

# ICI RESEARCH PERSPECTIVE

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## The Closed-End Fund Market, 2023

### KEY FINDINGS

- » **Total closed-end fund (CEF) assets were \$544 billion at year-end 2023.** Traditional CEFs had total assets of \$249 billion, interval funds had total assets of \$77 billion, tender offer funds had total assets of \$60 billion, and business development companies (BDCs) had total net assets of \$159 billion.
- » **The number of traditional CEFs continued to fall, from 427 funds at year-end 2022 to 402 funds by year-end 2023.** The number of traditional CEFs has fallen for 12 consecutive years and is down 36 percent from year-end 2011.
- » **Average traditional CEF discounts widened in 2023.** Traditional CEF discounts have persisted over time, and the majority of traditional CEFs generally trade at a discount.
- » **Pressure from activist shareholders surged in 2023, with a record number of traditional CEFs being targeted compared with any year back to 2000.** In 2023, just three activist shareholders were responsible for 90 percent of total CEF activism.
- » **Total assets in interval funds, tender offer funds, and BDCs continued to grow in 2023.** Total assets in these vehicles more than doubled from \$139 billion at year-end 2020 to \$296 billion at year-end 2023.
- » **CEF investors differ from mutual fund investors in that comparatively more CEF investors are retired, and they tend to express more willingness to take financial risk.** An estimated 3.2 million US households held CEFs in 2023.

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James Duvall, economist, Kevin Ercoline, assistant general counsel, and Casey Rybak, senior research associate, prepared this report.

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For a complete set of data files for each figure in this report—including a statistical appendix with additional data—see [www.ici.org/files/2024/per30-05-data.xlsx](http://www.ici.org/files/2024/per30-05-data.xlsx).

The following, unless otherwise specified, apply to all data in this report: dollars and percentages may not add to the totals presented because of rounding.

### What is a Closed-End Fund?

Closed-end funds (CEFs) are one of four main types of investment companies, along with mutual funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). Historically, the vast majority of CEFs have been “listed” CEFs—investment companies that issue a fixed number of common shares in an initial public offering (IPO) that are publicly traded on an exchange or in the over-the-counter market, like traditional stocks. Once issued, shareholders may not redeem those shares directly to the fund (though some CEFs may repurchase shares through stock repurchase programs or through a tender for shares). Subsequent issuance of common shares generally only occurs through secondary or follow-on offerings, at-the-market offerings, rights offerings, or dividend reinvestments.<sup>1</sup> Listed CEFs primarily include traditional CEFs but may also include interval funds and business development companies (BDCs) that are listed on exchanges.

There are also “unlisted” CEFs, which have recently seen steady asset growth. Unlisted CEFs are not listed on an exchange but sold publicly to retail investors, mainly through intermediaries, or to certain qualified investors through private placement offerings.<sup>2</sup> Unlike listed CEFs, unlisted CEFs do not issue a fixed number of shares but are permitted to continuously offer their shares at net asset value (NAV) following their IPO. As they are not traded on an exchange, unlisted CEFs engage in scheduled repurchases or tender offers for a certain percentage of the CEF’s shares to allow shareholders to exit the fund. The ability of a shareholder to exit the CEF is dependent on the timing of the scheduled repurchase or tender offer and whether the repurchase or tender is “over-subscribed.”<sup>3</sup> Unlisted CEFs include tender offer funds, most interval funds, and BDCs.

A CEF's assets are professionally managed in accordance with the fund's investment objectives and policies and may be invested in stocks, bonds, and other assets. Because CEFs do not face daily redemptions, there is little need to maintain cash reserves and they can typically be fully invested according to their strategies. Also, other than for any upcoming repurchase or tender offer, CEFs do not sell portfolio securities daily and have the flexibility to invest in less-liquid portfolio securities. For example, a CEF 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.

CEFs 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.<sup>4</sup> Issuing preferred shares allows a CEF to raise additional capital, which it can use to purchase more assets for its portfolio.

## Traditional CEFs

**Traditional CEFs** issue a fixed number of shares during an IPO that are then listed on an exchange or traded in the over-the-counter market where investors buy and sell them in the open market (i.e., all traditional CEFs are listed CEFs). The market price of a traditional CEF fluctuates like that of other publicly traded securities and is determined by supply and demand in the marketplace.

## Secondary Market Trading of Traditional CEFs

More than 95 percent of traditional CEFs calculate the value of their portfolios every business day, while the rest calculate their portfolio values weekly or on some other basis. The NAV of a CEF 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.

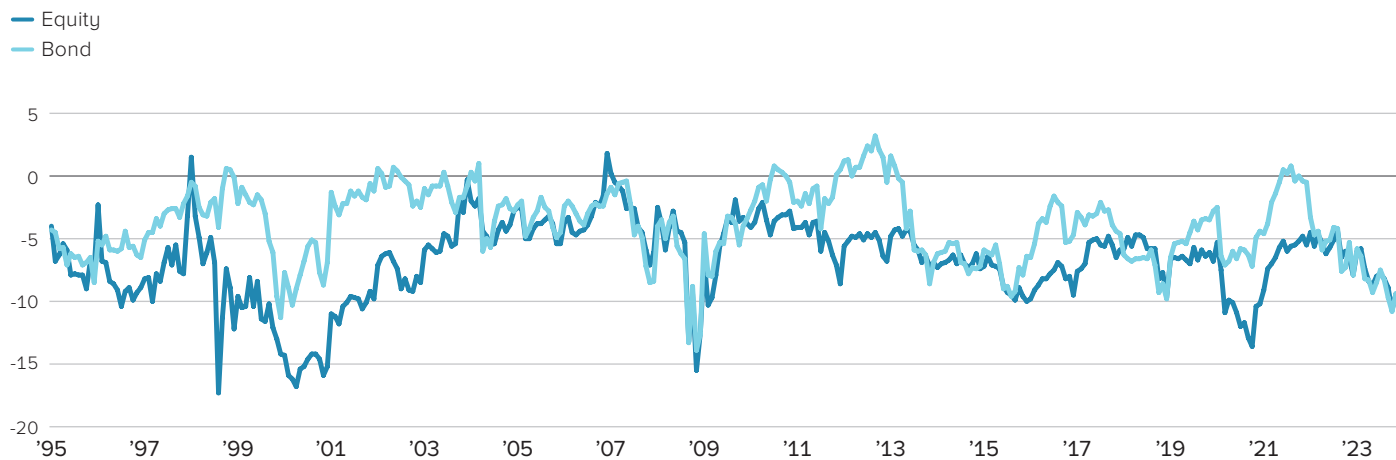
Because a traditional CEF's shares trade based on investor demand, the fund may trade at a price higher or lower than its NAV. A CEF trading at a share price higher than its NAV is said to be trading at a "premium" to the NAV, while a CEF trading at a share price lower than its NAV is said to be trading at a "discount." Funds may trade at premiums or discounts to the NAV for a number of potential reasons, such as market perceptions or investor sentiment.<sup>5</sup> For example, a CEF 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. By contrast, a CEF with large unrealized capital gains may trade at a discount because investors will have priced in any perceived tax liability. Unlisted CEFs—which are sold and repurchased based on NAV—do not have premiums or discounts.

CEF price deviations from NAV increased somewhat in 2023—equity fund discounts widened from 7.9 percent at year-end 2022 to 9.9 percent at year-end 2023 and bond fund discounts widened from 7.9 percent to 9.3 percent over the same period (Figure 1, top panel). Generally, the majority of CEFs trade at a discount in any given month (Figure 1, bottom panel).

