5500, it is possible to determine whether participants have loans by capturing loan use rather than loan offering. See *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2013,* available at www.ici.org/pdf/ppr_15_dcplan_profile_401k.pdf.

FIGURE 7.10

401(k) Sponsors Use a Variety of Plan Designs

Percentage of plans with selected plan activity combinations, 2013



Note: The sample is 53,661 plans with $3.5 trillion in assets. The results exclude 403(b) plans with a 401(k) feature and plans with fewer than 100 participants or less than $1 million in plan assets. A plan was determined to allow participant loans if any participant had a loan outstanding at the end of plan year 2013. Components do not add to 100 percent because of rounding.

Sources: BrightScope Defined Contribution Plan Database and Investment Company Institute tabulations of Department of Labor 2013 Form 5500 Research File. See BrightScope and Investment Company Institute, *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2013*.

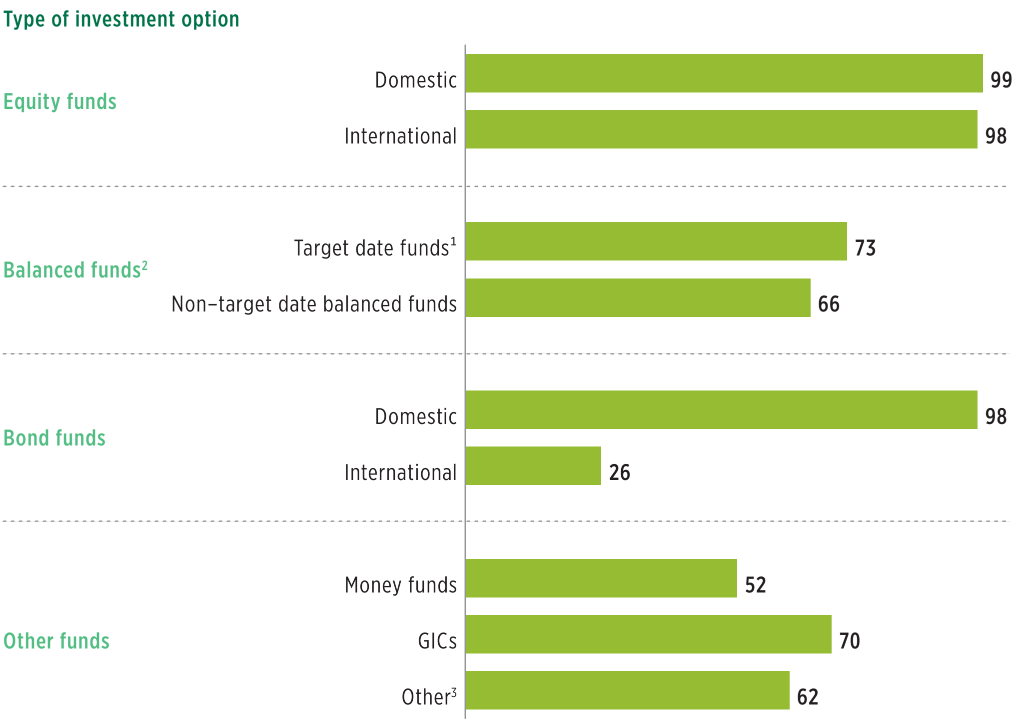
Investment Lineup

In addition to choosing how to structure contributions to the 401(k) plan, employers also select the investment options to make available to plan participants. In 2013, domestic equity funds, international equity funds, and domestic bond funds were offered in nearly all large 401(k) plans (Figure 7.11). 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 international equity (three funds) or domestic bond funds (three funds). Target date funds also are common investment choices, with nearly three quarters of large 401(k) plans offering nine of these funds on average. In addition, about half of large 401(k) plans offered one money fund on average and seven in 10 offered one guaranteed investment contract (GIC). In total, the average large 401(k) plan offered 27 funds to participants in 2013. Large 403(b) plans also offer participants a diverse array of investment options to choose from.

FIGURE 7.11

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

Percentage of plans with audited 401(k) filings in the BrightScope database, 2013



[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 this fund category as *hybrid* in its data.

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

Note: The sample is 34,444 plans with $3.3 trillion in assets. BrightScope audited 401(k) filings generally include plans with 100 participants or more. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. Plans with fewer than four investment options, more than 100 investment options, or less than $1 million in plan assets are excluded from 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, 2013*.

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

Asset Allocation

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

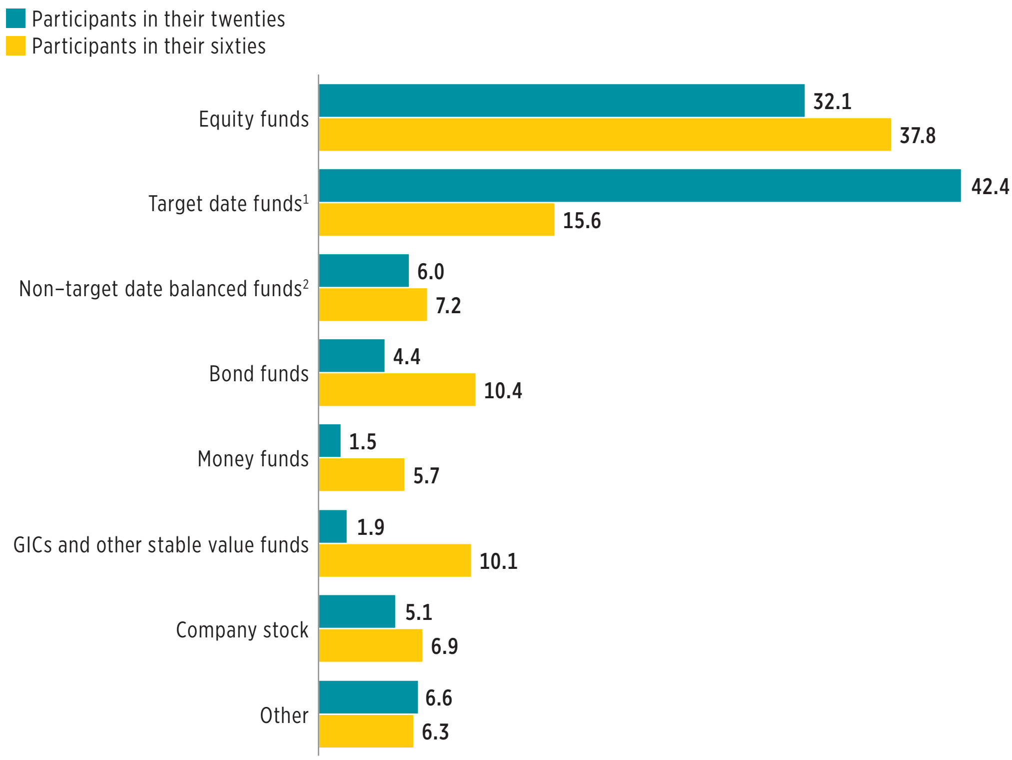
On average, younger participants allocate more of their portfolios to equities (which include equity mutual funds and other pooled equity investments; the equity portion of balanced funds,* including target date funds; and company stock of their employers). According to research conducted by ICI and the Employee Benefit Research Institute (EBRI), at year-end 2014, individuals in their twenties had 37 percent of their 401(k) assets in equity funds and company stock; 48 percent in target date funds and non–target date balanced funds; and only 8 percent in GICs and other stable value funds, money funds, and bond funds (Figure 7.12). All told, participants in their twenties had 78 percent of their 401(k) assets in equities. By comparison, at year-end 2014, participants in their sixties had 26 percent of their 401(k) account assets in GICs and other stable value funds, money funds, and bond funds; only 23 percent in target date funds and non–target date balanced funds; and 45 percent in equity funds and company stock. All told, participants in their sixties had 56 percent of their 401(k) assets in equities.

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

FIGURE 7.12

401(k) Asset Allocation Varied with Participant Age

Average asset allocation of 401(k) account balances, percentage of account balances, year-end 2014



[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.

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.

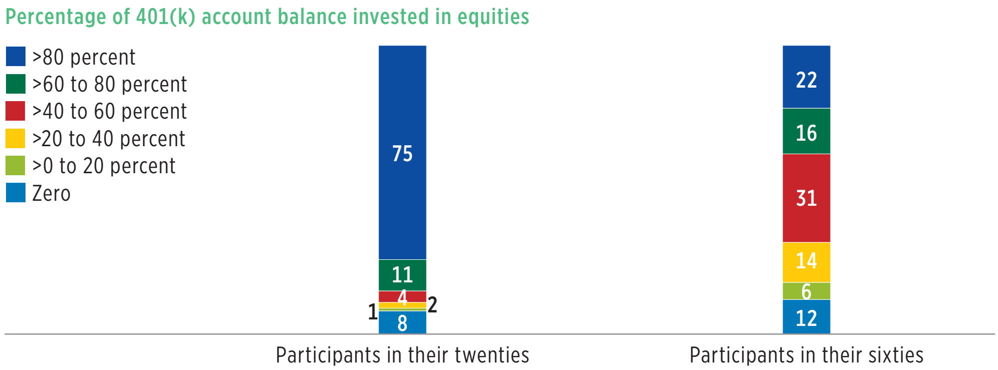
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project. See *ICI Research Perspective*, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2014."

Portfolio allocation also varies widely within age groups. At year-end 2014, 75 percent of 401(k) participants in their twenties held more than 80 percent of their account in equities, and 9 percent of these participants held 20 percent or less (Figure 7.13). Of 401(k) participants in their sixties, 22 percent held more than 80 percent of their account in equities, and 18 percent held 20 percent or less.

FIGURE 7.13

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

Asset allocation distribution of 401(k) participant account balance to equities, percentage of participants, year-end 2014



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. Components do not add to 100 percent because of rounding. 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 2014."

Target Date Funds

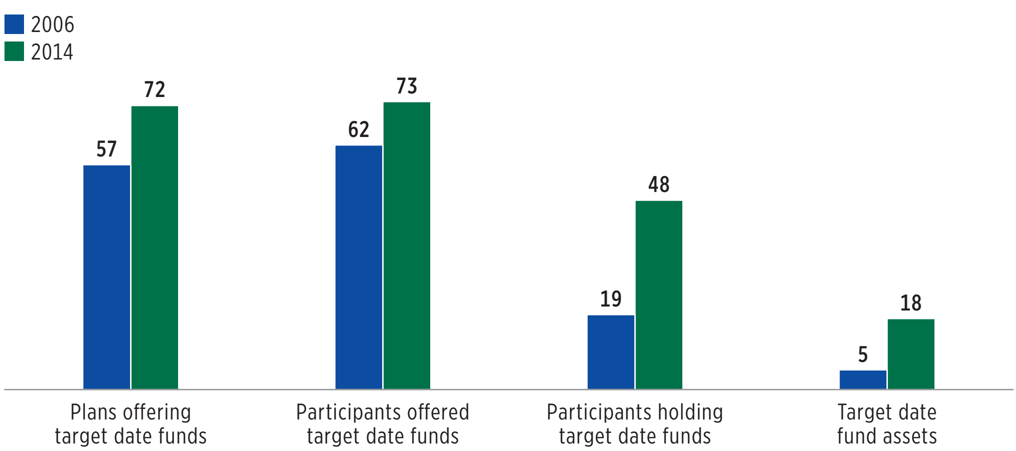
Target date funds, introduced in the mid-1990s, have grown rapidly in recent years. A target date fund (including both target date mutual funds and other pooled target date investments) follows a predetermined reallocation of assets over time based on a specified target retirement date. Typically the 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. Since 2006, the share of 401(k) plans that offer target date funds, the share of 401(k) plan participants offered target date funds, and the share of 401(k) participants holding target date funds all have increased (Figure 7.14). At year-end 2014, target date funds accounted for 18 percent of 401(k) assets, up from 5 percent at year-end 2006.

In 2014, 72 percent of 401(k) plans offered target date funds, and 73 percent of 401(k) plan participants were offered target date funds (Figure 7.14). Because not all plan participants choose to allocate assets to these funds, the percentage of 401(k) participants with target date fund assets was lower than the percentage of participants who were offered the option.

FIGURE 7.14

Target Date Funds' 401(k) Market Share

Percentage of total 401(k) market; year-end, 2006 and 2014



Note: 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 2014."

At year-end 2014, 48 percent of 401(k) participants held at least some plan assets in target date funds. In addition, because not all participants with assets in target date funds allocated 100 percent of their holdings to these funds, and because participants with assets in these funds were more likely to be younger or recently hired and have lower account balances, the share of 401(k) assets invested in target date funds was lower than the share of participants invested in these funds.

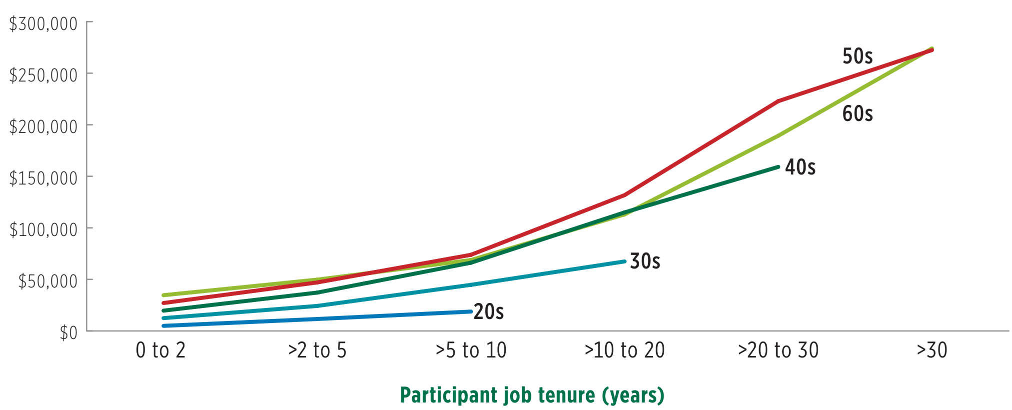
Account Balances

Account balances tended to be higher the longer 401(k) plan participants had been working for their current employers and the older the participant. Participants in their sixties with more than 30 years of tenure at their current employer had an average 401(k) account balance of $274,043 at year-end 2014 (Figure 7.15). Participants in their forties with five to 10 years of tenure at their current employer had an average 401(k) balance of $66,173. The median 401(k) plan participant was 46 years old at year-end 2014, and the median job tenure was eight years.

FIGURE 7.15

401(k) Balances Tend to Increase with Participant Age and Job Tenure

Average 401(k) account balance by participant age and tenure, 2014



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 2014.”

Plan Loans

Most 401(k) participants do not borrow from their plans, although the majority have access to loans. At year-end 2014, 20 percent of participants eligible for loans had loans outstanding, down slightly from 21 percent at year-end 2013. 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 17 percent had loans outstanding at year-end 2014. The average unpaid loan balances among participants with loans represented about 11 percent of their 401(k) account balances (net of the unpaid loan balances). In aggregate, U.S. Department of Labor data indicate that outstanding loan amounts were less than 2 percent of 401(k) plan assets in 2013.

Individual Retirement Accounts

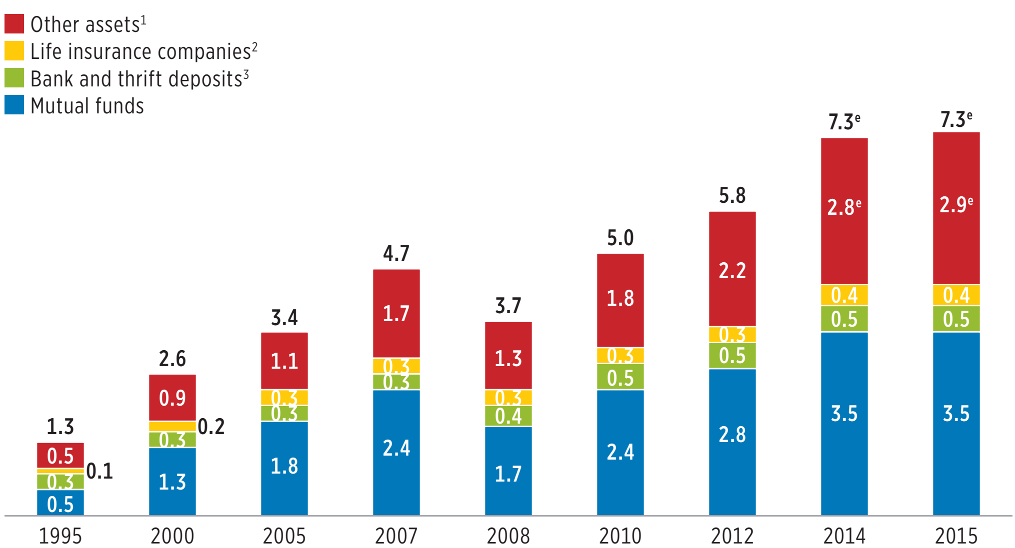
The first type of IRA—known as a traditional IRA—was created under the Employee Retirement Income Security Act of 1974 (ERISA). IRAs provide all workers with a contributory retirement savings vehicle and, through rollovers, give workers leaving jobs a means to preserve the tax benefits and growth opportunities 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 employers to provide retirement plans by simplifying the rules applicable to tax-qualified plans.

Total IRA assets, $7.3 trillion at year-end 2015, accounted for 31 percent of U.S. retirement assets. Mutual funds accounted for $3.5 trillion of IRA assets at year-end 2015, about the same as at year-end 2014 (Figure 7.16). Assets managed by mutual funds were the largest component of IRA assets, followed by the other asset category, which includes ETFs, closed-end funds, individual stocks and bonds, and other securities held through brokerage accounts ($2.9 trillion at year-end 2015). The mutual fund industry's share of the IRA market was 48 percent at year-end 2015, down slightly from year-end 2014.

FIGURE 7.16

IRA Assets

Trillions of dollars; year-end, selected years



[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.

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

Sources: Investment Company Institute, Federal Reserve Board, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division. See Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015."

IRA Investors

More than three out of 10 U.S. households, or about 40 million, owned at least one type of IRA as of mid-2015 (Figure 7.17). Traditional IRAs—those introduced under ERISA—were the most common type, owned by about 30 million U.S. households. Roth IRAs, first available in 1998 under the Taxpayer Relief Act of 1997, were owned by about 20 million U.S. households. Nearly seven million U.S. households owned employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, or SIMPLE IRAs).

Although most U.S. households are eligible to make contributions to IRAs, few do so. Indeed, only 14 percent of U.S. households contributed to any type of IRA in tax year 2014. In addition, very few eligible households made "catch-up" contributions to traditional or Roth IRAs.

FIGURE 7.17

40 Million U.S. Households Owned IRAs

	Year created	Number of U.S. households with type of IRA (mid-2015)	Percentage of U.S. households with type of IRA (mid-2015)	Assets in IRAs (billions of dollars, year-end 2015)
Traditional IRA	**1974** (Employee Retirement Income Security Act)	30.4 million	24.4%	$6,174[e]
SEP IRA	**1978** (Revenue Act)	6.7 million	5.4%	$495[e]
SAR-SEP IRA	**1986** (Tax Reform Act)			
SIMPLE IRA	**1996** (Small Business Job Protection Act)			
Roth IRA	**1997** (Taxpayer Relief Act)	20.3 million	16.3%	$660[e]
Any IRA		40.2 million	32.3%	$7,329[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.

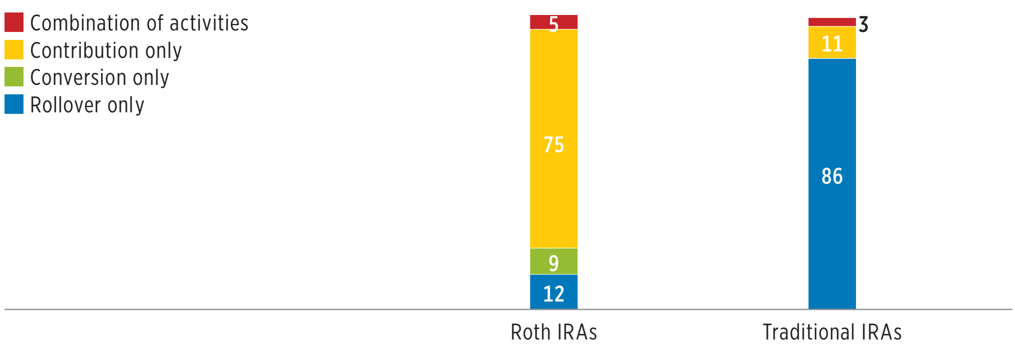
Sources: Investment Company Institute and U.S. Census Bureau. See *ICI Research Perspective*, "The Role of IRAs in U.S. Households Saving for Retirement, 2015" and "The U.S. Retirement Market, Fourth Quarter 2015."

Instead, investment returns and rollovers from employer-sponsored retirement plans have fueled the growth of IRAs. In any given year, a small portion of traditional IRA investors make rollovers, but analysis of The IRA Investor Database—which contains information on more than 15 million IRA investors—finds that, for the most part, the groups that make rollovers differ from year to year. Rollovers play an important role in opening traditional IRAs. With the availability of retirement accumulations that can be rolled over, whether from DC accounts or as lump-sum distributions from DB plans, most (86 percent) new traditional IRAs in 2013 were opened only with rollovers (Figure 7.18). By contrast, in 2013, 12 percent of Roth IRAs were opened only with rollovers; the majority (75 percent) were opened only with contributions.

FIGURE 7.18

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

Percentage of new IRAs opened in 2013 by type of IRA



Note: New IRAs are accounts that did not exist in The IRA Investor Database in 2012 and were opened by one of the paths indicated in 2013. The calculation excludes IRAs that changed financial services firms. The samples are 0.3 million new Roth IRA investors aged 18 or older at year-end 2013 and 0.7 million new traditional IRA investors aged 25 to 74 at year-end 2013. Components may not add to 100 percent because of rounding.

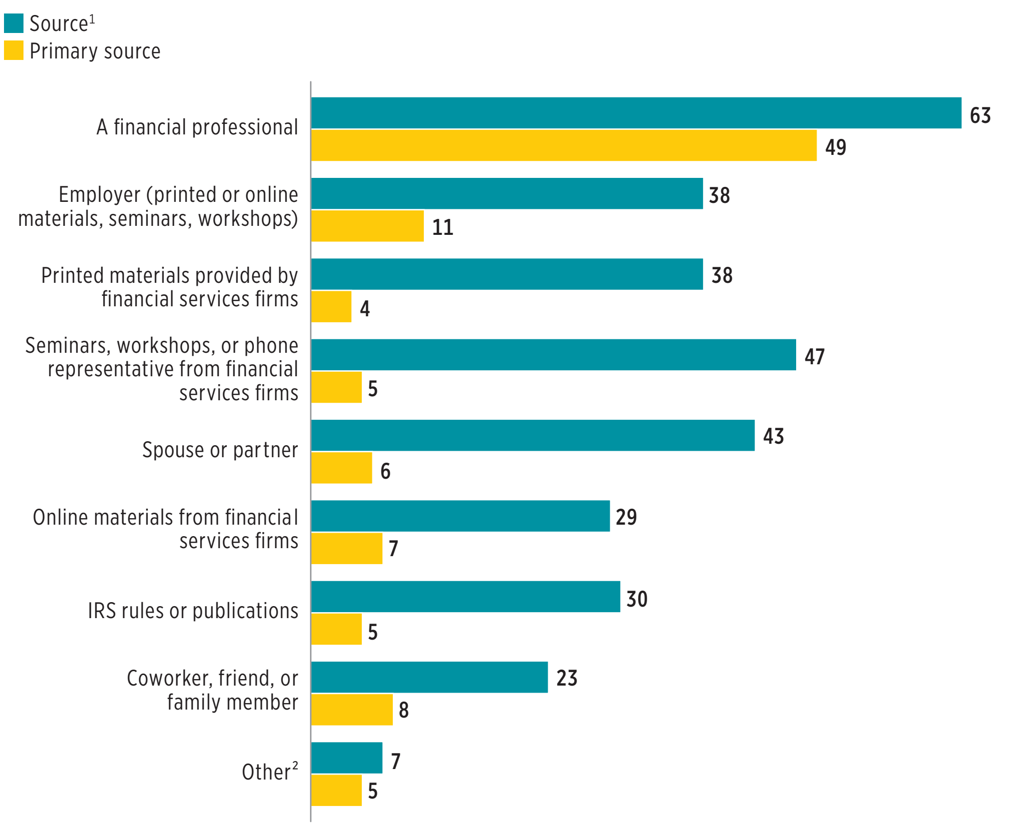
Source: The IRA Investor Database™. See *ICI Research Report*, “The IRA Investor Profile: Roth IRA Investors’ Activity, 2007–2013.”

Traditional IRA–owning households generally researched the decision to roll over money from their former employer's retirement plan into a traditional IRA. The most common source of information was professional financial advisers. Advisers were consulted by 63 percent of traditional IRA–owning households with rollovers, with nearly half indicating they primarily relied on financial professionals (Figure 7.19). Older households were more likely to consult professional financial advisers than younger households. Seven 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 than older households as their primary source of information.

FIGURE 7.19

Multiple Sources of Information Are Consulted for the Rollover Decision

Percentage of traditional IRA–owning households with rollovers, mid-2015



[1] Multiple responses are included; 81 percent of traditional IRA–owning households with rollovers consulted multiple sources of information.

[2] Other responses given included: myself, other online information, bank, and books and magazines.

Source: Investment Company Institute IRA Owners Survey. See *ICI Research Perspective*, "The Role of IRAs in U.S. Households' Saving for Retirement, 2015."

Households owning IRAs generally are headed by middle-aged individuals (median age of 54 years) with moderate household incomes (median income of $87,500). These households held a median of $50,000 in IRAs. In addition, many households held multiple types of IRAs. For example, 41 percent of households with traditional IRAs also owned Roth IRAs, and 12 percent also owned employer-sponsored IRAs.

IRA Portfolios

At year-end 2013, younger IRA investors tended to have more invested in equities, equity funds, and target date funds, on average, than older investors, according to The IRA Investor Database. Older investors were invested more heavily in non–target date balanced funds* and fixed-income investments. For example, traditional IRA investors in their thirties had, on average, 53 percent of their assets in equities and equity funds and another 19 percent in target date funds (Figure 7.20). Traditional IRA investors in their sixties held 51 percent and 5 percent of their traditional IRA assets, respectively, in these two asset categories. Traditional IRA investors in their sixties had 41 percent of their assets in money market funds (12 percent), bonds and bond funds (18 percent), and non–target date balanced funds (12 percent). By contrast, traditional IRA investors in their thirties held a quarter of their assets in these three asset categories.

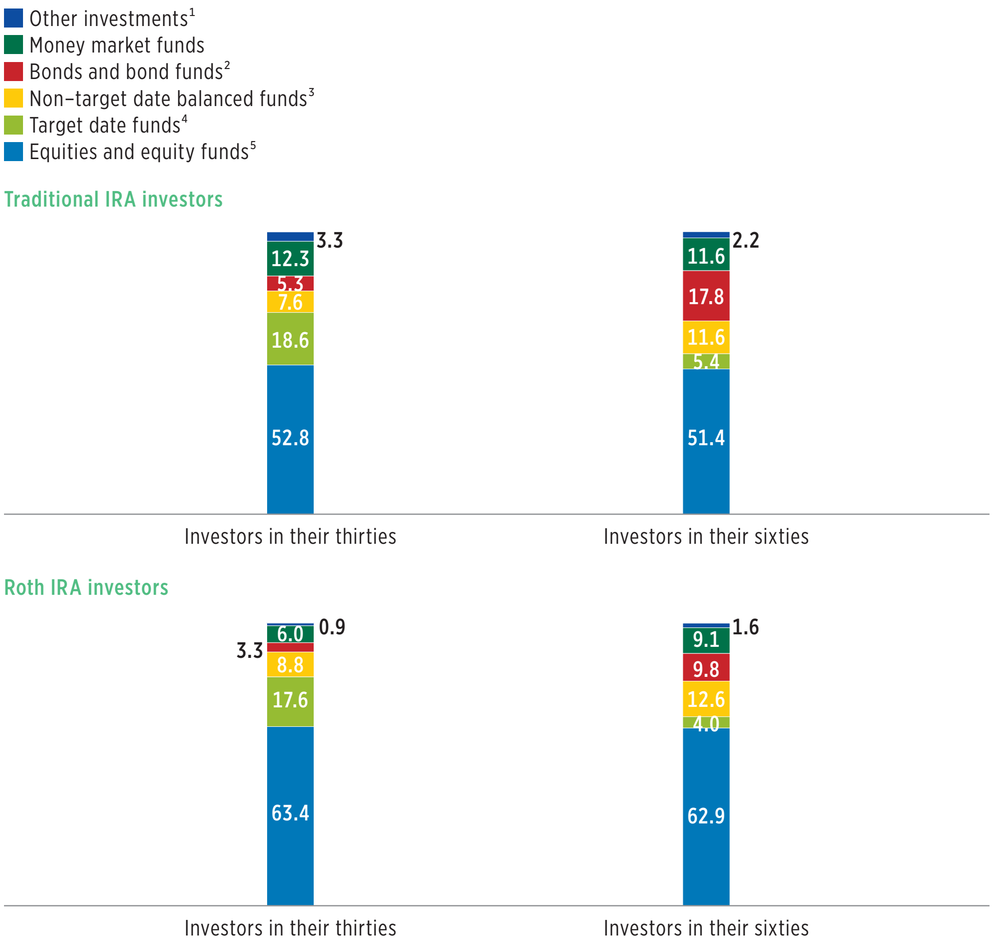
Roth IRA investors display a similar pattern of investing by age, although Roth IRA investors of all ages tended to have higher allocations to equities and equity funds compared with traditional IRA investors—for example, Roth IRA investors in their thirties and sixties held the same portion of their assets in equities and equity funds (63 percent). Roth IRA investors in their thirties had, on average, 18 percent of their assets in target date funds, while Roth IRA investors in their sixties had 4 percent (Figure 7.20). By contrast, Roth IRA investors in their sixties had nearly a third of their assets in money market funds (9 percent), bonds and bond funds (10 percent), and non–target date balanced funds (13 percent). Roth IRA investors in their thirties held less than one-fifth of their assets in these three asset categories.

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

FIGURE 7.20

IRA Asset Allocation Varied with Investor Age

Average asset allocation of IRA balances, percentage of assets, year-end 2013



[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] Balanced funds invest in a mix of equities and fixed-income securities. 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. Components may not add to 100 percent because of rounding.

Source: The IRA Investor Database™. See *ICI Research Report*, "The IRA Investor Profile: Traditional IRA Investors' Activity, 2007–2013," and *ICI Research Report*, "The IRA Investor Profile: Roth IRA Investors' Activity, 2007–2013."

Distributions from IRAs

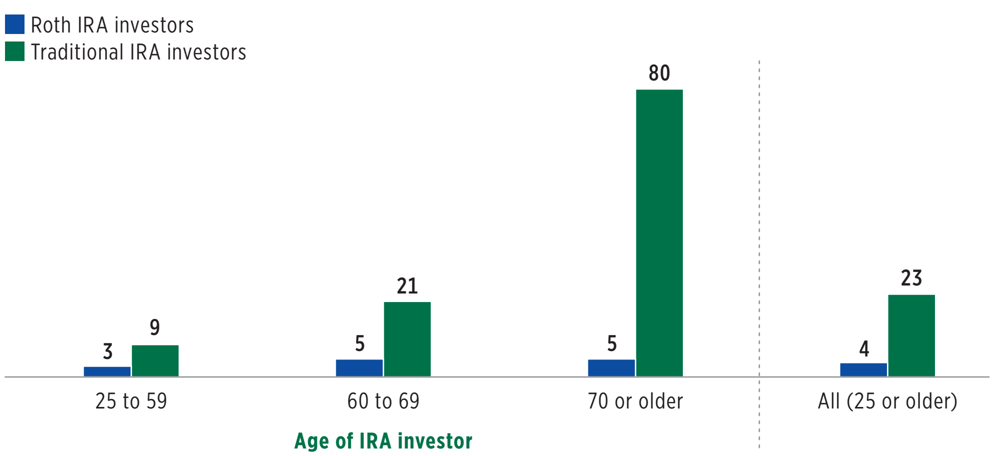
Withdrawals from IRAs tend to occur later in life, often to fulfill required minimum distributions (RMDs). An RMD is equal to a percentage of the IRA balance, based on remaining life expectancy. Traditional IRA owners aged 70½ or older generally must withdraw at least the minimum amount each year or pay a penalty. In tax year 2014, 61 percent of individuals who took traditional IRA withdrawals stated they calculated the withdrawal amount based on RMD rules.

In contrast to traditional IRAs, Roth IRAs have no RMDs (unless they are inherited). As a result, withdrawal activity is much lower among Roth IRA investors. In 2013, only 4 percent of Roth IRA investors aged 25 or older made withdrawals, compared with 23 percent of traditional IRA investors (Figure 7.21). Early withdrawal penalties can apply to both Roth and traditional IRA investors younger than 59½, and withdrawal activity is lower among investors younger than 60 compared with investors aged 60 or older.

FIGURE 7.21

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, 2013



Note: The samples are 5.1 million Roth IRA investors aged 25 or older at year-end 2013 and 10.7 million traditional IRA investors aged 25 or older at year-end 2013.

Source: The IRA Investor Database™. See *ICI Research Report*, "The IRA Investor Profile: Roth IRA Investors' Activity, 2007–2013."

Withdrawals from IRAs tend to be retirement related. Of the 22 percent of traditional IRA–owning households who reported taking withdrawals in tax year 2014, 73 percent reported that the head of household, the spouse, or both were retired. Of retired households that took traditional IRA withdrawals in tax year 2014, 48 percent reported using some or all of the withdrawal amount to pay for living expenses (Figure 7.22). Other uses included reinvesting or saving in another account (37 percent), paying for a healthcare expense (36 percent), and buying, repairing, or remodeling a home (25 percent).

Traditional IRA–owning households that reported taking withdrawals in tax year 2014 and were not retired indicated a slightly different pattern for the withdrawals. The nonretired households with withdrawals were less likely to indicate using some or all of the money for living expenses (34 percent) or to reinvest or save it in another account (36 percent) than the retired households (Figure 7.22).

FIGURE 7.22

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

Percentage of traditional IRA–owning households by retirement status,[1] mid-2015

Purpose of traditional IRA withdrawal	Retired[1, 2]	Not retired[3]
Took withdrawals to pay for living expenses	48	34
Spent it on a car, boat, or big-ticket item other than a home	12	14
Spent it on a healthcare expense	36	25
Used it for an emergency	23	27
Used it for home purchase, repair, or remodeling	25	27
Reinvested or saved it in another account	37	24
Paid for education	8	12
Some other purpose	11	10

[1] 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?"

[2] The base of respondents includes the 16 percent of traditional IRA–owning households that were retired in mid-2015 and took withdrawals in tax year 2014.

[3] The base of respondents includes the 6 percent of traditional IRA–owning households that were not retired in mid-2015 and took withdrawals in tax year 2014.

Note: Multiple responses are included.

Source: Investment Company Institute IRA Owners Survey. See *ICI Research Perspective*, "The Role of IRAs in U.S. Households' Saving for Retirement, 2015."

Because current withdrawal activity might not be a good indicator of future withdrawal activity, ICI also asked about plans for future traditional IRA withdrawals. Among traditional IRA–owning households in 2015 that did not take a withdrawal in tax year 2014, 72 percent said that they were not likely to take a withdrawal before age 70½. Traditional IRA–owning households that were either (1) retired and did not take withdrawals in tax year 2014 or (2) not retired reported a pattern for the expected role of their future IRA withdrawals in retirement that is consistent with those that withdrew in tax year 2014. Sixty-two percent of these households reported they plan to use IRA withdrawals to pay for living expenses in retirement, and 45 percent reported they plan to reinvest or save their IRA withdrawals in another account.

