# ICI RESEARCH PERSPECTIVE

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# The Closed-End Fund Market, 2012

#### **KEY FINDINGS**

- » Total closed-end fund assets were \$264 billion at year-end 2012, up 9 percent from year-end 2011. Closed-end funds, which are a type of investment company, generally issue a fixed number of shares that are listed on a stock exchange or traded in the over-the-counter market.
- » Bond closed-end funds accounted for more than half of all closed-end fund assets. Bond funds have traditionally accounted for a majority of closed-end fund assets. At year-end 2012, bond closed-end fund assets were \$163 billion, or 62 percent of closed-end fund assets. However, assets in equity closed-end funds grew from 21 percent a decade ago to 38 percent of all closed-end fund assets at year-end 2012.
- At year-end 2012, there were 602 closed-end funds, down 5 percent from 632 in 2011. Nearly two-thirds of closed-end funds were bond funds at year-end 2012.
- Closed-end fund investors tended to have above-average household incomes and financial assets. An estimated 1.9 million U.S. households held closed-end funds in 2012. These households tended to include affluent, experienced investors who owned a range of equity and fixed-income investments.



#### What Is a Closed-End Fund?

Closed-end funds are one of four types of registered investment companies, along with mutual (or open-end) funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). 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. The market price of closed-end fund shares fluctuates like that of other publicly traded securities and is determined by supply and demand in the marketplace.

Closed-end funds offer a fixed number of shares to investors during an initial public offering. Closed-end funds also may make subsequent public offerings of shares in order to raise additional capital. Once issued, the shares of a closed-end fund typically are not purchased or redeemed directly by the fund. Rather, they are bought and sold by investors in the open market. 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.

#### **Closed-End Fund Pricing**

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

Because a closed-end fund's shares trade in the stock market based on investor demand, the fund may trade at a price higher or lower than its NAV. For example, a closed-end fund in great demand may trade at a share price higher than its NAV. In this case, the fund's shares are said to be selling at a "premium" to the NAV. Conversely, a closed-end fund trading at a share price lower than its NAV is said to be selling at a "discount."

#### **Assets in Closed-End Funds**

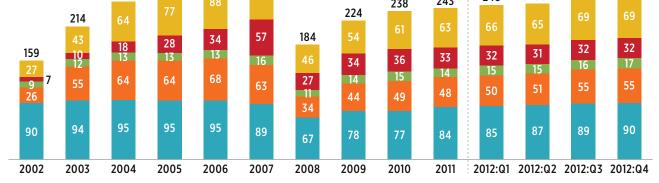
Total closed-end fund assets were \$264 billion at year-end 2012, up 9 percent from year-end 2011 (Figure 1). Closed-end fund assets increased by \$21 billion, on net, during 2012.

Historically, bond funds have accounted for a large share of assets in closed-end funds. A decade ago, 79 percent of all closed-end fund assets were held in bond funds, and the remaining 21 percent were held in equity funds. At year-end 2012, assets in bond closed-end funds were \$163 billion, or 62 percent of closed-end fund assets (Figure 2). Equity

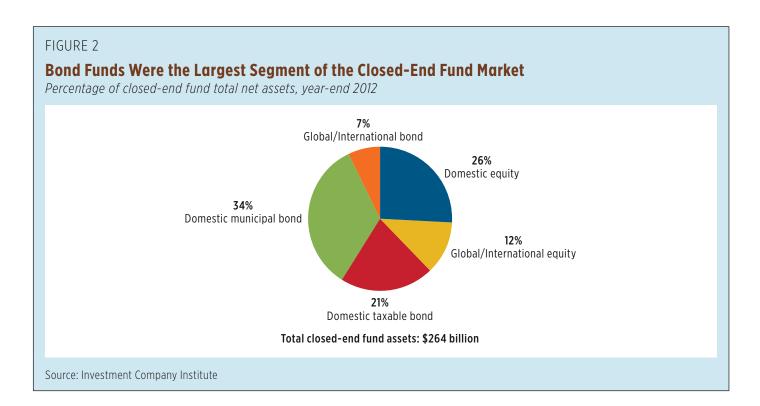
#### About the Annual Mutual Fund Shareholder Tracking Survey

The Investment Company Institute conducts the Annual Mutual Fund Shareholder Tracking Survey each spring to gather information on the demographic and financial characteristics of households in the United States. The most recent survey was undertaken in May 2012 and was based on a sample of 4,019 U.S. households selected by random digit dialing. All interviews were conducted over the telephone with the member of the household who was the sole or co-decisionmaker most knowledgeable about the household's savings and investments. For more information about the survey see Schrass, Bogdan, and Holden 2012.