FIGURE 1

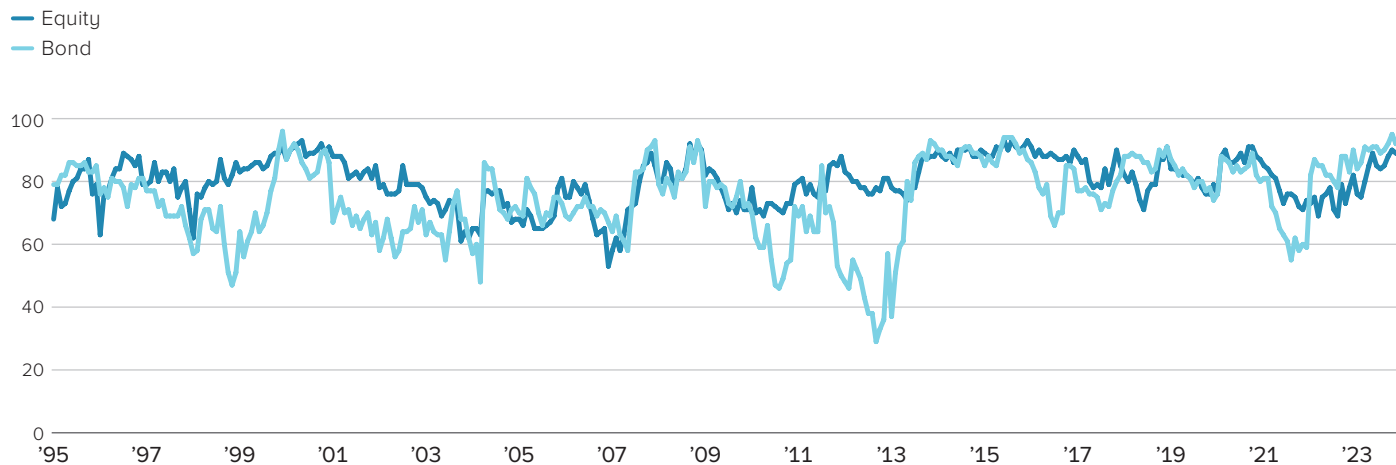
### Traditional CEF Discounts Widened in 2023

Percent, month-end



### Generally, the Majority of Traditional CEFs Trade at a Discount

Percentage of total traditional CEFs trading at a discount, month-end



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

Source: Investment Company Institute calculations of Bloomberg and Refinitiv data

## Shareholder Activism in the Traditional CEF Market

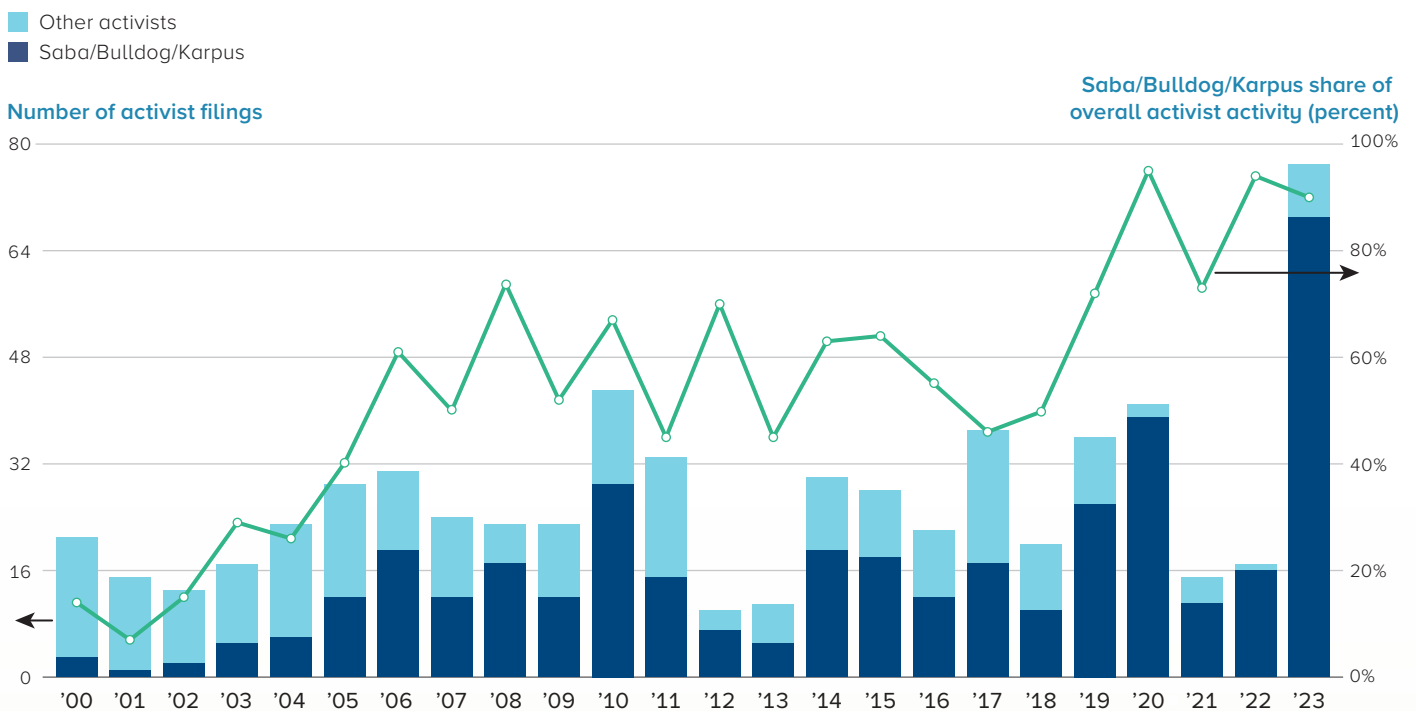
The persistence and prevalence of discounts—in combination with trading on the secondary market—provide traditional CEF shareholders the ability to realize gains through changes in the fund’s market price. For example, if a traditional CEF is trading at a discount and a shareholder expects that discount to narrow over some period, then the shareholder may attempt to capture a gain by buying the shares of the CEF at the lower price with the intent of selling them at a higher price in the future.<sup>6</sup>

Traditional CEFs can also conduct certain liquidity events to provide shareholders with the difference between the fund’s market price and its NAV. Traditional CEFs may repurchase shares at, or close to, NAV through share repurchases or tender offers. Additionally, if a traditional

CEF liquidates, then shareholders will receive a cash distribution equal to NAV for all common shares, and if a CEF converts to (or merges with) an open-end fund, then shareholders will have the option to redeem their shares at NAV. The availability of these liquidity events makes traditional CEFs susceptible to activist investors—shareholders whose primary objective is to capture short-term profits by purchasing a stake in a fund at a discount and use their voting power to pressure the fund to take an action that results in one of these liquidity events.

Shareholder activism has been present among traditional CEFs for a long time, but in recent years, it has become very concentrated among a select number of shareholders. In 2023, activists filed a total of 77 Schedule 13D and contested proxy filings targeting 70 distinct traditional CEFs—a huge spike in activity compared with the past 24 years (Figure 2).<sup>7</sup> And

**FIGURE 2**  
**Activist Activity Surged in 2023 and Is Highly Concentrated**



Source: Investment Company Institute calculations of publicly available SEC filings

90 percent of the actions in 2023 were concentrated among just three shareholders. Additionally, these same three activist shareholders have widespread ownership among traditional CEFs, holding shares in more than 50 percent of all traditional CEFs at year-end 2023.