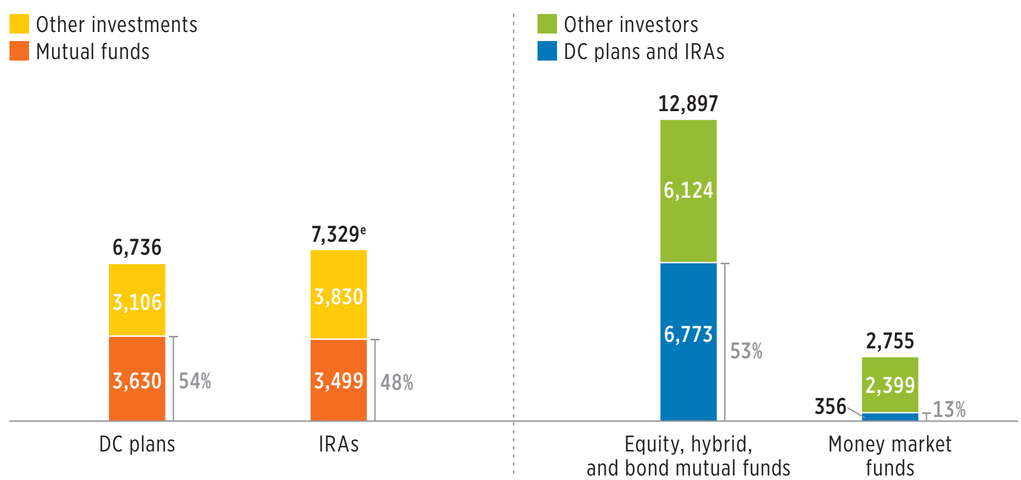
The Role of Mutual Funds in Retirement Savings

At year-end 2015, mutual funds held in DC plans and IRAs accounted for $7.1 trillion, or 30 percent, of the $24.0 trillion U.S. retirement market. The $7.1 trillion in mutual fund retirement assets made up 46 percent of all mutual fund assets at year-end 2015. Mutual funds accounted for 54 percent of DC plan assets and 48 percent of IRA assets (Figure 7.23). Additionally, retirement investors tend to hold long-term mutual funds. At year-end 2015, DC plans and IRAs held 53 percent of equity, hybrid, and bond mutual funds, but only 13 percent of money market funds.

FIGURE 7.23

Substantial Amount of Retirement Assets Are Invested in Mutual Funds

Assets, billions of dollars, year-end 2015



[e] Data are estimated.

Sources: Investment Company Institute, Federal Reserve Board, American Council of Life Insurers, and Internal Revenue Service Statistics of Income Division. See Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015."

Across the entire U.S. retirement market, mutual funds play a major role in IRAs and employer-sponsored DC plans, such as 401(k) plans. At year-end 2015, investors held slightly more mutual fund assets in DC plans ($3.6 trillion, or 54 percent of total DC plan assets) than in IRAs ($3.5 trillion, or 48 percent of total IRA assets) (Figure 7.24). Among DC plans, 401(k) plans held the most assets in mutual funds, with $2.8 trillion, followed by 403(b) plans ($429 billion), other private-sector DC plans ($286 billion), and 457 plans ($110 billion).

Types of Mutual Funds Used by Retirement Plan Investors

Retirement investors tend to hold equity investments. At year-end 2015, 58 percent of the $7.1 trillion in mutual fund retirement assets held in DC plans and IRAs were invested in domestic or world equity funds (Figure 7.24). By comparison, about 52 percent of overall fund industry assets—retirement and nonretirement accounts—were invested in domestic or world equity funds. Domestic equity funds alone constituted about $3.1 trillion, or 44 percent, of mutual fund assets held in DC plans and IRAs.

FIGURE 7.24

Majority of Mutual Fund Retirement Account Assets Were Invested in Equities

Billions of dollars, year-end 2015

	Equity					
	Domestic	World	Hybrid[1]	Bond	Money market	Total
IRAs[2]	**1,460**	**465**	**783**	**576**	**216**	**3,499**
DC plans	**1,688**	**503**	**887**	**411**	**141**	**3,630**
401(k) plans	1,262	415	747	286	96	2,805
403(b) plans	264	35	76	35	20	429
457 plans	61	16	18	14	2	110
Other DC plans[3]	102	37	47	76	24	286
Total	**$3,148**	**$968**	**$1,670**	**$987**	**$356**	**$7,130**

[1] Hybrid funds invest in a mix of equities and fixed-income securities. Most target date and lifestyle funds 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] *Other DC plans* includes Keoghs and other private-sector DC plans without 401(k) features.

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

Source: Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015"

Retirement investors also gain exposure to equities and fixed-income securities through hybrid funds. At year-end 2015, 23 percent of mutual fund assets held in DC plans and IRAs were held in hybrid funds, which invest in a mix of equity, bond, and money market securities (Figure 7.24). At year-end 2015, the remaining 19 percent of mutual fund assets held in DC plans and IRAs were invested in bond funds and money market funds. Bond funds held $987 billion, or 14 percent, of mutual fund assets held in DC plans and IRAs, and money market funds accounted for $356 billion, or 5 percent.

Target Date and Lifestyle Mutual Funds

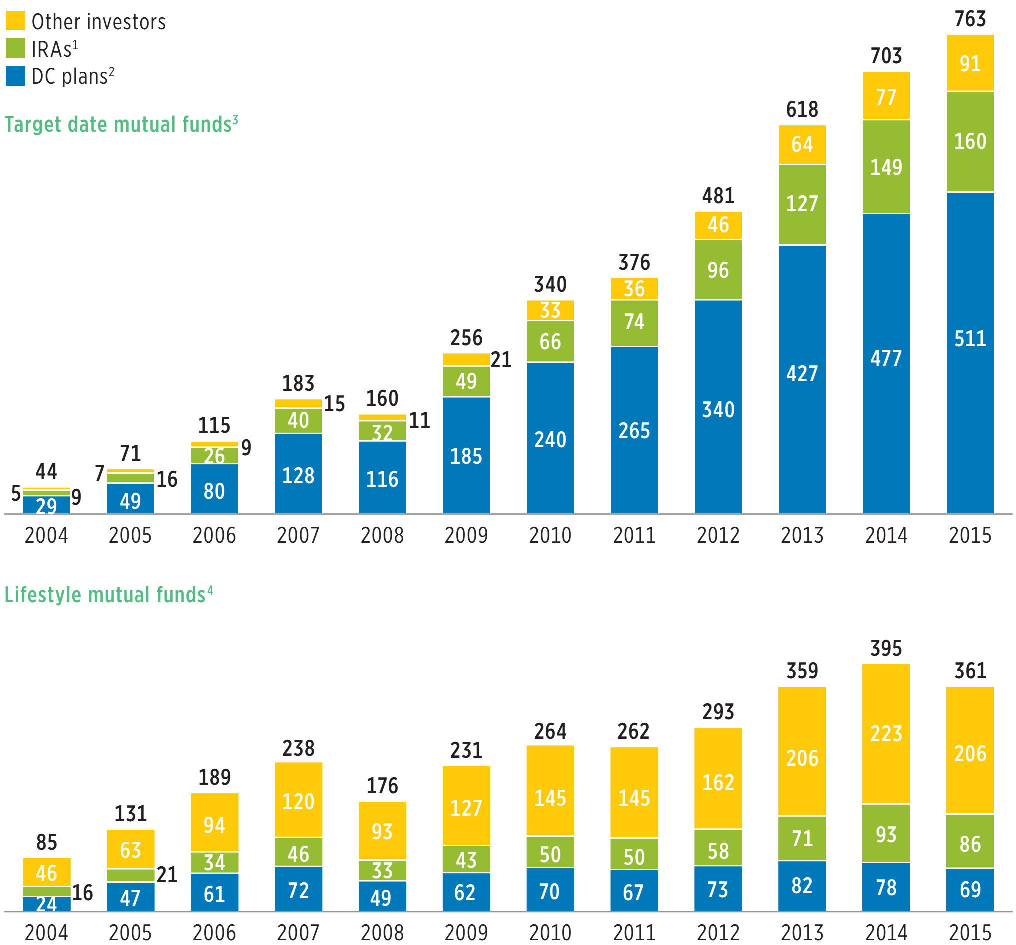
Target date and lifestyle mutual funds, generally included in the hybrid fund category, have grown more popular among investors and retirement plan sponsors over the past decade. A target date fund follows a predetermined reallocation of assets over time based on a specified target retirement date. Typically 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. A lifestyle fund maintains a predetermined risk level and generally uses words such as "conservative," "moderate," or "aggressive" in its name to indicate the fund's risk level.

Assets in target date and lifestyle mutual funds totaled $1.1 trillion at year-end 2015, about the same as at year-end 2014 (Figure 7.25). Target date mutual funds' assets were up 9 percent in 2015, increasing from $703 billion to $763 billion. Assets in lifestyle mutual funds fell 9 percent in 2015, dropping from $395 billion to $361 billion. Most target date mutual fund assets (88 percent) were held in retirement accounts, compared with 43 percent of lifestyle mutual fund assets.

FIGURE 7.25

Target Date and Lifestyle Mutual Fund Assets by Account Type

Billions of dollars; year-end, 2004–2015



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

[3] 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.

[4] A lifestyle mutual fund maintains a predetermined risk level and generally uses "conservative," "moderate," or "aggressive" in its name.

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

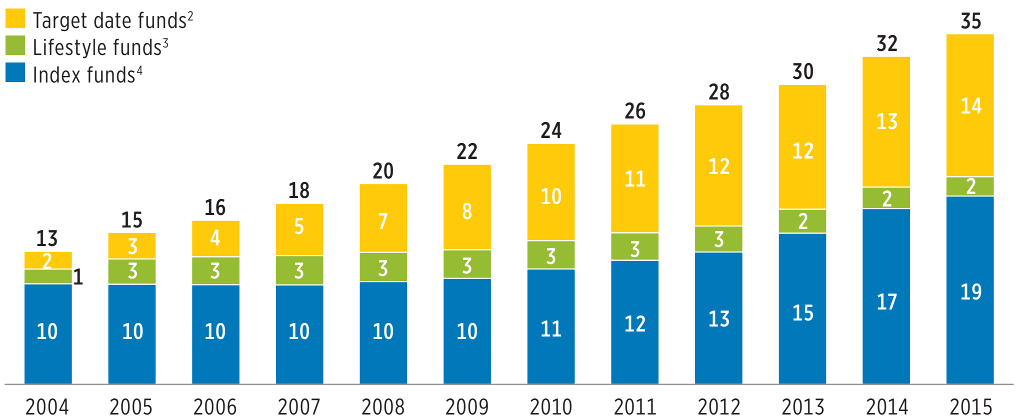
Source: Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015"

Target date, lifestyle, and index mutual funds have grown as a share of mutual fund assets in DC plans. Target date mutual funds increased 12 percentage points as a share of DC plans' mutual fund assets from 2004 to year-end 2015, rising from 2 percent to 14 percent (Figure 7.26). At year-end 2015, target date, lifestyle, and index mutual funds made up 35 percent of mutual fund assets in DC plans compared to only 13 percent in 2004.

FIGURE 7.26

Target Date, Lifestyle, and Index Funds Have Risen as a Share of DC Plans' Mutual Fund Assets

Percentage of mutual fund assets held in DC plans;[1] year end, 2004–2015



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

[2] 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.

[3] A lifestyle mutual fund maintains a predetermined risk level and generally uses "conservative," "moderate," or "aggressive" in its name.

[4] Index mutual funds are equity, bond, and hybrid funds that target specific market indexes with the general objective of meeting the performance of that index. Equity index funds are the most common type of index fund.

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

Source: Investment Company Institute, "The U.S. Retirement Market, Fourth Quarter 2015"

The Role of Mutual Funds in Education Savings

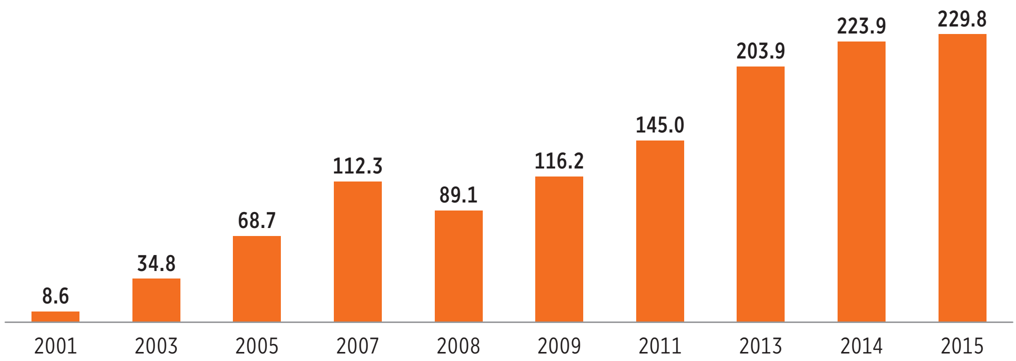
Twenty-four percent of households that owned mutual funds in 2015 cited education as a financial goal for their fund investments. Nevertheless, the demand for education savings vehicles has been historically modest since their introduction in the 1990s, partly because of their limited availability and investors' lack of familiarity with them. The Economic Growth and Tax Relief Reconciliation Act (EGTRRA), enacted in 2001, enhanced the attractiveness of Section 529 plans and Coverdell Education Savings Accounts (ESAs)—two education savings vehicles—by allowing greater contributions to them and making them more flexible. The Pension Protection Act (PPA), enacted in 2006, made the EGTRRA enhancements to Section 529 plans 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.

Assets in Section 529 savings plans increased 3 percent in 2015, with $230 billion at year-end 2015, up from $224 billion at year-end 2014 (Figure 7.27). As of year-end 2015, there were 11.3 million 529 savings plan accounts, with an average account size of approximately $20,300.

FIGURE 7.27

Section 529 Savings Plan Assets

Billions of dollars; year-end, selected years



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 2015."

In mid-2015, 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, with 43 percent younger than 45 (Figure 7.28). Heads of households saving for college had a range of education attainment: 44 percent had less than a college degree and 56 percent had a college degree or more. These households also had a range of incomes: 32 percent earned less than $75,000; 15 percent earned between $75,000 and $99,999; and more than half earned $100,000 or more. Nearly six in 10 of these households had children (younger than 18) in the home, and 34 percent had more than one child in the home.

FIGURE 7.28

Characteristics of Households Saving for College

Percentage of U.S. households saving for college,[1] mid-2015

Age of head of household[2]	
Younger than 35	21
35 to 44	22
45 to 54	29
55 to 64	16
65 or older	12
Education level	
High school diploma or less	17
Associate's degree or some college	27
Completed college	24
Some graduate school or completed graduate school	32
Household income[3]	
Less than $25,000	7
$25,000 to $34,999	5
$35,000 to $49,999	7
$50,000 to $74,999	14
$75,000 to $99,999	14
$100,000 or more	53
Number of children in home[4]	
None	42
One	24
Two	22
Three or more	12

[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 is based on the sole or co-decisionmaker for saving and investing.

[3] Total reported is household income before taxes in 2014.

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

For More Information

» Individual Retirement Account Resource Center
www.ici.org/iraresource

» 401(k) Resource Center
www.ici.org/401k

» Target Retirement Date Funds Resource Center
www.ici.org/trdf

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

» *How America Supports Retirement: Challenging the Conventional Wisdom on Who Benefits*
www.ici.org/whobenefits

» Getting the Numbers Right on Investment Advice for Retirement Savers
www.ici.org/viewpoints/view_15_fiduciary_data

» On Fiduciary Rule, *New York Times* Relies on Fatally Flawed Research
www.ici.org/viewpoints/view_15_fatal_flaw

PART TWO

Data Tables

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WORLDWIDE REGULATED OPEN-END FUNDS

TABLE 1

Total Net Assets, Number of Funds, and Number of Share Classes of the Mutual Fund Industry

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	1,065.19	3,079	3,177
1991	1,393.19	3,403	3,587
1992	1,642.54	3,824	4,208
1993	2,069.96	4,534	5,562
1994	2,155.32	5,325	7,697
1995	2,811.29	5,725	9,007
1996	3,525.80	6,248	10,352
1997	4,468.20	6,684	12,002
1998	5,525.21	7,314	13,720
1999	6,846.34	7,791	15,262
2000	6,964.63	8,155	16,738
2001	6,974.91	8,305	18,022
2002	6,383.16	8,243	18,982
2003	7,402.12	8,127	19,320
2004	8,095.80	8,045	20,041
2005	8,891.38	7,977	20,554
2006	10,398.16	8,123	21,264
2007	12,000.17	8,041	21,638
2008	9,620.64	8,040	22,263
2009	11,112.62	7,666	21,651
2010	11,833.36	7,555	21,911
2011	11,632.35	7,588	22,283
2012	13,056.68	7,590	22,637
2013	15,050.82	7,715	23,389
2014	15,875.27	7,928	24,227
2015	15,651.96	8,116	25,038

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

TABLE 2

Total Sales, New Sales, Exchange Sales, Redemptions, and Exchange Redemptions of the Mutual Fund Industry

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	1,564.81	1,517.41	138.79	1,470.83	140.98
1991	2,037.64	1,990.53	155.75	1,879.69	154.31
1992	2,749.68	2,704.69	197.43	2,548.28	198.15
1993	3,187.49	3,137.76	248.79	2,904.44	253.95
1994	3,075.63	3,019.76	317.55	2,928.62	325.00
1995	3,600.62	3,526.00	351.53	3,314.86	351.08
1996	4,671.44	4,586.71	504.73	4,266.20	503.94
1997	5,801.23	5,704.83	613.44	5,324.29	618.49
1998	7,230.40	7,126.92	742.97	6,649.27	743.37
1999	9,043.58	8,922.96	949.96	8,562.10	947.36
2000	11,109.54	10,970.50	1,149.75	10,586.59	1,145.42
2001	12,866.21	12,747.53	797.34	12,242.32	798.08
2002	13,168.76	13,084.32	747.34	13,011.36	745.65
2003	12,393.59	12,315.40	572.50	12,361.66	573.76
2004	12,191.21	12,101.07	409.00	12,038.96	417.95
2005	13,939.28	13,812.45	420.84	13,546.77	432.42
2006	17,409.26	17,228.70	487.72	16,751.98	492.20
2007	23,470.65	23,236.42	606.47	22,352.20	611.96
2008	26,349.29	26,135.06	735.12	25,714.11	730.11
2009	20,680.22	20,528.82	530.25	20,676.85	528.35
2010	18,210.24	18,053.46	420.18	18,320.28	434.88
2011	17,837.57	17,661.79	448.06	17,739.21	466.52
2012	17,023.43	16,832.69	422.03	16,621.11	434.12
2013	18,158.48	17,969.37	517.69	17,778.80	531.09
2014	18,714.67	18,499.38	425.48	18,387.59	433.36
2015	20,933.30	20,709.41	452.11	20,808.76	454.43

[1] Total sales are the dollar value of new sales plus sales made through reinvestment of income dividends from existing accounts, but exclude 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

Total Net Assets of the Mutual Fund Industry

Billions of dollars, year-end

Year	Total	Long-term funds: Equity	Long-term funds: 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
1976	51.28	39.19	8.39	3.69
1977	48.94	34.07	10.98	3.89
1978	55.84	32.67	12.31	10.86
1979	94.51	35.88	13.10	45.53
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

Year	Total	Long-term funds: Equity: Domestic	Long-term funds: Equity: World	Long-term funds: Hybrid	Long-term funds: Bond: Taxable	Long-term funds: Bond: Municipal	Money market funds: Taxable	Money market funds: 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	1,065.19	211.18	28.30	35.98	171.14	120.25	414.56	83.78
1991	1,393.19	365.21	39.52	52.04	239.77	154.20	452.46	89.98
1992	1,642.54	468.41	45.68	77.63	308.37	196.26	451.35	94.84
1993	2,069.96	626.54	114.13	142.33	367.05	254.60	461.88	103.44
1994	2,155.32	691.57	161.19	161.40	302.84	227.31	501.11	109.89
1995	2,811.29	1,052.57	196.51	206.70	349.21	253.29	631.32	121.69
1996	3,525.80	1,440.81	285.20	248.36	396.56	253.07	763.94	137.87
1997	4,468.20	2,021.66	346.37	311.90	457.50	271.89	901.23	157.66
1998	5,525.21	2,586.31	391.64	360.04	536.96	298.59	1,166.97	184.71
1999	6,846.34	3,456.64	585.25	374.64	545.18	271.48	1,413.25	199.90
2000	6,964.63	3,369.73	564.75	360.92	545.58	278.41	1,611.38	233.87
2001	6,974.91	2,947.93	444.47	358.03	642.96	296.22	2,026.23	259.08
2002	6,383.16	2,273.05	369.37	335.28	810.26	330.13	1,988.78	276.30
2003	7,402.12	3,118.32	535.05	447.57	924.85	336.31	1,749.73	290.29
2004	8,095.80	3,626.37	716.20	552.25	971.03	328.24	1,589.70	312.00
2005	8,891.38	3,929.72	955.73	621.48	1,018.68	338.95	1,690.45	336.37
2006	10,398.16	4,472.13	1,360.45	731.50	1,130.52	365.09	1,969.42	369.03
2007	12,000.17	4,694.65	1,718.57	821.52	1,305.51	374.15	2,617.67	468.09
2008	9,620.64	2,738.82	916.34	562.26	1,233.18	337.79	3,338.56	493.68
2009	11,112.62	3,564.56	1,307.98	717.58	1,748.11	458.50	2,916.96	398.94
2010	11,833.36	4,053.93	1,542.70	842.20	2,117.07	473.95	2,473.51	330.01
2011	11,632.35	3,855.40	1,357.59	883.98	2,346.90	497.53	2,399.25	291.70
2012	13,056.68	4,324.64	1,614.10	1,034.06	2,810.53	580.17	2,405.74	287.43
2013	15,050.82	5,726.85	2,035.87	1,285.01	2,785.99	499.29	2,447.20	270.61
2014	15,875.27	6,233.17	2,081.15	1,376.59	2,893.24	566.48	2,463.85	260.79
2015	15,651.96	6,045.88	2,102.37	1,336.58	2,818.96	593.41	2,499.81	254.93

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

Total Net Assets of the Mutual Fund Industry 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	$1,433.95	$564.75	$1,935.78	$360.92	$245.69	$109.94	$32.98	$124.87	$32.10	$131.92	$146.49	$1,611.38	$233.87
2001	1,105.24	444.47	1,842.69	358.03	311.29	109.20	31.75	154.14	36.57	139.78	156.44	2,026.23	259.08
2002	765.54	369.37	1,507.51	335.28	405.94	108.11	34.12	218.98	43.10	152.72	177.41	1,988.78	276.30
2003	1,041.14	535.05	2,077.18	447.57	473.59	158.99	43.97	197.99	50.31	149.26	187.05	1,749.73	290.29
2004	1,148.56	716.20	2,477.81	552.25	518.25	167.89	52.63	176.61	55.67	144.09	184.15	1,589.70	312.00
2005	1,232.82	955.73	2,696.90	621.48	570.10	159.36	59.95	167.34	61.93	147.46	191.50	1,690.45	336.37
2006	1,319.36	1,360.45	3,152.78	731.50	640.32	175.73	80.90	153.15	80.42	154.42	210.67	1,969.42	369.03
2007	1,419.60	1,718.57	3,275.05	821.52	760.34	175.96	110.01	158.19	101.01	155.94	218.21	2,617.67	468.09
2008	808.69	916.34	1,930.13	562.26	736.40	118.23	105.65	188.04	84.86	135.09	202.70	3,338.56	493.68
2009	1,085.64	1,307.98	2,478.92	717.58	1,050.03	198.06	158.73	210.31	130.99	159.26	299.24	2,916.96	398.94
2010	1,246.24	1,542.70	2,807.69	842.20	1,241.29	243.48	246.41	225.43	160.46	156.16	317.80	2,473.51	330.01
2011	1,176.99	1,357.59	2,678.41	883.98	1,365.08	271.18	294.42	242.09	174.13	158.89	338.64	2,399.25	291.70
2012	1,317.35	1,614.10	3,007.29	1,034.06	1,570.03	341.92	369.02	298.28	231.28	177.53	402.64	2,405.74	287.43
2013	1,723.13	2,035.87	4,003.72	1,285.01	1,448.87	418.53	431.37	239.42	247.80	144.82	354.47	2,447.20	270.61
2014	1,854.17	2,081.15	4,379.00	1,376.59	1,522.03	377.27	466.89	253.88	273.17	156.16	410.32	2,463.85	260.79
2015	1,842.81	2,102.37	4,203.07	1,336.58	1,512.51	325.62	431.52	265.85	283.46	159.84	433.57	2,499.81	254.93

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

TABLE 5

Number of Funds of the Mutual Fund Industry

Year-end

Year	Total	Long-term funds: Equity	Long-term funds: Bond and income	Money market funds
1970	361	323	38	–
1971	392	350	42	–
1972	410	364	46	–
1973	421	366	55	–
1974	431	343	73	15
1975	426	314	76	36
1976	452	302	102	48
1977	477	296	131	50
1978	505	294	150	61
1979	526	289	159	78
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	3,079	944	155	192	584	463	505	236
1991	3,403	985	206	211	658	523	552	268
1992	3,824	1,086	239	234	773	628	585	279
1993	4,534	1,280	306	281	951	796	627	293
1994	5,325	1,463	423	360	1,104	1,012	649	314
1995	5,725	1,611	528	411	1,167	1,011	676	321
1996	6,248	1,902	668	465	1,244	981	669	319
1997	6,684	2,183	768	500	1,287	933	685	328
1998	7,314	2,622	890	525	1,351	900	687	339
1999	7,791	3,004	949	531	1,375	887	704	341
2000	8,155	3,315	1,055	508	1,367	871	704	335
2001	8,305	3,610	1,085	473	1,308	814	690	325
2002	8,243	3,714	1,018	458	1,295	770	677	311
2003	8,127	3,659	929	474	1,313	779	660	313
2004	8,045	3,651	887	472	1,324	767	639	305
2005	7,977	3,659	912	481	1,315	740	593	277
2006	8,123	3,748	995	500	1,320	713	573	274
2007	8,041	3,678	1,060	496	1,326	676	545	260
2008	8,040	3,655	1,140	511	1,311	640	534	249
2009	7,666	3,419	1,172	481	1,291	599	476	228
2010	7,555	3,321	1,194	495	1,310	583	442	210
2011	7,588	3,259	1,266	520	1,348	563	431	201
2012	7,590	3,217	1,279	564	1,393	557	400	180
2013	7,715	3,193	1,345	606	1,456	560	382	173
2014	7,928	3,238	1,410	666	1,530	557	364	163
2015	8,116	3,277	1,487	717	1,581	573	336	145

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

Number of Funds of the Mutual Fund Industry 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	1,555	1,055	1,760	508	575	219	155	323	95	589	282	704	335
2001	1,723	1,085	1,887	473	557	224	140	296	91	550	264	690	325
2002	1,729	1,018	1,985	458	575	212	126	284	98	515	255	677	311
2003	1,680	929	1,979	474	601	212	121	281	98	523	256	660	313
2004	1,650	887	2,001	472	614	217	122	275	96	513	254	639	305
2005	1,631	912	2,028	481	609	228	123	262	93	498	242	593	277
2006	1,669	995	2,079	500	594	221	139	256	110	478	235	573	274
2007	1,577	1,060	2,101	496	605	223	151	243	104	448	228	545	260
2008	1,555	1,140	2,100	511	595	216	161	236	103	415	225	534	249
2009	1,441	1,172	1,978	481	571	207	170	237	106	377	222	476	228
2010	1,391	1,194	1,930	495	583	210	183	229	105	361	222	442	210
2011	1,356	1,266	1,903	520	579	211	217	223	118	346	217	431	201
2012	1,341	1,279	1,876	564	580	218	255	216	124	336	221	400	180
2013	1,325	1,345	1,868	606	593	230	290	214	129	331	229	382	173
2014	1,328	1,410	1,910	666	604	240	348	199	139	322	235	364	163
2015	1,345	1,487	1,932	717	622	240	371	192	156	319	254	336	145

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

TABLE 7

Number of Share Classes of the Mutual Fund Industry

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	3,177	962	166	199	598	490	522	240
1991	3,587	1,021	227	223	687	558	591	280
1992	4,208	1,189	263	257	877	708	616	298
1993	5,562	1,560	385	347	1,207	1,054	672	337
1994	7,697	2,026	630	515	1,605	1,660	858	403
1995	9,007	2,442	845	634	1,844	1,862	953	427
1996	10,352	3,056	1,155	749	2,050	1,889	1,005	448
1997	12,002	3,860	1,449	873	2,293	1,978	1,075	474
1998	13,720	4,872	1,770	964	2,532	1,955	1,137	490
1999	15,262	5,818	1,968	1,026	2,722	1,998	1,230	500
2000	16,738	6,725	2,299	1,007	2,821	2,031	1,331	524
2001	18,022	7,738	2,511	994	2,874	1,957	1,405	543
2002	18,982	8,427	2,515	1,030	3,065	1,939	1,463	543
2003	19,320	8,546	2,369	1,112	3,222	2,040	1,462	569
2004	20,041	9,002	2,357	1,202	3,377	2,050	1,477	576
2005	20,554	9,259	2,501	1,344	3,427	1,992	1,464	567
2006	21,264	9,641	2,775	1,355	3,542	1,938	1,454	559
2007	21,638	9,706	3,030	1,354	3,640	1,893	1,447	568
2008	22,263	9,881	3,386	1,424	3,753	1,829	1,443	547
2009	21,651	9,342	3,550	1,374	3,782	1,757	1,330	516
2010	21,911	9,201	3,715	1,450	3,990	1,774	1,281	500
2011	22,283	9,173	3,949	1,562	4,150	1,719	1,255	475
2012	22,637	9,143	4,042	1,693	4,438	1,698	1,174	449
2013	23,389	9,220	4,262	1,868	4,720	1,748	1,141	430
2014	24,227	9,422	4,532	2,028	4,996	1,743	1,100	406
2015	25,038	9,640	4,776	2,200	5,222	1,773	1,056	371

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

TABLE 8

Number of Share Classes of the Mutual Fund Industry by Composite Investment Objective

Year-end

Year	Equity funds			Hybrid funds	Bond funds							Money market funds	
	Capital appreciation	World	Total return		Investment grade	High yield	World	Government	Multisector	State muni	National muni	Taxable	Tax-exempt
2000	3,232	2,299	3,493	1,007	1,141	490	311	679	200	1,393	638	1,331	524
2001	3,770	2,511	3,968	994	1,190	524	292	661	207	1,325	632	1,405	543
2002	3,974	2,515	4,453	1,030	1,340	528	291	676	230	1,286	653	1,463	543
2003	3,950	2,369	4,596	1,112	1,461	538	291	703	229	1,333	707	1,462	569
2004	4,068	2,357	4,934	1,202	1,551	571	302	716	237	1,333	717	1,477	576
2005	4,092	2,501	5,167	1,344	1,574	612	315	687	239	1,306	686	1,464	567
2006	4,245	2,775	5,396	1,355	1,604	623	367	666	282	1,258	680	1,454	559
2007	4,158	3,030	5,548	1,354	1,655	661	413	630	281	1,220	673	1,447	568
2008	4,176	3,386	5,705	1,424	1,660	680	491	624	298	1,151	678	1,443	547
2009	3,925	3,550	5,417	1,374	1,629	660	544	633	316	1,069	688	1,330	516
2010	3,832	3,715	5,369	1,450	1,707	690	615	652	326	1,065	709	1,281	500
2011	3,778	3,949	5,395	1,562	1,721	704	744	620	361	1,029	690	1,255	475
2012	3,763	4,042	5,380	1,693	1,796	744	892	626	380	1,002	696	1,174	449
2013	3,762	4,262	5,458	1,868	1,844	796	1,044	631	405	1,010	738	1,141	430
2014	3,788	4,532	5,634	2,028	1,874	833	1,252	601	436	990	753	1,100	406
2015	3,866	4,776	5,774	2,200	1,950	850	1,335	592	495	976	797	1,056	371

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
1990	$59,014	$10,791	$5,751	$16,820	$16,482	$9,170	248	41	51	85	53	18
1991	76,092	13,109	6,115	19,403	29,519	7,947	280	40	52	86	87	15
1992	100,581	14,581	7,100	24,632	45,593	8,674	372	43	61	99	149	20
1993	131,438	15,462	12,466	30,909	60,100	12,501	494	48	70	120	227	29
1994	130,586	16,018	21,505	26,604	56,035	10,425	510	50	86	123	219	32
1995	142,540	18,078	23,769	28,678	60,318	11,698	499	49	91	119	207	33
1996	146,908	19,830	27,074	28,418	59,540	12,046	496	50	91	118	205	32
1997	151,767	20,536	29,011	28,315	61,992	11,912	486	45	89	115	205	32
1998	155,749	22,529	25,011	34,127	63,628	10,454	491	44	83	123	211	30
1999	146,940	24,696	16,494	30,888	64,513	10,348	511	49	74	117	241	30
2000	143,066	24,557	11,986	28,581	68,266	9,676	481	53	69	109	220	30
2001	141,185	22,309	8,748	26,559	74,467	9,102	489	52	64	108	238	27
2002	158,664	26,596	6,988	25,643	90,024	9,414	543	63	59	105	291	25
2003	213,756	42,987	9,743	55,428	94,060	11,539	581	75	55	127	297	27
2004	253,382	63,732	18,072	63,890	94,841	12,847	618	95	61	137	295	30
2005	275,932	77,090	27,784	63,935	94,563	12,559	634	120	71	132	280	31
2006	297,236	88,013	33,657	67,962	94,526	13,079	645	128	74	134	276	33
2007	312,371	87,869	57,329	62,571	88,920	15,682	662	136	92	131	269	34
2008	184,175	45,753	26,525	33,673	67,334	10,891	642	128	93	128	260	33
2009	222,894	52,940	34,489	44,126	77,677	13,660	627	117	91	127	260	32
2010	237,790	60,461	36,239	48,985	77,140	14,965	624	117	87	130	258	32
2011	242,387	62,414	33,441	48,009	84,100	14,422	632	125	87	132	256	32
2012	263,618	68,461	32,179	53,638	90,594	18,746	602	125	86	131	223	37
2013	279,287	81,757	32,429	58,489	82,876	23,737	599	131	85	132	210	41
2014	289,191	88,962	30,370	56,820	90,164	22,874	568	126	84	124	194	40
2015	260,611	72,055	27,542	51,672	89,465	19,876	558	121	84	126	188	39

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]						
2002	$24,895	$9,191	$3	$2,309	$13,392	$0
2003	40,810	11,187	50	25,587	2,954	1,032
2004	27,991	15,424	5,714	5,820	5	1,028
2005	21,388	12,559	6,628	2,046	31	124
2006	12,745	7,992	2,505	1,718	196	334
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	17,012	4,311	106	4,525	1,643	6,428
2014	8,413	4,263	619	677	2,854	1
2015	4,140	496	1,461	1,403	728	51
Gross redemptions[2]						
2007	$2,717	$1,024	$105	$254	$1,313	$20
2008	22,573	7,060	1,832	6,891	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
Net issuance[3]						
2007	$28,369	$4,949	$19,659	$1,966	-$880	$2,675
2008	-22,298	-7,052	-1,687	-6,770	-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	13,677	4,097	-543	3,921	-220	6,423
2014	4,891	3,819	494	266	523	-212
2015	1,676	148	1,043	678	-87	-104

[1] Gross issuance of shares is the value of net proceeds from underwritings, additional offerings, and other issuance. Data are not available prior to 2002.