Note: Components may not add to the total because of rounding. Data reflect revisions to previously reported data. Source: Investment Company Institute



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closed-end fund assets totaled \$101 billion, or 38 percent of closed-end fund assets. These relative shares have shifted a bit over time, in part because issuance by equity closed-end funds exceeded that of bond closed-end funds for every year from 2004 through 2008 (Figure 3).

Proceeds from issuance of closed-end funds totaled \$14.9 billion in 2012, about the same as in the previous year (Figure 3). In 2012, issuance of closed-end bond funds totaled \$10.7 billion, of which \$8.6 billion—or about 58 percent of total issuance—was domestic bond funds. The remaining \$4.1 billion in proceeds was from issuance of closed-end equity funds. Eighty-eight percent of equity closed-end fund issuance was from domestic equity closed-end funds.

Despite strong issuance over the past three years and solid returns in equity and bond markets, total net assets of closed-end funds have not fully recovered to their 2007 peak of \$312 billion (Figure 1). There are a few explanations for this apparent disconnect between issuance and total net assets. First, 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. Second, a few closed-end funds have liquidated each year and others have converted into open-end mutual funds or ETFs. Finally, closed-end fund preferred share assets have declined since the financial crisis of 2008.<sup>2</sup> These trends have limited the growth in both the assets and the number of closed-end funds in recent years.

FIGURE 3

#### **Closed-End Fund Share Issuance**

Proceeds from the issuance of initial and additional public offerings of closed-end fund shares, millions of dollars, 2002–2012\*

		Eq	uity	В	ond
	Total	Domestic	Global/ International	Domestic	Global/ International
2002	\$24,895	\$9,191	\$3	\$15,701	\$0
2003	40,810	11,187	50	28,541	1,032
2004	27,991	15,424	5,714	5,825	1,028
2005	21,388	12,559	6,628	2,077	124
2006	12,745	7,992	2,505	1,914	334
2007	31,086	5,973	19,764	2,654	2,695
2008	275	8	145	121	0
2009	3,615	549	485	2,265	317
2010	13,975	3,719	114	9,785	358
2011	14,945	3,805	1,469	9,669	2
2012	14,855	3,615	516	8,644	2,081

<sup>\*</sup>Data are not available for years prior to 2002.

Note: Components may not add to the total because of rounding. Data reflect revisions to previously reported data.

Source: Investment Company Institute

#### Number of Closed-End Funds

The number of closed-end funds available to investors remains below its peak of 663 at the end of 2007 due to the effects of mergers, liquidations, and conversions (Figure 4). At the end of 2012, there were 602 closed-end funds, down 30 from 632 in 2011 but up from 544 at the end of 2002. Bond funds were the most common type of closed-end fund, accounting for 65 percent of the total number of funds. Municipal bond funds represented 37 percent of all closed-end funds in 2012. Equity funds made up 35 percent of the total number of closed-end funds.

#### **Closed-End Fund Distributions**

Closed-end funds may make distributions to shareholders from three possible sources: income from interest and dividends, realized capital gains, and return of capital. Some closed-end funds follow a managed distribution policy, which allows a closed-end fund to provide predictable, but not guaranteed, cash flow to common shareholders. The goal of a managed distribution policy is to reduce the uncertainty regarding future cash flows for common shareholders. The payment from a managed distribution policy typically takes the form of a regular fixed cash payment or a payment based on a percentage of a fund's assets, which are paid to common shareholders on a

monthly or quarterly basis.<sup>3</sup> Managed distribution policies are most often used in multistrategy or equity-based closed-end funds where capital appreciation is an important part of the closed-end fund's expected total return.