Activist shareholders have historically claimed that their involvement benefits all CEF shareholders, including long-term shareholders, and will lead to improvements in the fund’s discount. These improvements, however, tend to be short-lived. After studying traditional CEFs that held an activist-induced tender offer between 2015 and 2022, we found that, on average, these funds’ excess discounts—a fund’s discount relative to the discount of other CEFs in the same asset class—narrowed in the window between the initial activist public filing and the completion of the tender offer (Figure 3). The narrower

discount is likely related to the tender offer event because the CEF will be buying back some percentage of shares at or close to NAV; all else equal, one should see the market price narrow toward the NAV.

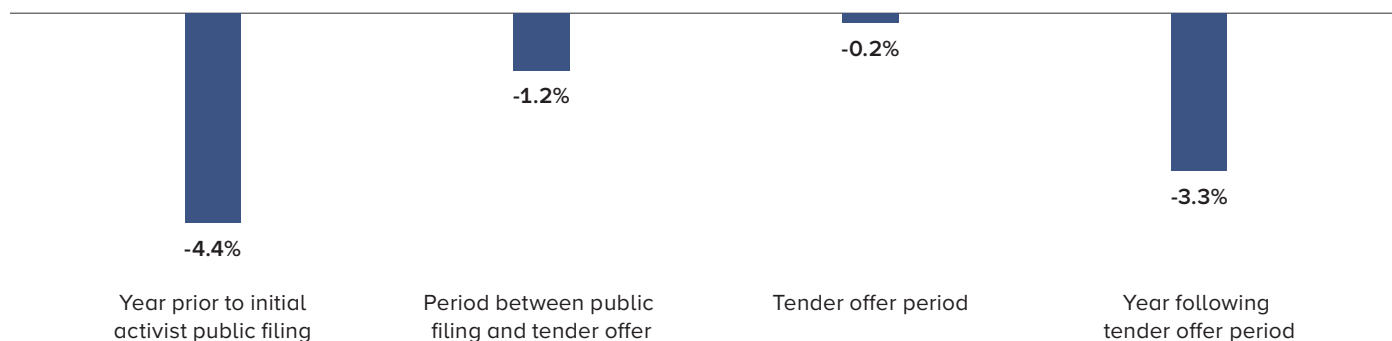
However, most importantly, activist involvement does not appear to improve traditional CEF discounts in the long term. Average excess discounts tend to widen to close to their pre-activist levels within the first year after CEFs hold an activist-induced tender offer.<sup>8</sup> During this period, the activist typically exits the targeted CEF—activists completely exited 75 percent of the CEFs for which they were able to successfully secure tender offers.

For more information on shareholder activism, see *Closed-End Fund Activism* at [www.ici.org/files/2024/cef-activism.pdf](http://www.ici.org/files/2024/cef-activism.pdf).

FIGURE 3

**Generally, Activism Does Not Improve Discounts over the Long Term**

On average, excess discounts\* on CEFs widen back out after activist involvement



\* *Excess discount* is the simple average discount of the given CEF over the specified period minus the simple average discount of all funds in the same investment objective over the specified period.

Note: Sample includes 34 funds with forced tender offers between 2015 and 2022.

Sources: Investment Company Institute, Bloomberg, and Refinitiv

## Total Assets and Net Issuance of Traditional CEFs

At year-end 2023, there were 402 traditional CEFs, with total assets of \$249 billion (Figure 4). The modest increase in CEF assets in 2023 reflected market returns.

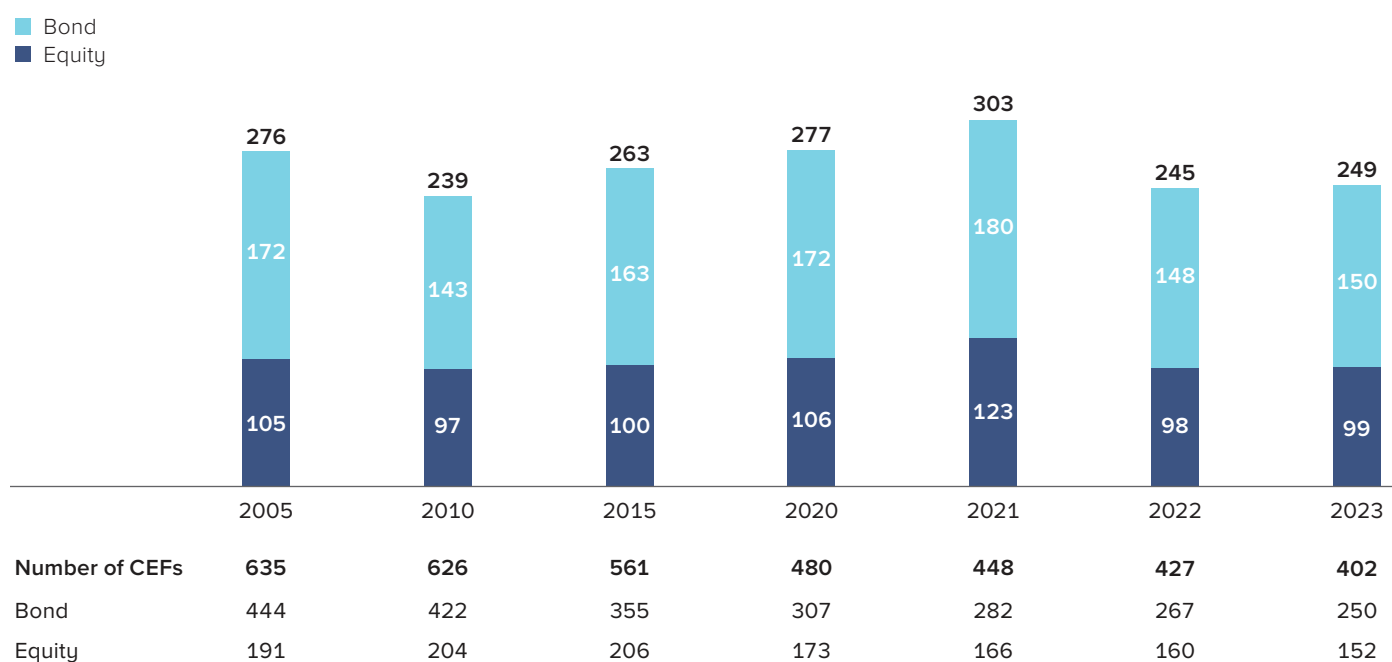
At year-end 2023, bond CEFs accounted for the majority of assets (60 percent) in traditional CEFs, with the remainder held by equity CEFs.

The number of traditional CEFs available to investors decreased again in 2023 (Figure 4). In recent years, more traditional CEFs were liquidated, merged, or converted into open-end mutual funds or ETFs than were launched.

FIGURE 4

### Total Assets of Traditional CEFs Have Stagnated in Recent Years and the Number of Traditional CEFs Has Significantly Decreased

Billions of dollars, year-end



Note: *Total assets* is the fair value of assets held in CEF portfolios funded by common and preferred shares less any liabilities (not including liabilities attributed to preferred shares). Data prior to 2018 may include a small number of interval funds or tender offer funds.