[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. A positive number indicates that gross issuance exceeded gross redemptions. A negative number indicates that gross redemptions exceeded gross issuance. 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			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]
1993	$464	$464	-	-	-	-	-	$464	-	-	-
1994	424	424	-	-	-	-	-	424	-	-	-
1995	1,052	1,052	-	-	-	-	-	1,052	-	-	-
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	888,198	2,736	101,055	1,294
2011	1,048,134	400,696	108,548	245,114	109,176	377	184,222	934,216	5,049	108,868	1,580
2012	1,337,112	509,338	135,378	328,521	120,016	656	243,203	1,206,974	10,257	119,881	2,227
2013	1,674,616	761,701	202,706	398,834	64,042	1,469	245,862	1,596,691	14,055	63,869	2,659
2014	1,974,377	935,652	267,523	414,805	56,974	3,047	296,376	1,901,331	16,508	56,538	5,204
2015	2,100,443	965,123	267,356	474,640	49,317	3,738	340,270	2,024,438	27,534	48,471	10,690

[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]
1993	1	1	-	-	-	-	-	1	-	-	-
1994	1	1	-	-	-	-	-	1	-	-	-
1995	2	2	-	-	-	-	-	2	-	-	-
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	844	25	54	27
2011	1,134	287	229	368	75	7	168	1,028	33	73	32
2012	1,194	274	222	404	79	13	202	1,070	44	80	45
2013	1,294	292	235	438	76	15	238	1,158	61	75	38
2014	1,411	316	236	494	82	19	264	1,228	111	72	40
2015	1,594	360	266	592	81	21	274	1,387	134	73	50

[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

		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]
1993	$442	$442	-	-	-	-	-	$442	-	-	-
1994	-28	-28	-	-	-	-	-	-28	-	-	-
1995	443	443	-	-	-	-	-	443	-	-	-
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	108,141	1,711	8,129	433
2011	117,642	34,653	9,682	24,250	2,940	72	46,045	112,437	2,567	2,639	389
2012	185,394	57,739	14,307	51,896	8,889	246	52,318	171,329	5,025	9,041	510
2013	179,885	99,470	34,434	62,807	-29,870	849	12,195	205,323	4,468	-29,906	1,180
2014	240,785	102,335	40,593	46,642	-1,420	1,629	51,007	240,011	2,538	-1,764	2,423
2015	230,919	49,705	13,371	109,668	2,118	1,110	54,949	216,463	12,926	1,530	5,778

[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 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
1990	$105,390	$4,192	$9,456	$91,742	12,131	171	722	11,238	$7,489	$495	$1,349	$5,644
1991	102,828	4,940	9,721	88,167	12,388	168	678	11,542	8,195	900	1,687	5,609
1992	97,925	6,484	9,976	81,465	13,598	230	745	12,623	8,909	1,771	2,385	4,752
1993	87,574	8,494	8,567	70,513	13,740	258	679	12,803	9,359	3,206	1,598	4,555
1994	73,682	9,285	7,252	57,144	13,310	306	568	12,436	8,915	3,265	1,709	3,941
1995	73,125	14,019	8,094	51,013	12,979	301	578	12,100	11,264	6,743	1,154	3,367
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

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

TABLE 15

Liquid Assets and Liquidity Ratio of Long-Term Mutual Funds

Year-end

	Liquid assets *Millions of dollars*				Liquidity ratio* *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	48,440	27,344	4,198	16,899	8.5	11.4	11.7	5.8
1991	60,385	30,657	3,309	26,419	7.1	7.6	6.4	6.7
1992	73,984	42,417	6,560	25,007	6.7	8.3	8.5	5.0
1993	99,436	57,539	16,613	25,284	6.6	7.8	11.7	4.1
1994	120,430	70,885	19,929	29,616	7.8	8.3	12.3	5.6
1995	141,755	97,743	19,271	24,741	6.9	7.8	9.3	4.1
1996	151,988	107,667	17,954	26,367	5.8	6.2	7.2	4.1
1997	198,826	145,565	24,645	28,616	5.8	6.1	7.9	3.9
1998	191,393	143,516	25,289	22,588	4.6	4.8	7.0	2.7
1999	219,098	174,692	20,979	23,427	4.2	4.3	5.6	2.9
2000	277,164	225,023	26,798	25,343	5.4	5.7	7.4	3.1
2001	222,475	170,361	26,911	25,203	4.7	5.0	7.5	2.7
2002	208,939	120,500	25,423	63,016	5.1	4.6	7.6	5.5
2003	259,641	154,877	30,654	74,110	4.8	4.2	6.8	5.9
2004	307,111	184,140	36,419	86,552	5.0	4.2	6.6	6.7
2005	303,189	190,906	43,133	69,150	4.4	3.9	6.9	5.1
2006	346,768	218,670	57,461	70,637	4.3	3.7	7.9	4.7
2007	381,679	266,285	56,813	58,581	4.3	4.2	6.9	3.5
2008	314,286	203,282	52,712	58,291	5.4	5.6	9.4	3.7
2009	365,787	169,799	52,845	143,143	4.7	3.5	7.4	6.5
2010	330,355	192,757	61,073	76,525	3.7	3.4	7.3	3.0
2011	461,852	182,548	70,744	208,559	5.2	3.5	8.0	7.3
2012	516,627	200,436	100,800	215,390	5.0	3.4	9.7	6.4
2013	659,196	272,506	149,640	237,050	5.3	3.5	11.6	7.2
2014	742,614	291,692	165,691	285,231	5.6	3.5	12.0	8.2
2015	671,029	258,382	179,572	233,075	5.2	3.2	13.4	6.8

* The liquidity ratio is the ratio of liquid assets divided by total net assets at year-end.
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

Liquidity Ratio of Long-Term Mutual Funds 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%	9.1%	-2.2%	-2.8%	-2.2%	3.1%	3.5%
2001	4.9	6.2	4.8	7.5	3.3	7.7	-3.7	-0.5	0.6	2.3	3.2
2002	4.9	5.7	4.1	7.6	10.7	7.9	-2.5	0.5	-1.0	2.6	4.2
2003	3.7	5.8	4.1	6.8	9.7	6.1	3.3	1.7	7.1	2.2	3.7
2004	3.6	5.5	4.2	6.6	8.9	6.1	6.1	3.8	7.5	2.9	6.5
2005	3.3	5.2	3.7	6.9	6.5	5.2	6.1	1.2	6.2	2.5	5.7
2006	3.4	4.3	3.7	7.9	6.9	4.9	12.5	-4.1	2.2	2.0	4.5
2007	4.3	5.2	3.6	6.9	2.3	4.6	17.0	-0.8	2.8	1.8	4.6
2008	6.1	7.9	4.2	9.4	1.1	10.7	13.0	4.4	3.7	1.7	4.9
2009	4.5	3.9	2.8	7.4	6.8	5.4	13.6	4.0	6.6	2.8	6.0
2010	3.5	4.4	2.9	7.3	0.3	5.8	16.5	-2.5	2.7	2.1	5.2
2011	3.8	4.5	2.8	8.0	7.2	7.2	17.5	0.9	5.2	3.1	6.6
2012	3.6	4.0	2.9	9.7	5.4	5.6	15.1	2.8	6.9	3.4	6.2
2013	3.6	4.5	3.0	11.6	6.9	4.4	17.2	1.0	7.0	2.0	6.5
2014	3.3	4.9	2.9	12.0	7.5	4.4	19.3	2.5	8.0	3.6	7.6
2015	3.3	4.3	2.6	13.4	4.7	5.8	15.0	3.2	9.4	4.4	8.2

Note: The liquidity ratio is the ratio of liquid assets divided by total net assets at year-end. Data for funds that invest primarily in other mutual funds were excluded from the series.

TABLE 17

Net New Cash Flow of Long-Term Mutual Funds

Millions of dollars, annual

Year	Total	Equity funds	Hybrid funds	Bond funds
1984	$19,194	$4,336	$1,801	$13,058
1985	73,490	6,643	3,720	63,127
1986	129,991	20,386	6,988	102,618
1987	29,776	19,231	3,748	6,797
1988	-23,119	-14,948	-3,684	-4,488
1989	8,731	6,774	3,183	-1,226
1990	21,211	12,915	1,463	6,833
1991	106,213	39,888	7,067	59,258
1992	171,696	78,983	21,725	70,989
1993	242,049	127,261	42,619	72,169
1994	75,160	114,525	21,998	-61,362
1995	122,208	124,392	3,738	-5,922
1996	231,874	216,937	11,796	3,142
1997	272,030	227,107	15,757	29,166
1998	241,796	156,875	10,265	74,656
1999	169,780	187,565	-13,018	-4,767
2000	228,874	315,711	-36,722	-50,115
2001	129,188	33,439	7,285	88,463
2002	120,583	-29,326	8,043	141,865
2003	215,884	144,055	39,080	32,750
2004	209,890	171,937	53,056	-15,102
2005	192,017	123,967	42,754	25,295
2006	227,078	147,773	19,857	59,448
2007	224,321	73,328	40,384	110,609
2008	-211,197	-215,710	-25,525	30,039
2009	393,030	2,000	19,792	371,238
2010	243,540	-24,414	35,612	232,342
2011	28,197	-129,241	39,771	117,667
2012	199,664	-152,680	46,118	306,226
2013	162,136	159,547	73,754	-71,165
2014	97,678	25,215	28,998	43,465
2015	-123,136	-76,850	-20,790	-25,496

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 many not add to the total because of rounding.

DATA SECTION 3

TABLE 18

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

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	216,937	674,323	442,372	231,951	457,385	240,531	216,854
1997	227,106	880,286	579,064	301,222	653,180	362,022	291,158
1998	156,875	1,065,197	699,554	365,643	908,322	534,256	374,065
1999	187,565	1,410,846	918,600	492,245	1,223,281	744,145	479,136
2000	315,711	1,972,208	1,320,049	652,159	1,656,497	1,032,153	624,345
2001	33,439	1,329,827	953,619	376,208	1,296,387	891,802	404,586
2002	-29,326	1,214,146	894,047	320,099	1,243,471	875,677	367,794
2003	144,055	1,074,175	837,496	236,679	930,120	707,565	222,555
2004	171,937	1,096,540	926,961	169,579	924,603	758,902	165,701
2005	123,967	1,192,654	1,017,225	175,428	1,068,686	878,158	190,528
2006	147,773	1,417,077	1,214,420	202,658	1,269,304	1,047,381	221,923
2007	73,328	1,729,376	1,506,720	222,656	1,656,048	1,389,144	266,905
2008	-215,710	1,526,770	1,331,755	195,014	1,742,480	1,467,491	274,989
2009	2,000	1,194,430	1,032,587	161,843	1,192,430	1,012,070	180,360
2010	-24,414	1,406,727	1,236,968	169,759	1,431,140	1,239,214	191,926
2011	-129,241	1,493,209	1,323,075	170,134	1,622,450	1,418,037	204,413
2012	-152,680	1,449,651	1,260,222	189,428	1,602,331	1,382,128	220,202
2013	159,547	1,864,277	1,641,158	223,119	1,704,730	1,496,822	207,908
2014	25,215	2,008,790	1,797,555	211,235	1,983,576	1,773,315	210,260
2015	-76,850	2,009,473	1,792,535	216,938	2,086,324	1,874,220	212,104

[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 3

TABLE 19

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

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	15,757	68,347	55,264	13,084	52,590	38,265	14,325
1998	10,265	82,691	67,294	15,397	72,426	53,353	19,073
1999	-13,018	81,917	67,617	14,300	94,934	69,790	25,145
2000	-36,722	70,445	56,973	13,473	107,167	77,219	29,948
2001	7,285	83,546	65,634	17,912	76,260	58,850	17,410
2002	8,043	93,685	75,664	18,021	85,642	67,407	18,234
2003	39,079	115,929	96,811	19,117	76,849	63,329	13,520
2004	53,055	143,463	125,438	18,025	90,407	77,520	12,887
2005	42,754	144,267	126,616	17,651	101,513	86,199	15,314
2006	19,857	146,088	127,532	18,555	126,231	106,066	20,165
2007	40,384	206,415	183,482	22,933	166,031	144,066	21,965
2008	-25,525	181,437	155,076	26,361	206,962	165,396	41,566
2009	19,792	174,217	150,048	24,169	154,425	127,179	27,246
2010	35,612	205,830	181,871	23,959	170,218	146,546	23,672
2011	39,771	264,070	234,481	29,589	224,298	191,199	33,099
2012	46,118	266,743	240,075	26,669	220,625	196,018	24,607
2013	73,754	338,257	301,452	36,805	264,503	233,452	31,052
2014	28,998	321,418	289,915	31,503	292,420	265,208	27,212
2015	-20,790	297,039	265,863	31,176	317,829	283,057	34,771

[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

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

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	6,833	80,659	57,106	23,552	73,826	47,978	25,848
1991	59,258	141,674	108,095	33,580	82,416	56,177	26,239
1992	70,989	217,863	171,991	45,872	146,874	96,628	50,246
1993	72,169	262,300	208,605	53,696	190,131	127,294	62,838
1994	-61,362	186,908	131,351	55,556	248,270	162,823	85,448
1995	-5,922	166,437	110,451	55,986	172,359	114,686	57,673
1996	3,141	203,343	137,886	65,457	200,201	125,486	74,715
1997	29,166	242,309	176,275	66,034	213,143	140,906	72,237
1998	74,656	314,429	230,934	83,495	239,773	160,071	79,702
1999	-4,767	299,198	217,431	81,767	303,965	207,254	96,711
2000	-50,115	250,918	187,188	63,730	301,033	220,868	80,165
2001	88,463	394,211	301,477	92,733	305,748	226,197	79,551
2002	141,865	515,028	402,020	113,009	373,163	285,070	88,093
2003	32,750	520,683	428,553	92,130	487,934	376,840	111,094
2004	-15,102	395,451	340,549	54,902	410,554	341,466	69,088
2005	25,295	402,734	351,116	51,617	377,438	321,639	55,799
2006	59,448	446,377	391,126	55,251	386,929	329,462	57,467
2007	110,609	592,760	506,964	85,796	482,151	410,366	71,785
2008	30,039	709,541	580,855	128,686	679,503	582,615	96,888
2009	371,238	1,006,675	856,834	149,841	635,438	525,214	110,224
2010	232,342	1,089,698	964,459	125,239	857,356	742,628	114,728
2011	117,667	1,103,665	976,073	127,592	985,999	870,097	115,901
2012	306,226	1,246,704	1,121,190	125,514	940,478	838,189	102,289
2013	-71,165	1,307,931	1,158,795	149,136	1,379,096	1,190,730	188,366
2014	43,465	1,278,071	1,174,003	104,068	1,234,606	1,137,777	96,829
2015	-25,496	1,196,485	1,090,043	106,442	1,221,980	1,119,594	102,386

[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

Net New Cash Flow of Long-Term Mutual Funds 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	$262,090	$58,195	-$4,574	-$36,722	$5,460	-$15,376	-$4,631	-$16,663	-$4,439	-$5,456	-$9,010
2001	-22,779	-23,206	79,425	7,285	49,253	880	-1,151	24,769	2,436	6,293	5,983
2002	-52,387	-4,451	27,513	8,043	64,670	2,953	-71	53,048	4,380	5,337	11,549
2003	27,126	24,361	92,569	39,079	31,835	21,945	4,029	-22,124	3,903	-8,309	1,471
2004	-11,497	71,583	111,851	53,055	22,382	-3,045	4,310	-26,259	2,857	-7,939	-7,410
2005	-25,359	106,918	42,408	42,754	36,732	-13,529	6,404	-14,211	5,188	1,232	3,480
2006	-26,842	150,935	23,680	19,857	36,993	3,044	10,936	-17,834	11,204	3,876	11,229
2007	-43,061	141,788	-25,399	40,384	76,108	-4,822	21,132	-2,242	9,454	3,358	7,621
2008	-47,898	-66,686	-101,126	-25,525	9,449	-6,360	6,087	20,600	-7,554	-2,302	10,119
2009	-7,228	29,633	-20,405	19,792	202,341	22,384	32,668	18,950	24,515	6,084	64,295
2010	-26,576	56,679	-54,517	35,612	111,385	19,335	70,076	4,059	15,826	-2,838	14,499
2011	-44,180	4,060	-89,121	39,771	51,242	21,587	44,468	3,393	8,593	-9,890	-1,726
2012	-38,754	6,420	-120,346	46,118	104,922	34,257	42,969	33,743	40,162	8,539	41,633
2013	-2,973	141,409	21,111	73,754	-97,530	55,641	66,239	-51,214	14,194	-22,420	-36,074
2014	-41,131	85,338	-18,993	28,998	9,303	-44,275	24,417	5,752	20,280	-1,064	29,051
2015	-54,664	93,887	-116,073	-20,790	-1,096	-36,987	-23,568	12,431	8,932	682	14,109

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

New Sales of Long-Term Mutual Funds 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	$574,322	$342,511	$403,217	$56,973	$79,200	$27,405	$8,267	$24,359	$6,787	$16,989	$24,180
2001	306,550	251,663	395,407	65,634	127,711	36,277	8,948	58,987	12,245	25,028	32,282
2002	250,056	245,152	398,839	75,664	172,587	39,665	10,920	93,874	15,446	26,360	43,168
2003	250,597	205,236	381,662	96,811	186,661	65,577	18,946	71,167	20,968	20,546	44,688
2004	268,027	184,371	474,563	125,438	165,644	48,346	18,132	38,512	18,548	16,820	34,548
2005	263,542	239,620	514,063	126,616	171,630	42,175	23,786	32,063	21,172	21,959	38,331
2006	301,994	354,878	557,548	127,532	183,990	45,724	29,025	29,690	30,147	25,566	46,985
2007	368,273	479,180	659,267	183,482	247,214	55,721	45,546	34,593	39,718	29,590	54,582
2008	340,076	374,604	617,076	155,076	277,177	47,425	53,469	64,527	37,711	30,562	69,983
2009	273,313	284,663	474,610	150,048	426,743	70,370	69,340	90,702	58,029	28,386	113,264
2010	309,299	379,531	548,138	181,871	450,179	96,163	129,602	79,464	71,271	28,530	109,250
2011	340,212	398,368	584,494	234,481	448,943	128,890	138,829	72,240	76,873	19,797	90,501
2012	335,564	362,821	561,838	240,075	489,090	124,107	132,763	109,826	106,435	30,912	128,058
2013	395,452	511,173	734,534	301,452	466,426	172,527	193,007	74,507	116,833	23,833	111,661
2014	424,978	542,981	829,596	289,915	492,785	147,372	194,861	70,546	128,592	22,423	117,425
2015	422,484	583,423	786,628	265,863	466,966	124,283	154,000	80,030	126,728	24,301	113,737

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

Exchange Sales of Long-Term Mutual Funds 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	$139,153	$13,473	$16,756	$10,298	$3,011	$15,829	$1,662	$5,304	$10,870
2001	176,020	85,824	114,364	17,912	32,627	11,378	2,057	24,779	2,860	5,348	13,686
2002	144,274	71,084	104,741	18,021	39,454	11,201	2,373	37,280	3,474	5,625	13,602
2003	94,572	41,777	100,330	19,117	33,917	17,110	3,528	18,355	4,713	4,288	10,218
2004	57,575	27,630	84,373	18,025	23,666	8,944	2,056	7,023	4,330	2,750	6,135
2005	55,786	38,396	81,246	17,651	20,833	7,270	2,780	6,575	4,742	2,983	6,435
2006	64,336	56,926	81,396	18,555	21,896	7,295	2,740	5,972	7,027	3,450	6,869
2007	60,884	68,791	92,981	22,933	41,587	7,931	4,630	10,226	5,036	5,706	10,680
2008	58,645	49,364	87,005	26,361	50,417	7,414	8,506	27,495	10,048	7,039	17,767
2009	44,893	47,478	69,472	24,169	76,507	13,182	7,976	18,336	8,641	5,161	20,037
2010	41,940	55,916	71,903	23,959	58,253	13,068	9,482	14,512	10,792	3,852	15,280
2011	48,394	40,005	81,735	29,589	59,218	14,814	10,801	14,323	10,756	3,736	13,944
2012	45,111	47,470	96,847	26,669	54,575	13,407	9,807	14,912	12,957	3,685	16,171
2013	68,215	44,075	110,829	36,805	52,690	18,967	26,824	13,320	10,305	4,900	22,131
2014	61,399	48,136	101,701	31,503	46,085	12,167	10,140	7,231	9,738	3,600	15,107
2015	64,230	55,765	96,943	31,176	41,338	14,497	13,956	9,151	9,379	3,899	14,222

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

Redemptions of Long-Term Mutual Funds by Composite Investment Objective

Millions of dollars, annual

Year	Equity funds			Hybrid funds	Bond funds						
	Capital appreciation	World	Total return		Investment grade	High yield	World	Government	Multisector	State muni	National muni
2000	$367,939	$288,253	$375,961	$77,219	$71,781	$37,560	$11,447	$35,865	$10,431	$21,877	$31,908
2001	307,031	264,414	320,356	58,850	87,986	34,381	9,538	37,939	10,367	18,584	27,401
2002	276,869	243,479	355,328	67,407	117,197	36,207	11,383	53,918	12,043	20,889	33,434
2003	222,877	183,743	300,945	63,329	150,032	47,355	15,501	79,437	17,372	25,700	41,443
2004	269,656	122,228	367,018	77,520	141,777	49,051	13,819	58,824	15,552	22,817	39,625
2005	274,036	148,065	456,057	86,199	136,146	52,217	18,358	43,913	16,059	20,457	34,488
2006	313,742	223,271	510,369	106,066	146,821	42,462	18,602	43,975	19,707	21,692	36,205
2007	393,843	347,697	647,604	144,066	186,051	57,163	26,374	38,850	29,139	25,838	46,949
2008	375,619	413,224	678,648	165,396	281,433	51,012	49,488	59,781	45,632	32,200	63,070
2009	273,761	254,635	483,675	127,179	248,411	51,338	40,278	69,920	36,084	22,762	56,421
2010	329,283	317,496	592,435	146,546	347,313	79,906	62,812	74,239	55,858	29,101	93,398
2011	376,689	383,010	658,338	191,199	406,914	108,257	95,480	69,572	69,333	28,412	92,128
2012	367,172	354,562	660,394	196,018	393,653	92,111	92,006	77,394	70,412	22,815	89,798
2013	401,109	374,159	721,554	233,452	529,454	121,666	141,365	117,158	101,524	40,542	139,022
2014	464,597	459,184	849,534	265,208	490,355	186,425	170,248	63,799	110,865	23,917	92,168
2015	480,174	500,167	893,879	283,057	467,019	156,729	181,379	68,938	118,959	23,870	102,699

Note: 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

Exchange Redemptions of Long-Term Mutual Funds 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	$287,910	$165,451	$170,983	$29,948	$18,715	$15,519	$4,463	$20,986	$2,457	$5,872	$12,153
2001	198,317	96,279	109,990	17,410	23,098	12,393	2,618	21,058	2,301	5,499	12,583
2002	169,848	77,208	120,738	18,234	30,174	11,706	1,981	24,188	2,498	5,758	11,787
2003	95,166	38,910	88,479	13,520	38,711	13,387	2,945	32,209	4,407	7,443	11,992
2004	67,443	18,190	80,067	12,887	25,150	11,284	2,059	12,969	4,468	4,692	8,467
2005	70,651	23,033	96,844	15,314	19,585	10,757	1,804	8,936	4,666	3,253	6,798
2006	79,431	37,597	104,895	20,165	22,073	7,513	2,227	9,521	6,264	3,449	6,420
2007	78,376	58,486	130,043	21,965	26,641	11,311	2,670	8,210	6,161	6,099	10,692
2008	71,000	77,430	126,558	41,566	36,712	10,187	6,401	11,642	9,682	7,703	14,562
2009	51,674	47,874	80,812	27,246	52,499	9,830	4,371	20,168	6,071	4,702	12,584
2010	48,532	61,271	82,123	23,672	49,734	9,990	6,195	15,678	10,379	6,119	16,632
2011	56,097	51,303	97,012	33,099	50,005	13,860	9,681	13,597	9,703	5,011	14,043
2012	52,256	49,310	118,636	24,607	45,090	11,146	7,594	13,601	8,817	3,243	12,797
2013	65,531	39,680	102,697	31,052	87,193	14,188	12,228	21,882	11,420	10,611	30,844
2014	62,910	46,595	100,755	27,212	39,212	17,388	10,335	8,225	7,186	3,170	11,313
2015	61,204	45,134	105,765	34,771	42,380	19,037	10,144	7,812	8,215	3,648	11,150

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

Annual Redemption Rates of Long-Term Mutual Funds

Percent

Year	Narrow redemption rate[1] Total	Equity funds	Hybrid funds	Bond funds	Broad redemption rate[2] 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	16.4	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	43.1
1995	17.4	16.2	15.1	20.3	28.9	29.4	21.3	30.4
1996	17.0	16.2	13.8	20.0	30.0	30.7	19.8	32.0
1997	17.9	17.7	13.7	20.4	30.5	31.9	18.8	30.9
1998	19.7	20.0	15.9	20.5	32.2	34.0	21.6	30.6
1999	21.7	21.2	19.0	25.1	34.5	34.9	25.8	36.8
2000	25.7	25.9	21.0	26.9	39.9	41.5	29.1	36.7
2001	24.0	24.3	16.4	25.7	34.2	35.4	21.2	34.7
2002	27.9	29.0	19.4	27.4	38.7	41.2	24.7	35.9
2003	24.2	22.5	16.2	31.4	31.5	29.5	19.6	40.6
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	30.4
2008	30.1	29.2	23.9	35.8	35.8	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	35.7
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	25.7	21.8	20.1	35.7	29.5	24.9	22.8	41.3
2014	24.9	22.1	19.9	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	35.6

[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.

DATA SECTION 3

TABLE 27

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

Year-end

Year	Total net assets	Common and preferred stocks	Long-term U.S. government bonds	Corporate bonds	Municipal bonds	Liquid assets	Other
Millions of dollars							
1995	$2,058,275	$1,215,218	$259,107	$190,837	$245,331	$141,755	$6,026
1996	2,623,994	1,718,203	264,972	238,003	245,183	151,988	5,645
1997	3,409,315	2,358,258	282,272	292,770	266,324	198,826	10,866
1998	4,173,531	3,004,185	286,592	389,213	292,395	191,393	9,753
1999	5,233,193	4,059,429	293,565	388,472	267,426	219,098	5,204
2000	5,119,386	3,910,200	309,752	348,928	269,334	277,164	4,008
2001	4,689,603	3,424,533	379,740	371,436	289,651	222,475	1,768
2002	4,118,082	2,687,959	481,467	417,331	320,477	208,939	1,910
2003	5,362,097	3,761,034	504,549	501,853	331,981	259,641	3,038
2004	6,194,101	4,489,609	537,297	533,250	318,354	307,111	8,480
2005	6,864,553	5,055,105	612,797	549,980	330,945	303,189	12,536
2006	8,059,704	6,024,800	644,738	668,278	359,163	346,768	15,956
2007	8,914,408	6,609,155	749,428	784,014	369,055	381,679	21,077
2008	5,788,401	3,733,992	705,030	676,684	336,878	314,286	21,532
2009	7,796,729	5,090,647	849,809	1,021,925	451,151	365,787	17,411
2010	9,029,849	5,869,613	1,084,865	1,258,388	479,666	330,355	6,963
2011	8,941,397	5,507,500	1,186,130	1,318,813	506,841	461,852	-39,739
2012	10,363,508	6,295,160	1,379,948	1,605,106	592,863	516,627	-26,196
2013	12,333,012	8,224,236	1,209,184	1,730,932	512,657	659,196	-3,193
2014	13,150,627	8,796,913	1,213,026	1,841,586	568,188	742,614	-11,700
2015	12,897,215	8,622,970	1,251,553	1,794,515	582,835	671,029	-25,686
Percent							
1995	100.0%	59.0%	12.6%	9.3%	11.9%	6.9%	0.3%
1996	100.0	65.5	10.1	9.1	9.3	5.8	0.2
1997	100.0	69.2	8.3	8.6	7.8	5.8	0.3
1998	100.0	72.0	6.9	9.3	7.0	4.6	0.2
1999	100.0	77.6	5.6	7.4	5.1	4.2	0.1
2000	100.0	76.4	6.1	6.8	5.3	5.4	0.1
2001	100.0	73.0	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	70.1	9.4	9.4	6.2	4.8	0.1
2004	100.0	72.5	8.7	8.6	5.1	5.0	0.1
2005	100.0	73.6	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	74.1	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	5.3	0.0
2014	100.0	66.9	9.2	14.0	4.3	5.6	-0.1
2015	100.0	66.9	9.7	13.9	4.5	5.2	-0.2

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

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

Year-end

Year	Total net assets	Common and preferred stocks	Long-term U.S. government bonds	Corporate bonds	Municipal bonds	Liquid assets	Other	Total net assets *Millions of dollars*
Equity funds								
2001	100.0%	94.3%	0.1%	0.5%	0.0%	5.0%	0.0%	$3,392,399
2002	100.0	94.2	0.4	0.8	0.0	4.6	0.0	2,642,420
2003	100.0	95.0	0.2	0.5	0.0	4.2	0.0	3,653,370
2004	100.0	95.2	0.1	0.4	0.0	4.2	0.1	4,342,577
2005	100.0	95.5	0.1	0.4	0.0	3.9	0.1	4,885,444
2006	100.0	95.6	0.1	0.4	0.0	3.8	0.1	5,832,582
2007	100.0	95.2	0.1	0.4	0.0	4.2	0.2	6,413,222
2008	100.0	93.5	0.2	0.5	0.0	5.6	0.3	3,655,162
2009	100.0	95.8	0.1	0.5	0.0	3.5	0.1	4,872,541
2010	100.0	95.7	0.2	0.5	0.0	3.4	0.1	5,596,629
2011	100.0	95.6	0.3	0.6	0.0	3.5	0.0	5,212,989
2012	100.0	95.6	0.3	0.6	0.0	3.4	0.0	5,938,747
2013	100.0	95.6	0.2	0.6	0.0	3.5	0.0	7,762,721
2014	100.0	95.7	0.2	0.6	0.0	3.5	0.1	8,314,321
2015	100.0	96.1	0.2	0.5	0.0	3.2	0.1	8,148,257
Hybrid funds								
2001	100.0%	59.9%	11.9%	20.4%	0.2%	7.5%	0.2%	$358,027
2002	100.0	57.4	12.4	22.3	0.2	7.5	0.1	335,276
2003	100.0	62.5	10.6	19.7	0.3	6.9	0.0	447,570
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	621,479
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	821,522
2008	100.0	55.4	9.8	24.3	0.4	9.6	0.4	562,262
2009	100.0	58.3	9.8	23.4	0.4	7.7	0.5	717,580
2010	100.0	60.7	8.9	22.3	0.5	7.3	0.4	842,198
2011	100.0	59.3	9.4	22.1	0.5	7.9	0.8	883,981
2012	100.0	59.4	8.9	21.1	0.5	9.4	0.8	1,034,058
2013	100.0	61.3	7.8	18.7	0.4	11.2	0.6	1,285,009
2014	100.0	59.5	8.2	19.6	0.5	11.7	0.4	1,376,586
2015	100.0	57.7	8.8	19.6	0.6	13.3	0.0	1,336,584
Bond funds								
2001	100.0%	1.1%	35.5%	29.9%	30.8%	2.7%	0.0%	$939,177
2002	100.0	0.6	37.6	28.1	28.0	5.5	0.0	1,140,387
2003	100.0	0.8	35.8	31.3	26.2	5.8	0.1	1,261,157
2004	100.0	0.8	36.2	31.7	24.2	6.6	0.4	1,299,274
2005	100.0	0.8	39.6	30.0	23.9	5.1	0.6	1,357,630
2006	100.0	0.8	37.4	33.5	23.6	4.3	0.5	1,495,619
2007	100.0	1.0	38.9	35.0	21.6	3.0	0.6	1,679,664
2008	100.0	0.6	40.8	33.2	21.2	3.6	0.5	1,570,978
2009	100.0	0.8	34.8	37.4	20.1	6.5	0.4	2,206,609
2010	100.0	0.9	38.2	40.0	18.1	3.0	-0.1	2,591,022
2011	100.0	0.8	37.8	38.2	17.4	7.4	-1.7	2,844,428
2012	100.0	0.9	37.0	39.5	17.1	6.5	-1.0	3,390,704
2013	100.0	1.1	32.9	43.7	15.2	7.4	-0.4	3,285,282
2014	100.0	1.1	31.3	43.9	16.1	8.4	-0.7	3,459,721
2015	100.0	0.9	32.7	43.7	16.8	6.9	-0.9	3,412,371

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 29

Paid and Reinvested Dividends of Long-Term Mutual Funds 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	21,124	6,721	1,717	12,686
1991	35,145	9,007	2,337	23,801	24,300	7,255	1,898	15,147
1992	58,608	17,023	4,483	37,102	30,393	8,845	2,923	18,625
1993	73,178	20,230	6,810	46,137	38,116	12,174	4,239	21,703
1994	61,261	17,279	6,662	37,320	39,136	12,971	4,907	21,258
1995	67,229	22,567	8,856	35,806	46,635	18,286	6,792	21,558
1996	73,282	25,061	9,580	38,642	53,213	21,345	8,031	23,837
1997	79,522	27,597	11,319	40,606	58,423	23,100	9,413	25,910
1998	81,011	25,495	11,104	44,413	60,041	22,377	9,328	28,336
1999	95,443	32,543	12,441	50,458	69,973	27,332	10,544	32,096
2000	88,215	27,042	10,848	50,325	66,277	23,786	9,537	32,954
2001	82,967	21,390	10,361	51,216	62,306	19,251	9,270	33,786
2002	82,065	20,472	9,740	51,853	62,413	18,560	8,778	35,076
2003	85,926	24,359	9,920	51,648	66,870	22,127	8,840	35,903
2004	98,131	34,708	12,186	51,237	78,253	31,427	10,668	36,158
2005	115,502	42,413	16,691	56,397	94,024	38,435	14,579	41,011
2006	143,500	60,112	19,134	64,254	119,074	54,210	16,989	47,875
2007	181,014	77,563	25,058	78,393	151,777	69,596	22,092	60,090
2008	182,120	70,598	26,032	85,490	153,100	63,634	23,045	66,421
2009	168,019	58,877	22,213	86,930	140,359	53,098	19,388	67,873
2010	180,989	62,196	23,277	95,516	152,331	56,385	20,671	75,275
2011	202,446	68,706	29,026	104,714	172,526	62,436	25,630	84,461
2012	215,295	83,226	24,937	107,131	186,528	76,125	22,678	87,725
2013	209,487	84,509	24,208	100,769	183,897	77,978	22,146	83,773
2014	237,039	101,055	29,949	106,035	211,694	93,774	27,698	90,222
2015	242,330	108,268	31,358	102,705	218,402	100,850	29,139	88,413

[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.