Closed-end fund managed distribution policies have potential advantages and disadvantages for common shareholders. First, a closed-end fund with a managed distribution policy can be an important tool for investors seeking steady income or cash flow. Second, a managed distribution policy permits a fund to offer regular cash flows from strategies not typically associated with regular income. Third, having a managed distribution policy in place may help support the fund's market price and may help reduce any discount between the closed-end fund's market price and NAV.<sup>4</sup> Closed-end fund managed distribution policies also may have disadvantages for common shareholders. Regular distributions provide common shareholders with predictable cash inflows, but also result in consistent cash outflows from the fund. This reduces the amount of assets available for investment by a fund's adviser and may cause a fund to hold a larger cash position than otherwise necessary in order to pay regular distributions. Finally, if a closed-end fund consistently pays distributions that are greater than the fund's total return over time, the fund will eventually deplete its capital.<sup>5</sup>

Number (	f Closed-End	Funds
FIGURE 4		

Year-end. 2002-2012

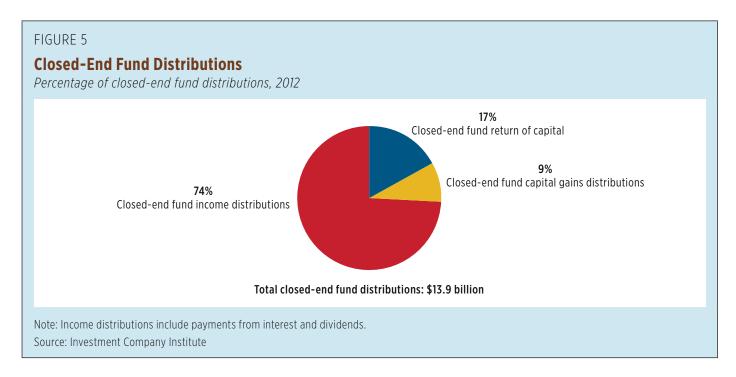
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
All closed-end funds	544	583	619	635	646	663	642	627	624	632	602
Equity closed-end funds	122	130	157	192	203	229	221	208	204	212	211
Domestic	63	75	96	121	129	137	128	117	117	125	125
Global/International	59	55	61	71	74	92	93	91	87	87	86
Bond closed-end funds	422	453	462	443	443	434	421	419	420	420	391
Domestic	397	426	432	412	410	400	388	387	388	388	355
Taxable	105	129	137	132	134	131	128	127	130	132	132
Municipal	292	297	295	280	276	269	260	260	258	256	223
Global/International	25	27	30	31	33	34	33	32	32	32	36

Note: Data reflect revisions to previously reported data. Source: Investment Company Institute In 2012, closed-end funds distributed \$13.9 billion to shareholders (Figure 5). Income from interest and dividends made up 74 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 9 percent was from capital gains in 2012.

## **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 the likelihood of share price volatility and market risk. At year-end 2012, about two-thirds of closed-end funds were using some form of leverage as a part of their investment strategy.

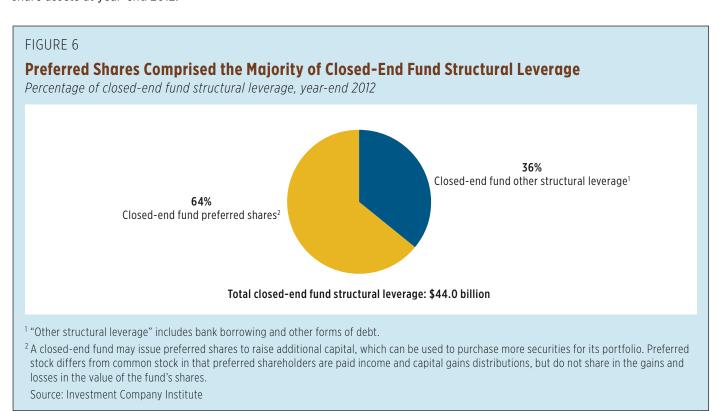
Closed-end fund leverage can be classified as either structural leverage or portfolio leverage. Structural leverage, the most common type of leverage, affects the closed-end fund's capital structure by increasing the fund's portfolio assets. Types of closed-end fund structural leverage include borrowing and issuing debt and preferred shares. Closedend funds are subject to asset coverage requirements if they issue debt or preferred shares. For each \$1.00 of debt issued, the fund must have \$3.00 of assets immediately after issuance and at the time of dividend declarations (commonly referred to as 33 percent leverage). Similarly, for each \$1.00 of preferred stock issued, the fund must have \$2.00 of assets at issuance and dividend declaration dates (commonly referred to as 50 percent leverage). Portfolio leverage is leverage that results from certain portfolio investments. Types of closed-end fund portfolio leverage include certain types of derivatives, reverse repurchase agreements, and tender option bonds.