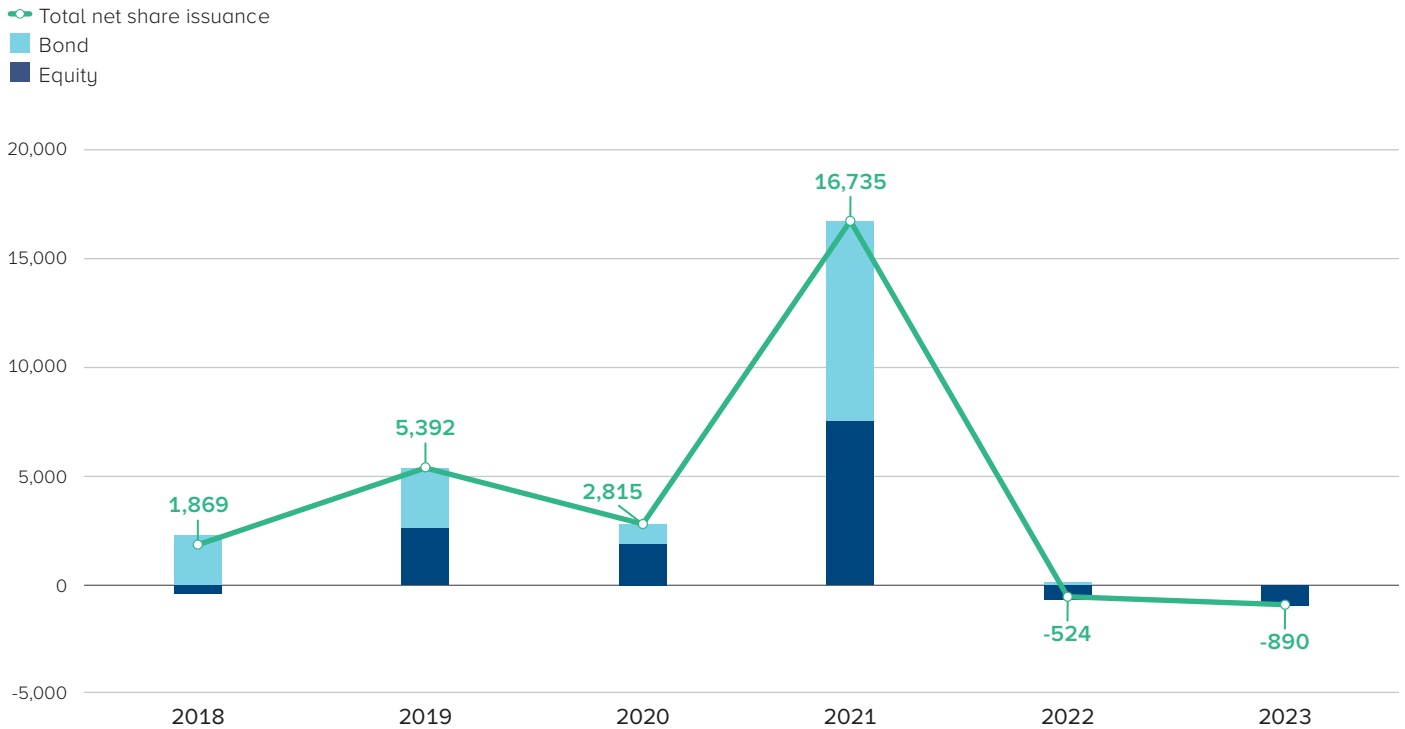
Source: Investment Company Institute

Traditional CEFs had negative net share issuance of \$890 million in 2023, which follows negative net issuance of \$524 million in 2022 (Figure 5.2). In 2023, equity CEFs had positive net issuance of \$51 million, while bond

CEFs had negative net issuance of \$941 million. Positive returns on stocks and bonds around the world were not enough to bolster demand for traditional CEFs in 2023—a year without a single traditional CEF entering the market.

**FIGURE 5**  
**Traditional CEF Net Share Issuance Remained Negative in 2023**

Millions of dollars, annual



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: Investment Company Institute



## Traditional CEF Distributions

In 2023, traditional CEFs distributed an estimated \$16.3 billion to shareholders (Figure 6). CEFs 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 the majority (67 percent) of traditional CEF distributions. Capital gains distributions accounted for 13 percent of traditional CEF distributions and return of capital for 20 percent.

Some CEFs follow a managed distribution policy, which allows them 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 is typically paid to common shareholders on a monthly or quarterly basis and can be a regular fixed cash payment or an amount based on a percentage of a fund's assets.<sup>9</sup> Managed distribution policies for traditional CEFs are used most often in multi-strategy or equity-based CEFs where capital appreciation is an important part of a fund's expected total return.<sup>10</sup>

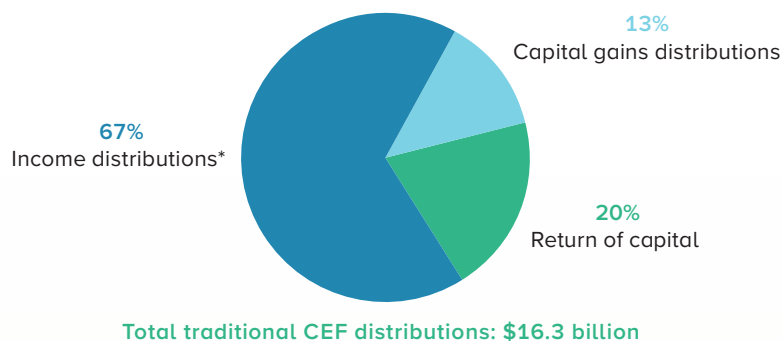
Managed distribution policies may have potential advantages for common shareholders. First, a CEF with a managed distribution policy can be an important tool for investors seeking steady income or cash flow. Second, a managed distribution policy permits a fund to offer regular cash flow from strategies not typically associated with regular income. Third, for traditional CEFs, having a managed distribution policy in place may help support the fund's share price and may help reduce any discount between the CEF's share price and its NAV.<sup>11</sup>

Managed distribution policies may also 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. In addition, if a CEF consistently pays distributions that are greater than the fund's total return, a portion of the distributions will be made from a return of capital, and the fund eventually will deplete its capital.<sup>12</sup>

FIGURE 6

### Most Traditional CEF Distributions Are from Income Distributions

Percentage of traditional CEF distributions, 2023



\* Income distributions are paid from interest and dividends that the fund earns on its investments in securities.  
Source: Investment Company Institute

Return of capital distributions from CEFs may result from unrealized capital gains, pass-through return of capital from underlying holdings, or just the return of investors' own capital. In order to avoid selling securities that are expected to continue to appreciate, a CEF may use cash holdings to pay a distribution based on the expected capital gains. In this scenario, the fund's total return would exceed the distribution rate if the expected gains were realized.

Certain types of portfolio securities, such as master limited partnerships (MLPs), generate return of capital through their ordinary business operations. MLPs generally do not pay taxes, as they pass through income and gains to investors. MLPs pay distributions based on their cash flow, but because MLPs tend to be focused on energy-related operations, they typically have large depreciation and amortization costs that offset the income. Therefore, the cash that is generated from operations is issued as a return of capital from the MLP, and a CEF holding these types of securities must pass through the return of capital to its shareholders.<sup>13</sup>

When a CEF maintains a distribution rate that exceeds income generated from interest income, dividends, and capital gains, then the excess will result in a return of the investors' own capital, which will decrease the assets available to the fund to generate income.

