



CHAPTER

5

US Closed-End Funds

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

IN THIS CHAPTER

- 87** What Is a Closed-End Fund?
- 88** Total Assets of Closed-End Funds
- 90** Net Issuance of Closed-End Funds
- 91** Closed-End Fund Distributions
- 92** Closed-End Fund Leverage
- 96** Characteristics of Households Owning Closed-End Funds

What Is a Closed-End Fund?

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

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

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

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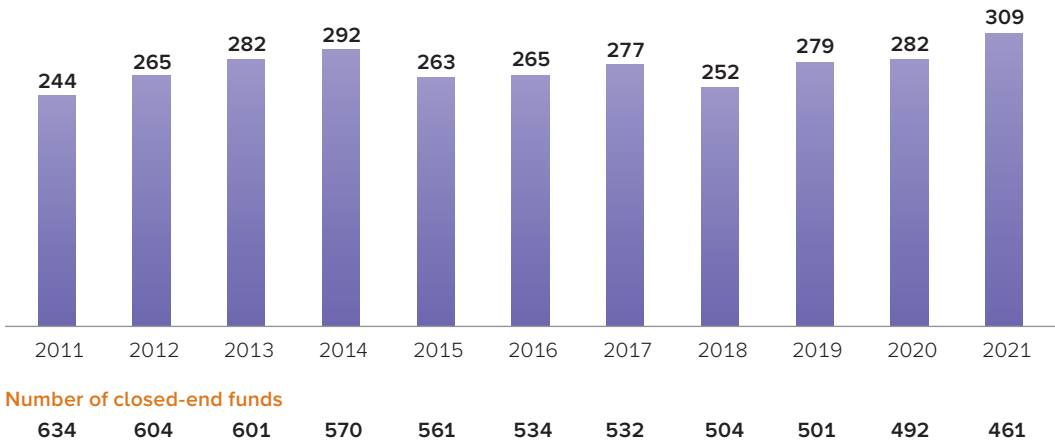
Total Assets of Closed-End Funds

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

FIGURE 5.1

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

Billions of dollars, year-end



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

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

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The Closed-End Fund Market, 2021

www.ici.org/research/industry/closedend

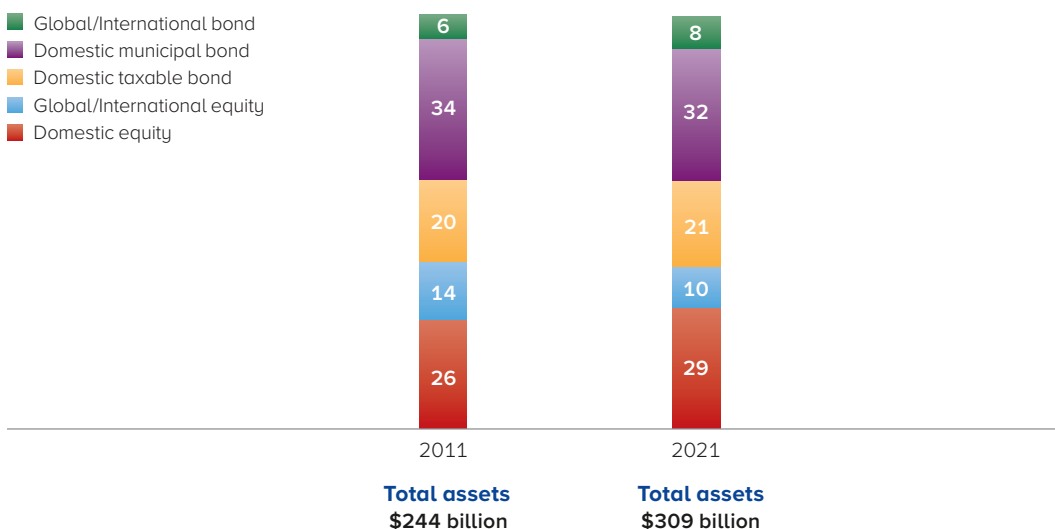
Historically, bond funds have accounted for a large share of assets in closed-end funds. At year-end 2011, 61 percent of all closed-end fund assets were held by bond funds, with the remainder held by equity funds (Figure 5.2). At year-end 2021, 60 percent of closed-end fund assets (\$186 billion) were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

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

FIGURE 5.2

Composition of the Closed-End Fund Market by Investment Objective

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



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

* As measured by the Wilshire 5000 Total Market Index.