At year-end 2012, total closed-end fund structural leverage was \$44.0 billion, with 64 percent of those assets from preferred shares (Figure 6). Thirty-six percent of closed-end fund structural leverage was other structural leverage at year-end 2012. Closed-end fund holdings of reverse repurchase agreements and tender option bonds, two forms of portfolio leverage, were \$12.5 billion at year-end 2012.

The issuance of preferred shares accounts for the majority of closed-end fund structural leverage. Closed-end funds 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 income and capital gains distributions, but do not share in the gains and losses in the value of the fund's shares.<sup>8</sup> At year-end 2012, 11 percent of the \$264 billion in closed-end fund assets was invested in preferred shares (Figure 7). Bond closed-end funds accounted for 93 percent of outstanding preferred share assets at year-end 2012.

Closed-end fund preferred share assets have declined since the liquidity crisis for auction market preferred stock, which began in mid-February 2008. Since then, closed-end funds have, among other things, obtained bank loans and lines of credit, issued tender option bonds, engaged in reverse repurchase agreements, and issued extendable notes to replace auction market preferred stock while maintaining leverage. To redeem auction market preferred stock while maintaining leverage, a number of closed-end funds have issued puttable preferred shares and mandatory redeemable preferred shares. A few funds have conducted tender offers for their auction market preferred stock at a discount to par value.

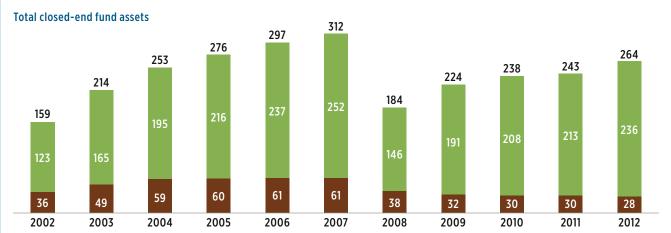


#### FIGURE 7

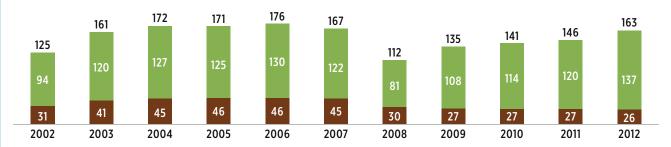
#### **Closed-End Fund Preferred Share Assets**

Billions of dollars, year-end, 2002-2012

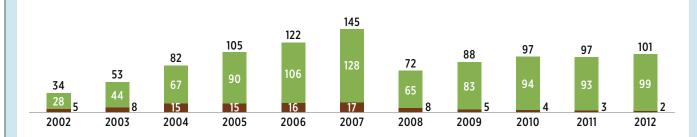




Bond closed-end fund assets



**Equity closed-end fund assets** 



<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> All closed-end funds issue common stock, also known as common shares.

Note: Components may not add to the total because of rounding. Data reflect revisions to previously reported data.