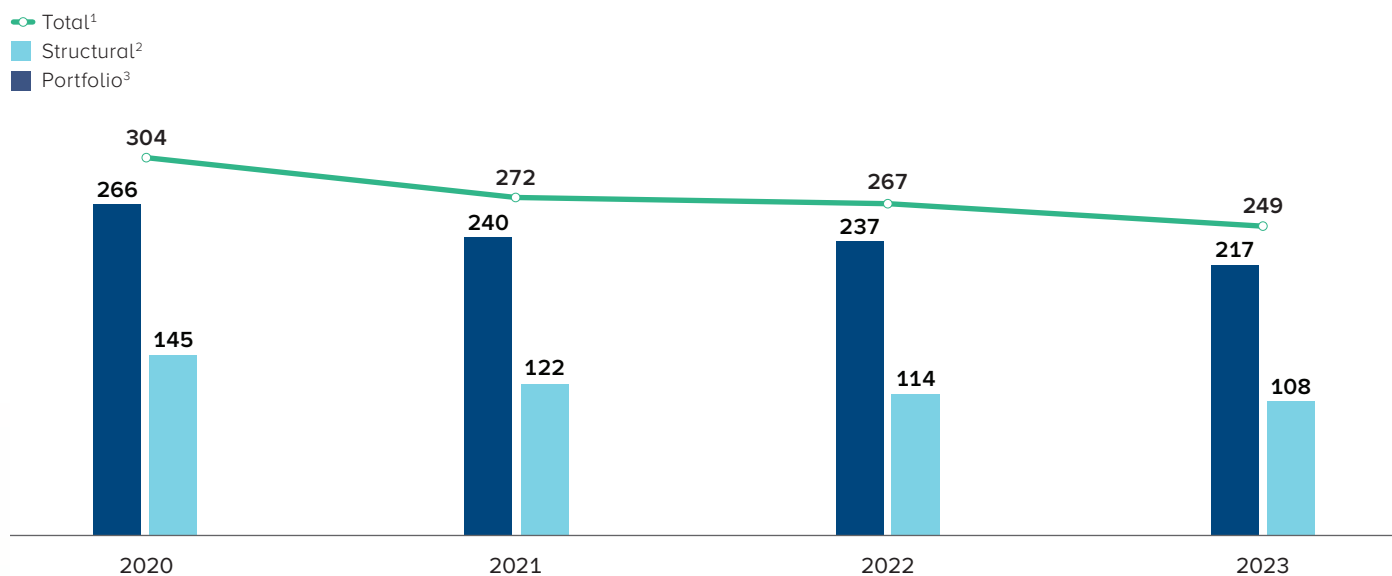
### Traditional CEF Leverage

CEFs have the ability, subject to strict regulatory limits, to use leverage as part of their investment strategy.<sup>14</sup> The use of leverage by a CEF can enable it to achieve higher long-term returns but also increases risk and the likelihood of share price volatility. CEF leverage can be classified as either structural leverage or portfolio leverage. At year-end 2023, at least 249 traditional CEFs—62 percent of funds—were using structural leverage, portfolio leverage consisting of tender option bonds or reverse repurchase agreements, or both (Figure 7).<sup>15</sup>

FIGURE 7

### Traditional CEFs Are Employing Structural Leverage and Some Types of Portfolio Leverage

Number of traditional CEFs, year-end



<sup>1</sup> Components do not add to the total because CEFs may employ both structural and portfolio leverage.

<sup>2</sup> Structural leverage affects the CEF's capital structure by increasing the fund's portfolio assets through borrowing capital and issuing debt and preferred shares.

<sup>3</sup> 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 available only 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: Investment Company Institute

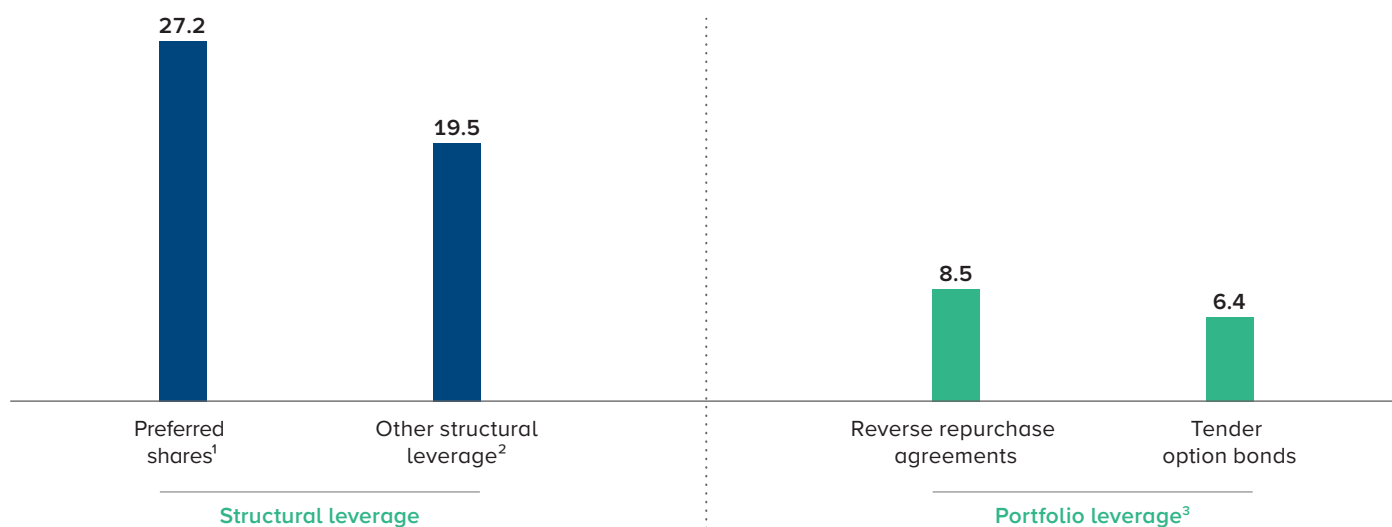
**Structural leverage**, the most common type of leverage used by traditional CEFs, affects the CEF's capital structure by increasing the fund's portfolio assets. Types of CEF structural leverage include borrowing capital and issuing debt and preferred shares.<sup>16</sup> CEFs are subject to asset coverage 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 immediately after issuance and at the time of dividend declaration dates (commonly referred to as 50 percent leverage).<sup>17</sup>

At the end of 2023, 217 traditional CEFs had a total of \$46.8 billion in structural leverage, with \$27.2 billion from preferred shares and \$19.5 billion from other types of structural leverage (Figures 7 and 8). The average leverage ratio<sup>18</sup> across those traditional CEFs employing structural leverage was 28 percent at year-end 2023. Among traditional CEFs employing structural leverage, the average leverage ratio for bond funds was somewhat higher (29 percent) than that of equity funds (26 percent).

At year-end 2023, 11 percent of the \$249 billion in traditional CEF total assets was funded by proceeds from preferred shares (Figure 9), with bond funds accounting for the vast majority of preferred share assets. The dollar

**FIGURE 8**  
**Majority of Traditional CEF Leverage Is from Preferred Shares**

Billions of dollars, year-end 2023



<sup>1</sup> A CEF 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.

<sup>2</sup> *Other structural leverage* includes bank borrowing and other forms of debt.