TABLE 30

Paid and Reinvested Capital Gains of Long-Term Mutual Funds 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	182,764	160,744	19,080	2,941	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	237,624	219,484	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	68,626	60,088	6,105	2,433	64,820	56,965	5,790	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	38,074	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	413,641	377,682	32,163	3,795	380,921	347,633	30,011	3,277
2008	132,404	110,883	9,786	11,735	123,272	103,801	9,064	10,407
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	73,284	51,455	5,503	16,326	67,437	48,120	5,275	14,042
2012	100,185	66,771	5,563	27,851	93,350	62,866	5,328	25,157
2013	239,183	201,806	22,834	14,544	227,570	191,961	22,138	13,471
2014	399,582	345,744	40,526	13,312	382,164	330,047	39,564	12,554
2015	379,426	331,241	35,248	12,938	363,847	316,962	34,580	12,305

[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.

DATA SECTION 3

TABLE 31

Total Portfolio, Common Stock, and Other Securities: Purchases, Sales, and Net Purchases by Long-Term Mutual Funds

Millions of dollars, annual

	Total portfolio			Common stock			Other securities		
Year	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases
1984	$119,273	$98,934	$20,338	$56,588	$50,900	$5,688	$62,685	$48,035	$14,650
1985	259,496	186,985	72,511	80,719	72,577	8,142	178,777	114,408	64,369
1986	500,597	365,087	135,509	134,446	118,026	16,421	366,150	247,062	119,089
1987	530,601	485,271	45,330	198,859	176,004	22,855	331,741	309,267	22,474
1988	410,509	421,223	-10,713	112,742	128,815	-16,073	297,767	292,407	5,359
1989	471,744	445,453	26,291	142,771	141,694	1,077	328,973	303,759	25,214
1990	554,720	505,780	48,940	166,398	146,580	19,817	388,322	359,199	29,123
1991	735,698	608,129	127,569	250,289	209,276	41,013	485,409	398,853	86,556
1992	949,404	758,476	190,928	327,518	261,857	65,661	621,886	496,619	125,268
1993	1,335,514	1,060,359	275,155	506,713	380,855	125,858	828,801	679,504	149,298
1994	1,433,739	1,329,329	104,409	628,668	512,346	116,321	805,071	816,983	-11,912
1995	1,550,510	1,400,702	149,809	790,017	686,756	103,260	760,494	713,946	46,548
1996	2,018,253	1,736,884	281,370	1,151,262	927,266	223,996	866,991	809,618	57,373
1997	2,384,639	2,108,981	275,659	1,457,384	1,268,983	188,401	927,255	839,997	87,258
1998	2,861,562	2,560,074	301,487	1,762,565	1,597,311	165,255	1,098,997	962,764	136,233
1999	3,437,180	3,224,301	212,878	2,262,505	2,088,544	173,962	1,174,674	1,135,757	38,917
2000	4,922,927	4,698,192	224,734	3,560,671	3,330,417	230,254	1,362,255	1,367,775	-5,519
2001	4,688,530	4,393,114	295,416	2,736,933	2,609,657	127,275	1,951,597	1,783,456	168,141
2002	4,018,969	3,807,392	211,578	2,176,363	2,141,754	34,609	1,842,606	1,665,638	176,968
2003	4,281,605	3,998,766	282,840	2,054,379	1,884,711	169,667	2,227,227	2,114,054	113,173
2004	4,310,180	4,019,273	290,907	2,390,924	2,198,578	192,346	1,919,256	1,820,695	98,561
2005	4,834,374	4,532,166	302,208	2,765,100	2,610,805	154,296	2,069,274	1,921,362	147,912
2006	5,737,363	5,398,108	339,255	3,330,057	3,172,222	157,835	2,407,306	2,225,886	181,420
2007	7,098,611	6,721,251	377,360	3,835,574	3,733,130	102,444	3,263,037	2,988,121	274,916
2008	7,353,050	7,294,533	58,518	3,655,854	3,715,557	-59,703	3,697,197	3,578,976	118,221
2009	6,933,548	6,453,779	479,769	2,644,973	2,543,511	101,462	4,288,575	3,910,268	378,306
2010	7,336,284	6,866,563	469,721	2,811,558	2,752,269	59,289	4,524,726	4,114,294	410,432
2011	8,533,641	8,127,548	406,093	3,033,610	3,034,111	-501	5,500,031	5,093,437	406,593
2012	8,196,082	7,608,901	587,181	2,773,356	2,828,018	-54,661	5,422,726	4,780,883	641,842
2013	9,255,798	8,735,929	519,869	3,409,812	3,226,356	183,456	5,845,986	5,509,573	336,414
2014	8,526,007	7,967,642	558,365	3,521,681	3,446,149	75,532	5,004,326	4,521,493	482,833
2015	8,880,055	8,425,786	454,269	3,595,161	3,558,715	36,446	5,284,894	4,867,071	417,823

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

Total Portfolio, Common Stock, and Other Securities: Purchases, Sales, and Net Purchases by Equity Mutual Funds

Millions of dollars, annual

	Total portfolio			Common stock			Other securities		
Year	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases
1984	$54,933	$49,853	$5,080	$49,098	$44,213	$4,885	$5,835	$5,640	$195
1985	77,327	70,685	6,642	66,762	61,599	5,163	10,565	9,086	1,479
1986	129,723	111,233	18,491	110,016	96,512	13,504	19,708	14,721	4,987
1987	196,902	175,292	21,611	170,715	150,705	20,009	26,188	24,586	1,601
1988	119,861	130,821	-10,959	100,888	113,635	-12,747	18,973	17,186	1,788
1989	148,346	144,753	3,593	128,998	127,026	1,973	19,348	17,728	1,621
1990	187,592	169,373	18,219	151,907	133,630	18,277	35,685	35,743	-59
1991	251,773	207,947	43,827	224,117	186,785	37,333	27,656	21,162	6,494
1992	339,003	268,868	70,135	300,712	242,319	58,393	38,291	26,549	11,742
1993	500,206	382,433	117,773	451,485	345,357	106,128	48,720	37,076	11,644
1994	618,004	508,394	109,610	564,380	456,708	107,672	53,623	51,686	1,937
1995	785,867	678,060	107,807	718,298	621,699	96,599	67,569	56,361	11,208
1996	1,116,906	896,644	220,262	1,050,884	832,486	218,397	66,022	64,157	1,865
1997	1,421,211	1,223,463	197,748	1,352,085	1,166,649	185,436	69,126	56,814	12,312
1998	1,723,752	1,557,212	166,540	1,635,842	1,475,384	160,458	87,909	81,827	6,082
1999	2,232,828	2,049,540	183,288	2,126,860	1,941,505	185,355	105,968	108,035	-2,067
2000	3,515,572	3,258,635	256,937	3,393,017	3,144,116	248,902	122,554	114,519	8,035
2001	2,707,359	2,593,454	113,905	2,571,182	2,464,587	106,595	136,177	128,867	7,310
2002	2,140,797	2,112,759	28,039	2,017,847	1,999,827	18,020	122,950	112,931	10,019
2003	1,965,419	1,822,753	142,666	1,902,718	1,758,142	144,576	62,701	64,611	-1,910
2004	2,278,755	2,110,605	168,150	2,216,948	2,053,652	163,296	61,807	56,953	4,854
2005	2,671,170	2,524,339	146,831	2,592,059	2,452,257	139,803	79,110	72,083	7,028
2006	3,231,135	3,063,822	167,313	3,129,822	2,966,143	163,679	101,313	97,679	3,634
2007	3,760,234	3,658,395	101,838	3,582,758	3,490,174	92,584	177,476	168,221	9,255
2008	3,628,276	3,698,255	-69,979	3,361,901	3,426,442	-64,540	266,375	271,813	-5,439
2009	2,749,913	2,676,641	73,273	2,433,267	2,339,181	94,086	316,646	337,459	-20,813
2010	2,828,781	2,828,824	-44	2,568,443	2,532,634	35,809	260,338	296,191	-35,853
2011	2,914,958	2,943,155	-28,196	2,756,087	2,785,493	-29,406	158,871	157,662	1,209
2012	2,639,806	2,696,126	-56,321	2,499,401	2,571,677	-72,276	140,405	124,449	15,955
2013	3,178,944	2,993,417	185,527	3,043,744	2,877,082	166,662	135,200	116,335	18,864
2014	3,301,070	3,191,111	109,959	3,120,637	3,033,171	87,466	180,433	157,939	22,493
2015	3,385,138	3,309,322	75,817	3,187,955	3,122,235	65,720	197,184	187,087	10,097

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

Total Portfolio, Common Stock, and Other Securities: Purchases, Sales, and Net Purchases by Hybrid Mutual Funds

Millions of dollars, annual

	Total portfolio			Common stock			Other securities		
Year	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases
1984	$11,589	$9,258	$2,331	$7,129	$5,822	$1,308	$4,459	$3,436	$1,023
1985	19,647	14,915	4,732	13,378	10,513	2,865	6,269	4,402	1,867
1986	34,746	28,007	6,739	21,894	19,451	2,443	12,853	8,556	4,297
1987	48,335	44,168	4,168	26,282	23,989	2,293	22,053	20,179	1,874
1988	28,070	31,455	-3,384	10,628	13,833	-3,205	17,442	17,622	-179
1989	26,747	24,864	1,883	12,459	13,598	-1,139	14,288	11,266	3,022
1990	30,606	26,671	3,935	13,327	11,832	1,494	17,279	14,839	2,440
1991	41,999	33,747	8,252	18,657	15,435	3,222	23,342	18,313	5,029
1992	63,564	43,131	20,433	23,965	17,200	6,765	39,599	25,931	13,667
1993	113,314	72,150	41,164	49,686	30,485	19,201	63,628	41,665	21,963
1994	134,972	110,305	24,667	54,808	46,429	8,380	80,163	63,876	16,287
1995	180,638	170,864	9,774	67,616	60,602	7,015	113,021	110,262	2,759
1996	223,905	201,872	22,033	92,485	88,464	4,021	131,420	113,408	18,011
1997	255,207	234,820	20,387	98,109	94,976	3,132	157,099	139,844	17,255
1998	282,651	257,096	25,555	115,703	111,401	4,301	166,948	145,694	21,254
1999	296,235	296,850	-615	128,303	138,923	-10,620	167,932	157,927	10,005
2000	308,821	335,531	-26,711	158,039	174,998	-16,960	150,782	160,533	-9,751
2001	357,557	334,161	23,396	155,235	134,368	20,868	202,322	199,794	2,528
2002	340,650	320,591	20,059	145,370	129,204	16,166	195,280	191,387	3,893
2003	360,653	312,111	48,542	137,490	113,785	23,706	223,163	198,326	24,837
2004	404,955	337,219	67,736	163,795	132,966	30,829	241,160	204,253	36,907
2005	397,695	346,260	51,435	165,487	150,166	15,321	232,208	196,094	36,114
2006	408,861	381,376	27,485	191,740	197,120	-5,380	217,122	184,256	32,865
2007	529,061	465,049	64,011	241,633	230,855	10,778	287,428	234,194	53,233
2008	594,156	577,635	16,521	281,814	273,655	8,159	312,342	303,980	8,363
2009	477,006	443,131	33,876	200,907	194,826	6,081	276,099	248,305	27,794
2010	512,564	463,315	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	723,933	662,086	61,847	253,601	237,412	16,189	470,332	424,674	45,658
2013	912,709	832,006	80,704	345,127	327,859	17,268	567,582	504,146	63,435
2014	931,786	864,486	67,300	370,570	385,211	-14,641	561,216	479,275	81,941
2015	943,656	910,815	32,841	377,910	403,229	-25,319	565,747	507,587	58,160

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

Total Portfolio, Common Stock, and Other Securities: Purchases, Sales, and Net Purchases by Bond Mutual Funds

Millions of dollars, annual

	Total portfolio			Common stock			Other securities		
Year	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases	Purchases	Sales	Net purchases
1984	$52,751	$39,823	$12,928	$361	$865	-$504	$52,390	$38,958	$13,432
1985	162,522	101,385	61,137	579	465	114	161,943	100,919	61,024
1986	336,127	225,848	110,279	2,537	2,062	475	333,590	223,785	109,805
1987	285,363	265,812	19,551	1,862	1,310	553	283,501	264,502	18,999
1988	262,577	258,947	3,630	1,226	1,347	-121	261,351	257,600	3,751
1989	296,651	275,836	20,815	1,314	1,071	243	295,337	274,765	20,572
1990	336,522	309,735	26,787	1,164	1,118	46	335,358	308,617	26,741
1991	441,926	366,435	75,490	7,514	7,056	458	434,411	359,379	75,033
1992	546,837	446,476	100,360	2,840	2,338	502	543,997	444,138	99,858
1993	721,995	605,777	116,218	5,542	5,013	528	716,453	600,763	115,690
1994	680,764	710,631	-29,867	9,479	9,210	269	671,285	701,421	-30,136
1995	584,006	551,779	32,227	4,103	4,456	-353	579,903	547,323	32,580
1996	677,442	638,368	39,075	7,893	6,316	1,578	669,549	632,052	37,497
1997	708,221	650,698	57,523	7,190	7,358	-167	701,031	643,340	57,691
1998	855,159	745,767	109,392	11,020	10,525	496	844,139	735,242	108,897
1999	908,117	877,911	30,205	7,342	8,115	-773	900,774	869,796	30,978
2000	1,098,534	1,104,026	-5,491	9,615	11,303	-1,688	1,088,919	1,092,722	-3,803
2001	1,623,614	1,465,499	158,115	10,515	10,703	-188	1,613,099	1,454,796	158,303
2002	1,537,522	1,374,042	163,480	13,146	12,723	423	1,524,376	1,361,320	163,057
2003	1,955,533	1,863,902	91,632	14,171	12,785	1,386	1,941,363	1,851,117	90,246
2004	1,626,470	1,571,448	55,022	10,181	11,959	-1,779	1,616,290	1,559,489	56,801
2005	1,765,509	1,661,567	103,942	7,554	8,382	-828	1,757,955	1,653,185	104,770
2006	2,097,367	1,952,910	144,456	8,496	8,960	-464	2,088,871	1,943,950	144,921
2007	2,809,317	2,597,806	211,511	11,183	12,100	-917	2,798,134	2,585,706	212,428
2008	3,130,618	3,018,643	111,975	12,138	15,460	-3,321	3,118,480	3,003,183	115,297
2009	3,706,628	3,334,008	372,621	10,798	9,503	1,295	3,695,830	3,324,504	371,326
2010	3,994,939	3,574,424	420,515	17,925	15,271	2,654	3,977,014	3,559,153	417,861
2011	4,958,219	4,587,646	370,573	22,858	19,105	3,752	4,935,361	4,568,541	366,820
2012	4,832,343	4,250,688	581,654	20,354	18,929	1,425	4,811,989	4,231,760	580,229
2013	5,164,145	4,910,506	253,639	20,940	21,415	-475	5,143,205	4,889,091	254,114
2014	4,293,151	3,912,045	381,106	30,474	27,766	2,707	4,262,677	3,884,279	378,398
2015	4,551,261	4,205,649	345,611	29,297	33,251	-3,955	4,521,964	4,172,398	349,566

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
1984	$233,554	$51,800	$157,951	$23,802	425	158	173	94	425	158	173	94
1985	243,802	55,705	151,849	36,249	460	151	199	110	460	151	199	110
1986	292,152	63,736	164,610	63,806	487	147	213	127	487	147	213	127
1987	316,096	67,589	187,087	61,420	543	154	235	154	543	154	235	154
1988	337,954	61,298	210,897	65,758	610	159	274	177	610	159	274	177
1989	428,093	74,685	283,939	69,470	673	160	310	203	673	160	310	203
1990	498,341	109,376	305,189	83,777	741	176	329	236	762	183	339	240
1991	542,442	138,111	314,346	89,984	820	211	341	268	871	228	363	280
1992	546,194	151,043	300,310	94,841	864	235	350	279	914	248	368	298
1993	565,319	149,180	312,701	103,439	920	265	362	293	1,009	286	386	337
1994	611,005	148,139	352,972	109,894	963	276	373	314	1,261	368	490	403
1995	753,018	181,494	449,829	121,695	997	284	392	321	1,380	404	549	427
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	1,549	442	633	474
1998	1,351,678	312,907	854,061	184,711	1,026	277	410	339	1,627	462	675	490
1999	1,613,146	333,726	1,079,523	199,897	1,045	281	423	341	1,730	488	742	500
2000	1,845,248	367,780	1,243,598	233,869	1,039	275	429	335	1,855	534	797	524
2001	2,285,310	461,631	1,564,598	259,081	1,015	269	421	325	1,948	573	832	543
2002	2,265,075	453,157	1,535,621	276,297	988	259	418	311	2,006	581	882	543
2003	2,040,022	410,041	1,339,689	290,291	973	251	409	313	2,031	572	890	569
2004	1,901,700	379,706	1,209,995	311,999	944	240	399	305	2,053	577	900	576
2005	2,026,822	399,330	1,291,119	336,373	870	221	372	277	2,031	570	894	567
2006	2,338,451	426,838	1,542,584	369,029	847	215	358	274	2,013	579	875	559
2007	3,085,760	760,389	1,857,280	468,092	805	203	342	260	2,015	574	873	568
2008	3,832,236	1,490,208	1,848,349	493,680	783	200	334	249	1,990	584	859	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	2,690,950	970,075	1,429,178	291,697	632	166	265	201	1,730	544	711	475
2012	2,693,169	928,749	1,476,993	287,426	580	158	242	180	1,623	519	655	449
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	1,226,422	1,273,390	254,931	481	145	191	145	1,427	522	534	371

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

Total Net Assets of Money Market Funds by Type of Fund

Millions of dollars, year-end

	All money market funds				Retail money market funds				Institutional money market funds			
		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	$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	1,351,678	312,907	854,061	184,711	835,624	121,664	571,834	142,126	516,054	191,243	282,227	42,585
1999	1,613,146	333,726	1,079,523	199,897	965,289	132,915	676,590	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	2,285,310	461,631	1,564,598	259,081	1,135,500	169,883	776,132	189,484	1,149,810	291,748	788,466	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	2,040,022	410,041	1,339,689	290,291	939,224	141,248	607,364	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	2,026,822	399,330	1,291,119	336,373	876,493	126,244	546,843	203,406	1,150,328	273,085	744,276	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	3,085,760	760,389	1,857,280	468,092	1,226,440	185,526	755,324	285,590	1,859,321	574,863	1,101,955	182,503
2008	3,832,236	1,490,208	1,848,349	493,680	1,370,803	289,731	777,860	303,212	2,461,433	1,200,476	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	958,744	189,694	563,075	205,975	1,844,770	665,327	1,055,412	124,031
2011	2,690,950	970,075	1,429,178	291,697	950,737	203,677	550,610	196,451	1,740,213	766,398	878,568	95,247
2012	2,693,169	928,749	1,476,993	287,426	949,381	205,513	540,892	202,975	1,743,788	723,236	936,101	84,451
2013	2,717,808	962,009	1,485,187	270,612	936,920	205,056	535,602	196,262	1,780,889	756,954	949,585	74,350
2014	2,724,641	1,010,783	1,453,071	260,787	907,028	199,533	517,492	190,003	1,817,613	811,250	935,579	70,784
2015	2,754,743	1,226,422	1,273,390	254,931	941,244	346,452	410,049	184,743	1,813,500	879,970	863,341	70,188

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

Net New Cash Flow* of Money Market Funds by Type of Fund

Millions of dollars, annual

	All money market funds				Retail money market funds				Institutional money market funds			
		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	103,466	20,129	69,107	14,231	46,745	4,781	32,206	9,758	56,721	15,347	36,901	4,473
1998	235,457	45,178	167,909	22,370	131,072	15,835	100,508	14,728	104,386	29,343	67,401	7,642
1999	193,681	8,486	174,957	10,238	82,215	-757	73,145	9,827	111,466	9,243	101,812	411
2000	159,365	14,412	118,354	26,599	43,576	504	24,417	18,655	115,789	13,908	93,937	7,944
2001	375,291	86,621	267,329	21,340	36,449	13,579	12,827	10,043	338,842	73,043	254,502	11,297
2002	-45,937	-11,131	-51,060	16,254	-80,065	-10,174	-71,219	1,328	34,128	-957	20,159	14,925
2003	-263,403	-50,998	-222,179	9,774	-151,260	-20,609	-125,743	-4,908	-112,143	-30,389	-96,436	14,682
2004	-156,744	-36,125	-139,213	18,593	-88,769	-15,871	-75,331	2,433	-67,975	-20,254	-63,882	16,160
2005	62,085	13,182	28,009	20,895	2,358	-3,652	-4,781	10,791	59,728	16,834	32,790	10,103
2006	245,162	19,615	200,115	25,432	96,543	9,317	71,069	16,157	148,619	10,297	129,046	9,276
2007	654,412	319,240	251,219	83,953	172,657	38,769	83,264	50,624	481,755	280,471	167,955	33,329
2008	637,155	697,443	-73,523	13,235	114,128	98,267	2,099	13,763	523,027	599,176	-75,621	-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	-124,196	-25,964	-69,827	-28,404	-400,869	-227,962	-131,938	-40,968
2011	-124,073	107,294	-192,713	-38,654	-1,331	20,461	-12,527	-9,265	-122,742	86,833	-180,186	-29,389
2012	-178	-43,343	47,096	-3,930	-1,185	-781	-7,592	7,187	1,007	-42,563	54,687	-11,117
2013	15,037	29,348	2,473	-16,784	-12,214	-1,143	-4,279	-6,792	27,251	30,491	6,752	-9,993
2014	6,235	48,232	-31,890	-10,107	-30,631	-5,843	-18,302	-6,486	36,865	54,075	-13,588	-3,621
2015	21,462	40,831	-13,868	-5,501	5,301	20,728	-11,271	-4,156	16,160	20,103	-2,598	-1,345

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 38

Net New Cash Flow and Components of Net New Cash Flow of Money Market Funds

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	$35,077	$640,021	$620,536	$19,485	$604,944	$586,990	$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	103,466	5,127,328	4,894,226	233,102	5,023,863	4,783,096	240,767
1998	235,457	6,407,574	6,129,140	278,434	6,172,116	5,901,590	270,526
1999	193,681	8,080,959	7,719,310	361,649	7,887,278	7,540,912	346,367
2000	159,365	9,826,677	9,406,287	420,391	9,667,312	9,256,350	410,962
2001	375,291	11,737,291	11,426,804	310,487	11,362,000	11,065,468	296,533
2002	-45,937	12,008,801	11,712,587	296,215	12,054,738	11,783,209	271,530
2003	-263,403	11,177,118	10,952,544	224,574	11,440,521	11,213,929	226,592
2004	-156,744	10,874,608	10,708,117	166,492	11,031,353	10,861,076	170,277
2005	62,085	12,493,636	12,317,491	176,145	12,431,551	12,260,771	170,779
2006	245,162	15,706,879	15,495,624	211,255	15,461,717	15,269,074	192,643
2007	654,412	21,314,339	21,039,253	275,086	20,659,927	20,408,620	251,307
2008	637,155	24,452,430	24,067,371	385,059	23,815,275	23,498,612	316,663
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	-124,073	15,248,902	15,128,158	120,744	15,372,976	15,259,873	113,102
2012	-178	14,291,619	14,211,202	80,417	14,291,797	14,204,776	87,021
2013	15,037	14,976,597	14,867,969	108,629	14,961,561	14,857,792	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

[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

Paid and Reinvested Dividends of Money Market Funds 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	48,843	44,185	4,658	37,979	34,425	3,554
1998	57,375	52,164	5,211	43,443	39,580	3,863
1999	69,004	63,229	5,775	50,648	46,602	4,046
2000	98,219	90,158	8,061	72,771	66,890	5,881
2001	79,307	73,361	5,946	56,367	51,949	4,418
2002	32,251	29,397	2,854	22,033	19,940	2,093
2003	17,041	15,124	1,917	11,314	9,916	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	96,423	85,018	11,405	61,488	53,268	8,220
2007	127,907	113,177	14,730	82,457	71,938	10,519
2008	93,857	82,727	11,130	61,134	53,455	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

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

Asset Composition of Taxable Government Money Market Funds as a Percentage of Total Net Assets

Year-end

Year	Total net assets *Millions of dollars*	U.S. Treasury bills	Other Treasury securities	U.S. government agency issues	Repurchase agreements	Certificates of deposit	Eurodollar CDs	Commercial paper	Bank notes[1]	Corporate notes[2]	Other assets[3]	Average maturity *Days*
1984	$51,800	21.0%	7.5%	20.4%	33.9%	4.3%	4.3%	7.3%	–	–	1.3%	46
1985	55,705	23.9	4.9	15.9	38.2	2.9	6.3	6.2	–	–	1.6	44
1986	63,736	22.8	7.9	14.4	39.1	4.1	4.9	4.3	–	–	2.5	51
1987	67,589	4.6	11.2	22.0	44.9	4.8	7.4	4.0	–	–	1.1	35
1988	61,298	5.0	9.7	20.5	58.4	1.2	0.1	3.2	–	–	2.0	28
1989	74,685	5.0	6.9	20.6	62.7	0.2	0.1	3.0	–	–	1.5	31
1990	109,376	11.1	12.2	20.6	45.7	0.0	0.0	0.3	–	–	9.9	46
1991	138,111	21.5	16.5	20.3	40.9	0.0	0.0	0.4	–	–	0.3	58
1992	151,043	26.0	16.5	21.6	34.7	0.0	0.0	0.5	–	–	0.6	55
1993	149,180	30.3	14.1	20.7	32.8	0.0	0.0	0.3	–	–	1.8	61
1994	148,139	24.4	12.6	26.3	34.0	0.0	0.0	0.4	0.0%	–	2.2	37
1995	181,494	19.8	13.9	28.5	34.1	0.0	0.0	0.5	0.0	–	3.1	48
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	312,907	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	1,490,208	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	1,226,422	17.2	17.2	32.8	32.2	0.0	0.0	0.0	0.0	0.1	0.4	40

[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

Asset Composition of Taxable Prime Money Market Funds as a Percentage of Total Net Assets

Year-end

Year	Total net assets *Millions of dollars*	U.S. Treasury bills	Other Treasury securities	U.S. government agency issues	Repurchase agreements	Certificates of deposit	Eurodollar CDs	Commercial paper	Bank notes[1]	Corporate notes[2]	Other assets[3]	Average maturity *Days*
1984	$157,951	5.9%	0.8%	4.1%	3.3%	13.6%	12.0%	47.2%	–	–	13.1%	42
1985	151,849	4.6	1.0	6.1	3.1	10.0	10.2	55.4	–	–	9.5	42
1986	164,610	3.6	1.6	3.6	4.4	10.0	11.6	56.0	–	–	9.3	42
1987	187,087	1.0	0.9	6.5	4.8	16.2	8.9	52.3	–	–	9.4	34
1988	210,897	1.0	0.2	2.8	2.8	15.2	14.1	54.6	–	–	9.4	32
1989	283,939	1.3	0.8	2.0	2.8	14.4	9.3	62.3	–	–	7.1	43
1990	305,189	4.4	2.2	4.7	2.9	6.9	8.9	65.5	–	–	4.7	48
1991	314,346	5.7	2.9	4.2	3.7	10.6	6.9	60.1	–	–	5.8	56
1992	300,310	2.7	2.5	7.5	4.9	10.4	6.9	57.7	–	–	7.4	59
1993	312,701	2.6	2.4	11.9	5.9	8.0	3.2	52.6	–	–	13.3	58
1994	352,972	2.4	1.3	11.4	5.6	6.4	4.5	53.4	2.4%	–	12.7	38
1995	449,829	1.4	0.9	9.2	6.2	8.9	4.5	52.5	3.7	–	12.7	60
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	1,079,523	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	1,564,598	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	1,339,689	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	1,291,119	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	1,429,178	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	1,273,390	1.9	2.8	5.1	23.9	34.7	0.9	23.4	2.0	3.0	2.3	31

[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

Alternative Strategies 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	$41,504	$20,343	$1,149	$18,619	$1,392	–	-$780	$445	-$47	-$632	-$546	–
2008	31,276	17,097	431	12,574	1,174	–	-1,239	-1,013	-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	227,172	51,718	10,907	110,353	2,337	51,857	-15,343	-5,848	2,618	3,051	-186	-14,978
	Number of funds *Year-end*						**Number of share classes** *Year-end*					
2007	181	126	16	21	18	–	426	296	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	649	330	72	157	52	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	488	176	57	188	29	38	1,347	416	157	572	66	136

* 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 43

Emerging Markets 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	$2,442	-$288	23	48
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	12,963	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	12,569	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

* 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.

DATA SECTION 5

TABLE 44

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	$23,791	-$2,626	16	30
2001	19,718	-5,114	23	56
2002	13,392	-5,792	22	52
2003	14,968	-310	20	49
2004	24,032	7,449	23	62
2005	27,485	2,195	25	73
2006	33,620	5,445	23	84
2007	33,667	-2,448	29	103
2008	17,128	-8,170	31	126
2009	28,330	4,362	31	122
2010	47,109	15,041	32	127
2011	59,877	10,158	38	156
2012	76,619	10,625	41	169
2013	140,898	59,580	51	199
2014	118,254	-22,232	52	203
2015	93,332	-22,628	56	225

* 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.

DATA SECTION 5

TABLE 45

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*			Number of funds *Year-end*			Number of share classes *Year-end*		
Year	Total	Equity	Hybrid and bond	Total	Equity	Hybrid and bond	Total	Equity	Hybrid and bond	Total	Equity	Hybrid and bond
1990	$1,426	$211	$1,215	$131	-$21	$152	20	11	9	20	11	9
1991	2,313	403	1,910	475	97	378	20	10	10	20	10	10
1992	3,722	651	3,072	1,134	205	929	21	10	11	21	10	11
1993	5,403	900	4,503	1,160	154	1,006	24	12	12	24	12	12
1994	6,170	1,367	4,803	567	342	225	32	15	17	32	15	17
1995	9,063	2,288	6,774	1,135	633	503	36	19	17	37	19	18
1996	13,404	4,596	8,808	2,457	1,572	885	45	24	21	56	28	28
1997	21,480	7,305	14,175	3,380	1,552	1,828	94	38	56	148	55	93
1998	35,368	11,862	23,506	6,376	1,951	4,426	175	72	103	305	109	196
1999	48,310	18,250	30,060	6,572	3,400	3,171	212	80	132	394	134	260
2000	56,911	11,919	44,992	10,401	3,146	7,255	215	58	157	414	95	319
2001	63,385	11,159	52,226	8,929	1,313	7,617	213	58	155	450	94	356
2002	68,960	10,311	58,649	11,593	1,532	10,061	268	68	200	625	118	507
2003	123,029	19,367	103,662	29,859	3,006	26,853	299	70	229	716	118	598
2004	199,197	27,729	171,469	50,481	5,260	45,222	372	69	303	957	126	831
2005	305,749	41,279	264,470	79,550	5,885	73,665	472	90	382	1,292	185	1,107
2006	469,377	70,897	398,480	101,347	13,782	87,565	598	119	479	1,849	258	1,591
2007	638,073	96,660	541,413	126,407	17,276	109,131	704	124	580	2,331	295	2,036
2008	469,333	42,860	426,473	60,480	5,712	54,768	839	123	716	2,782	312	2,470
2009	680,121	55,266	624,856	70,169	4,146	66,022	945	131	814	3,051	325	2,726
2010	914,743	80,580	834,164	118,374	4,964	113,410	980	147	833	3,140	348	2,792
2011	1,035,850	80,700	955,151	119,741	3,011	116,730	1,085	158	927	3,407	362	3,045
2012	1,269,378	93,075	1,176,304	93,915	-2,651	96,566	1,154	164	990	3,737	410	3,327
2013	1,558,494	128,782	1,429,713	109,706	12,621	97,084	1,257	174	1,083	4,003	417	3,586
2014	1,693,357	128,171	1,565,185	68,584	11,706	56,878	1,331	175	1,156	4,239	420	3,819
2015	1,721,622	137,237	1,584,385	58,086	9,095	48,991	1,404	180	1,224	4,569	449	4,120

[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 46

Funds of Funds:[1] Components of Net New Cash Flow[2]

Millions of dollars, annual

	Sales									Redemptions								
	New + exchange			New[3]			Exchange[4]			Regular + exchange			Regular[5]			Exchange[6]		
Year	Total	Equity	Hybrid and bond	Total	Equity	Hybrid and bond	Total	Equity	Hybrid and bond	Total	Equity	Hybrid and bond	Total	Equity	Hybrid and bond	Total	Equity	Hybrid and bond
1990	$416	$68	$348	$351	$58	$293	$65	$10	$55	$285	$89	$196	$186	$87	$99	$100	$3	$97
1991	772	192	580	579	142	437	194	50	143	298	95	203	185	79	105	113	16	97
1992	1,617	371	1,246	1,255	294	961	362	76	286	483	166	318	303	130	174	180	36	144
1993	1,953	358	1,594	1,533	293	1,240	419	65	354	793	205	588	453	156	297	340	49	291
1994	1,781	583	1,197	1,341	389	952	439	194	245	1,213	241	972	682	166	517	531	75	456
1995	2,362	987	1,376	1,750	692	1,059	612	295	317	1,227	354	873	768	233	535	459	121	338
1996	4,522	2,321	2,201	3,621	1,847	1,774	901	474	428	2,066	749	1,317	1,290	519	771	776	230	546
1997	6,317	2,765	3,553	4,753	1,957	2,796	1,565	808	757	2,937	1,213	1,725	1,749	768	981	1,189	445	744
1998	12,931	4,247	8,684	9,938	3,446	6,492	2,993	801	2,192	6,554	2,296	4,258	3,766	1,490	2,277	2,788	807	1,981
1999	16,749	6,722	10,028	12,759	5,458	7,301	3,990	1,263	2,727	10,178	3,321	6,856	6,638	2,465	4,173	3,540	856	2,684
2000	24,092	5,493	18,599	18,607	4,493	14,114	5,485	1,000	4,485	13,690	2,347	11,344	9,250	1,925	7,325	4,440	422	4,019
2001	22,577	3,914	18,663	17,606	3,255	14,351	4,971	659	4,312	13,647	2,601	11,046	9,546	2,018	7,528	4,101	583	3,518
2002	28,194	4,937	23,256	23,063	4,149	18,914	5,131	789	4,342	16,600	3,405	13,195	12,209	2,875	9,335	4,391	530	3,861
2003	46,920	5,914	41,006	38,406	4,824	33,582	8,515	1,090	7,425	17,062	2,909	14,153	12,785	2,452	10,333	4,277	456	3,820
2004	76,677	9,285	67,392	63,004	7,409	55,595	13,674	1,876	11,798	26,196	4,026	22,171	19,742	3,459	16,283	6,455	567	5,888
2005	122,744	11,395	111,349	105,973	9,035	96,938	16,771	2,360	14,411	43,194	5,510	37,685	35,168	4,747	30,421	8,027	763	7,264
2006	163,033	22,354	140,679	138,808	17,618	121,190	24,225	4,736	19,489	61,686	8,572	53,114	48,972	7,182	41,790	12,714	1,390	11,324
2007	226,977	33,410	193,567	193,640	26,126	167,515	33,336	7,285	26,052	100,569	16,134	84,435	81,898	13,073	68,825	18,671	3,061	15,610
2008	210,801	25,028	185,773	181,189	20,752	160,437	29,613	4,276	25,337	150,321	19,316	131,006	119,872	16,056	103,816	30,449	3,260	27,190
2009	190,511	19,788	170,723	171,433	18,309	153,123	19,079	1,479	17,600	120,343	15,642	104,701	102,091	14,236	87,855	18,252	1,406	16,845
2010	290,435	21,531	268,904	265,197	20,330	244,868	25,237	1,201	24,036	172,060	16,567	155,494	150,065	15,167	134,898	21,996	1,400	20,596
2011	350,637	20,730	329,907	322,898	19,619	303,279	27,739	1,112	26,628	230,897	17,720	213,177	202,789	16,237	186,552	28,108	1,483	26,625
2012	330,536	18,465	312,071	304,536	17,100	287,436	26,001	1,366	24,635	236,622	21,116	215,505	211,417	19,615	191,802	25,205	1,501	23,704
2013	402,464	33,319	369,145	362,400	30,718	331,682	40,064	2,601	37,463	292,759	20,698	272,061	259,712	19,202	240,510	33,046	1,496	31,551
2014	409,154	34,767	374,386	368,559	32,827	335,732	40,594	1,940	38,654	340,569	23,061	317,508	289,442	21,681	267,761	51,127	1,380	49,748
2015	456,106	39,372	416,734	403,874	37,345	366,529	52,232	2,028	50,205	398,020	30,277	367,743	338,929	28,239	310,690	59,091	2,038	57,053

[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.