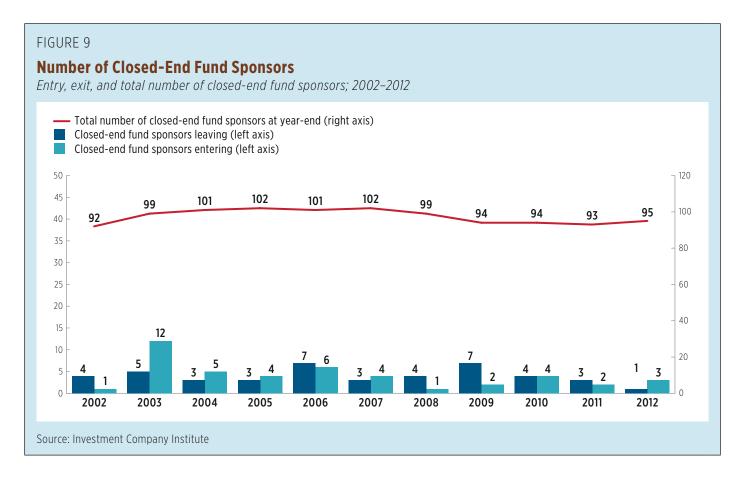
Source: Investment Company Institute

At year-end 2012, the majority of closed-end fund preferred share assets were floating-rate preferred shares (Figure 8). Puttable preferred shares, which include variable rate demand preferred shares and variable rate muni term preferred shares, were 54 percent of closed-end fund preferred share assets at year-end 2012. Auction market preferred shares were 32 percent of closed-end fund preferred assets at year-end 2012.

## **Competition in the Closed-End Fund Industry**

At year-end 2012, there were 95 closed-end fund sponsors, up 2 percent from 93 at year-end 2011 (Figure 9). Competitive dynamics affect the number of closed-end funds offered in any given year. In particular, closed-end fund sponsors create new closed-end funds to meet investor demand, and they merge or liquidate

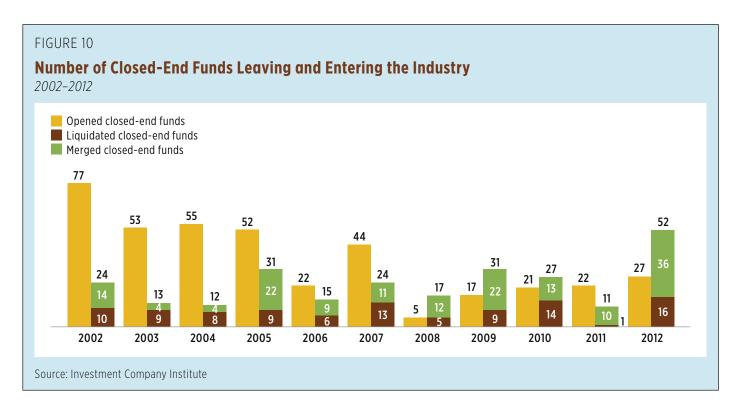
losed-End Fund Preferred Share Class Assets by ercentage of closed-end fund preferred share assets, year-en		
Floating-rate	91	
Auction market preferred	32	
Puttable preferred	54	
Mandatory redeemable (floating) preferred	5	
Fixed-rate	9	
Mandatory redeemable (fixed) preferred	7	
Perpetual (fixed) preferred	2	



closed-end funds that do not attract sufficient investor interest. The pace of newly opened closed-end funds has been restrained since the financial crisis of 2008. In 2012, the number of newly opened closed-end funds increased slightly to 27 closed-end funds compared with 22 in 2011 (Figure 10). The rate of closed-end fund mergers and liquidations increased to 52 in 2012 from 11 in 2011.

Competitive dynamics also have prevented any single firm or group of firms from dominating the closed-end fund market. For example, of the largest 25 firms in 2002, only 14 remained in this group at year-end 2012. In addition, the share of assets managed by the largest 25 firms has decreased since 2002 (Figure 11). Other measures also indicate that no one firm or group of firms dominates the