<sup>3</sup> 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: Investment Company Institute

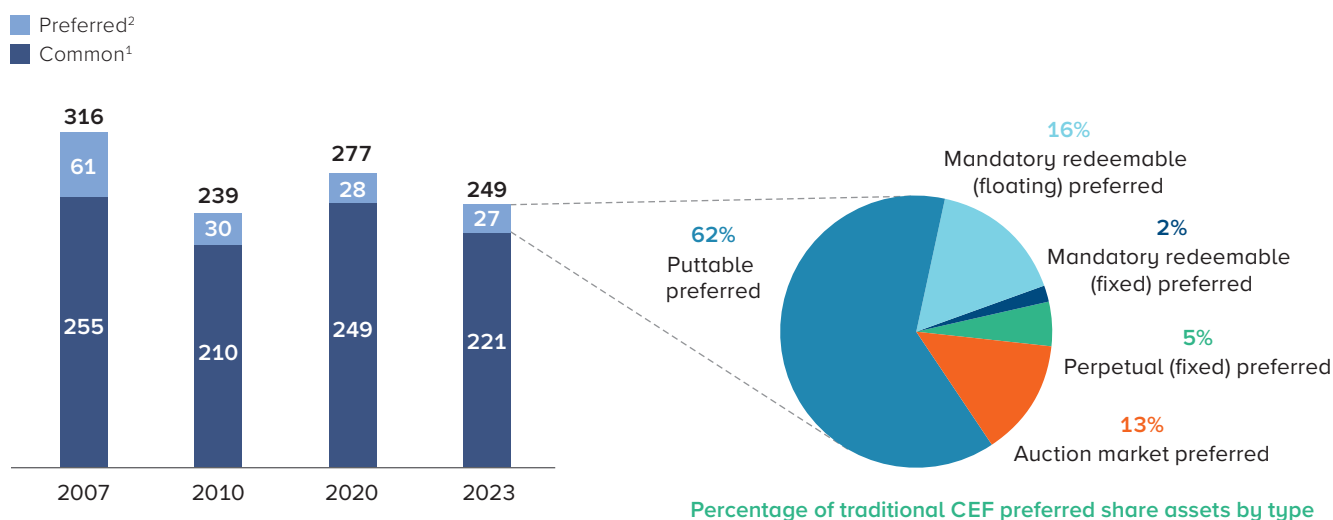
amount of outstanding traditional CEF preferred shares has declined since auction market preferred stock, once a common type of preferred share, suffered a liquidity crisis in mid-February 2008.<sup>19</sup> Since then, traditional CEFs have replaced auction market preferred stock with alternative forms of structural and portfolio leverage, such as bank loans, lines of credit, tender option bonds, reverse repurchase agreements, puttable preferred shares, mandatory redeemable preferred shares, or extendible notes.

At year-end 2023, 93 percent of traditional CEF preferred share assets were floating-rate preferred shares,

which include puttable preferred shares (including variable rate demand preferred shares), auction market preferred shares, and mandatory redeemable (floating) preferred shares.

**Portfolio leverage** is leverage that results from certain portfolio investments,<sup>20</sup> such as certain types of derivatives, reverse repurchase agreements, and tender option bonds. At the end of 2023, 108 traditional CEFs had \$15.0 billion outstanding in reverse repurchase agreements and tender option bonds (Figures 7 and 8).

**FIGURE 9**  
**Preferred Share Assets Accounted for 11 percent of Traditional CEF Total Assets at Year-End 2023**  
 Billions of dollars, year-end



<sup>1</sup> All traditional CEFs issue common stock (also known as common shares).

<sup>2</sup> A traditional CEF 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.

Note: Data prior to 2018 may include a small number of interval funds or tender offer funds.

Source: Investment Company Institute

## Interval Funds, Tender Offer Funds, and BDCs

In addition to traditional CEFs, there are three other types of CEFs—interval funds, tender offer funds, and business development companies (BDCs). At year-end 2023, there were 322 interval funds, tender offer funds, and BDCs with total assets of \$296 billion (Figure 10).

**Interval funds**, unlike traditional CEFs, are permitted to continuously offer their shares at NAV following their IPO.<sup>21</sup> Most interval funds differ from traditional CEFs in that they do not offer liquidity via the secondary market (i.e., they typically are not listed on an exchange). Instead, they buy back shares by making periodic repurchase offers at NAV in compliance with Securities and Exchange Commission (SEC) Rule 23c-3 under the 1940 Act. There are some interval funds, however, that are listed on an exchange and are bought and sold in the secondary market—these funds continue to make periodic repurchases at NAV via Rule 23c-3. Certain unlisted interval funds are not available to the general public

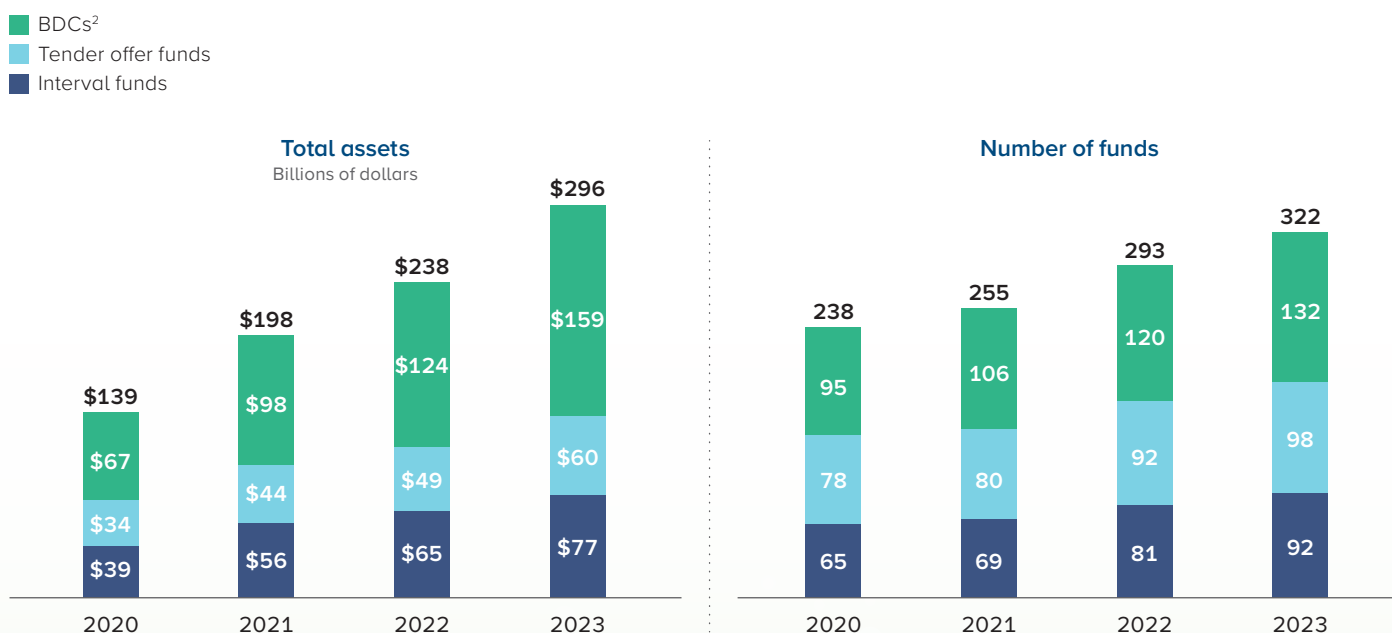
and are primarily held by qualified investors that meet income, wealth, and/or sizeable minimum investment thresholds.<sup>22</sup> At year-end 2023, there were 92 interval funds with total assets of \$77 billion.

For interval funds making continuous offerings, purchases resemble open-end mutual funds in that their shares typically are continuously offered and priced daily. However, unlike a mutual fund, shares are not continuously available for redemption but are repurchased by the fund at scheduled intervals (e.g., quarterly, semiannually, or annually).<sup>23</sup> In 2023, 91 percent of interval funds had policies to repurchase shares every three months, while the remainder had policies to repurchase shares monthly, annually, or semi-annually.<sup>24</sup> Further, the number of outstanding shares repurchased may vary, but it must be between 5 percent and 25 percent of outstanding shares. For more information on the different operational characteristics around interval fund repurchases, see [Interval Funds: Operational Challenges and the Industry’s Way Forward](#).