TABLE 47

Index Mutual Funds: Total Net Assets and Net New Cash Flow

Millions of dollars

	Total net assets (Year-end)					Net new cash flow* (Annual)				
		Equity funds					Equity funds			
Year	Total	S&P 500	Other domestic	World	Hybrid and bond	Total	S&P 500	Other domestic	World	Hybrid and bond
1993	$27,805	$19,790	$3,338	$1,281	$3,396	$6,428	$3,994	$953	$501	$980
1994	32,573	22,752	3,863	2,095	3,863	3,348	1,871	515	436	525
1995	57,042	41,744	6,442	2,846	6,009	11,815	8,820	1,038	512	1,446
1996	97,759	73,856	11,241	4,124	8,538	24,780	18,447	3,192	1,033	2,108
1997	170,302	129,857	21,221	5,329	13,895	34,847	25,208	5,230	818	3,591
1998	264,998	201,791	35,051	7,962	20,193	46,143	30,977	8,499	1,568	5,099
1999	387,411	284,588	63,386	13,130	26,307	61,603	38,063	16,102	2,241	5,197
2000	384,039	272,462	72,009	12,645	26,923	25,592	10,783	10,668	1,664	2,477
2001	370,560	249,452	73,598	11,128	36,381	26,735	9,113	8,859	1,181	7,582
2002	327,417	200,989	69,426	11,050	45,952	25,255	4,818	12,153	1,669	6,616
2003	455,293	273,691	112,480	18,218	50,903	35,234	14,231	16,538	2,199	2,266
2004	554,044	317,826	147,819	28,236	60,163	40,130	11,739	16,078	5,661	6,651
2005	618,699	334,012	171,377	42,792	70,518	27,877	-317	11,731	8,456	8,007
2006	747,491	379,765	218,166	66,647	82,913	32,974	-5,908	20,134	10,674	8,074
2007	854,715	394,593	257,850	95,695	106,577	61,139	-1,440	29,193	16,915	16,473
2008	619,474	252,956	177,975	67,871	120,672	48,624	7,666	23,337	7,697	9,924
2009	835,422	328,647	256,365	92,507	157,903	59,928	8,195	16,646	7,951	27,135
2010	1,016,713	375,949	325,276	122,751	192,736	57,560	-808	15,024	19,076	24,268
2011	1,093,749	376,582	357,625	121,445	238,098	54,828	-6,869	24,600	17,202	19,895
2012	1,311,077	429,698	439,633	161,212	280,534	59,043	-7,139	22,134	15,523	28,525
2013	1,733,629	574,380	638,869	215,545	304,835	114,376	5,541	46,541	28,309	33,985
2014	2,053,656	669,483	768,289	242,925	372,959	149,070	12,567	49,009	38,403	49,091
2015	2,207,297	691,070	795,436	303,007	417,784	165,870	14,788	32,311	74,961	43,810

* 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 48

Index Mutual Funds: Number of Funds and Number of Share Classes

Year-end

	Number of funds					Number of share classes				
		Equity funds					Equity funds			
Year	Total	S&P 500	Other domestic	World	Hybrid and bond	Total	S&P 500	Other domestic	World	Hybrid and bond
1993	70	39	15	6	10	74	43	15	6	10
1994	82	43	17	7	15	96	54	17	10	15
1995	87	48	18	7	14	110	63	19	11	17
1996	105	60	22	7	16	143	86	25	11	21
1997	132	72	27	12	21	205	115	38	21	31
1998	156	86	37	15	18	252	148	52	25	27
1999	197	97	59	20	21	323	166	95	31	31
2000	271	120	99	26	26	465	221	163	43	38
2001	286	126	110	24	26	518	238	197	43	40
2002	313	132	124	28	29	578	255	221	53	49
2003	321	128	134	30	29	601	253	243	56	49
2004	328	127	146	28	27	633	262	269	55	47
2005	322	119	147	29	27	647	258	279	62	48
2006	343	125	157	33	28	699	272	303	70	54
2007	354	125	159	37	33	735	276	312	83	64
2008	360	122	163	42	33	755	278	316	96	65
2009	357	113	151	49	44	756	259	291	107	99
2010	365	111	161	50	43	776	253	301	121	101
2011	382	111	169	57	45	856	260	337	144	115
2012	372	103	166	58	45	871	247	349	153	122
2013	371	96	171	58	46	881	234	364	156	127
2014	383	95	183	58	47	909	232	403	148	126
2015	406	95	194	64	53	967	234	433	162	138

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

TABLE 49

Index Mutual Funds: New Sales and Exchange Sales

Millions of dollars, annual

Year	New + exchange					New[1]					Exchange[2]				
		Equity funds					Equity funds					Equity funds			
	Total	S&P 500	Other domestic	World	Hybrid and bond	Total	S&P 500	Other domestic	World	Hybrid and bond	Total	S&P 500	Other domestic	World	Hybrid and bond
1993	$13,399	$9,029	$1,560	$746	$2,064	$11,308	$7,926	$1,283	$455	$1,644	$2,091	$1,104	$277	$291	$420
1994	11,980	8,106	1,283	824	1,767	10,257	7,187	1,130	579	1,361	1,723	919	153	245	405
1995	21,853	15,916	2,107	1,019	2,811	17,669	13,095	1,883	800	1,891	4,184	2,821	224	219	920
1996	42,680	31,829	4,893	1,855	4,103	34,903	26,165	4,182	1,463	3,093	7,776	5,664	711	392	1,010
1997	73,274	54,494	10,219	2,173	6,388	54,093	41,160	6,562	1,816	4,555	19,181	13,334	3,657	357	1,834
1998	102,843	75,186	15,515	3,014	9,128	79,382	59,457	11,406	2,157	6,362	23,461	15,728	4,109	857	2,767
1999	145,582	101,675	26,755	4,544	12,608	112,686	81,540	18,994	3,232	8,920	32,896	20,135	7,761	1,312	3,688
2000	136,385	92,019	29,049	6,091	9,225	107,344	75,990	20,141	4,863	6,351	29,041	16,029	8,908	1,229	2,875
2001	122,247	72,936	28,055	4,643	16,612	94,018	58,654	20,960	3,946	10,458	28,229	14,282	7,096	697	6,154
2002	127,752	68,085	34,211	5,161	20,295	99,640	57,060	24,922	4,505	13,154	28,112	11,026	9,289	656	7,141
2003	136,830	67,688	44,593	5,998	18,550	104,703	54,472	31,681	5,178	13,372	32,127	13,216	12,913	820	5,178
2004	159,310	74,967	53,947	9,403	20,992	128,162	63,371	40,622	7,915	16,254	31,148	11,597	13,325	1,488	4,739
2005	163,344	70,763	56,374	13,523	22,684	131,335	58,818	43,402	11,275	17,840	32,009	11,945	12,972	2,248	4,844
2006	189,915	69,619	73,333	19,890	27,074	152,437	59,125	57,381	16,061	19,871	37,478	10,494	15,953	3,829	7,203
2007	259,419	93,691	92,086	30,539	43,102	200,041	76,300	71,958	23,650	28,133	59,378	17,391	20,129	6,889	14,969
2008	253,056	87,082	82,141	29,733	54,099	203,402	74,132	64,725	24,545	40,000	49,654	12,951	17,416	5,188	14,099
2009	244,203	69,398	66,309	25,752	82,744	182,247	60,024	52,130	19,915	50,177	61,956	9,374	14,178	5,837	32,567
2010	279,015	70,013	84,010	50,914	74,078	212,865	59,437	64,649	32,063	56,717	66,151	10,577	19,361	18,851	17,362
2011	330,845	93,679	107,165	44,919	85,081	268,319	80,167	83,055	36,824	68,274	62,526	13,512	24,110	8,096	16,807
2012	338,948	93,429	110,994	44,029	90,496	277,651	79,206	89,369	35,357	73,720	61,296	14,223	21,625	8,672	16,776
2013	432,830	111,144	146,421	59,647	115,619	345,802	95,555	119,032	50,086	81,129	87,028	15,588	27,389	9,561	34,490
2014	512,273	142,880	179,064	72,752	117,577	437,048	121,824	153,388	62,364	99,473	75,225	21,056	25,677	10,388	18,104
2015	594,431	144,544	195,687	121,269	132,932	511,663	125,770	166,956	107,144	111,794	82,767	18,773	28,731	14,125	21,138

[1] 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.

[2] Exchange sales are the dollar value of mutual fund shares switched into 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 50

Index Mutual Funds: Redemptions and Exchange Redemptions

Millions of dollars, annual

	Regular + exchange					Regular[1]					Exchange[2]				
		Equity funds					Equity funds					Equity funds			
Year	Total	S&P 500	Other domestic	World	Hybrid and bond	Total	S&P 500	Other domestic	World	Hybrid and bond	Total	S&P 500	Other domestic	World	Hybrid and bond
1993	$6,971	$5,036	$607	$245	$1,084	$5,304	$4,022	$449	$118	$715	$1,667	$1,014	$158	$127	$369
1994	8,632	6,236	768	387	1,241	7,177	5,426	645	243	863	1,455	810	123	144	379
1995	10,038	7,096	1,069	507	1,365	7,721	5,738	935	337	711	2,316	1,358	135	170	654
1996	17,900	13,382	1,700	822	1,995	13,578	10,330	1,429	566	1,253	4,321	3,052	271	256	743
1997	38,427	29,286	4,989	1,355	2,797	24,753	19,825	2,469	779	1,681	13,674	9,462	2,520	576	1,116
1998	56,700	44,208	7,016	1,446	4,029	40,024	32,563	4,256	973	2,232	16,676	11,646	2,760	473	1,797
1999	83,979	63,612	10,653	2,303	7,411	60,809	48,336	7,050	1,276	4,146	23,170	15,276	3,603	1,027	3,265
2000	110,793	81,237	18,381	4,427	6,749	80,788	61,735	11,959	2,816	4,278	30,005	19,501	6,422	1,611	2,471
2001	95,512	63,823	19,196	3,462	9,030	68,474	47,792	12,731	2,597	5,353	27,038	16,030	6,465	865	3,677
2002	102,497	63,267	22,059	3,493	13,679	74,963	48,625	15,223	2,820	8,296	27,534	14,642	6,835	673	5,383
2003	101,596	53,457	28,056	3,800	16,284	76,804	42,814	20,548	3,407	10,035	24,792	10,643	7,508	393	6,249
2004	119,180	63,228	37,869	3,742	14,341	90,044	50,340	26,886	3,061	9,756	29,136	12,888	10,982	681	4,585
2005	135,467	71,080	44,643	5,067	14,677	102,053	54,621	32,287	4,108	11,036	33,414	16,459	12,356	959	3,641
2006	156,941	75,527	53,200	9,215	18,999	118,531	59,556	39,112	6,775	13,089	38,410	15,971	14,088	2,441	5,910
2007	198,280	95,131	62,894	13,625	26,630	141,059	71,405	42,808	10,081	16,764	57,221	23,726	20,086	3,544	9,865
2008	204,432	79,416	58,804	22,036	44,175	156,303	62,324	43,144	16,547	34,288	48,129	17,093	15,660	5,489	9,887
2009	184,275	61,203	49,663	17,801	55,609	129,835	49,794	38,167	14,348	27,525	54,440	11,409	11,495	3,453	28,084
2010	221,455	70,821	68,985	31,839	49,810	162,504	56,993	54,782	14,737	35,991	58,952	13,828	14,203	17,102	13,819
2011	276,017	100,548	82,565	27,717	65,187	219,553	81,877	64,654	20,333	52,689	56,464	18,671	17,911	7,384	12,497
2012	279,905	100,568	88,860	28,506	61,971	212,633	79,623	62,278	21,662	49,071	67,273	20,946	26,582	6,844	12,901
2013	318,454	105,603	99,880	31,338	81,634	248,683	89,331	81,112	25,139	53,100	69,772	16,272	18,768	6,199	28,534
2014	363,204	130,313	130,056	34,349	68,486	308,645	112,519	109,911	28,142	58,073	54,559	17,795	20,144	6,207	10,413
2015	428,561	129,756	163,376	46,308	89,122	367,242	112,114	140,139	38,972	76,016	61,320	17,642	23,237	7,336	13,106

[1] Regular redemptions are the dollar value of shareholder liquidation of mutual fund shares.
[2] 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 5

TABLE 51

Inflation-Protected and Treasury Inflation-Protected Mutual Funds: Total Net Assets, Net New Cash Flow, Number of Funds, and Number of Share Classes

Year	Total	Inflation-protected	Treasury inflation-protected	Total	Inflation-protected	Treasury inflation-protected
	Total net assets *Millions of dollars, year-end*			**Net new cash flow*** *Millions of dollars, annual*		
2010	$108,438	$98,326	$10,112	$9,181	$7,346	$1,835
2011	133,330	120,065	13,266	11,425	9,900	1,525
2012	150,342	137,116	13,226	7,338	8,289	-951
2013	108,160	95,942	12,218	-31,504	-31,383	-120
2014	107,328	92,360	14,968	-3,089	-5,869	2,780
2015	105,776	86,206	19,570	-976	-5,821	4,845
	Number of funds *Year-end*			**Number of share classes** *Year-end*		
2010	59	50	9	200	170	30
2011	63	52	11	217	183	34
2012	68	56	12	234	197	37
2013	69	57	12	242	205	37
2014	65	56	9	232	205	27
2015	68	59	9	258	230	28

* 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.

DATA SECTION 5

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
2004	$101,728	$144,182	$365,645	$348,495	$97,716	$111,824	$418,598	$156,404	$97,094	$146,278	$804,228	$645,668
2005	106,921	153,494	377,231	381,045	108,707	135,441	464,347	169,401	108,504	164,955	843,752	701,795
2006	114,522	156,733	379,207	414,190	130,100	155,866	570,240	197,391	123,102	193,651	974,531	807,898
2007	119,593	177,801	393,968	480,751	122,045	158,450	577,987	203,448	119,792	202,391	1,017,004	873,932
2008	67,787	91,840	225,666	275,749	78,536	88,564	339,613	111,339	71,867	109,537	637,320	493,352
2009	94,830	127,591	295,647	364,987	104,214	121,027	416,722	140,989	96,987	149,165	817,289	632,531
2010	116,796	159,110	328,493	397,753	130,444	146,334	456,880	159,686	120,735	182,499	923,238	687,874
2011	107,182	145,853	327,906	354,792	120,523	135,540	435,524	156,211	116,873	172,318	911,626	629,791
2012	115,862	160,870	386,194	377,054	133,265	152,976	471,673	175,270	144,896	192,146	1,038,038	699,030
2013	165,727	212,801	508,170	490,835	175,869	209,657	591,375	243,129	207,615	265,990	1,402,130	907,960
2014	158,834	211,628	554,856	507,123	170,461	221,981	630,383	273,179	208,371	287,573	1,621,977	965,078
2015	153,514	199,694	563,088	508,747	145,787	200,397	563,767	258,110	196,653	279,240	1,633,905	925,211

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
2004	-$1,510	-$6,726	-$10,973	$3,442	$7,451	$21,072	$28,751	$5,632	$8,729	$9,117	$12,460	$18,639
2005	-2,380	-6,191	-16,583	-3,324	2,970	13,677	19,863	3,018	3,312	3,159	-12,397	8,807
2006	-3,781	-8,471	-18,896	4,041	3,653	-1,544	21,344	6,181	885	1,152	-14,435	6,444
2007	-4,434	-704	-27,204	9,005	-4,619	-1,511	-4,610	5,730	-5,886	-4,612	-4,973	-4,918
2008	-3,970	-9,602	-13,915	-11,300	-1,936	-8,764	-18,892	-15,187	-7,609	-14,118	-3,444	-31,176
2009	1,860	-993	-9,396	-9,317	1,124	2,486	-7,584	-3,438	1,383	-1,019	3,485	-16,841
2010	-1,783	-1,116	-12,751	-19,341	1,313	375	-13,519	-2,275	150	-650	-10,097	-29,813
2011	-5,467	-6,713	6,620	-33,673	-4,981	-4,838	-18,593	-130	-472	-5,656	-12,230	-42,220
2012	-6,430	-5,394	1,627	-38,500	-8,699	-7,296	-29,470	-10,684	-6,223	-5,774	-10,905	-41,294
2013	3,136	-2,942	-12,376	-16,672	-3,930	2,864	-25,901	14,452	7,768	7,980	29,365	-11,486
2014	-10,104	-15,150	-16,671	-28,496	-10,199	-3,975	-20,623	9,049	-7,551	-2,099	40,280	-23,874
2015	-3,204	-11,724	-17,543	-21,516	-13,995	-7,453	-43,245	-5,690	-4,113	-1,660	4,324	-44,242

* 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.

DATA SECTION 5

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
2004	258	255	412	247	193	156	384	195	176	137	504	256
2005	266	255	406	243	208	166	397	199	182	139	482	255
2006	267	256	390	232	214	185	398	199	187	142	497	257
2007	246	245	351	209	219	196	400	200	196	146	490	254
2008	237	244	348	208	221	202	395	203	186	149	491	253
2009	213	219	331	190	202	191	369	190	177	140	464	245
2010	207	206	318	180	197	186	358	192	171	134	458	234
2011	204	197	311	168	203	182	339	201	173	140	440	225
2012	198	188	301	163	209	179	329	211	167	136	420	225
2013	191	179	289	164	205	176	322	213	179	131	414	228
2014	188	178	290	159	213	186	325	218	188	129	418	233
2015	183	178	288	161	215	188	324	213	199	135	425	233

	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
2004	657	671	1,033	592	474	409	972	496	414	325	1,224	620
2005	675	686	1,042	593	524	447	1,048	507	439	343	1,205	654
2006	688	698	1,023	592	558	502	1,075	512	451	353	1,266	679
2007	653	699	960	544	582	533	1,106	532	480	374	1,257	684
2008	652	692	1,004	548	595	563	1,109	551	471	405	1,303	708
2009	606	631	957	530	560	530	1,024	503	450	383	1,249	718
2010	580	607	921	516	561	540	1,025	516	431	360	1,236	700
2011	591	589	909	489	582	543	994	545	436	382	1,224	689
2012	581	565	896	470	598	547	956	570	438	378	1,184	709
2013	560	552	879	481	593	552	949	599	478	366	1,186	735
2014	560	553	892	461	610	590	981	621	521	355	1,216	740
2015	549	559	909	468	629	597	1,000	603	570	357	1,247	771

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	$2,955	$1,108	$11,675	$103,853	$22,908	$3,917
2001	1,290	13,901	40,545	2,429	1,276	13,509	62,339	17,744	2,940
2002	1,096	10,885	30,087	2,230	2,431	17,745	31,308	11,275	2,082
2003	1,436	13,138	36,803	3,307	4,158	31,653	46,929	13,481	2,412
2004	1,631	12,917	40,147	5,844	4,215	49,927	42,403	19,201	2,974
2005	1,405	11,837	45,398	12,048	6,928	59,158	34,366	28,390	3,189
2006	1,928	12,269	44,744	14,723	9,741	81,329	32,891	34,589	3,950
2007	2,147	8,518	43,967	22,312	11,804	53,738	34,169	45,669	4,826
2008	1,776	4,857	31,337	9,967	7,776	33,503	16,331	23,240	1,766
2009	2,439	5,941	32,440	17,496	14,785	44,126	27,610	30,327	2,986
2010	3,113	6,286	32,507	22,853	22,926	55,120	30,738	33,332	4,597
2011	3,546	4,548	35,884	20,998	17,029	60,155	26,680	34,785	3,906
2012	4,675	5,901	44,105	22,041	15,293	75,340	28,570	35,400	5,001
2013	6,431	9,285	74,767	30,960	6,790	77,363	41,486	40,149	8,173
2014	7,017	9,415	103,447	36,904	6,005	104,288	45,358	41,556	8,969
2015	9,514	10,222	124,538	29,232	4,477	101,459	47,088	32,516	7,006

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	$236	-$203	$339	$43,837	$1,015	-$187
2001	254	-962	236	-182	-28	430	-4,458	-953	-198
2002	11	-1,603	-2,895	-70	480	3,612	-6,211	-2,076	-288
2003	9	-940	-767	327	456	5,177	73	-292	-145
2004	3	-1,535	-387	1,414	419	7,050	-6,165	1,571	148
2005	-209	-1,586	836	3,483	1,016	3,000	-8,541	3,311	121
2006	29	-1,017	-4,137	789	717	4,395	-4,456	556	-49
2007	94	-2,617	-3,378	1,724	-214	-15,282	-2,745	1,992	257
2008	209	96	-3,025	-268	832	1,791	-3,847	-3,397	-488
2009	82	-457	-3,163	1,767	2,249	492	1,768	254	386
2010	101	-626	-2,407	1,470	2,353	1,746	-1,391	-848	724
2011	262	-885	478	1,193	-1,336	1,018	-2,346	701	-286
2012	544	56	1,385	564	152	4,490	-1,515	-1,994	173
2013	794	859	8,582	5,411	-1,425	315	1,972	-1,409	977
2014	47	-256	7,645	5,823	-165	5,279	85	3,783	91
2015	2,235	978	11,007	-654	-37	-4,552	288	-2,585	-1,510

* 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.

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	19	11	74	132	34	16
2001	9	41	57	18	10	75	155	40	17
2002	12	42	63	15	11	79	145	35	19
2003	11	38	58	16	11	91	124	33	19
2004	14	40	59	17	11	94	115	34	20
2005	14	41	53	18	11	93	103	32	19
2006	18	40	57	20	12	97	108	38	23
2007	19	40	52	20	11	96	98	39	25
2008	19	38	48	21	11	92	88	41	22
2009	19	36	41	20	11	90	79	37	23
2010	19	35	38	21	11	87	74	35	21
2011	19	32	34	26	10	83	69	33	21
2012	20	33	35	28	11	84	66	36	24
2013	19	32	35	32	11	87	68	41	24
2014	19	31	34	36	11	87	67	37	24
2015	19	31	34	44	11	90	67	39	24

	Number of share classes								
Year	Consumer	Financial	Health	Natural resources	Precious metals	Real estate	Technology/ Telecom	Utilities	Other sectors
2000	12	73	91	33	19	151	283	75	23
2001	17	88	145	32	21	156	350	89	25
2002	22	92	171	26	24	172	348	91	28
2003	19	85	155	33	26	214	290	88	28
2004	27	92	159	34	27	238	279	91	29
2005	26	95	137	38	27	240	260	94	27
2006	33	93	147	41	30	246	267	107	37
2007	41	95	133	47	34	252	249	113	42
2008	42	91	124	52	37	246	218	117	33
2009	42	80	101	50	37	246	199	105	41
2010	42	79	97	54	38	246	190	96	36
2011	43	72	80	75	33	238	184	89	36
2012	47	73	83	85	36	241	182	100	43
2013	41	72	83	97	34	256	188	109	44
2014	41	70	80	106	34	266	181	96	40
2015	39	70	80	141	34	281	180	101	39

Note: 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	Lifestyle	Total	Target date	Lifestyle	Total	Target date	Lifestyle	Total	Target date	Lifestyle
1995	$2,746	$487	$2,259	$1,194	$185	$1,009	26	6	20	50	10	40
1996	6,497	805	5,693	2,583	216	2,367	44	9	35	70	9	61
1997	14,314	1,408	12,906	4,138	193	3,945	77	12	65	141	17	124
1998	25,413	4,508	20,905	6,015	1,153	4,862	110	17	93	199	23	176
1999	34,849	7,014	27,835	4,928	1,311	3,618	130	19	111	240	30	210
2000	39,716	8,788	30,928	7,581	3,598	3,983	146	24	122	279	42	237
2001	45,467	12,372	33,095	7,696	3,795	3,902	147	25	122	351	82	269
2002	49,425	14,902	34,523	8,095	3,709	4,387	171	25	146	432	82	350
2003	81,733	25,901	55,832	19,040	7,221	11,819	192	45	147	499	120	379
2004	129,170	43,756	85,414	28,336	12,903	15,433	241	84	157	740	263	477
2005	202,017	71,223	130,794	57,166	22,256	34,910	324	127	197	1,128	465	663
2006	303,594	114,560	189,034	66,792	33,023	33,769	422	184	238	1,559	783	776
2007	420,863	182,905	237,958	91,920	56,200	35,720	494	245	249	1,837	1,035	802
2008	335,419	159,828	175,591	54,424	41,897	12,527	613	338	275	2,214	1,366	848
2009	486,540	255,590	230,950	52,116	43,442	8,674	643	379	264	2,350	1,513	837
2010	603,927	339,772	264,155	48,615	44,431	4,184	638	377	261	2,327	1,491	836
2011	637,856	375,810	262,046	40,473	41,557	-1,084	676	412	264	2,488	1,620	868
2012	773,331	480,743	292,588	50,288	52,948	-2,660	684	430	254	2,602	1,754	848
2013	976,805	618,016	358,789	55,282	52,968	2,314	762	491	271	2,931	2,031	900
2014	1,097,376	702,632	394,744	41,676	44,583	-2,908	799	528	271	3,040	2,142	898
2015	1,134,541	762,540	372,001	52,682	66,223	-13,541	840	573	267	3,202	2,301	901

[1] Categories include data for 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 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	Lifestyle	Total	Target date	Lifestyle	Total	Target date	Lifestyle	Total	Target date	Lifestyle
1995	$1,289	$282	$1,008	$364	$9	$355	$304	$100	$203	$155	$5	$151
1996	3,393	622	2,771	564	12	552	989	406	583	385	11	373
1997	5,580	513	5,067	1,067	33	1,033	1,763	331	1,432	746	23	723
1998	8,856	1,306	7,549	2,782	1,354	1,428	3,557	641	2,916	2,066	867	1,199
1999	10,663	1,831	8,832	3,144	1,707	1,436	6,102	1,000	5,102	2,776	1,227	1,549
2000	15,034	4,267	10,767	4,621	2,845	1,776	8,302	1,654	6,648	3,772	1,861	1,912
2001	15,408	4,787	10,621	4,179	2,576	1,602	8,510	1,844	6,665	3,381	1,724	1,656
2002	18,235	5,282	12,953	3,691	2,307	1,384	10,901	2,340	8,561	2,930	1,541	1,389
2003	27,581	8,084	19,498	5,321	3,390	1,931	11,038	2,521	8,518	2,824	1,731	1,093
2004	41,670	16,442	25,228	8,713	5,474	3,239	17,571	6,275	11,296	4,477	2,739	1,738
2005	77,111	26,754	50,358	11,647	7,692	3,955	25,919	8,633	17,287	5,673	3,558	2,116
2006	89,497	39,913	49,584	17,113	11,157	5,956	31,232	12,662	18,571	8,586	5,385	3,201
2007	137,672	76,155	61,517	23,456	17,041	6,415	56,638	28,507	28,131	12,570	8,490	4,080
2008	127,517	78,539	48,978	22,099	16,120	5,979	73,878	38,386	35,492	21,314	14,376	6,938
2009	118,467	80,328	38,138	15,172	11,554	3,618	68,193	39,388	28,805	13,329	9,053	4,277
2010	149,974	107,619	42,356	20,606	16,623	3,983	104,940	67,373	37,567	17,025	12,437	4,588
2011	172,546	131,659	40,887	22,271	17,914	4,356	132,000	90,802	41,198	22,343	17,215	5,129
2012	182,811	143,656	39,155	19,668	15,988	3,680	133,084	92,070	41,014	19,107	14,626	4,481
2013	217,821	171,407	46,415	30,991	25,303	5,687	167,016	121,592	45,424	26,514	22,150	4,364
2014	240,263	186,196	54,067	33,593	28,093	5,500	187,301	129,048	58,253	44,879	40,658	4,221
2015	279,227	239,068	40,160	45,529	40,478	5,051	220,743	166,728	54,015	51,331	46,595	4,737

[1] Categories include data for 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.

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
1990	$28,749	$14,974	$8,355	$5,420	$3,083	$1,866	$323	$895	331	145	134	52
1991	91,056	69,138	13,734	8,184	6,174	5,097	1,498	-420	354	150	147	57
1992	109,868	80,934	21,046	7,888	12,884	8,708	4,363	-188	366	157	151	58
1993	152,403	104,823	39,740	7,841	26,088	16,423	9,834	-169	428	192	176	60
1994	176,370	121,153	44,339	10,878	22,066	15,998	3,763	2,305	507	245	202	60
1995	259,813	187,702	60,042	12,069	20,824	18,604	2,214	5	665	344	250	71
1996	349,341	260,959	73,189	15,193	40,133	32,699	5,063	2,371	800	435	290	75
1997	473,331	364,286	92,571	16,474	40,470	33,743	6,316	411	937	535	323	79
1998	615,152	474,961	116,337	23,853	44,259	27,857	10,362	6,040	1,162	703	377	82
1999	818,958	656,877	128,349	33,732	38,543	30,736	-460	8,267	1,353	868	404	81
2000	816,800	652,421	131,342	33,037	48,461	58,314	-7,790	-2,063	1,562	1,051	431	80
2001	742,258	558,654	138,848	44,756	21,583	4,861	8,035	8,687	1,750	1,248	413	89
2002	638,949	438,603	152,276	48,070	-1,286	-12,763	11,151	327	1,903	1,389	422	92
2003	837,443	619,018	182,773	35,652	29,827	34,969	6,929	-12,071	1,889	1,364	437	88
2004	973,910	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	4,449	-1,299	1,882	1,356	443	83
2006	1,266,934	975,532	249,210	42,192	29,712	17,018	7,192	5,501	1,926	1,391	454	81
2007	1,398,318	1,052,868	292,727	52,723	31,780	1,581	22,948	7,251	1,900	1,367	455	78
2008	928,693	598,524	255,199	74,971	-6,059	-30,615	5,018	19,538	1,897	1,369	449	79
2009	1,187,610	792,083	338,231	57,296	10,033	-3,644	32,483	-18,806	1,830	1,307	450	73
2010	1,339,959	886,357	405,048	48,554	-1,996	-25,375	33,090	-9,711	1,773	1,256	447	70
2011	1,299,386	800,129	450,383	48,873	-21,121	-48,213	26,956	136	1,738	1,222	452	64
2012	1,444,379	875,004	525,443	43,932	-31,604	-55,367	28,895	-5,132	1,726	1,195	471	60
2013	1,671,751	1,050,470	581,489	39,792	-53,709	-61,392	10,321	-2,638	1,735	1,180	498	57
2014	1,710,993	1,065,125	608,744	37,124	-67,342	-58,536	-6,142	-2,665	1,730	1,150	524	56
2015	1,637,860	1,006,711	592,105	39,043	-64,971	-53,821	-12,956	1,806	1,707	1,127	527	53

* 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.

DATA SECTION 5

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
1990	$9,994	$4,714	$1,808	$3,473	$1,082	$450	$183	$449	$6,993	$2,941	$1,465	$2,587	$1,000	$357	$203	$440
1991	16,408	9,034	3,368	4,006	838	331	174	333	10,294	3,967	1,920	4,407	778	301	124	352
1992	24,779	13,294	6,634	4,851	1,568	740	350	478	12,014	4,745	2,348	4,921	1,450	581	273	596
1993	42,392	22,738	13,146	6,508	1,131	576	325	230	16,352	6,425	3,410	6,517	1,084	467	227	390
1994	48,010	25,661	10,907	11,443	7,017	4,064	429	2,525	25,933	9,941	6,830	9,161	7,029	3,786	742	2,501
1995	53,101	31,661	9,326	12,114	8,674	4,984	727	2,963	32,283	13,201	7,234	11,849	8,668	4,840	606	3,223
1996	84,933	53,188	13,056	18,689	12,656	7,190	864	4,602	44,729	20,497	8,041	16,191	12,726	7,182	815	4,729
1997	105,222	67,005	15,290	22,926	24,210	13,017	2,348	8,846	65,377	33,408	9,905	22,063	23,586	12,871	1,417	9,298
1998	141,464	83,457	23,227	34,780	37,136	18,967	5,502	12,668	99,141	54,024	14,964	30,153	35,199	20,542	3,403	11,254
1999	212,025	130,900	22,004	59,120	40,818	22,080	2,985	15,753	174,418	100,392	22,275	51,750	39,883	21,853	3,174	14,856
2000	334,936	222,945	20,128	91,863	36,326	22,822	1,852	11,652	287,230	166,186	27,483	93,561	35,571	21,267	2,288	12,017
2001	346,166	197,831	33,707	114,628	31,716	15,928	5,185	10,604	325,676	190,977	27,510	107,189	30,623	17,921	3,346	9,356
2002	342,193	183,758	48,179	110,256	34,170	16,428	7,160	10,583	344,224	194,374	38,908	110,942	33,425	18,574	5,281	9,570
2003	283,007	169,043	54,392	59,572	28,791	15,307	5,944	7,540	253,526	136,061	46,632	70,832	28,445	13,319	6,774	8,351
2004	261,715	170,082	46,592	45,042	26,407	14,396	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	37,578	19,472	11,666	2,702	5,104
2006	280,246	191,872	51,529	36,846	22,318	10,823	3,425	8,070	250,509	173,300	44,350	32,859	22,344	12,376	3,412	6,555
2007	343,465	218,138	73,991	51,336	37,045	19,701	8,247	9,097	317,180	215,814	55,877	45,488	31,550	20,444	3,413	7,693
2008	380,350	198,130	94,051	88,169	25,445	11,112	5,114	9,220	390,038	227,293	90,601	72,144	21,816	12,564	3,546	5,706
2009	312,904	150,971	100,406	61,528	22,650	14,589	3,767	4,294	302,743	154,821	69,691	78,231	22,778	14,382	1,999	6,397
2010	337,926	164,882	140,079	32,964	17,325	6,755	6,742	3,828	339,668	188,495	108,772	42,401	17,578	8,517	4,959	4,102
2011	331,923	144,679	150,992	36,252	16,269	6,816	6,865	2,589	353,061	189,868	126,284	36,910	16,251	9,840	4,616	1,795
2012	310,832	128,108	154,148	28,575	14,248	10,720	2,118	1,410	341,502	181,579	126,100	33,824	15,181	12,616	1,271	1,293
2013	298,319	142,685	124,886	30,748	23,205	14,353	5,993	2,859	350,273	201,508	113,897	34,867	24,960	16,922	6,661	1,377
2014	258,332	132,904	97,227	28,201	9,591	4,669	1,607	3,316	325,034	189,773	104,218	31,043	10,232	6,335	758	3,139
2015	267,750	137,142	98,247	32,361	16,468	6,576	6,257	3,635	333,091	190,541	111,461	31,089	16,099	6,998	5,999	3,102

[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 60

Total Net Assets of Mutual Funds Held in Individual and Institutional Accounts

Millions of dollars, year-end

Year	Total	Equity	Hybrid	Bond	Money market
Total					
2001	$6,974,913	$3,392,399	$358,027	$939,177	$2,285,310
2002	6,383,157	2,642,420	335,276	1,140,387	2,265,075
2003	7,402,118	3,653,370	447,570	1,261,157	2,040,022
2004	8,095,801	4,342,577	552,250	1,299,274	1,901,700
2005	8,891,375	4,885,444	621,479	1,357,630	2,026,822
2006	10,398,155	5,832,582	731,503	1,495,619	2,338,451
2007	12,000,168	6,413,222	821,522	1,679,664	3,085,760
2008	9,620,637	3,655,162	562,262	1,570,978	3,832,236
2009	11,112,623	4,872,541	717,580	2,206,609	3,315,893
2010	11,833,363	5,596,629	842,198	2,591,022	2,803,514
2011	11,632,348	5,212,989	883,981	2,844,428	2,690,950
2012	13,056,677	5,938,747	1,034,058	3,390,704	2,693,169
2013	15,050,820	7,762,721	1,285,009	3,285,282	2,717,808
2014	15,875,269	8,314,321	1,376,586	3,459,721	2,724,641
2015	15,651,956	8,148,257	1,336,584	3,412,371	2,754,743
Individual accounts					
2001	$6,102,362	$3,215,167	$347,782	$855,593	$1,683,820
2002	5,520,759	2,491,013	325,811	1,046,924	1,657,012
2003	6,554,272	3,463,587	435,131	1,168,216	1,487,338
2004	7,204,277	4,093,544	536,248	1,205,962	1,368,522
2005	7,803,136	4,576,624	600,437	1,235,488	1,390,586
2006	9,098,620	5,437,579	704,116	1,358,138	1,598,787
2007	10,393,003	5,986,591	792,386	1,521,986	2,092,040
2008	7,866,675	3,405,824	544,230	1,425,757	2,490,863
2009	9,294,472	4,503,074	693,742	2,009,477	2,088,180
2010	10,062,948	5,131,396	808,656	2,339,321	1,783,575
2011	9,937,877	4,779,201	845,148	2,579,414	1,734,114
2012	11,246,870	5,449,358	991,861	3,067,822	1,737,830
2013	13,070,425	7,158,276	1,227,376	2,956,424	1,728,349
2014	13,774,752	7,663,633	1,316,730	3,107,233	1,687,156
2015	13,544,493	7,499,413	1,279,971	3,057,993	1,707,116
Institutional accounts*					
2001	$872,551	$177,232	$10,245	$83,584	$601,490
2002	862,398	151,407	9,465	93,463	608,064
2003	847,846	189,783	12,439	92,941	552,684
2004	891,524	249,033	16,002	93,312	533,178
2005	1,088,239	308,820	21,042	122,143	636,235
2006	1,299,535	395,003	27,386	137,481	739,664
2007	1,607,166	426,630	29,136	157,678	993,721
2008	1,753,962	249,337	18,031	145,220	1,341,374
2009	1,818,151	369,467	23,839	197,132	1,227,714
2010	1,770,416	465,233	33,542	251,701	1,019,939
2011	1,694,471	433,788	38,832	265,014	956,837
2012	1,809,807	489,389	42,196	322,882	955,339
2013	1,980,396	604,445	57,633	328,858	989,460
2014	2,100,517	650,688	59,856	352,488	1,037,485
2015	2,107,463	648,844	56,614	354,378	1,047,627

* 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.