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

Net Issuance of Closed-End Funds

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

FIGURE 5.3

Closed-End Fund Net Share Issuance

Millions of dollars

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

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

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

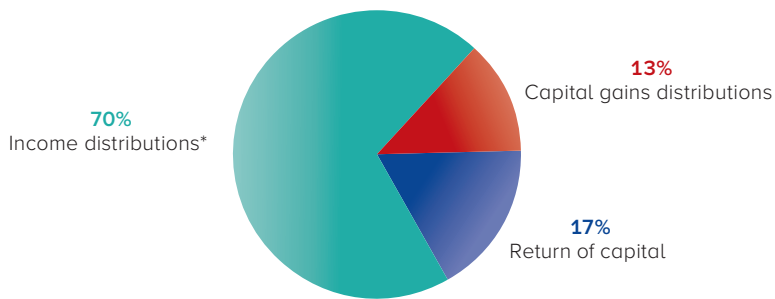
Closed-End Fund Distributions

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

FIGURE 5.4

Closed-End Fund Distributions

Percentage of closed-end fund distributions, 2021



Total closed-end fund distributions: \$16.4 billion

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

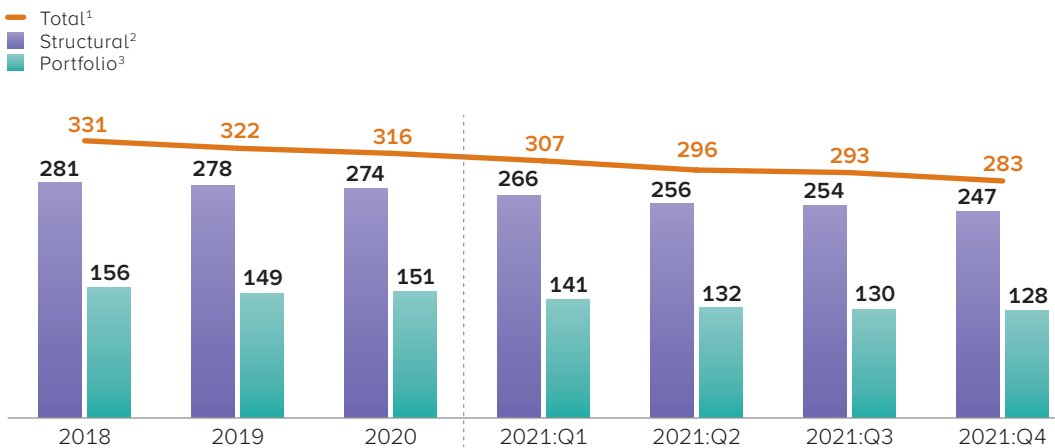
Closed-End Fund Leverage

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

FIGURE 5.5

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

Number of funds, end of period



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

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

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

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

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Frequently Asked Questions About Closed-End Funds and Their Use of Leverage

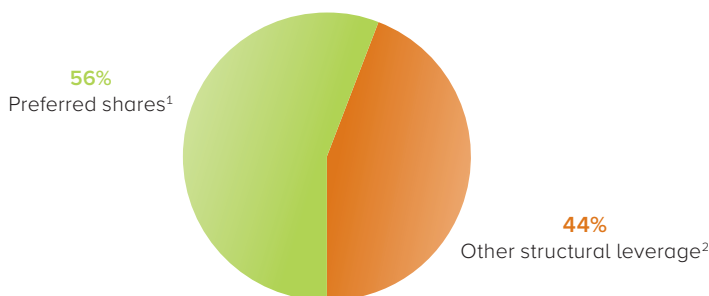
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Structural leverage affects the closed-end fund's capital structure by increasing the fund's portfolio assets. Types of closed-end fund structural leverage include borrowing capital and issuing debt and preferred shares. At the end of 2021, 247 funds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