FIGURE 10

### Interval Funds, Tender Offer Funds, and BDCs Have Flourished in Recent Years

Year-end<sup>1</sup>



<sup>1</sup> Data are based on quarterly public filings between November and January.

<sup>2</sup> Data for BDCs are total net assets.

Source: Investment Company Institute calculations of data from publicly available SEC Form N-PORT, N-CEN, 10-Q, and 10-K filings

**Tender offer funds** are generally unlisted and permitted to continuously offer their shares at NAV. Like interval funds, certain tender offer funds are only sold to accredited investors or other types of qualified investors. Unlike interval funds, however, tender offer funds repurchase shares on a discretionary basis through a tender offer, which must comply with SEC Rule 13e-4 under the Securities Exchange Act of 1934 by filing a Schedule TO. There is no set schedule for when tender offer funds must conduct repurchases or how many shares they must tender. Some tender offer funds hold infrequent tender offers (e.g., one every 2 to 3 years), but many offer them more regularly (e.g., quarterly). In 2023, 50 percent of tender offer funds held tender offers four times during the year, 11 percent held between one and three tender offers, and the remaining 39 percent did not hold any tender offer during the year.<sup>25</sup> At year-end 2023, there were 98 tender offer funds with total assets of \$60 billion.

**BDCs** differ from other CEFs in that they are not registered under the 1940 Act but instead elect to be subject to and regulated by certain provisions of the 1940 Act.<sup>26</sup> BDCs primarily invest in small and medium-

sized private companies, developing companies, and distressed companies that do not otherwise have access to lending.<sup>27</sup> In particular, BDCs must invest at least 70 percent of their assets in domestic private companies or domestic public companies that have market capitalizations of \$250 million or less.<sup>28</sup> At year-end 2023, there were 132 BDCs, with total net assets of \$159 billion.

BDCs may be listed or unlisted. Listed BDCs are bought and sold on stock exchanges in the secondary market. Unlisted BDCs may be either non-traded or private. Non-traded BDCs are continuously offered (like unlisted interval funds and tender offer funds), may be available to retail investors, and often conduct periodic repurchase offers for investors to redeem their shares.<sup>29</sup> Private BDCs are sold through private placement offerings only to qualified investors. Private BDCs typically only offer investors the chance to liquidate their shares by either going public (e.g., holding an IPO) or choosing to unwind the portfolio and liquidate the fund. These liquidity events often occur between five and ten years following the initial private placement.

## Holdings of Interval Funds and Tender Offer Funds

Interval funds and tender offer funds generally hold different types of assets than those held by traditional CEFs. While traditional CEFs often hold securities available in public markets (like mutual funds and ETFs, but typically holding securities that are less liquid), interval funds and tender offer funds tend to invest more in private markets or other alternative investments.

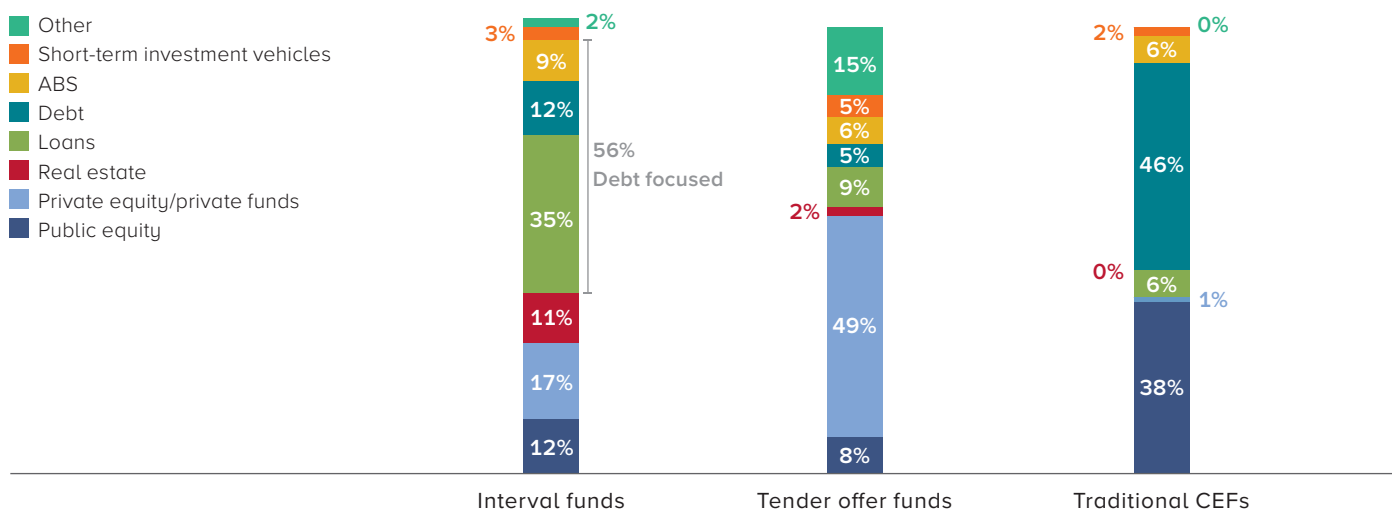
At year-end 2023, 56 percent of interval fund assets were in debt-focused securities such as loans, asset-backed securities (e.g., collateralized loan obligations and non-agency mortgage-backed securities), and

other forms of debt, including high-yield bonds (Figure 11). In particular, credit-focused funds make up a large portion of interval fund assets,<sup>30</sup> and growing investor demand for private credit has contributed to the growth in interval funds in recent years.<sup>31</sup> Most of the private credit market is composed of some form of direct lending, which generally comprise loans made directly to small- or mid-sized companies. Given these loans tend to have relatively low liquidity, they fit well within the interval fund structure with its limits on redemptions. Interval funds also held 11 percent of their portfolios in real estate, which primarily includes non-traded or private real estate investment trusts (REITs).<sup>32</sup>

FIGURE 11

### Interval Fund and Tender Offer Fund Holdings

Percentage of total dollar value of holdings by CEF type and asset class, year-end 2023\*



\* Data are based on quarterly public filings between November and January.

Notes: Public equity includes securities such as public stocks and public REITs. Private equity/private funds may include holdings of private equity funds, private debt funds, or private BDCs. Loans and debt may include both public and private credit. Real estate may include holdings of real estate or private REITs.