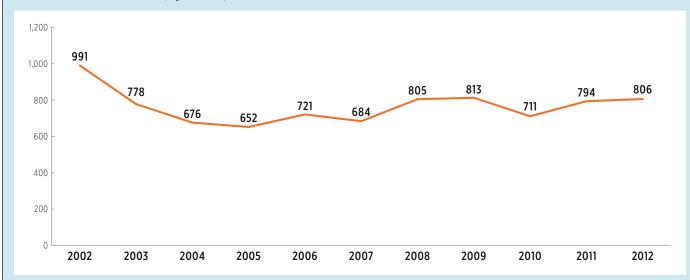
closed-end fund market. One such measure of market concentration is the Herfindahl-Hirschman Index, which weighs both the number and relative size of firms in the industry. Index numbers below 1,000 indicate that an industry is unconcentrated, and index numbers between 1,000 and 1,800 indicate moderate concentration. Index numbers above 1,800 indicate that an industry is highly concentrated. At year-end 2012, the closed-end fund industry had a Herfindahl-Hirschman Index number of 806. In addition to the low Herfindahl-Hirschman Index number, it is important to note that closed-end funds compete with other registered investment companies. While there are 602 closed-end funds, there are more than 8,700 mutual funds, nearly 5,800 UITs, and more than 1,200 ETFs. In the industry is highly concentrated.



#### FIGURE 11

# **Closed-End Fund Industry Found Competitive**

Herfindahl-Hirschman Index,\* year-end, 2002–2012



# **Share of Closed-End Fund Assets at Largest Complexes**

Percentage of total closed-end fund industry assets, year-end, 2002–2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Top 5 complexes	56	51	46	46	52	52	56	56	51	53	53
Top 10 complexes	70	66	64	64	65	65	67	67	64	65	66
Top 25 complexes	91	87	86	86	85	85	87	86	85	86	86

<sup>\*</sup>The Herfindahl-Hirschman Index weighs both the number and relative size of firms in the industry to measure competition. Index numbers below 1,000 indicate that an industry is unconcentrated.

Source: Investment Company Institute

#### Characteristics of Closed-End Fund Investors

An estimated 1.9 million U.S. households owned closed-end funds in 2012. These households tended to include affluent, experienced investors who owned a range of equity and fixed-income investments. In 2012, 92 percent of households owning closed-end funds also owned equities, either directly or through equity mutual funds or variable annuities (Figure 12).

Seventy-three percent of households that owned closed-end funds also held bonds, bond mutual funds, or fixed annuities (Figure 12). In addition, 56 percent of these households owned investment real estate. Because a large number of households that owned closed-end funds also owned equities and mutual funds, the characteristics of closed-end fund owners were similar in many respects to those of equity and mutual fund owners. For instance, households that owned closed-end funds—like equity- and mutual

fund-owning households—tended to be headed by collegeeducated individuals and had household incomes above the national average (Figure 13).

Nonetheless, households that owned closed-end funds exhibit certain characteristics that distinguish them from equity- and mutual fund-owning households. For example, households owning closed-end funds tended to be older (median age 61) than households owning either individual equities (median age 53) or mutual funds (median age 51) (Figure 13). Households with closed-end funds tended to have much greater household financial assets than either equity or mutual fund investors. Nearly half of closed-end fund-owning households were retired from their lifetime occupations, making them more likely to be retired than households owning either individual equities or mutual funds.

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#### Closed-End Fund Investors Owned a Broad Range of Investments

Percentage of closed-end fund-owning households holding each type of investment, May 2012

Equity mutual funds, individual equities, or variable annuities (total)	92	
Bond mutual funds, bonds, or fixed annuities (total)	73	
Mutual funds (total)	81	
Equity mutual funds	70	
Bond mutual funds	66	
Hybrid mutual funds	50	
Money market funds	51	
Individual equities	83	
Bonds	37	
Fixed or variable annuities	46	
Investment real estate	56	

Note: Multiple responses are included.

Source: Investment Company Institute Annual Mutual Fund Shareholder Tracking Survey

FIGURE 13

# Closed-End Fund Investors Had Above-Average Household Incomes and Financial Assets May 2012

	All U.S. households	Households owning closed-end funds	Households owning mutual funds	Households owning individual equities
Median				
Age of head of household <sup>1</sup>	50	61	51	53
Household income <sup>2</sup>	\$50,000	\$113,600	\$80,000	\$87,500
Household financial assets <sup>3</sup>	\$62,500	\$500,000	\$190,000	\$250,000
Percentage of households				
Household primary or co-decisionmake	er for saving and invest	ing		
Married or living with a partner	61	68	75	73
Widowed	10	11	6	7
Four-year college degree or more	31	62	49	52
Employed (full- or part-time)	58	57	72	66
Retired from lifetime occupation <sup>4</sup>	30	49	25	30
Household owns				
IRA(s)	40	71	68	69
DC retirement plan account(s)	51	48	80	74

<sup>&</sup>lt;sup>1</sup> Age is based on the sole or co-decisionmaker for household saving and investing.