FIGURE 5.6

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

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



Total closed-end fund structural leverage: \$52.0 billion

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

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

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

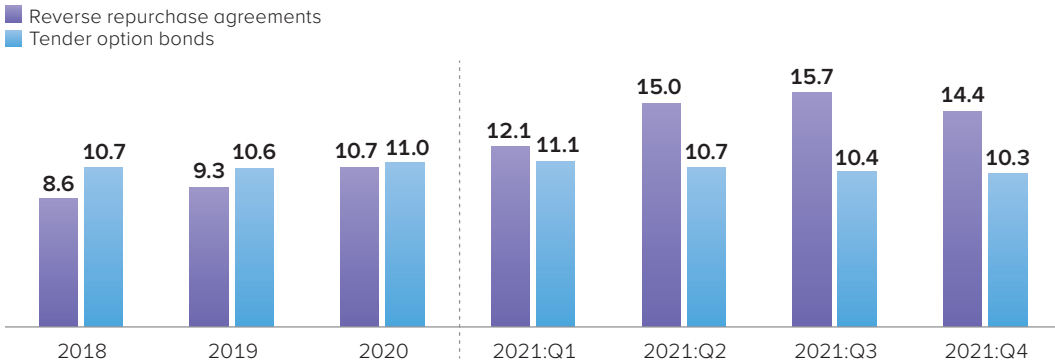
* The *leverage ratio* is the ratio of the amount of structural leverage to the sum of the amount of common share assets and structural leverage.

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

FIGURE 5.7

Use of Portfolio Leverage

Billions of dollars, end of period



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

Source: ICI Research Perspective, “The Closed-End Fund Market, 2021”

Closed-End Fund Discounts

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

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

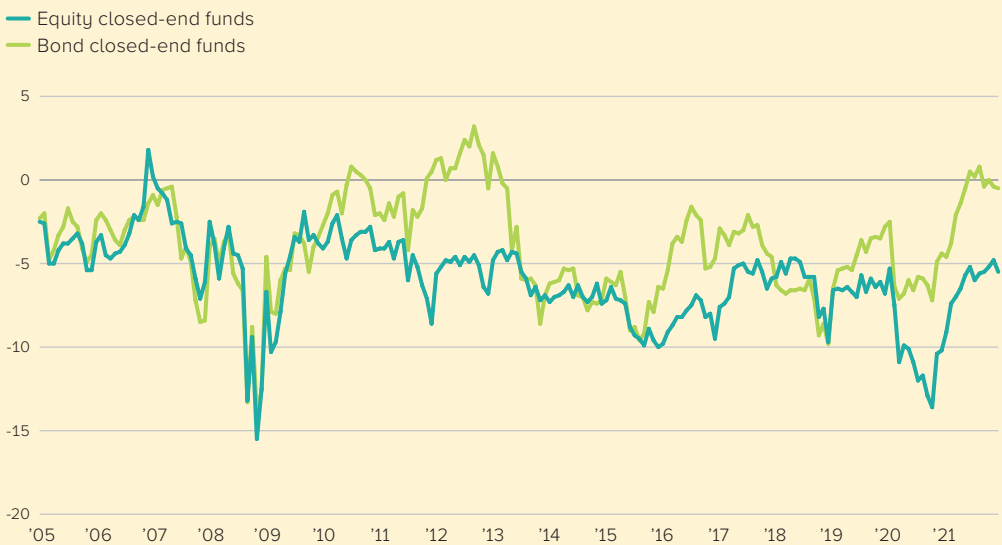
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perceptions or investor sentiment. For example, a closed-end fund that invests in securities that are anticipated to generate above-average future returns and are difficult for retail investors to obtain directly may trade at a premium because of a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

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

FIGURE 5.8
Closed-End Funds' Premium/Discount Rate
Percent, month-end



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

Source: Investment Company Institute tabulations of Bloomberg data

Characteristics of Households Owning Closed-End Funds

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

FIGURE 5.9

Closed-End Fund Investors Owned a Broad Range of Investments

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

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

Note: Multiple responses are included.

Source: ICI Research Perspective, “The Closed-End Fund Market, 2021”

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

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

FIGURE 5.10

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

2021

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

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

² Total reported is household income before taxes in 2020.

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

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