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

Total Net Assets of Institutional Investors in Mutual Funds by Type of Institution and Type of Fund

Millions of dollars, year-end

Year		Total	Business corporations	Financial institutions[1]	Nonprofit organizations	Other[2]
2006	**Total**	**$1,299,535**	**$605,919**	**$392,457**	**$125,403**	**$175,755**
	Equity	395,003	135,407	117,135	55,242	87,219
	Hybrid	27,386	7,856	8,295	4,848	6,388
	Bond	137,481	34,654	26,783	25,411	50,633
	Money market	739,664	428,003	240,243	39,902	31,515
2007	**Total**	**1,607,166**	**749,128**	**474,903**	**150,177**	**232,957**
	Equity	426,630	136,905	119,384	60,760	109,580
	Hybrid	29,136	8,306	10,216	4,500	6,114
	Bond	157,678	38,276	30,836	24,435	64,131
	Money market	993,721	565,641	314,466	60,482	53,132
2008	**Total**	**1,753,962**	**904,784**	**497,079**	**135,541**	**216,558**
	Equity	249,337	70,729	64,981	33,136	80,492
	Hybrid	18,031	5,702	5,708	2,717	3,904
	Bond	145,220	29,355	28,624	22,868	64,373
	Money market	1,341,374	798,998	397,766	76,820	67,789
2009	**Total**	**1,818,151**	**886,559**	**510,826**	**147,414**	**273,352**
	Equity	369,467	106,237	89,282	44,777	129,171
	Hybrid	23,839	7,989	7,126	3,665	5,060
	Bond	197,132	47,265	41,527	29,010	79,331
	Money market	1,227,714	725,069	372,893	69,963	59,790
2010	**Total**	**1,770,416**	**741,637**	**515,472**	**153,371**	**359,936**
	Equity	465,233	121,372	108,385	49,083	186,394
	Hybrid	33,542	10,953	10,186	4,262	8,142
	Bond	251,701	54,171	54,853	33,453	109,224
	Money market	1,019,939	555,140	342,048	66,574	56,177
2011	**Total**	**1,694,471**	**681,851**	**488,005**	**146,375**	**378,239**
	Equity	**433,788**	**102,158**	**95,036**	**45,315**	**191,280**
	Hybrid	**38,832**	**12,042**	**11,390**	**4,795**	**10,606**
	Bond	**265,014**	**51,822**	**57,910**	**36,207**	**119,075**
	Money market	**956,837**	**515,830**	**323,670**	**60,058**	**57,278**
2012	**Total**	**1,809,807**	**684,202**	**514,673**	**152,281**	**458,651**
	Equity	489,389	108,787	97,985	51,715	230,902
	Hybrid	42,196	11,218	13,941	5,186	11,851
	Bond	322,882	59,285	68,645	40,305	154,647
	Money market	955,339	504,912	334,102	55,074	61,251
2013	**Total**	**1,980,396**	**747,036**	**544,128**	**168,929**	**520,303**
	Equity	604,445	136,382	119,939	63,309	284,815
	Hybrid	57,633	15,300	17,246	7,420	17,667
	Bond	328,858	59,023	70,253	36,578	163,004
	Money market	989,460	536,331	336,690	61,622	54,816
2014	**Total**	**2,100,517**	**792,761**	**572,587**	**185,064**	**550,105**
	Equity	650,688	150,258	122,681	64,945	312,804
	Hybrid	59,856	15,659	18,060	7,682	18,454
	Bond	352,488	68,618	78,590	40,105	165,174
	Money market	1,037,485	558,226	353,255	72,332	53,672
2015	**Total**	**2,107,463**	**812,540**	**569,853**	**188,405**	**536,665**
	Equity	648,844	149,621	124,215	62,350	312,658
	Hybrid	56,614	15,716	19,077	8,172	13,649
	Bond	354,378	70,382	85,393	39,450	159,153
	Money market	1,047,627	576,821	341,168	78,433	51,205

[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.

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

Total Net Assets of Institutional Investors in Taxable Money Market Funds by Type of Institution and Type of Fund[1]

Millions of dollars, year-end

Year		Total	Business corporations	Financial institutions[2]	Nonprofit organizations	Other[3]
2001	**Total**	**$575,181**	**$300,471**	**$219,136**	**$27,975**	**$27,599**
	Institutional funds	468,478	234,934	195,663	18,193	19,687
	Retail funds	106,704	65,536	23,473	9,783	7,912
2002	**Total**	**578,112**	**303,148**	**226,645**	**27,673**	**20,646**
	Institutional funds	484,760	246,880	202,475	20,186	15,219
	Retail funds	93,352	56,267	24,170	7,487	5,427
2003	**Total**	**515,153**	**270,469**	**194,259**	**32,223**	**18,202**
	Institutional funds	428,443	220,562	173,539	22,473	11,870
	Retail funds	86,710	49,907	20,720	9,751	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**	**1,253,701**	**736,036**	**377,963**	**74,803**	**64,900**
	Institutional funds	1,129,759	659,901	350,945	60,632	58,282
	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	872,587	459,580	307,202	56,440	49,365
	Retail funds	88,458	53,458	21,688	8,812	4,500
2011	**Total**	**909,996**	**481,122**	**314,508**	**58,686**	**55,680**
	Institutional funds	822,836	428,498	292,478	50,996	50,864
	Retail funds	87,160	52,624	22,031	7,689	4,815
2012	**Total**	**907,723**	**468,745**	**324,330**	**53,961**	**60,686**
	Institutional funds	831,747	422,858	305,032	47,365	56,492
	Retail funds	75,976	45,887	19,299	6,596	4,194
2013	**Total**	**945,152**	**501,228**	**328,943**	**60,660**	**54,320**
	Institutional funds	873,597	453,682	314,440	55,175	50,300
	Retail funds	71,555	47,547	14,503	5,485	4,020
2014	**Total**	**994,202**	**523,649**	**346,684**	**70,818**	**53,051**
	Institutional funds	924,944	477,550	332,962	65,085	49,348
	Retail funds	69,258	46,099	13,722	5,734	3,703
2015	**Total**	**1,005,277**	**543,165**	**334,344**	**77,244**	**50,524**
	Institutional funds	938,834	500,001	321,937	70,426	46,470
	Retail funds	66,443	43,164	12,407	6,818	4,054

[1] 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.

[2] Financial institutions include credit unions, accounts of banks not held as fiduciaries, insurance companies, and other financial organizations.

[3] Other institutional investors include state and local governments, funds holding mutual fund shares, and other institutional accounts not classified.

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 63

Mutual Fund 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	-$3
1998	994	688	67	91	72	76	77	44	4	6	11	11
1999	1,294	914	109	102	77	92	70	45	8	2	5	11
2000	1,285	885	115	109	80	96	85	68	22	-1	-3	-1
2001	1,227	789	96	118	104	119	91	39	2	12	19	18
2002	1,102	631	85	115	139	132	77	26	6	7	26	12
2003	1,422	866	124	154	155	122	50	37	7	13	4	-11
2004	1,656	1,016	172	195	164	110	71	40	21	22	2	-14
2005	1,879	1,104	229	255	179	112	96	12	27	46	10	(*)
2006	2,222	1,246	334	326	192	124	91	-5	47	36	6	8
2007	2,492	1,297	422	403	217	152	94	-29	35	52	13	22
2008	1,710	755	223	309	225	198	37	-38	-14	32	17	40
2009	2,196	982	324	429	291	170	40	-11	13	32	35	-29
2010	2,509	1,129	372	520	341	146	31	-12	7	34	28	-26
2011	2,473	1,069	324	554	373	154	17	-40	-2	36	15	8
2012	2,847	1,208	380	664	440	154	35	-38	-3	39	37	(*)
2013	3,474	1,616	481	808	419	150	56	13	27	36	-15	-5
2014	3,702	1,756	496	873	437	140	18	-17	25	17	2	-10
2015	3,630	1,688	503	887	411	141	-44	-66	22	23	-23	(*)

(*) = 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 Fund 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	$787	$442	$79	$84	$92	$90	$67	$54	$7	$5	$7	-$6
1998	999	586	93	98	107	114	90	50	6	3	12	19
1999	1,277	797	137	102	110	132	67	54	2	-1	1	11
2000	1,265	781	136	104	109	136	62	68	14	-9	-7	-4
2001	1,205	699	111	110	133	153	69	34	-2	8	19	10
2002	1,090	548	93	110	175	164	55	3	(*)	10	34	9
2003	1,389	748	131	162	196	152	50	30	4	24	7	-14
2004	1,598	860	176	218	205	138	59	19	20	37	-1	-15
2005	1,782	932	231	264	211	144	64	3	24	34	2	1
2006	2,144	1,067	324	340	234	179	110	5	36	31	11	27
2007	2,438	1,125	410	409	270	224	124	-14	33	45	24	36
2008	1,697	654	221	288	261	273	(*)	-43	-15	1	16	41
2009	2,121	834	309	372	376	229	24	-18	3	13	69	-45
2010	2,427	949	371	444	459	204	41	-18	11	26	47	-26
2011	2,418	895	316	495	499	213	26	-38	-11	45	21	9
2012	2,763	1,011	358	583	594	218	38	-33	-14	28	53	5
2013	3,334	1,359	449	716	579	230	90	23	25	44	-14	12
2014	3,533	1,481	461	788	585	219	17	-11	16	35	-13	-10
2015	3,499	1,460	465	783	576	216	3	-18	16	8	(*)	-3

(*) = 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 Total Net Assets of Regulated Open-End Funds

Millions of U.S. dollars, year-end

	2008	2009	2010	2011	2012	2013	2014	2015
World	**$20,631,003**	**$25,088,939**	**$27,374,359**	**$26,578,593**	**$30,213,561**	**$34,462,543**	**$37,072,351**	**$37,190,528**
Americas	**11,130,264**	**13,355,373**	**14,591,545**	**14,583,246**	**16,488,566**	**18,864,164**	**20,009,504**	**19,557,328**
Argentina	3,867	4,470	5,179	6,808	9,185	11,179	15,630	16,435
Brazil	479,321	783,970	980,448	1,008,928	1,070,998	1,018,641	989,542	743,530
Canada	416,031	565,156	636,947	753,606	856,504	940,580	981,804	889,610
Chile	17,587	34,227	38,243	33,425	37,900	39,291	44,166	39,898
Costa Rica	1,098	1,309	1,470	1,266	1,484	1,933	2,092	2,533
Mexico	60,435	70,659	98,094	92,743	112,201	120,518	119,504	105,940
Trinidad and Tobago	N/A	5,832	5,812	5,989	6,505	6,586	7,121	6,983
United States	10,151,925	11,889,750	12,825,352	12,680,481	14,393,789	16,725,436	17,849,645	17,752,399
Europe	**7,393,787**	**8,912,070**	**9,573,876**	**8,949,093**	**10,257,646**	**11,715,462**	**12,858,573**	**12,772,328**
Austria	155,555	176,008	173,908	157,510	172,950	181,694	165,084	151,199
Belgium	105,057	106,721	96,288	81,505	81,651	91,528	100,790	92,115
Bulgaria	226	256	302	291	324	504	496	440
Croatia	N/A	N/A	N/A	N/A	N/A	N/A	2,058	1,975
Czech Republic	5,260	5,436	5,508	4,445	5,001	5,131	5,746	7,812
Denmark	65,182	83,024	89,800	84,891	103,506	118,702	120,844	116,696
Finland	48,750	66,131	71,210	62,193	73,985	88,462	86,397	88,351
France	1,591,082	1,805,641	1,617,176	1,382,068	1,473,085	1,531,500	1,940,490	1,832,073
Germany	1,130,972	1,342,275	1,389,306	1,356,446	1,587,390	1,824,429	1,847,268	1,799,754
Greece	12,189	12,434	8,627	5,213	6,011	6,742	5,256	4,292
Hungary	10,234	13,127	14,672	8,417	9,494	12,870	15,980	14,825
Ireland	720,486	860,515	1,242,321	1,324,482	1,581,361	1,811,933	2,020,134	2,067,251
Italy	288,354	297,839	248,838	191,479	189,937	223,403	217,363	207,867
Liechtenstein	20,489	30,329	38,981	36,412	36,585	40,940	45,792	44,938
Luxembourg	2,042,317	2,538,921	2,799,021	2,587,137	3,007,396	3,453,394	3,518,566	3,565,757
Malta	N/A	N/A	N/A	2,132	3,033	3,160	4,423	3,808
Netherlands	77,379	95,512	85,924	69,156	76,145	85,304	74,922	N/A
Norway	41,157	71,170	84,505	79,999	98,723	109,325	112,223	102,526

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TABLE 65 CONTINUED

Worldwide Total Net Assets of Regulated Open-End Funds

Millions of U.S. dollars, year-end

	2008	2009	2010	2011	2012	2013	2014	2015
Poland	17,782	23,025	25,595	18,463	25,883	27,858	34,177	32,286
Portugal	13,572	15,808	11,004	7,321	7,509	9,625	15,786	21,628
Romania	326	1,134	1,713	2,388	2,613	4,000	4,932	5,038
Russia	2,026	3,182	3,917	3,072	N/A	N/A	N/A	N/A
Slovakia	3,873	4,257	4,381	3,222	2,997	3,347	6,514	6,202
Slovenia	2,067	2,610	2,663	2,279	2,370	2,506	2,550	2,448
Spain	270,983	269,611	216,915	195,220	191,284	248,234	274,072	274,715
Sweden	113,331	170,277	205,449	179,707	205,733	252,878	283,683	279,977
Switzerland	135,052	168,260	261,893	273,061	310,686	397,080	436,431	457,162
Turkey	15,404	19,426	19,545	14,048	16,478	14,078	15,288	12,833
United Kingdom	504,681	729,141	854,413	816,537	985,517	1,166,834	1,501,308	1,578,360
Asia and Pacific	**2,037,535**	**2,715,235**	**3,067,323**	**2,921,278**	**3,322,199**	**3,740,049**	**4,057,800**	**4,738,804**
Australia	841,133	1,198,838	1,455,850	1,440,128	1,667,128	1,624,081	1,601,078	1,521,313
China	276,303	381,207	364,985	339,038	437,449	460,332	708,884	1,263,130
India	62,805	130,284	111,421	87,519	114,489	107,895	136,834	168,186
Japan	575,327	660,666	785,504	745,383	738,488	1,157,972	1,171,974	1,328,634
Korea, Rep. of	221,991	264,574	266,495	226,717	267,583	285,172	330,168	343,293
New Zealand	10,612	17,657	19,562	23,709	31,145	34,185	41,559	41,908
Pakistan	1,985	2,224	2,290	2,984	3,159	3,464	4,156	4,164
Philippines	1,263	1,488	2,184	2,363	3,566	4,662	5,098	5,029
Taiwan	46,116	58,297	59,032	53,437	59,192	62,286	58,049	63,147
Africa	**69,417**	**106,261**	**141,615**	**124,976**	**145,150**	**142,868**	**146,474**	**122,068**
South Africa	69,417	106,261	141,615	124,976	145,150	142,868	146,474	122,068

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. New Zealand and Trinidad and Tobago include home-and-foreign domiciled funds. Croatia, France, Ireland, Netherlands, Norway, and Slovakia include funds of funds. Prior to 2014, Finland, Germany, Italy, Luxembourg, Romania, Spain, and Switzerland include funds of funds. After 2013, Japan includes funds of funds. Prior to 2014, ETFs and other non-UCITS are not included in European data. Prior to 2013, institutional funds are not included in data for Japan.

Source: International Investment Funds Association

TABLE 66

Worldwide Number of Regulated Open-End Funds

Year-end

	2008	2009	2010	2011	2012	2013	2014	2015
World	**76,519**	**75,293**	**77,836**	**81,429**	**82,410**	**88,747**	**98,832**	**100,494**
Americas	**17,205**	**17,732**	**18,916**	**20,884**	**22,291**	**23,322**	**24,378**	**25,230**
Argentina	253	252	254	281	291	297	302	346
Brazil	4,169	4,744	5,618	6,513	7,468	8,072	8,560	8,783
Canada	2,015	2,075	2,117	2,655	2,866	2,963	3,164	3,283
Chile	1,484	1,691	1,912	2,150	2,286	2,385	2,418	2,500
Costa Rica	85	64	68	63	66	66	66	65
Mexico	431	407	434	464	488	487	486	499
Trinidad and Tobago	N/A	36	35	36	42	43	43	44
United States	8,768	8,463	8,478	8,722	8,784	9,009	9,339	9,710
Europe	**43,521**	**41,862**	**42,712**	**43,400**	**42,449**	**43,092**	**49,335**	**47,427**
Austria	1,765	1,717	1,762	1,760	1,776	1,805	1,629	1,596
Belgium	1,828	1,845	1,797	1,723	1,529	1,432	1,231	1,164
Bulgaria	81	85	90	92	95	98	104	104
Croatia	N/A	N/A	N/A	N/A	N/A	N/A	82	85
Czech Republic	76	78	80	80	80	85	108	128
Denmark	489	483	490	500	495	510	526	556
Finland	389	377	366	368	375	369	383	371
France	8,301	7,982	7,791	7,744	7,392	7,154	11,273	11,122
Germany	5,633	5,967	5,923	5,813	5,868	5,905	5,509	5,604
Greece	239	210	213	196	177	166	143	139
Hungary	302	301	325	200	214	216	307	316
Ireland	3,097	2,721	2,899	3,085	3,167	3,345	5,833	3,864
Italy	977	880	823	822	733	777	687	713
Liechtenstein	335	348	536	596	717	875	946	1,184
Luxembourg	11,166	11,136	11,860	12,258	12,458	12,760	11,838	12,074
Malta	N/A	N/A	N/A	59	54	69	110	130
Netherlands	458[a]	N/A	N/A	495	497	501	561	N/A
Norway	530	487	507	507	406	573	619	700
Poland	210	208	214	226	259	264	398	391

Continued on the next page

TABLE 66 CONTINUED

Worldwide Number of Regulated Open-End Funds

Year-end

	2008	2009	2010	2011	2012	2013	2014	2015
Portugal	184	171	171	173	157	153	184	396
Romania	52	51	56	105	62	64	72	74
Russia	528	480	462	472	N/A	N/A	N/A	N/A
Slovakia	57	55	59	65	62	58	87	88
Slovenia	125	125	130	137	131	114	110	109
Spain	2,944	2,588	2,486	2,474	2,349	2,267	2,235	2,238
Sweden	508	506	504	508	456	484	522	471
Switzerland	572	509	653	664	667	765	843	860
Turkey	304	286	311	337	351	373	398	377
United Kingdom	2,371	2,266	2,204	1,941	1,922	1,910	2,597	2,573
Asia and Pacific	**14,909**	**14,795**	**15,265**	**16,198**	**16,703**	**21,271**	**23,948**	**26,510**
Australia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
China	429	547	660	831	1,065	1,415	1,763	2,558
India	551	590	658	680	692	699	768	804
Japan	3,333	3,656	3,905	4,196	4,384	7,818	8,761	9,804
Korea, Rep. of	9,384	8,703	8,687	9,064	9,121	9,876	11,235	11,918
New Zealand	643	702	700	709	700	694	632	609
Pakistan	83	96	125	137	139	152	159	160
Philippines	43	41	43	47	48	47	53	55
Taiwan	443	460	487	534	554	570	577	602
Africa	**884**	**904**	**943**	**947**	**967**	**1,062**	**1,171**	**1,327**
South Africa	884	904	943	947	967	1,062	1,171	1,327

[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. New Zealand and Trinidad and Tobago include home-and-foreign domiciled funds. Croatia, France, Ireland, Netherlands, Norway, and Slovakia include funds of funds. Prior to 2014, Finland, Germany, Italy, Luxembourg, Romania, Spain, and Switzerland include funds of funds. After 2013, Japan includes funds of funds. Prior to 2014, ETFs and other non-UCITS are not included in European data. Prior to 2013, institutional funds are not included in data for Japan.
Source: International Investment Funds Association

TABLE 67

Worldwide Net Sales of Regulated Open-End Funds

Millions of U.S. dollars, annual

	2008	2009	2010	2011	2012	2013	2014	2015
World	**$540,820**	**$483,428**	**$505,846**	**$345,087**	**$1,223,059**	**$1,292,283**	**$1,794,520**	**$1,950,142**
Americas	**797,670**	**199,478**	**94,270**	**288,701**	**690,170**	**658,620**	**676,043**	**453,487**
Argentina	N/A	N/A	N/A	N/A	N/A	N/A	4,511[b]	4,421
Brazil	-32,653	47,317	58,316	49,995	56,099	34,713	1,886	13,531
Canada	17,495	12,074	23,797	37,032	50,697	64,965	90,035	82,238
Chile	-1,167	9,921	415	-423	813	5,394	8,550	983
Costa Rica	N/A	N/A	N/A	432	-221	-305	341	427
Mexico	-3,418	8,572	18,382	4,005	6,869	7,705	10,442	-1,226
Trinidad and Tobago	N/A	-150	-45	107	292	-13	292	-23
United States	817,413	121,744	-6,766	197,553	575,621	546,161	559,986	353,136
Europe	**-369,399**	**258,538**	**399,705**	**282**	**382,316**	**486,502**	**800,826**	**712,170**
Austria	-19,238	1,348	2,967	-5,081	-138	-910	4,688	3,198
Belgium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bulgaria	-151	8	51	8	16	129	36	(*)
Croatia	N/A	N/A	N/A	N/A	N/A	N/A	-52	249
Czech Republic	-1,561	-263	55	-536	161	256	712	1,426
Denmark	-4,000	2,419	5,204	2,537	8,038	7,439	8,137	6,951
Finland	-11,387	5,475	936	-1,709	3,223	5,617	10,933	7,888
France	-68,351	6,164	-110,856	-125,565	-30,528	-99,007	-26,455	24,178
Germany	-1,601	58,262	99,321	55,803	94,210	110,189	120,364	149,783
Greece	-11,382	-1,124	-1,424	-1,489	-330	-741	-303	-444
Hungary	-688	1,256	1,882	-2,534	-491	3,548	1,297	226
Ireland	N/A	N/A	161,063	106,830	116,203	103,063	155,231	127,605
Italy	-108,494	-11,437	-30,507	-41,845	-14,247	16,796	38,415	11,339
Liechtenstein	3,206	5,698	400	762	2,981	-215	8,364	993
Luxembourg	-59,829	133,944	215,576	8,144	159,652	256,895	329,398	300,428
Malta	N/A	N/A	N/A	-53	599	-295	122	-267
Netherlands	-6,117[a]	N/A	225	-9,532	-1,017	875	-5,261	-440[c]
Norway	40	6,689	4,807	4,380	7,048	4,727	17,184	1,733
Poland	-1,423	859	1,278	-1,764	3,931	2,610	3,167	465

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DATA SECTION 8

TABLE 67 CONTINUED

Worldwide Net Sales of Regulated Open-End Funds

Millions of U.S. dollars, annual

	2008	2009	2010	2011	2012	2013	2014	2015
Portugal	-11,169	1,120	-3,684	-2,858	-538	1,354	-221	-94
Romania	125	760	561	351	432	1,075	1,288	378
Russia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Slovakia	-897	80	308	-1,040	-442	157	855	419
Slovenia	-433	27	21	-103	-140	-54	52	86
Spain	-84,149	-15,858	-30,938	-11,803	-13,580	30,744	47,704	26,866
Sweden	3,754	10,203	7,371	5,843	652	8,708	15,714	8,136
Switzerland	17,851	7,343	4,063	9,067	15,887	5,780	30,075	31,736
Turkey	N/A	2,324	2,608	-1,228	166	969	-641	-202
United Kingdom	-3,506	43,241	68,417	13,696	30,567	26,794	40,023	9,534
Asia and Pacific	**105,562**	**13,908**	**-3,091**	**49,475**	**136,777**	**127,092**	**307,629**	**776,596**
Australia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
China	35,721[b]	-35,612	-15,115	27,179	90,505	-3,842	167,834	470,457
India	2,754	43,029	-35,950	532	15,832	2,724	7,895	33,195
Japan	5,430	32,571	68,847	33,028	21,526	129,992	97,243	233,405
Korea, Rep. of	58,819	-27,836	-19,603	-15,605	6,822	-4,876	34,917	29,190
New Zealand	226	1,363	1,281	1,784	2,468	231	3,551	2,966
Pakistan	-612	-3	-208	769	10	-89	28	-68
Philippines	-453	11	318	536	629	1,480	-4	327
Taiwan	**3,677**	**385**	**-2,661**	**1,252**	**-1,015**	**1,472**	**-3,835**	**7,124**
Africa	**6,987**	**11,504**	**14,962**	**6,629**	**13,796**	**20,069**	**10,022**	**7,889**
South Africa	6,987	11,504	14,962	6,629	13,796	20,069	10,022	7,889

(*) = between -$0.5 million and $0.5 million

[a] Year-end data are not available. Data are for January through September.

[b] Data are only for October through December.

[c] Data are only for January through June.

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. New Zealand and Trinidad and Tobago include home-and-foreign domiciled funds. Croatia, France, Ireland, Netherlands, Norway, and Slovakia include funds of funds. Prior to 2014, Finland, Germany, Italy, Luxembourg, Romania, Spain, and Switzerland include funds of funds. After 2013, Japan includes funds of funds. Prior to 2014, ETFs and other non-UCITS are not included in European data. Prior to 2013, institutional funds are not included in data for Japan.

Source: International Investment Funds Association

APPENDIX A

How U.S.-Registered Investment Companies Operate and the Core Principles Underlying Their Regulation

This appendix provides an overview of how investment company operations and features serve investors, examines the tax treatment of funds, and describes the core principles underlying investment company regulation.

The Origins of Pooled Investing

The investment company concept dates to the late 1700s in Europe, according to K. Geert Rouwenhorst in *The Origins of Mutual Funds*, when "a Dutch merchant and broker…invited subscriptions from investors to form a trust…to provide an opportunity to diversify for small investors with limited means."

The emergence of "investment pooling" in England in the 1800s brought the concept closer to U.S. shores. In 1868, the Foreign and Colonial Government Trust formed in London. This trust resembled the U.S. fund model in basic structure, providing "the investor of moderate means the same advantages as the large capitalists…by spreading the investment over a number of different stocks."

Perhaps more importantly, the British fund model established a direct link with U.S. securities markets, helping to finance the development of the post–Civil War U.S. economy. The Scottish American Investment Trust, formed on February 1, 1873, by fund pioneer Robert Fleming, invested in the economic potential of the United States, chiefly through American railroad bonds. Many other trusts followed that not only targeted investment in America, but also led to the introduction of the fund investing concept on U.S. shores in the late 1800s and early 1900s.

The first mutual, or open-end, fund was introduced in Boston in March 1924. The Massachusetts Investors Trust introduced important innovations to the investment company concept by establishing a simplified capital structure, continuous offering of shares, the ability to redeem shares rather than hold them until dissolution of the fund, and a set of clear investment restrictions and policies.

The stock market crash of 1929 and the Great Depression that followed hampered the growth of pooled investments until a succession of landmark securities laws, beginning with the Securities Act of 1933 and concluding with the Investment Company Act of 1940, reinvigorated investor confidence. Renewed investor confidence and many innovations led to relatively steady growth in industry assets and number of accounts.

Four Principal Securities Laws Govern Investment Companies

The Investment Company Act of 1940	Regulates the structure and operations of investment companies through a combination of registration and disclosure requirements and restrictions on day-to-day operations. The Investment Company Act requires the registration of all investment companies with more than 100 investors. Among other things, the act addresses investment company capital structures, custody of assets, investment activities (particularly with respect to transactions with affiliates and other transactions involving potential conflicts of interest), and the duties of fund boards.
The Investment Advisers Act of 1940	Regulates investment advisers. Requires all advisers to registered investment companies and other large advisers to register with the SEC. The Advisers Act contains provisions requiring fund advisers to meet recordkeeping, custodial, reporting, and other regulatory responsibilities.
The Securities Exchange Act of 1934	Regulates the trading, purchase, and sale of securities, including investment company shares. The 1934 Act also regulates broker-dealers, including investment company principal underwriters and others that sell investment company shares, and requires them to register with the SEC. In 1938, the Securities Exchange Act of 1934 was revised to add Section 15A, which authorized the SEC to create self-regulatory organizations. Pursuant to this authority, in 1939 a self-regulatory organization for broker-dealers—which is now known as the Financial Industry Regulatory Authority (FINRA)—was created. Through its rules, inspections, and enforcement activities, FINRA, with oversight by the SEC, continues to regulate the conduct of broker-dealers, thereby adding another layer of protection for investors.
The Securities Act of 1933	Requires the registration of public offerings of securities, including investment company shares, and regulates such offerings. The 1933 Act also requires that all investors receive a current prospectus describing the fund.

The Types of U.S. Investment Companies

Fund sponsors in the United States offer four types of registered investment companies: open-end investment companies (commonly called mutual funds), closed-end investment companies, exchange-traded funds (ETFs), and unit investment trusts (UITs).

The majority of investment companies are **mutual funds**, both in terms of number of funds and assets under management. Mutual funds can have actively managed portfolios, in which a professional investment adviser creates a unique mix of investments to meet a particular investment objective, or passively managed portfolios, in which the adviser seeks to track the performance of a selected benchmark or index. One hallmark of mutual funds is that they issue redeemable securities, meaning that the fund stands ready to buy back its shares at their next computed net asset value (NAV). The NAV is calculated by dividing the total market value of the fund's assets, minus its liabilities, by the number of mutual fund shares outstanding.

Money market funds are one type of mutual fund that offer investors a variety of features, including liquidity, a market-based rate of return, and the goal of returning principal, all at a reasonable cost. These funds, which are typically publicly offered to all types of investors, are registered investment companies that are regulated by the Securities and Exchange Commission (SEC) under U.S. federal securities laws, including Rule 2a-7 under the Investment Company Act. That rule contains numerous risk-limiting conditions concerning portfolio maturity, quality, diversification, and liquidity intended to help a fund achieve its objectives. In 2014, the SEC adopted amendments to Rule 2a-7 that will require institutional prime (funds that primarily invest in corporate debt securities) and institutional municipal money market funds to maintain a floating NAV for transactions based on the current market value of the securities in their portfolios; funds must comply with this requirement by October 2016. Government money market funds and retail money market funds (funds designed to limit all beneficial owners of the funds to natural persons) will be allowed to continue using the amortized cost or penny rounding method of pricing or both to seek to maintain a stable share price. The 2014 amendments also give money market fund boards of directors the ability to impose liquidity fees or to suspend redemptions temporarily if a fund's level of weekly liquid assets falls below a certain threshold.

Unlike mutual funds, **closed-end funds** do not issue redeemable shares. Instead, they issue a fixed number of shares that trade intraday on stock exchanges at market-determined prices. Investors in a closed-end fund buy or sell shares through a broker, just as they would trade the shares of any publicly traded company. For more information on closed-end funds, see chapter 4 on page 76.

ETFs are described as a hybrid of other types of investment companies. They are structured and legally classified as mutual funds or UITs (discussed below), but trade intraday on stock exchanges like closed-end funds. ETFs only buy and sell fund shares directly to authorized participants in large blocks, often 50,000 shares or more. For more information on ETFs, see chapter 3 on page 56.

UITs are also a hybrid, with some characteristics of mutual funds and some of closed-end funds. Like closed-end funds, UITs typically issue only a specific, fixed number of shares, called units. Like mutual funds, the units are redeemable, but unlike mutual funds, generally the UIT sponsor will maintain a secondary market in the units so that redemptions do not deplete the UIT's assets. A UIT does not actively trade its investment portfolio—instead it buys and holds a set of particular investments until a set termination date, at which time the trust is dissolved and proceeds are paid to shareholders. For more information on UITs, see page 20.

The Organization of a Mutual Fund

A mutual fund typically is 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 Massachusetts business trusts, Maryland corporations, and Delaware statutory trusts (Figure A.1).[1]

Historically, Massachusetts business trusts were the most popular—in part because the very first mutual fund was formed as a Massachusetts business trust. This was a common form of organization at the time for pools that invested in real estate or public utilities and it provided a model for others to follow. Over the last few decades, the percentage of funds organized as Massachusetts business trusts has declined as more and more funds have formed as Maryland corporations, as well as Delaware statutory trusts, the most favored form of mutual fund organization.