#### Additional Reading

- » Closed-End Fund Resource Center, Investment Company Institute. Available at www.ici.org/cef.
- "Frequently Asked Questions About Closed-End Funds and Their Use of Leverage," Investment Company Institute. These FAQs include information related to the failed auctions for auction market preferred stock. Available at www.ici.org/pubs/faqs/faqs\_closed\_end.
- » "A Guide to Closed-End Funds," Investment Company Institute. This publication includes an overview of the types of closed-end funds and how they operate. Available at www.ici.org/cef/background/bro\_g2\_ce.
- » Find guarterly updates to closed-end fund asset data at www.ici.org/research/stats.

<sup>&</sup>lt;sup>2</sup> Total reported is household income before taxes in 2011.

<sup>&</sup>lt;sup>3</sup> Household financial assets include assets in employer-sponsored retirement plans but exclude the household's primary residence.

<sup>&</sup>lt;sup>4</sup> The head of household was considered retired if they responded affirmatively to the question: "Are you retired from your lifetime occupation?" Source: Investment Company Institute Annual Mutual Fund Shareholder Tracking Survey

#### **Notes**

- See Investment Company Institute 2013a. The survey was conducted annually from 1988 through 2001, and quarterly since 2002. The focus of this publication is year 2012 in review. Data reflect revisions to previously reported data.
- For additional information, see Investment Company Institute, "Frequently Asked Questions About Closed-End Funds and Their Use of Leverage."
- In order to implement a managed distribution policy, a closed-end fund must petition the Securities and Exchange Commission (SEC) for exemption from Rule 19(b) of the Investment Company Act.
- <sup>4</sup> For more information on dividend policy and discounts on closed-end funds, see Johnson, Lin, and Song 2006.
- For more information on closed-end fund distributions, see Gabelli Funds, LLC 2004; Nuveen Investments 2013; and Morningstar 2013.
- For additional information, see Investment Company Institute, "Frequently Asked Questions About Closed-End Funds and Their Use of Leverage."
- <sup>7</sup> For more information on the types of closed-end fund leverage, see Nuveen Investments 2013.
- Section 18 of the Investment Company Act provides that preferred shareholders, voting as a class, are entitled to elect at least two directors at all times and to vote along with common shareholders on the remaining directors. In addition, preferred shareholders, voting as a class, are entitled to elect a majority of the directors if at any time the dividends on the preferred shares are unpaid in an amount equal to two full years' dividends on the preferred shares, and continue to be entitled to elect a majority of the directors until all dividends in arrears are paid.

- <sup>9</sup> See, e.g., Galley 2010.
- For more information on the different types of closed-end fund preferred shares, see Investment Company Institute, "Frequently Asked Questions About Closed-End Funds and Their Use of Leverage."
- By comparison, the share of mutual fund assets managed by the 25 largest firms was 73 percent at year-end 2012. See Investment Company Institute 2013b.
- See Cabral 2000 and U.S. Department of Justice and the Federal Trade Commission 2010 for more information about the Herfindahl-Hirschman Index.
- The mutual fund industry had a Herfindahl-Hirschman Index number of 465 as of December 2012. See Investment Company Institute 2013b. For additional discussion of the Herfindahl-Hirschman measure of mutual funds and other industries, see Stevens 2006.
- See Investment Company Institute 2013b for more information. The number of mutual funds includes mutual funds that invest primarily in other mutual funds. The number of ETFs includes investment companies not registered under the Investment Company Act of 1940 and ETFs that invest primarily in other ETFs.
- For additional information on the incidence of closed-end fund ownership across mutual fund-owning households by various demographic and financial characteristics, see Bogdan and Schrass 2013. For additional information on the Annual Mutual Fund Shareholder Tracking Survey, see Schrass, Bogdan, and Holden 2012.

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