[1] Fewer than 1,000 funds, or about 9 percent, have chosen other forms of organization, such as limited liability partnerships, or other domiciles, such as Ohio or Minnesota.

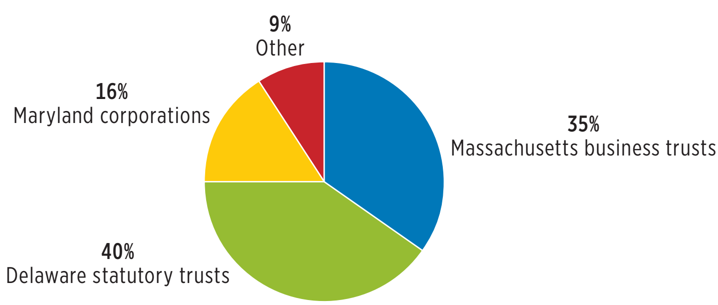
Developments in the late 1980s gave asset management companies these other attractive choices. For example, in 1987, Maryland revised its law to align it with interpretations of the Investment Company Act of 1940 concerning when funds are required to hold annual meetings. As a result, Maryland corporations became more competitive with the Massachusetts business trust as a form of organization for mutual funds. In 1988, Delaware—already a popular domicile for U.S. corporations—adopted new statutory provisions devoted specifically to business trusts (since renamed statutory trusts). Benefits, such as management of the trust and limited liability afforded to the trust's beneficial owners, have led to its current dominance over other forms of mutual fund organization.

Mutual funds have officers and directors (if the fund is a corporation) or trustees (if the fund is a business trust).[2] The fund's board plays an important role in overseeing fund operations, described in more detail on page 260.

FIGURE A.1

The Most Popular Forms of Mutual Fund Organization

Percentage of funds, year-end 2015



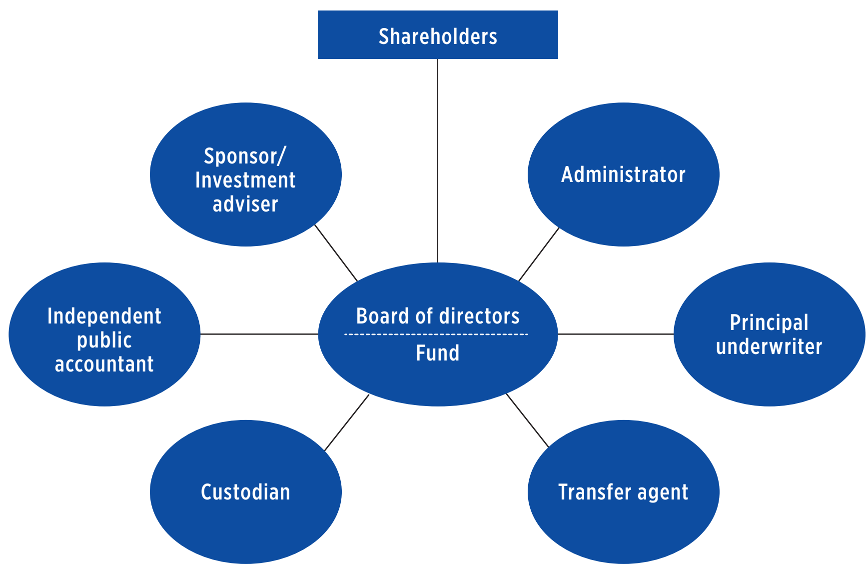
Note: Data include mutual funds that do not report statistical information to the Investment Company Institute and mutual funds that invest primarily in other mutual funds.

[2] For ease of reference, this appendix refers to all directors and trustees as *directors* and all boards as *boards of directors*.

Unlike other companies, a mutual fund is typically externally managed; it is not an operating company and it has no employees in the traditional sense. Instead, a fund relies upon third parties or service providers—either affiliated organizations or independent contractors—to invest fund assets and carry out other business activities. Figure A.2 shows the primary types of service providers usually relied upon by a fund.

Although it typically has no employees, a fund is required by law to have written compliance policies and procedures that govern the operations of the fund and the fund's administrator, investment adviser, transfer agent, and principal underwriter and that are reasonably designed to ensure the fund's compliance with the federal securities laws. All funds must also have a chief compliance officer (CCO), whose appointment must be approved by the fund's board and who must annually produce a report for the board regarding the adequacy of the fund's compliance policies and procedures, the effectiveness of their implementation, and any material compliance matters that have arisen.

FIGURE A.2
Organization of a Mutual Fund



Shareholders

Like shareholders of other companies, mutual fund shareholders have specific voting rights. These include the right to elect directors at meetings called for that purpose and the right to approve material changes in the terms of a fund's contract with its investment adviser, the entity that manages the fund's assets. For example, a fund's management fee cannot be increased and a fund's investment objectives or fundamental policies cannot be changed unless a majority of shareholders vote to approve the increase or change.

Sponsors

Setting up a mutual fund is a complicated process performed by the fund's sponsor, which is typically the fund's investment adviser. The fund sponsor has a variety of responsibilities. For example, it must assemble the group of third parties needed to launch the fund, including the persons or entities charged with managing and operating the fund. The sponsor provides officers and affiliated directors to oversee the fund and recruits unaffiliated persons to serve as independent directors.

Some of the major steps in the process of starting a mutual fund include organizing the fund under state law, registering the fund with the SEC as an investment company pursuant to the Investment Company Act of 1940, and registering the fund shares for sale to the public pursuant to the Securities Act of 1933.[3] Unless otherwise exempt from doing so, the fund also must make filings and pay fees to each state (except Florida) in which the fund's shares will be offered to the public. The Investment Company Act also requires that each new fund have at least $100,000 of seed capital before distributing its shares to the public; this capital is usually contributed by the sponsor or adviser in the form of an initial investment.

Advisers

Investment advisers have overall responsibility for directing the fund's investments and handling its business affairs. The investment advisers have their own employees, including investment professionals who work on behalf of the fund's shareholders and determine which securities to buy and sell in the fund's portfolio, consistent with the fund's investment objectives and policies. In addition to managing the fund's portfolio, the adviser often serves as administrator to the fund, providing various "back-office" services. As noted earlier, a fund's investment adviser is often the fund's initial sponsor and its initial shareholder through the seed money invested to create the fund.

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[3] For more information on the requirements for the initial registration of a mutual fund, see the SEC's Investment Company Registration and Regulation Package, available at www.sec.gov/divisions/investment/invcoreg121504.htm.

To protect investors, a fund's investment adviser and the adviser's employees are subject to numerous standards and legal restrictions, including restrictions on transactions that may pose conflicts of interest. Like a mutual fund, investment advisers are required to have their own written compliance programs that are overseen by CCOs and to establish detailed procedures and internal controls designed to ensure compliance with all relevant laws and regulations.

Administrators

A fund's administrator handles the many back-office functions for a fund. For example, administrators often provide office space, clerical and fund accounting services, data processing, and bookkeeping and internal auditing; they also may prepare and file SEC, tax, shareholder, and other reports. Fund administrators also help maintain compliance procedures and internal controls, subject to oversight by the fund's board and CCO.

Principal Underwriters

Investors buy and redeem fund shares either directly through a fund's transfer agent or indirectly through a broker-dealer that is authorized to sell fund shares. In order to offer a particular fund's shares, however, a broker-dealer must have a sales agreement with the fund. The role of a fund's principal underwriter is to act as the agent for the fund in executing sales agreements that authorize broker-dealers to offer for sale and sell fund shares. Though principal underwriters must register under the Securities Exchange Act of 1934 as broker-dealers, they (1) do not operate as full service broker-dealers, (2) typically are not involved in offering or selling fund shares to retail investors, and (3) do not establish or maintain accounts for retail investors.

Transfer Agents

Mutual funds and their shareholders rely on the services of transfer agents to maintain records of shareholder accounts, calculate and distribute dividends and capital gains, and prepare and mail shareholder account statements, federal income tax information, and other shareholder notices. Some transfer agents also prepare and mail statements confirming shareholder transactions and account balances. Additionally, they may maintain customer service departments, including call centers, to respond to shareholder inquiries.

Auditors

Auditors certify the fund's financial statements. The auditors' oversight role is described more fully on page 261.

Tax Features of Mutual Funds

Mutual funds are subject to special tax rules set forth in subchapter M of the Internal Revenue Code. Unlike most corporations, mutual funds are not subject to taxation on their income or capital gains at the entity level, provided that they meet certain gross income, asset, and distribution requirements.

To qualify as a regulated investment company (RIC) under subchapter M, at least 90 percent of a mutual fund's gross income must be derived from certain sources, including dividends, interest, payments with respect to securities loans, and gains from the sale or other disposition of stock, securities, or foreign currencies. In addition, at the close of each quarter of the fund's taxable year, at least 50 percent of the value of the fund's total net assets must consist of cash, cash items, government securities, securities of other funds, and investments in other securities which, with respect to any one issuer, represent neither more than 5 percent of the assets of the fund nor more than 10 percent of the voting securities of the issuer. Further, no more than 25 percent of the fund's assets may be invested in the securities of any one issuer (other than government securities or the securities of other funds), the securities (other than the securities of other funds) of two or more issuers that the fund controls and are engaged in similar trades or businesses, or the securities of one or more qualified publicly traded partnerships.

If a mutual fund satisfies the gross income and asset tests and thus qualifies as a RIC, the fund is eligible for the tax treatment provided by subchapter M, including the ability to deduct from its taxable income the dividends it pays to shareholders, provided that the RIC distributes at least 90 percent of its income (other than net capital gains) each year. A RIC may retain up to 10 percent of its income and all capital gains, but the retained income is taxed at regular corporate tax rates. Therefore, mutual funds generally distribute all, or nearly all, of their income and capital gains each year.

The Internal Revenue Code also imposes an excise tax on RICs, unless a RIC distributes by December 31 at least 98 percent of its ordinary income earned during the calendar year, 98.2 percent of its net capital gains earned during the 12-month period ending on October 31 of the calendar year, and 100 percent of any previously undistributed amounts. Mutual funds typically seek to avoid this charge—imposed at a 4 percent rate on the underdistributed amount—by making the required minimum distribution each year.

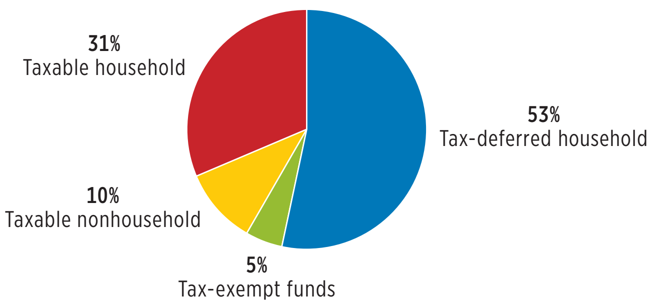
Mutual Fund Assets by Tax Status

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-deferred retirement accounts and variable annuities. As of year-end 2015, 5 percent of all mutual fund assets were held in tax-exempt funds, and 53 percent were invested in tax-deferred accounts held by households.

FIGURE A.3

58 Percent of Mutual Fund Assets Were Held in Tax-Deferred Accounts and Tax-Exempt Funds

Percentage of assets, year-end 2015



Total mutual fund assets: $15.7 trillion

Note: Components do not add to 100 percent because of rounding.

Types of Distributions

Mutual funds make two types of taxable distributions to shareholders: ordinary dividends and capital gains.

Ordinary dividend distributions come primarily from the interest and dividends earned by the securities in a fund's portfolio and net short-term gains, if any, after expenses are paid by the fund. These distributions must be reported as dividends on a U.S. investor's tax return and are taxed at the investor's ordinary income tax rate, unless they are qualified dividends. Qualified dividend income is taxed at a maximum rate of 20 percent. Some dividends paid by mutual funds may qualify for these lower top tax rates.

Long-term capital gains distributions represent a fund's net gains, if any, from the sale of securities held in its portfolio for more than one year. Long-term capital gains are taxed at a maximum rate of 20 percent.

Certain high-income individuals also are subject to a 3.8 percent tax on net investment income (NII). The tax on NII applies to interest, dividends, and net capital gains, including those received from a mutual fund.

Non-U.S. investors may be subject to U.S. withholding and estate taxes and certain U.S. tax reporting requirements on investments in U.S. funds. Amounts distributed to non-U.S. investors that are designated as interest-related dividends or dividends deriving from capital gains will generally be eligible for exemption from U.S. withholding tax. Other distributions that are treated as ordinary dividends will generally be subject to U.S. withholding tax (at a 30 percent rate or lower treaty rate).

To help mutual fund shareholders understand the impact of taxes on the returns generated by their investments, the SEC requires mutual funds to disclose standardized after-tax returns for one-, five-, and 10-year periods. After-tax returns, which accompany before-tax returns in fund prospectuses, are presented in two ways:

- After taxes on fund distributions only (preliquidation)
- After taxes on fund distributions and an assumed redemption of fund shares (postliquidation)

Types of Taxable Shareholder Transactions

An investor who sells mutual fund shares usually incurs a capital gain or loss in the year the shares are sold; an exchange of shares between funds in the same fund family also results in either a capital gain or loss.

Investors are liable for tax on any capital gain arising from the sale of fund shares, just as they would be if they sold a stock, bond, or other security. Capital losses from mutual fund share sales and exchanges, like capital losses from other investments, may be used to offset other capital gains in the current year and thereafter. In addition, up to $3,000 of capital losses in excess of capital gains ($1,500 for a married individual filing a separate return) may be used to offset ordinary income.

The amount of a shareholder's gain or loss on fund shares is determined by the difference between the cost basis of the shares (generally, the purchase price—including sales loads—of the shares, whether acquired with cash or reinvested dividends) and the sale price. Many funds voluntarily have been providing cost basis information to shareholders or computing gains and losses for shares sold. New tax rules enacted in 2012 require all brokers and funds to provide cost basis information to shareholders, as well as to indicate whether any gains or losses are long-term or short-term, for fund shares acquired beginning in 2012.

Tax-Exempt Funds

Tax-exempt bond funds distribute amounts attributable to municipal bond interest. These "exempt-interest dividends" are exempt from federal income tax and, in some cases, state and local taxes. Tax-exempt money market funds invest in short-term municipal securities or equivalent instruments and also pay exempt-interest dividends. Even though income from these funds generally is tax-exempt, investors must report it on their income tax returns. Tax-exempt funds provide investors with this information and typically explain how to handle exempt-interest dividends on a state-by-state basis. For some taxpayers, portions of income earned by tax-exempt funds also may be subject to the federal alternative minimum tax.

Mutual Fund 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 $250 billion in dividends to fund shareholders in 2015. Bond and money market funds accounted for 44 percent of all dividend distributions in 2015. Fifty-six percent of all dividend distributions were paid to tax-exempt fund shareholders and tax-deferred household accounts. Another 38 percent were paid to taxable household accounts.

FIGURE A.4

Dividend Distributions

Billions of dollars, 2000–2015

Year	Tax-deferred household and tax-exempt funds	Taxable household	Taxable nonhousehold	Total
2000	$74	$87	$25	$186
2001	68	72	23	162
2002	59	43	12	114
2003	57	37	9	103
2004	65	41	10	117
2005	84	61	21	166
2006	114	90	36	240
2007	143	118	47	309
2008	138	100	38	276
2009	109	63	15	187
2010	112	64	12	188
2011	121	74	12	208
2012	128	81	13	222
2013	123	81	14	218
2014	137	93	15	245
2015	140	94	16	250

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

Mutual Fund 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 $379 billion in capital gains to shareholders in 2015. Sixty-six percent of these distributions were paid to tax-deferred household accounts, and another 30 percent were paid to taxable household accounts. Equity, bond, and hybrid funds can distribute capital gains, but equity funds typically account for the bulk of these distributions. In 2015, 61 percent of stock fund share classes made a capital gains distribution, and 80 percent of these share classes distributed more than 2.0 percent of their assets as capital gains.

FIGURE A.5

Capital Gains Distributions*

Billions of dollars, 2000–2015

Year	Tax-deferred household	Taxable household	Taxable nonhousehold	Total
2000	$194	$119	$13	$326
2001	51	16	2	69
2002	10	5	1	16
2003	8	6	1	14
2004	30	21	4	55
2005	78	43	8	129
2006	164	79	14	257
2007	260	131	22	414
2008	97	29	7	132
2009	10	4	1	15
2010	22	18	3	43
2011	39	30	4	73
2012	58	37	5	100
2013	147	82	11	239
2014	252	130	17	400
2015	249	115	15	379

* Capital gains distributions include long-term and short-term capital gains.
Note: Components may not add to the total because of rounding.

Core Principles Underlying the Regulation of U.S. Investment Companies

Embedded in the structure and regulation of mutual funds and other registered investment companies are several core principles that provide important protections for shareholders.

Transparency

Funds are subject to more extensive disclosure requirements than any other comparable financial product, such as separately managed accounts, collective investment trusts, and private pools. The cornerstone of the disclosure regime for mutual funds and ETFs is the prospectus.[4] Mutual funds and ETFs are required to maintain a current prospectus, which provides investors with information about the fund, including its investment objectives, investment strategies, risks, fees and expenses, and performance, as well as how to purchase, redeem, and exchange fund shares. Importantly, the key parts of this disclosure with respect to performance information and fees and expenses are standardized to facilitate comparisons by investors. Mutual funds and ETFs may provide investors with a summary prospectus containing key information about the fund, while making more information available on the Internet and on paper upon request.

Mutual funds and ETFs also are required to make statements of additional information (SAIs) available to investors upon request and without charge. The SAI conveys information about the fund that, though useful to some investors, is not necessarily needed to make an informed investment decision. For example, the SAI generally includes information about the history of the fund, offers detailed disclosure on certain investment policies (such as borrowing and concentration policies), and lists officers, directors, and other persons who control the fund.

[4] Closed-end funds and UITs also provide investors with extensive disclosure, but under a slightly different regime that reflects the way shares of these funds trade. Both closed-end funds and UITs file an initial registration statement with the SEC containing a prospectus and other information related to the initial offering of their shares to the public.

The prospectus, SAI, and certain other required information are contained in the fund's registration statement, which is filed electronically with the SEC and is publicly available via the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system. Mutual fund and ETF registration statements are amended at least once each year to ensure that financial statements and other information do not become stale.[5] These funds also amend registration statements throughout the year as necessary to reflect material changes to their disclosure.

In addition to registration statement disclosure, funds provide shareholders with several other disclosure documents. Shareholders receive audited annual and unaudited semiannual reports within 60 days after the end and the midpoint of the fund's fiscal year. These reports contain updated financial statements, a list of the fund's portfolio securities,[6] management's discussion of financial performance, and other information current as of the date of the report.

Following their first and third quarters, funds file an additional form with the SEC, Form N-Q, disclosing the complete schedule of their portfolio holdings. Finally, funds annually disclose how they voted on specific proxy issues at portfolio companies on Form N-PX. Funds are the only shareholders required to publicly disclose each and every proxy vote they cast. Funds are not required to mail Form N-Q and Form N-PX to shareholders, but the forms are publicly available via the SEC's EDGAR database.

The combination of prospectuses, SAIs, annual and semiannual shareholder reports, Form N-Q, and Form N-PX provide the investing public, regulators, media, and other interested parties with far more information on funds than is available for other types of investments. This information is easily and readily available from most funds and the SEC. It is also available from private-sector vendors, such as Morningstar, that are in the business of compiling publicly available information on funds in ways that might benefit investors.

[5] Section 10(a)(3) of the Securities Act of 1933 prohibits investment companies that make a continuous offering of shares from using a registration statement with financial information that is more than 16 months old. This gives mutual funds and ETFs four months after the end of their fiscal year to amend their registration statements.

[6] A fund is permitted to include a summary portfolio schedule in its shareholder reports in lieu of the complete schedule, provided that the complete portfolio schedule is filed with the SEC and is provided to shareholders upon request, free of charge. The summary portfolio schedule includes each of the fund's 50 largest holdings in unaffiliated issuers and each investment that exceeds 1 percent of the fund's NAV.

Daily Valuation and Liquidity

Nearly all funds offer shareholders liquidity and objective, market-based valuation of their investments at least daily. ETF and closed-end fund shares are traded intraday on stock exchanges at market-determined prices, giving shareholders real-time liquidity and pricing. Mutual fund shares are redeemable on a daily basis at a price that reflects the current market value of the fund's portfolio securities. The value of each security in the fund's portfolio is determined either by a market quotation, if a market quotation is readily available, or at fair value as determined in good faith by the fund's board.

The daily pricing process is a critically important core compliance function that involves numerous staff and pricing vendors. The fair valuation process, a part of the overall pricing process, receives particular scrutiny from funds, their boards of directors, regulators, and independent auditors. Under SEC rules, all funds must adopt written policies and procedures that address the circumstances under which securities may be fair valued, and must establish criteria for determining how to assign fair values in particular instances.[7]

This daily valuation process results in a NAV for the fund. The NAV is the price used for all mutual fund share transactions occurring that day—new purchases, sales (redemptions), and exchanges from one fund to another within the same fund family.[8] It represents the current mark-to-market value of all the fund's assets, minus liabilities (e.g., fund expenses), divided by the total number of outstanding shares. Mutual funds release their daily NAVs to investors and others after they complete the pricing process, generally around 6:00 p.m. eastern time. Daily fund prices are available through fund toll-free telephone services, websites, and other means.

The Investment Company Act of 1940 requires mutual funds to process transactions based upon "forward pricing," meaning that shareholders receive the next computed NAV following

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7 ICI has published several papers on the mutual fund valuation process. For more information, see two white papers by ICI, the Independent Director's Council, and ICI Mutual Insurance Company titled *Valuation and Liquidity Issues for Mutual Funds* (February 1997 and March 2002) and two installments of ICI's *Fair Value Series*, "An Introduction to Fair Valuation" (2005) and "The Role of the Board" (2007). ICI also has a two-volume compendium of SEC releases, staff letters, and enforcement actions related to the mutual fund valuation process, which is available at www.ici.org/pdf/pub_11_valuation_volume1.pdf and www.ici.org/pdf/pub_11_valuation_volume2.pdf.

8 The pricing process is also critical for ETFs, although for slightly different reasons. ETFs operate like mutual funds with respect to transactions with authorized participants that trade with the ETF in large blocks, often of 50,000 shares or more. The NAV is the price used for these large transactions. Closed-end funds are not required to strike a daily NAV, but most do so in order to provide the market with the ability to calculate the difference between the fund's market price and its NAV. That difference is called the fund's *premium* or *discount*.

the fund's receipt of their transaction order. For example, for a fund that prices its shares at 4:00 p.m.,[9] orders received before 4:00 p.m. receive the NAV determined that same day at 4:00 p.m. Orders received after 4:00 p.m. receive the NAV determined at 4:00 p.m. on the next business day. Forward pricing is an important protection for mutual fund shareholders. It is designed to minimize the ability of shareholders to take advantage of fluctuations in the price of the securities in the fund's portfolio that occur after the fund calculates its NAV.

When a shareholder redeems shares in a mutual fund, he or she can expect to be paid promptly. Mutual funds may not suspend redemptions of their shares (subject to certain extremely limited exceptions)[10] or delay payments of redemption proceeds for more than seven days.

At least 85 percent of a mutual fund's portfolio must be invested in liquid securities.[11] In part to ensure that redemptions can be made, a security is generally deemed to be liquid if it can be sold or disposed of in the ordinary course of business within seven days at approximately the price at which the mutual fund has valued it. Many funds adopt a specific policy with respect to investments in illiquid securities; these policies are sometimes more restrictive than the SEC requirements.

Oversight and Accountability

All funds are subject to a strong system of oversight from both internal and external sources. Internal oversight mechanisms include boards of directors, which include independent directors, and written compliance programs overseen by CCOs, both at the fund and adviser levels (see Compliance Programs on page 260). External oversight is provided by the SEC, the Financial Industry Regulatory Authority (FINRA), and external service providers, such as certified public accounting firms.

[9] Funds must price their shares at least once every business day at a time determined by the fund's board. Many funds price at 4:00 p.m. eastern time or when the New York Stock Exchange closes.

[10] From time to time, natural disasters and other emergencies occur that disrupt fund pricing, but Section 22(e) of the Investment Company Act prohibits funds from suspending redemptions unless the SEC declares an emergency or the New York Stock Exchange closes or restricts trading. The SEC has not declared an emergency in more than 20 years. During that period, the NYSE has closed and funds have suspended redemptions on several occasions, such as during Hurricane Sandy in 2012. See also page 244.

[11] Money market funds are held to a stricter standard, and must limit illiquid investments to 5 percent of the portfolio.

Fund Boards

Mutual funds, closed-end funds, and most ETFs have boards. The role of a fund's board of directors is primarily one of oversight. The board of directors typically is not involved in the day-to-day management of the fund company. Instead, day-to-day management is handled by the fund's investment adviser or administrator pursuant to a contract with the fund.

Investment company directors review and approve major contracts with service providers (including, notably, the fund's investment adviser), approve policies and procedures to ensure the fund's compliance with federal securities laws, and undertake oversight and review of the performance of the fund's operations. Directors devote substantial time and consider large amounts of information in fulfilling these duties, in part because they must perform all their duties in "an informed and deliberate manner."

Fund boards must maintain a particular level of independence. The Investment Company Act of 1940 requires at least 40 percent of the members of a fund board to be independent from fund management. An independent director is a fund director who does not have any significant business relationship with a mutual fund's adviser or underwriter. In practice, most fund boards have far higher percentages of independent directors. As of year-end 2014, independent directors made up at least three-quarters of boards in 83 percent of fund complexes.[12]

Independent fund directors play a critical role in overseeing fund operations and are entrusted with the primary responsibility for looking after the interests of the fund's shareholders. They serve as watchdogs, furnishing an independent check on the management of funds. Like directors of operating companies, they owe shareholders the duties of loyalty and care under state law. But independent fund directors also have specific statutory and regulatory responsibilities under the Investment Company Act beyond the duties required of other types of directors. Among other things, they oversee the performance of the fund, approve the fees paid to the investment adviser for its services, and oversee the fund's compliance program.

Compliance Programs

The internal oversight function played by the board has been greatly enhanced in recent years by the development of written compliance programs and a formal requirement that all funds have CCOs. Rules adopted in 2003 require every fund and adviser to have a CCO

[12] See *Overview of Fund Governance Practices, 1994–2014* for a description of the study that collects data on this and other governance practices. Available at www.idc.org/pdf/pub_15_fund_governance.pdf.

who administers a written compliance program reasonably designed to prevent, detect, and correct violations of the federal securities laws. Compliance programs must be reviewed at least annually for their adequacy and effectiveness, and fund CCOs are required to report directly to the independent directors.

Regulatory Oversight

Internal oversight is accompanied by a number of forms of external oversight and accountability. Funds are subject to inspections, examinations, and enforcement by their primary regulator, the SEC. Fund underwriters and distributors also are overseen by FINRA, a self-regulatory organization. Funds affiliated with a bank may additionally be overseen by banking regulators. All funds are subject to the antifraud jurisdiction of each state in which the fund's shares are offered for sale or sold.

Auditors

A fund's financial statement disclosure is also subject to several internal and external checks. For example, annual reports include audited financial statements certified by a certified public accounting firm subject to oversight by the Public Company Accounting Oversight Board (PCAOB). This ensures that the financial statements are prepared in conformity with generally accepted accounting principles (GAAP) and fairly present the fund's financial position and results of operations.

Sarbanes-Oxley Act

Like officers of public companies, fund officers are required to make certifications and disclosures required by the Sarbanes-Oxley Act. For example, they must certify the accuracy of the financial statements.

Additional Regulation of Advisers

In addition to the system of oversight applicable directly to funds, investors enjoy protections through SEC regulation of the investment advisers that manage fund portfolios. All advisers to registered funds are required to register with the SEC, and are subject to SEC oversight and disclosure requirements. Advisers also owe a fiduciary duty to each fund they advise, meaning that they have a fundamental legal obligation to act in the best interests of the fund pursuant to a duty of undivided loyalty and utmost good faith.

Limits on Leverage

The inherent nature of a fund—a professionally managed pool of assets owned pro rata by its investors—is straightforward and easily understood by investors. The Investment Company Act of 1940 fosters simplicity by prohibiting complex capital structures and limiting funds' use of leverage.

The Investment Company Act imposes various requirements on the capital structure of mutual funds, closed-end funds, and ETFs, including limitations on the issuance of "senior securities" and borrowing. These limitations greatly minimize the possibility that a fund's liabilities will exceed the value of its assets.

Generally speaking, a senior security is any debt that takes priority over the fund's shares, such as a loan or preferred stock. The SEC historically has interpreted the definition of senior security broadly, taking the view that selling securities short, purchasing securities on margin, and investing in many types of derivative instruments, among other practices, may create senior securities.

The SEC also takes the view that the Investment Company Act prohibits a fund from creating a future obligation to pay unless it "covers" the obligation. A fund generally can cover an obligation by owning the instrument underlying that obligation. For example, a fund that wants to take a short position in a certain stock can comply with the Investment Company Act by owning an equivalent long position in that stock. The fund also can cover by earmarking or segregating liquid securities equal in value to the fund's potential exposure from the leveraged transaction. The assets set aside to cover the potential future obligation must be liquid, unencumbered, and marked-to-market daily. They may not be used to cover other obligations and, if disposed of, must be replaced.

The Investment Company Act also limits borrowing. With the exception of certain privately arranged loans and temporary loans, any promissory note or other indebtedness would generally be considered a prohibited senior security.[13] Mutual funds and ETFs are permitted to borrow from a bank if, immediately after borrowing, the fund's total net assets are at least three times total aggregate borrowings. In other words, the fund must have at least 300 percent asset coverage.

[13] Temporary loans cannot exceed 5 percent of the fund's total net assets and must be repaid within 60 days.

Closed-end funds have a slightly different set of limitations. They are permitted to issue debt and preferred stock, subject to certain conditions, including asset coverage requirements of 300 percent for debt and 200 percent for preferred stock.

Many funds voluntarily go beyond the prohibitions in the Investment Company Act, adopting policies that further restrict their ability to issue senior securities or borrow. Funds often, for example, adopt a policy stating that they will borrow only as a temporary measure for extraordinary or emergency purposes and not to finance investment in securities. In addition, they may disclose that, in any event, borrowings will be limited to a small percentage of fund assets (such as 5 percent). These are meaningful voluntary measures, because under the Investment Company Act, a fund's policies on borrowing money and issuing senior securities cannot be changed without the approval of fund shareholders.

Custody

To protect fund assets, the Investment Company Act requires all funds to maintain strict custody of fund assets, separate from the assets of the adviser. Although the Act permits other arrangements,[14] nearly all funds use a bank custodian for domestic securities. Foreign securities are required to be held in the custody of international foreign bank or securities depository.

A fund's custody agreement with a bank is typically far more elaborate than the arrangements used for other bank clients. The custodian's services generally include safekeeping and accounting for the fund's assets, settling securities transactions, receiving dividends and interest, providing foreign exchange services, paying fund expenses, reporting failed trades, reporting cash transactions, monitoring corporate actions at portfolio companies, and tracing loaned securities.

The strict rules on the custody and reconciliation of fund assets are designed to prevent theft and other fraud-based losses. Shareholders are further insulated from these types of losses by a provision in the Investment Company Act that requires all mutual funds to have fidelity bonds designed to protect them against possible instances of employee larceny or embezzlement.

[14] The Investment Company Act contains six separate custody rules for the possible types of custody arrangements for mutual funds, closed-end funds, and ETFs. UITs are subject to a separate rule that requires the use of a bank to maintain custody. See Section 17(f) of the Investment Company Act of 1940 and SEC Rules 17f-1 through 17f-7 thereunder.

Prohibitions on Transactions with Affiliates

The Investment Company Act of 1940 contains a number of strong and detailed prohibitions on transactions between the fund and fund insiders or affiliated organizations (such as the corporate parent of the fund's adviser). Many of these prohibitions were part of the original statutory text of the Act, enacted in response to instances of overreaching and self-dealing by fund insiders during the 1920s in the purchase and sale of portfolio securities, loans by funds, and investments in related funds. The SEC's Division of Investment Management has said that "for more than 50 years, [the affiliated transaction prohibitions] have played a vital role in protecting the interests of shareholders and in preserving the industry's reputation for integrity; they continue to be among the most important of the Act's many protections."[15]

Although there are a number of prohibitions in the Investment Company Act relating to affiliated transactions, three are particularly noteworthy:

» General prohibition on direct transactions between a fund and an affiliate

» General prohibition on "joint transactions," where the fund and affiliate are acting together vis-à-vis a third party

» Restrictions preventing investment banks from placing or "dumping" unmarketable securities with an affiliated fund by generally prohibiting the fund from buying securities in an offering syndicated by an affiliated investment bank

[15] See *Protecting Investors: A Half Century of Investment Company Regulation*, Report of the Division of Investment Management, Securities and Exchange Commission (May 1992), available at www.sec.gov/divisions/investment/guidance/icreg50-92.pdf. The Division of Investment Management is the division within the SEC responsible for the regulation of funds.

Diversification

Both tax and securities law provide diversification standards for funds registered under the Investment Company Act. As discussed in detail above, to qualify as RICs under the tax laws, all mutual funds, closed-end funds, and ETFs, as well as most UITs, must meet a tax diversification test every quarter. The effect of this test is that a fund with a modest cash position and no government securities would hold securities from at least 12 different issuers. Another tax diversification restriction limits the amount of an issuer's outstanding voting securities that a fund may own.

The securities laws set higher standards for funds that elect to be diversified. If a fund elects to be diversified, the Investment Company Act requires that, with respect to at least 75 percent of the portfolio, no more than 5 percent may be invested in the securities of any one issuer and no investment may represent more than 10 percent of the outstanding voting securities of any issuer. Diversification is not mandatory, but all mutual funds, closed-end funds, and ETFs must disclose whether or not they are diversified under the Act's standards.

In practice, most funds that elect to be diversified are much more highly diversified than they need to be to meet these two tests. As of December 2015, for example, the median number of stocks held by U.S. equity funds was 95.[16]

[16] This number is the median among U.S. actively managed and index equity funds, excluding sector funds.

APPENDIX B

Significant Events in Fund History

1774	Dutch merchant and broker Adriaan van Ketwich invites subscriptions from investors to form a trust, the Eendragt Maakt Magt, with the aim of providing investment diversification opportunities to investors of limited means.
1868	The Foreign and Colonial Government Trust, the precursor to the U.S. investment fund model, is formed in London. This trust provides "the investor of moderate means the same advantages as large capitalists."
1924	The first mutual funds are established in Boston.
1933	The Securities Act of 1933 regulates the registration and offering of new securities, including mutual fund and closed-end fund shares, to the public.
1934	The Securities Exchange Act of 1934 authorizes the Securities and Exchange Commission (SEC) to provide for fair and equitable securities markets.
1936	The Revenue Act of 1936 establishes the tax treatment of mutual funds and their shareholders. Closed-end funds were covered by the Act in 1942.
1940	The Investment Company Act of 1940 is signed into law, setting the structure and regulatory framework for registered investment companies. The forerunner to the National Association of Investment Companies (NAIC) is formed. The NAIC will become the Investment Company Institute.
1944	The NAIC begins collecting investment company industry statistics.
1951	The total number of mutual funds surpasses 100, and the number of shareholder accounts exceeds one million for the first time. The first mutual fund focusing on non-U.S. investments is made available to U.S. investors.
1954	Households' net purchases of fund shares exceed those of corporate stock. NAIC initiates a nationwide public information program emphasizing the role of investors in the U.S. economy and explaining the concept of investment companies.
1961	The first tax-free unit investment trust is offered. The NAIC changes its name to the Investment Company Institute (ICI) and welcomes fund advisers and underwriters as members.

1962	The Self-Employed Individuals Tax Retirement Act creates savings opportunities (Keogh plans) for self-employed individuals.
1971	Money market funds are introduced.
1974	The Employee Retirement Income Security Act (ERISA) creates the individual retirement account (IRA) for workers not covered by employer-sponsored retirement plans.
1976	The Tax Reform Act of 1976 permits the creation of municipal bond funds. The first retail index fund is offered.
1978	The Revenue Act of 1978 creates new Section 401(k) retirement plans and simplified employee pensions (SEPs).
1981	The Economic Recovery Tax Act establishes "universal" IRAs for all workers. IRS proposes regulations for Section 401(k).
1986	The Tax Reform Act of 1986 reduces IRA deductibility.
1987	ICI welcomes closed-end funds as members.
1990	Mutual fund assets top $1 trillion.
1993	The first exchange-traded fund (ETF) shares are issued.
1996	Enactment of the National Securities Markets Improvement Act of 1996 (NSMIA) provides a more rational system of state and federal regulation, giving the SEC exclusive jurisdiction for registering and regulating mutual funds, exchange-listed securities, and larger advisers. States retain their antifraud authority and responsibility for regulating non-exchange-listed offerings and smaller advisers. The Small Business Job Protection Act creates SIMPLE plans for employees of small businesses.
1997	The Taxpayer Relief Act of 1997 creates the Roth IRA and eliminates restrictions on portfolio management that disadvantage fund shareholders.
1998	The SEC approves the most significant disclosure reforms in the history of U.S. mutual funds, encompassing "plain English," fund profiles, and improved risk disclosure.
1999	The Gramm-Leach-Bliley Act modernizes financial services regulation and enhances financial privacy.
2001	Enactment of the Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001 significantly expands retirement savings opportunities for millions of working Americans.

2003	The Jobs and Growth Tax Relief Reconciliation Act (JGTRRA) provides mutual fund shareholders with the full benefits of lower tax rates on dividends and capital gains.
2006	Enactment of the Pension Protection Act (PPA) and the Tax Increase Prevention and Reconciliation Act provides incentives for investors of all ages to save more in tax-deferred and taxable investment accounts.
2008	The SEC votes to adopt the Summary Prospectus rule. Reserve Primary Fund fails to maintain $1.00 NAV, becoming the second money market fund in 25 years to "break a dollar."
2009	Money market fund assets hit $3.9 trillion, their highest level to date. The Money Market Working Group, a task force of senior industry executives, submits its report to the ICI Board. The board endorses the working group's call for immediate implementation of new regulatory and oversight standards for money market funds.
2010	The SEC adopts new rules and amendments to regulations governing money market funds. In *Jones v. Harris*, the U.S. Supreme Court unanimously upholds the *Gartenberg* standard under which courts have long considered claims of excessive fund advisory fees. Enactment of the RIC Modernization Act streamlines and updates technical tax rules, benefiting shareholders by making funds more efficient.
2011	In *Business Roundtable et al. v. SEC*, the United States Court of Appeals for the District of Columbia Circuit vacated the SEC's proxy access rule for failing to adequately evaluate the rule's costs and benefits. ICI Global—the first industry body exclusively advancing the perspective of global investment funds—is formed.
2014	The SEC adopted sweeping changes to the rules that govern money market funds, building upon the changes to money market fund regulation adopted by the SEC in 2010.
2015	The Federal Reserve raises its short-term policy interest rate target for the first time in more than nine years.

GLOSSARY

*You can find more information about many of these entries in the chapters and appendix of this book and on **www.ici.org**.*

actively managed fund. A fund that employs a portfolio manager or management team to manage the fund's investments to try to outperform their benchmarks and peer group average.

adviser. See **investment adviser.**

after-tax return. The total return of a fund after the effects of taxes on distributions and/or redemptions have been assessed. Funds are required by federal securities law to calculate after-tax returns using standardized formulas based upon the highest tax rates. (Consequently, they are not representative of the after-tax returns of most mutual fund shareholders.) These standardized after-tax returns are not relevant for shareholders in tax-deferred retirement accounts.

annual report. A report that a fund sends to its shareholders that discusses the fund's performance over the past fiscal year and identifies the securities in the fund's portfolio on the last business day of the fund's fiscal year. The annual report includes audited financial statements. See also **semiannual report**.

appreciation. An increase in an investment's value. Contrast **depreciation**.

asset allocation. The proportion of different investment categories—such as stocks, bonds, and cash equivalents—that investors hold in their portfolios.

asset class. A group of securities or investments that have similar characteristics and behave similarly in the marketplace. Three common asset classes are equities (e.g., stocks), fixed income (e.g., bonds), and cash equivalents (e.g., money market funds).

assets. The securities, cash, and receivables owned by a fund. Examples of this are stocks, bonds, and other investments.

auditor. An auditor certifies a fund's financial statements, providing assurance that they are prepared in conformity with generally accepted accounting principles (GAAP) and fairly present the fund's financial position and results of operations.

authorized participant. An entity, usually an institutional investor, that submits orders to an exchange-traded fund (ETF) for the creation and redemption of ETF **creation units**.

average portfolio maturity. The average maturity of all the securities in a bond or money market fund's portfolio.

back-end load. See **contingent deferred sales load (CDSL)**.

basis point. One one-hundredth of 1 percent (0.01 percent); thus, 100 basis points equals 1 percentage point. When applied to $1.00, 1 basis point is $0.0001; 100 basis points equals one cent ($0.01). Basis points are often used to simplify percentages written in decimal form.

bear market. A period during which the majority of securities prices in a particular market (such as the stock market) drop substantially. One generally accepted measure is a price decline of 20 percent or more over at least a two-month period. Contrast **bull market**.

benchmark. A standard against which the performance of a security or a mutual fund can be measured. For example, Barclays Capital Aggregate Bond Index is a benchmark index for many bond mutual funds. Many equity mutual funds are benchmarked to the **S&P 500 index**. See also **index**.

bond. A debt security issued by a company, municipality, government, or government agency. A bond investor lends money to the issuer and, in exchange, the issuer promises to repay the loan amount on a specified maturity date; the issuer usually pays the bondholder periodic interest payments over the life of the loan. The term *fixed-income* is often used interchangeably with *bond*.

bond fund. A fund that invests primarily in bonds and other debt instruments.

breakpoints. Designated levels above which certain discounts or fee rate reductions apply. In the mutual fund context, breakpoints relate to the sales charges investors pay if they buy fund shares through a broker or other intermediary, or to the management fee the fund pays to its investment adviser. Many funds offer sales charge (load) discounts to investors when they initially purchase fund shares if the amount invested surpasses a specified breakpoint. The amount of the discount typically increases as the amount of the investment reaches higher breakpoints. Similarly, funds may establish breakpoints requiring a reduction in the rate of the management fee the fund's investment adviser may charge as fund assets surpass specified levels.

break the dollar. A phrase used to describe when the net asset value (NAV) of a money market fund falls below its stable $1.00 NAV. This could be triggered by a deviation greater than one-half of 1 percent (one-half cent, or $0.0050) between the fund's mark-to-market value (shadow price) and its stable $1.00 NAV. Also known as *break the buck*.

broker. See **broker-dealer**.

broker-dealer. A *broker* is a firm engaged in the business of effecting transactions in securities for the accounts of others, and is often paid by commission. A *dealer* is a firm engaged in the business of buying and selling securities for its own account. A *broker-dealer* is a firm that acts as both a broker and a dealer. Broker-dealers selling mutual fund shares are required to be registered with the SEC and regulated by FINRA. They typically are compensated for their services through sales charges paid by investors and other fees paid by the fund (e.g., **12b-1 fees**).

bull market. A period during which the majority of securities prices in a particular market (such as the stock market) rise substantially. Contrast **bear market**.

capital gain. An increase in the value of an investment, calculated by the difference between the net purchase price and the net sale price. Contrast **capital loss**.

capital gains distributions. A distribution to mutual fund shareholders resulting from the fund's sale of securities held in its portfolio at a profit.

capital loss. A decline in the value of an investment, calculated by the difference between the net purchase price and the net sale price. Contrast **capital gain**.

catch-up contribution. An additional contribution that individuals aged 50 or older are permitted to make to an individual retirement account (IRA) or employer-sponsored retirement savings plan in excess of the annual contribution limit. In 2015, the catch-up contribution amount was limited to $1,000 for traditional and Roth IRAs, $6,000 for 401(k) plans, and $3,000 for SIMPLE IRA plans.

certificate of deposit (CD). A savings certificate entitling the bearer to receive interest. A CD bears a fixed maturity date, has a specified fixed interest rate, and can be issued in any denomination. CDs generally are issued by commercial banks and currently are insured by the Federal Deposit Insurance Corporation (FDIC) up to a maximum of $250,000. CDs generally are offered at terms ranging from one month to five years.

closed-end fund. A type of investment company that issues a fixed number of shares that trade intraday on stock exchanges at market-determined prices. Investors in a closed-end fund buy or sell shares through a broker, just as they would trade the shares of any publicly traded company.

commercial paper. Short-term, unsecured notes issued by a corporation to meet immediate short-term needs for cash, such as the financing of accounts payable, inventories, and short-term liabilities. Maturities typically range from overnight to 270 days. Commercial paper usually is issued by corporations with high credit ratings and sold at a discount from face value.

commission. A fee paid to a broker or other sales agent for services related to securities transactions.

common stock. An investment that represents a share of ownership in a corporation. Also known as *common shares*. See also **preferred stock**.

compounding. The cumulative effect that reinvesting an investment's earnings can have by generating additional earnings of its own. Over time, compounding can produce significant growth in the value of an investment.

contingent deferred sales load (CDSL). A fee that may be imposed by a fund on shareholders who redeem (sell back to the fund) shares during the first few years of ownership. A CDSL is disclosed to shareholders in the fund's prospectus. Also known as a *back-end load*.

corporate bond. A bond issued by a corporation, rather than by a government entity. The credit risk for a corporate bond is based on the ability of the issuing company to repay the bond.

Coverdell Education Savings Account (ESA). A tax-advantaged trust or custodial account set up to pay the qualified education expenses of a designated beneficiary. These accounts were previously referred to as *education IRAs*.

creation unit. Financial institutions (called authorized participants) interact directly with an ETF by purchasing and redeeming ETF shares in large blocks called creation units. A creation unit generally contains between 25,000 and 200,000 ETFs shares. See also **authorized participant**.

credit quality. A term used in portfolio management to describe the creditworthiness of an issuer of fixed-income securities and to indicate the likelihood that the issuer will be willing and able to repay its debt.

credit risk. The possibility that a bond issuer may not be willing and able to pay interest or repay its debt. Also known as *default risk*. See also **default**.

custodian. An organization, usually a bank, that safeguards the securities and other assets of a mutual fund.

dealer. See **broker-dealer**.

default. A failure by an issuer to: (1) pay principal or interest when due, (2) meet nonpayment obligations, such as reporting requirements, or (3) comply with certain covenants in the document authorizing the issuance of a bond (an indenture).

defined benefit (DB) plan. An employer-sponsored pension plan in which the amount of future benefits an employee will receive from the plan is defined, typically by a formula based on salary history and years of service. The amount of contributions the employer is required to make will depend on the investment returns experienced by the plan and the benefits promised. Contrast **defined contribution plan**.

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

depreciation. A decline in an investment's value. Contrast **appreciation**.

director. A person serving on the board of directors of a mutual fund. Mutual fund directors oversee the management and operations of a fund organized as a corporation. Directors also have significant and specific responsibilities under the federal securities laws. Among other things, they oversee the performance of the fund, approve the fees paid to the investment adviser for its services, and oversee the fund's compliance program. All directors have a fiduciary duty to represent the interests of shareholders. See also **independent director** and **trustee**.

distribution. (1) A fund's payment of dividends and capital gains to shareholders, (2) a method of selling fund shares to the public, which could involve either direct sales from the fund to retail or institutional investors, or sales through intermediaries, such as broker-dealers, who interact directly with the purchaser of fund shares, or both, or (3) a term used to describe a withdrawal of funds from a retirement plan.

diversification. The practice of investing broadly across a number of different securities, industries, or asset classes to reduce risk. Diversification is a key benefit of investing in mutual funds and other investment companies that have diversified portfolios.

dividend. Money that a fund or company pays to its shareholders, typically from its investment income, after expenses. The amount is usually expressed on a per-share basis. A dividend is a type of **distribution**.

dollar-cost averaging. The practice of investing a fixed amount of money at regular intervals, regardless of whether the securities markets are declining or rising, in the hopes of reducing average share cost by acquiring more shares when prices are low and fewer shares when prices are high.

education IRA. See **Coverdell Education Savings Account (ESA)**.

emerging market. Generally, economies that are in the process of growth and industrialization, for example, countries in Africa and Latin America. Though relatively undeveloped, these economies may hold significant growth potential in the future. May also be called *developing markets*.

equity. A security or investment representing ownership in a company. By contrast, a bond represents a loan from the investor (owner of the bond) to a borrower (the issuer of the bond). The term *equity* is often used interchangeably with **stock**.

equity fund. A fund that concentrates its investments in equities. Also known as a *stock fund*.

exchange privilege. A feature of some funds that enables shareholders to transfer their investments from one fund to another within the same fund family as the investor's needs or investment objectives change. Typically, fund companies allow exchanges several times a year for a low fee or no fee. Information relating to a specific fund's exchange privileges can be found in the fund's prospectus.

exchange-traded fund (ETF). An investment company, typically a mutual fund or unit investment trust, whose shares are traded intraday on stock exchanges at market-determined prices. Investors may buy or sell ETF shares on the secondary market through a broker, just as they would the shares of any publicly traded company. Authorized participants are the only entities allowed to purchase and redeem ETF shares directly from the ETF. See also **authorized participant**.

ex-dividend date. With regard to mutual funds, this is the day on which declared distributions (dividends or capital gains) are deducted from the fund's assets before it calculates its net asset value (NAV). The NAV per share will drop by the amount of the distribution per share.

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

face value. The stated principal or redemption value of a bond; the amount that a bond's issuer must repay at the bond's maturity date.

fair value. The amount a fund might reasonably expect to receive upon a current sale of a security. Where the value of the security cannot be readily determined from transactions occurring on an exchange or otherwise, a fund must have a process in place to determine how to value the amount it would expect to receive upon a current sale.

federal funds interest rate. The interest rate at which banks lend to each other in overnight borrowings to maintain their bank reserves at the Federal Reserve.

Financial Industry Regulatory Authority (FINRA). A self-regulatory organization that was created under the Securities Exchange Act of 1934 and that is charged with regulating broker-dealers. To fulfill its responsibilities, FINRA adopts regulatory rules that broker-dealers must comply with, conducts inspections of such broker-dealers, and imposes sanctions on those broker-dealers that violate its rules. FINRA's activities are overseen by the SEC.

financial statements. The written record of the financial status of a fund or company, usually published in the annual report. The record generally includes a balance sheet, income statement, and other financial statements and disclosures.

529 plan. An investment program designed to help pay future qualified higher education expenses through a tax-advantaged account. These plans are offered by state governments and may also be offered by private consortiums. States offer two types of 529 plans: prepaid tuition programs allow contributors to establish an account in the name of a student to cover the cost of a specified number of academic periods or course units in the future; and college savings plans allow individuals to contribute to an investment account to pay for a student's qualified higher education expenses.

fixed-income security. See **bond**.

forward pricing. The concept describing the price at which mutual fund shareholders buy or redeem fund shares. Shareholders must receive the next computed share price following the fund's receipt of a shareholder transaction order.

457 plan. An employer-sponsored retirement plan that enables employees of state and local governments and other tax-exempt employers to make tax-deferred contributions from their salaries to the plan.

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

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

front-end load. A fee imposed by some funds at the point of purchase to cover selling costs. Any front-end load imposed by a fund will be described in detail in the fund's prospectus.

fund family. A group or complex of funds, each typically with its own investment objective, that is managed and distributed by the same company.

funds of funds. Mutual funds that primarily invest in shares of other mutual funds rather than investing directly in individual securities. Also, ETFs that primarily invest in shares of other ETFs rather than investing directly in individual securities.

fund supermarket. A brokerage platform that provides access to funds from a wide range of fund families.

government bond. A debt security issued by a government or its agencies (e.g., in the United States: savings bonds, Treasury bonds, Treasury inflation-protected securities [TIPS]).

government money market fund. A money market fund that seeks to maintain a stable share price and invests at least 99.5 percent of its total assets in cash, government securities, and/or repurchase agreements collateralized by government securities or cash.

government securities. Any debt obligation issued by a government or its agencies (e.g., Treasury bills issued by the United States). See also **U.S. Treasury securities**.

hedge fund. A private investment pool for qualified (typically wealthy) investors that, unlike a mutual fund, is exempt from SEC registration.

hybrid fund. A mutual fund that invests in a mix of equity and fixed-income securities, which can change proportionally over time or remain fixed.

income distributions. Dividends, interest, and/or short-term capital gains paid to a mutual fund's shareholders. Operating expenses are deducted from income before it is distributed to shareholders.

independent director. A fund director must satisfy a number of specific and stringent requirements to be "independent." In general, under the 1940 Act, an independent director cannot currently have, or at any time during the previous two years have had, a significant business relationship with the fund's adviser, principal underwriter (distributor), or affiliates. An independent director also cannot own any stock of the investment adviser or certain related entities, such as parent companies or subsidiaries. See also **director** and **trustee**.

independent public accountant. The entity that audits a fund's financial statements. As part of the audit, the independent public accountant must consider the fund's internal control over financial reporting, including controls for safeguarding the fund's securities. The independent public accountant reports to the board's audit committee.

index. A portfolio of assets that tracks the performance of a particular financial market or subset of it (e.g., stock, bond, or commodity markets) and serves as a benchmark against which to evaluate a fund's performance. The most common index for equity funds is the **S&P 500**. See also **benchmark**.

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

individual retirement account (IRA). A tax-advantaged account set up by or for an individual to hold and invest funds for retirement.

inflation. The overall general upward price movement of goods and services in an economy. Inflation is one of the major risks to investors over the long term because it erodes the purchasing power of their savings.

inflation risk. The risk that the purchasing power of the future value of assets or income will be lower due to inflation.

initial public offering (IPO). A corporation's first public offering of stock or a closed-end fund's first offering of its shares to the public.

institutional investor. Businesses, nonprofit organizations, and other similar investors that own funds and other securities on behalf of their organizations. This classification of investors differs from individual or household investors who own the majority of investment company assets.

institutional money market fund. A money market fund that does not qualify as either a retail or government money market fund and does not limit all beneficial owners of the fund to natural persons.

interest/interest rate. The fee charged by a lender to a borrower, usually expressed as an annual percentage of the principal.

interest rate risk. Risk of gain or loss on a security due to possible changes in interest rate levels. When interest rates rise, the market value of a debt security will fall, and vice versa.

intraday indicative value (IIV). A real-time estimate of an exchange-traded fund's (ETF) intraday value. Typically, third-party providers calculate and disseminate this measure every 15 to 60 seconds during securities market trading hours.

investment adviser. An organization retained by an investment company to give professional advice on the fund's investments and asset management practices. All investment advisers to registered investment companies, such as mutual funds, must be registered with the U.S. Securities and Exchange Commission (SEC) under the Investment Advisers Act of 1940.

investment company. A corporation, trust, or partnership that invests pooled shareholder dollars in securities appropriate to the organization's objective. Mutual funds, closed-end funds, unit investment trusts, and exchange-traded funds are the main types of SEC-registered investment companies.

investment objective. The goal (e.g., current income, long-term capital growth) that a fund pursues on behalf of its investors. The fund's investment objective is disclosed to investors in the fund's prospectus and the fund's investments must be consistent with the stated investment objective.

investment return. The gain or loss on an investment over a certain period, expressed as a percentage. Income and capital gains or losses are included in calculating the investment return.

investment risk. The possibility of losing some or all of the amounts invested or not gaining value in an investment.

issuer. The company, municipality, government, or government agency that issues securities, such as stocks, bonds, or money market instruments.

Keogh. A tax-favored investment vehicle covering self-employed individuals, partners, and owners of unincorporated businesses; also called an H.R. 10 plan. These were first made available by Congress in 1962, but today operate under rules very similar to those for retirement plans for a corporation's employees.

level load. A combination of an annual 12b-1 fee (typically 1 percent) and a contingent deferred sales load fee (also often 1 percent) imposed by funds when shares are sold within the first year after purchase. See also **contingent deferred sales load** and **12b-1 fee**.

lifecycle fund. See **target date fund**.

lifestyle fund. Mutual funds that maintain a predetermined risk level and generally use words such as "conservative," "moderate," or "aggressive" in their names to indicate the fund's risk level. Also known as *target risk fund.*

liquidity. The ability to gain ready access to invested money. Mutual funds are liquid because their shares can be redeemed for the next computed net asset value (NAV) on any business day. In the securities market, a security is said to be liquid if the spread between bid and ask prices is narrow and reasonably sized trades can take place at those quotes.

load. See **sales charge**.

load fund. A mutual fund that imposes a sales charge—either when fund shares are purchased (front-end load) or redeemed (contingent deferred sales load)—or a fund that charges a 12b-1 fee greater than 0.25 percent. See also **12b-1 fee**.

long-term funds. A mutual fund industry designation for all mutual funds other than money market funds. Long-term funds are broadly divided into equity (stock), bond, and hybrid funds.

management fee. The amount paid by a mutual fund to the investment adviser for its services.

market value. The price at which a security was last traded or a price based on its current ask or bid prices.

maturity. The date by which an issuer promises to repay a bond's face value.

money market. The global financial market for short-term borrowing and lending where short-term instruments such as Treasury bills (T-bills), commercial paper, and repurchase agreements are bought and sold.

money market fund. A mutual fund regulated pursuant to Rule 2a-7 under the Investment Company Act of 1940 that invests in short-term, high-quality, fixed-income securities, and seeks the highest level of income consistent with preservation of capital (e.g., maintaining a stable share price).

mutual fund. An investment vehicle that offers investors professional money management and diversified investment opportunities. All mutual funds are investment companies that are registered with the SEC under the Investment Company Act of 1940. Mutual funds buy a portfolio of securities selected by the fund's investment adviser to meet a specified investment objective. One hallmark of mutual funds is that they are considered a liquid investment because they issue redeemable securities, meaning that the fund stands ready to buy back its shares at their next computed net asset value (NAV). See also **open-end investment company**.

net asset value (NAV). The per-share value of an investment company, calculated by subtracting the fund's liabilities from the current market value of its assets and dividing by the number of shares outstanding. Mutual funds calculate their NAVs at least once daily on each day the financial markets are open.

net new cash flow. The net amount of "new" money flowing into a mutual fund. The amount is determined by calculating the dollar value of new sales of the fund minus redemptions, plus net exchanges. A positive number indicates new sales plus exchanges into funds exceeded redemptions plus exchanges out of funds. A negative number indicates redemptions plus exchanges out of funds exceeded new sales plus exchanges into funds.

no-load fund. A mutual fund whose shares are sold without a sales charge and without a 12b-1 fee of more than 0.25 percent per year. See also **12b-1 fee**.

open-end investment company. The legal name for a mutual fund, indicating that it stands ready to redeem (buy back) its shares from investors. See also **mutual fund**.

operating expenses. Business costs paid from a fund's assets. These include management fees, 12b-1 fees, and other expenses.

payroll deduction plan. An arrangement that some employers offer where employees can authorize their employer to deduct a specified amount from their salaries at stated times to buy mutual fund shares.

pooled investing. The basic concept behind mutual funds and other investment companies in which a fund aggregates the assets of investors who share common financial goals. A fund uses the pooled assets to buy a portfolio of investments, and each share purchased represents a shareholder's pro rata ownership interest in the fund's portfolio.

portfolio. A collection of investments owned by an individual or an institution (such as a mutual fund) that may include stocks, bonds, money market instruments, and other investments.

portfolio manager. A specialist employed by a fund's adviser to invest the fund's assets in accordance with predetermined investment objectives.

portfolio turnover rate. A measure of how frequently securities are bought and sold within a fund during a year. The portfolio turnover rate usually is expressed as a percentage of the total value of a fund.

preferred stock. An investment that represents a share of ownership in a corporation that has a higher claim on the corporation's assets and earnings than common stock. Preferred stock differs from common stock in that preferred stock generally pays a fixed dividend that must be paid out before dividends to common stock shareholders. Also known as *preferred shares*. See also **common stock**.

prepayment risk. The possibility that a bond owner will receive his or her principal investment back from the issuer prior to the bond's maturity date.

principal. See **face value**.

principal underwriter. A mutual fund underwriter enters into sales agreements with retail distributors (e.g., broker-dealers) of the mutual fund. To sell fund shares, a retail distributor must have executed a contract with a fund or its principal underwriter, which authorizes the distributor to offer and sell fund shares to the public. Generally speaking, a fund's underwriter is not involved in the offer or sale of fund shares to investors.

prospectus. The official document that describes an investment company to prospective investors. The prospectus contains information required by the SEC, such as investment objectives and policies, risks, services, and fees. Federal law requires that every mutual fund investor receive a prospectus. See also **summary prospectus**.

redeem. To sell mutual fund shares back to the fund. Mutual fund shares may be redeemed on any business day. An investor receives the next computed share price, called net asset value (NAV), minus any deferred sales charge or redemption fee.

redemption price. The amount per share that mutual fund shareholders receive when they redeem. See **redeem**.

registered investment company. Any fund—including a mutual fund—that is registered as an investment company with the SEC under the Investment Company Act of 1940. In addition to registering as an investment company under the Investment Company Act of 1940, shares of the registered investment company must be registered under the Securities Act of 1933 (if they are offered to the public) and the investment company's investment adviser must be registered with the SEC under the Investment Advisers Act of 1940. Each of these acts imposes regulatory responsibilities on the entities or securities registered under such acts.

regulated investment company (RIC). A fund eligible under subchapter M of the Internal Revenue Code to eliminate tax at the entity level by distributing all of its taxable income to its shareholders. The fund's income thus is taxed only once, at the investor level. A RIC may be organized in either corporate or trust form—but is treated in all cases as a corporation. To qualify as a RIC, a corporation must be registered at all times during the taxable year under the Investment Company Act of 1940 and must derive at least 90 percent of its income from certain sources, including dividends, interest, and capital gains. It also must distribute at least 90 percent of the dividends and interest received.

repurchase agreements. A form of short-term funding that is typically used by dealers and other institutional investors. In a repurchase transaction, one party sells securities to another party and agrees to buy back the securities at a specified time (e.g., the next day) for a specified price. Also known as a *repo*.

required minimum distribution (RMD). Rules under the Internal Revenue Code that require a person who owns a traditional IRA or 401(k) account to take annual distributions from the IRA or 401(k) account beginning at age 70½. The annual distribution amount is determined by formulas established by the IRS and must be calculated each year based on the owner's age (or the ages of the owner and the owner's spouse). The IRS formula is intended to ensure that the entire amount of a traditional IRA or 401(k) account be distributed over the expected life of the individual (or the joint lives of the individual and the individual's spouse). Distributing less than the required amount will result in a tax penalty. Roth IRAs are not subject to required minimum distributions during the account holder's lifetime.

retail money market fund. A money market fund that has policies and procedures reasonably designed to limit all beneficial owners of the fund to natural persons.

return. The gain or loss of a security in a particular period. It usually is quoted as a percentage.

RIC. See **regulated investment company**.

risk. The degree of uncertainty associated with the return on an asset.

risk/return tradeoff. The principle that an investment must offer a higher expected return as compensation for the likelihood of higher volatility in returns.

risk tolerance. An investor's willingness to lose some or all of an investment in exchange for greater potential returns.

rollover. The transfer of an investor's assets from one qualified retirement plan (including an IRA) to another—due to changing jobs, for instance—without a tax penalty.

Roth 401(k) plan. A type of account within a 401(k) plan to which after-tax contributions are made, and from which qualified distributions of contributions and earnings are tax-free.

Roth IRA. An individual retirement plan, first available in 1998, that permits only after-tax contributions; earnings are not taxed, and qualified distributions of earnings and principal are generally tax-free.

sales charge. The sales fee that may be imposed on mutual fund shares that are purchased through a broker-dealer or other financial intermediary. By regulation, mutual fund sales charges are capped. Sales charges may vary depending on where the shares are acquired (e.g., a fund supermarket or a broker-dealer), the amount invested, and the fund purchased. Also known as the *load*.

SAR-SEP IRA (salary reduction simplified employee pension). A SEP IRA with a salary reduction feature (see **SEP IRA**). The Small Business Job Protection Act of 1996, which created SIMPLE IRAs, prohibited the formation of new SAR-SEP IRAs, which were created in 1986.

secondary market. Market in which an investor purchases or sells certain assets (such as investment company shares [closed-end, UIT, and ETF]) from another investor through an intermediary such as a broker-dealer.

sector fund. A fund that invests in a particular or specialized segment of the marketplace, such as stocks of companies in the software, healthcare, or real estate industries.

securitization. The process of aggregating similar instruments, such as loans or mortgages, into a negotiable security, such as the creation of mortgage-backed securities.

security. A general term for stocks, bonds, interests in funds, and other investments.

semiannual report. A report a fund sends to its shareholders that discusses the fund's performance over the first six months of the fiscal year and identifies the securities in the fund's portfolio on the last business day of the first six months of the fiscal year. See also **annual report**.

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

SEP IRA (simplified employee pension plan). A retirement program created in 1978 that consists of individual retirement accounts for all eligible employees, to which the employer can contribute according to certain rules. A fairly simple, inexpensive plan to establish and administer, a SEP IRA can be attractive to small businesses and self-employed individuals.

series fund. A group of different mutual funds, each with its own investment objective and policies, that is structured as a single corporation or business trust.

share. A representation of ownership in a company or investment fund. Also a synonym for *stock*.

share classes. Some mutual funds offer investors different types of shares known as classes (e.g., Class A, institutional shares). Each class will invest in the same portfolio of securities and will have the same investment objectives and policies, but each class will have different shareholder services and/or distribution arrangements with different fees and expenses and, therefore, different performance results. A multiclass structure offers investors the ability to select a fee and expense structure that is most appropriate for their investment goals (including the time that they expect to remain invested in the fund).

shareholder. An investor who owns shares of a mutual fund or other company.

short-term fund. See **money market fund**.

SIMPLE IRA (savings incentive match plan for employees). A simplified tax-favored retirement plan created in 1996 that small employers can set up for the benefit of their employees.

S&P 500 index. A daily measure of stock market performance based on 500 U.S. stocks chosen by Standard & Poor's for market size, liquidity, and industry group representation.

sponsor. A company or financial institution that creates a fund and determines its investment objective. When a new fund complex is launched, the fund sponsor (often an investment adviser) typically is the initial and sole shareholder of the new funds and elects the initial slate of directors.

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

statement of additional information (SAI). The supplementary document to a prospectus that contains more detailed information about a fund; also known as "Part B" of the fund's SEC registration statement.

stock. A share of ownership or equity in a corporation.

stock fund. See **equity fund**.

summary prospectus. SEC rules permit mutual funds to provide their investors with a brief summary (generally three to four pages) of key fund information instead of the fund's long-form, statutory prospectus if they make the statutory prospectus available online or by mail upon request and meet certain additional conditions. The summary prospectus must contain the following items in standardized order and cannot include additional information, nor omit required information: investment objectives/goals; fee and expense tables; principal investment strategies, principal risks and performance table; and management information. See also **prospectus**.

target date fund. Funds designed to satisfy their investors' investment objective by a particular target date, which is usually included in the name of the fund. For example, a Target Date 2025 fund may be designed for persons who plan to retire in 2025. To fulfill the investor's investment objective, the fund is typically constructed as a hybrid fund that follows a predetermined reallocation of risk over the lifetime of the investment. These funds invest in a mix of asset classes and typically rebalance their portfolios over time to become more conservative and income producing as the fund approaches and passes its target date. Target date funds are most commonly used to save for retirement or education, where the owner of the account expects to use the account proceeds at a known future date. Also known as *lifecycle fund.*

target risk fund. See **lifestyle fund**.

tender offer. In a closed-end fund tender offer, shareholders are given a limited opportunity to sell a portion of their shares back to the fund at a price—the tender price. Generally, the tender price is close to the fund's net asset value (NAV) and is higher than the market price.

total net assets. The total amount of assets, less any liabilities, a fund holds as of a certain date.

total return. A measure of a fund's performance that encompasses all elements of return: dividends, capital gains distributions, and changes in net asset value (NAV). Total return is the change in value of an investment over a given period, assuming reinvestment of any dividends and capital gains distributions, expressed as a percentage of the initial investment.

traditional IRA. The first type of individual retirement account, created in 1974. Individuals may make tax-deductible or nondeductible (depending on income and other requirements) contributions to these accounts. See also **individual retirement account (IRA)**.

transfer agent. A transfer agent is the entity within a fund complex that maintains all shareholder account records, processes all transactions effected by shareholders, and provides shareholders who own shares directly with the fund communications regarding the fund or the shareholder's account. Typically, when a mutual fund shareholder contacts the fund to discuss the shareholder's account, it is the transfer agent that handles such inquiries. The transfer agent must be registered with the SEC under the Securities Exchange Act of 1934 and must perform its services pursuant to an agreement with the fund's board.

Treasury bill (T-bill). A short-term debt obligation of the U.S. government with a maturity of less than one year. T-bills are sold in denominations of $1,000 up to a maximum purchase of $5 million and commonly have maturities of one month (four weeks), three months (13 weeks), or six months (26 weeks).

trustee. A member of the board of trustees of a fund organized as a business or statutory trust. Mutual fund trustees oversee the management and operations of the fund and have a fiduciary duty to represent the interests of shareholders. Fund trustees have the same responsibilities as fund directors. See also **director**.

12b-1 fee. A mutual fund fee, named for the SEC rule that permits it, used to pay distribution costs such as compensation to financial advisers for initial and ongoing assistance. If a fund has a 12b-1 fee, it will be disclosed in the fee table of a fund's prospectus.

underwriter. See **principal underwriter**.

unit investment trust (UIT). A type of fund that blends characteristics of mutual funds and closed-end funds. Like mutual funds, UITs issue redeemable shares. Like closed-end funds, however, UITs typically issue only a specific, fixed number of shares. A UIT does not actively trade its investment portfolio. Instead it buys and holds a fixed portfolio of securities until the UIT's set termination date, at which time the trust is dissolved and proceeds are paid to shareholders.

U.S. Treasury securities. Debt securities issued by the U.S. government and secured by its full faith and credit. Treasury securities are the debt financing instruments of the U.S. federal government, and they are often referred to simply as *Treasuries*. There are four types of Treasury securities: Treasury bills, Treasury bonds, Treasury notes, and Treasury inflation protected securities (TIPS). See also **Treasury bill**.

variable annuity. An investment contract sold by an insurance company. Capital is accumulated, often through mutual fund investments, with the option to convert to an income stream in retirement.

withdrawal plan. A fund service allowing shareholders to receive income or principal payments from their fund account at regular intervals.

yield. A measure of income (dividends and interest) earned by the securities in a fund's portfolio less the fund's expenses during a specified period. A fund's yield is expressed as a percentage of the maximum offering price per share on a specified date.

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