Source: ICI calculations of publicly available SEC Form N-PORT data

Tender offer funds had 49 percent of their assets concentrated in private equity and/or private funds (e.g., private equity funds, hedge funds) at year-end 2023.<sup>33</sup> With their limited investor liquidity, many fund sponsors have found tender offer funds to be a convenient structure to enhance investor access to private funds. Indeed, around one in four tender offer funds are organized as funds of hedge funds. This type of strategy—as well as access to private funds provided by other tender offer funds—gives investors easier access to securities that would otherwise be unavailable to them. Tender offer funds also have 15 percent of their assets in other securities. The majority of these other securities are various types of private investments, such as primary/secondary limited partnerships and co-investments.<sup>34</sup>

Given their more-specialized strategies and the investments they hold, interval funds and tender offer funds (or unlisted CEFs, more generally) tend to attract higher-net-worth investors. In particular, unlisted CEFs often are only available to qualified investors.<sup>35</sup> Unlisted CEFs that don't have a qualified investor standard tend to have higher initial investment minimums. In 2023, 36 percent of interval fund assets were in share classes with an initial investment minimum of greater than \$1 million. Another 41 percent had initial investment minimums between \$100,000 and \$1 million.<sup>36</sup>

## Additional Reading

- » **Closed-End Fund Resource Center**  
[www.ici.org/cef](http://www.ici.org/cef)
- » **Frequently Asked Questions About Closed-End Funds and Their Use of Leverage**  
[www.ici.org/faqs/faq/other/faqs\\_closed\\_end](http://www.ici.org/faqs/faq/other/faqs_closed_end)
- » **A Guide to Closed-End Funds**  
[www.ici.org/cef/background/bro\\_g2\\_ce](http://www.ici.org/cef/background/bro_g2_ce)
- » **Quarterly Closed-End Fund Asset Data**  
[www.ici.org/research/stats/closedend](http://www.ici.org/research/stats/closedend)



## Competition in the CEF Industry

At year-end 2023, there were 172 CEF sponsors competing in the US market, which include 71 traditional CEF sponsors, 74 interval fund sponsors, and 66 tender offer fund sponsors (Figure 12). In recent years, the vast majority of new firms entering the market have sponsored interval or tender offer funds.

Competitive dynamics have prevented any single sponsor or group of sponsors from dominating the CEF market, and many sponsors have only one CEF.

For example, in 2023, 30 sponsors of traditional CEFs (or 42 percent of all traditional CEF sponsors) offered only one fund. Similarly, 57 interval fund sponsors (77 percent) and 45 tender offer fund sponsors (68 percent) offer only one fund (Figure 12). CEF sponsors also tend to stick with one type of CEF—only 19 percent of sponsors support more than one type of CEF. In addition, the 724 CEFs must compete with other registered investment companies—8,582 mutual funds, 3,750 UITs, and 3,304 ETFs.<sup>37</sup>

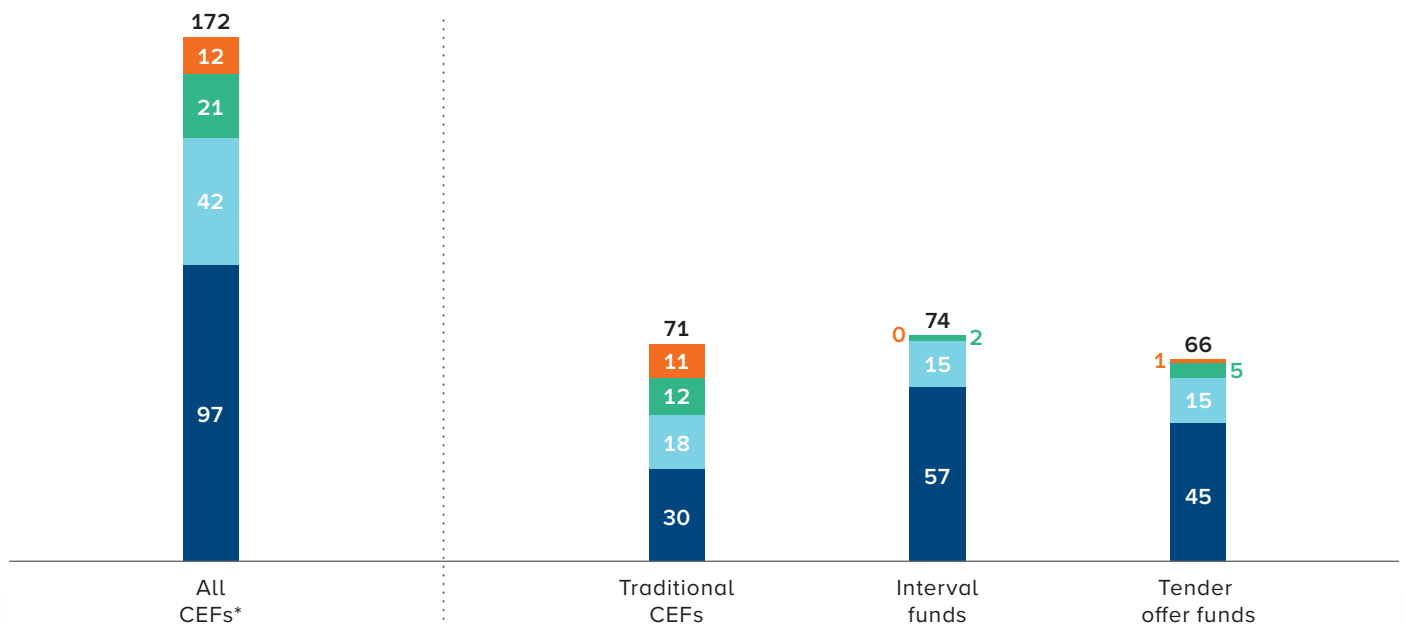
FIGURE 12

### Majority of CEF Sponsors Have Just One Fund

Number of fund sponsors, year-end 2023

#### Number of funds owned by sponsor:

- More than 10 funds
- 4 to 10 funds
- 2 to 3 funds
- 1 fund



\* Totals do not add across all types of CEFs because some CEF sponsors may have more than one type of CEF.

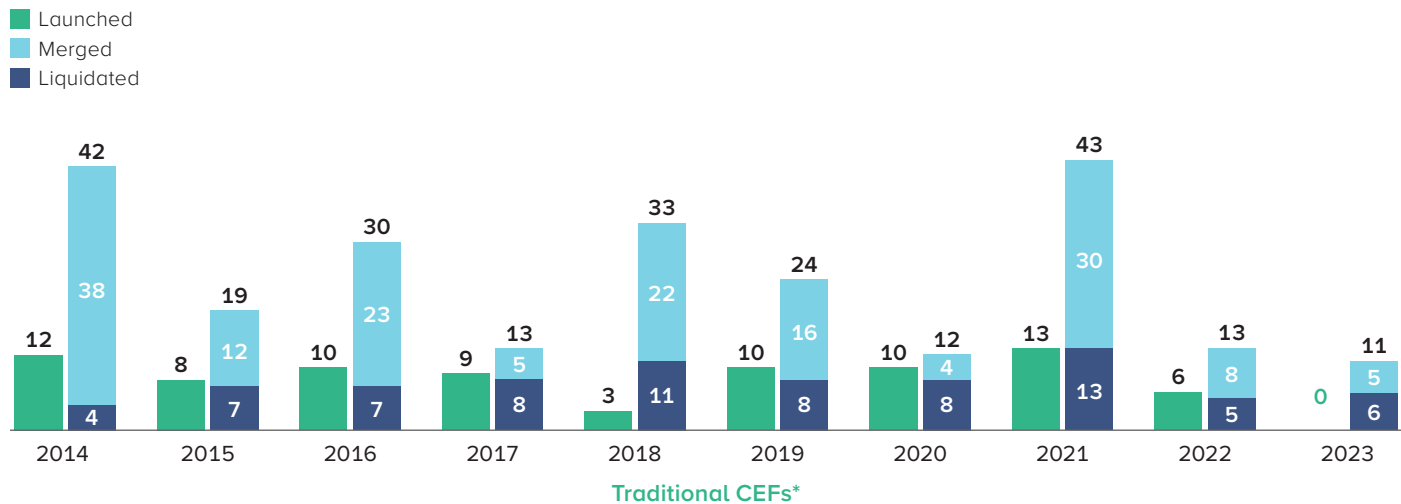
Note: Data for number of funds include feeder funds and exclude master funds.

Source: Investment Company Institute

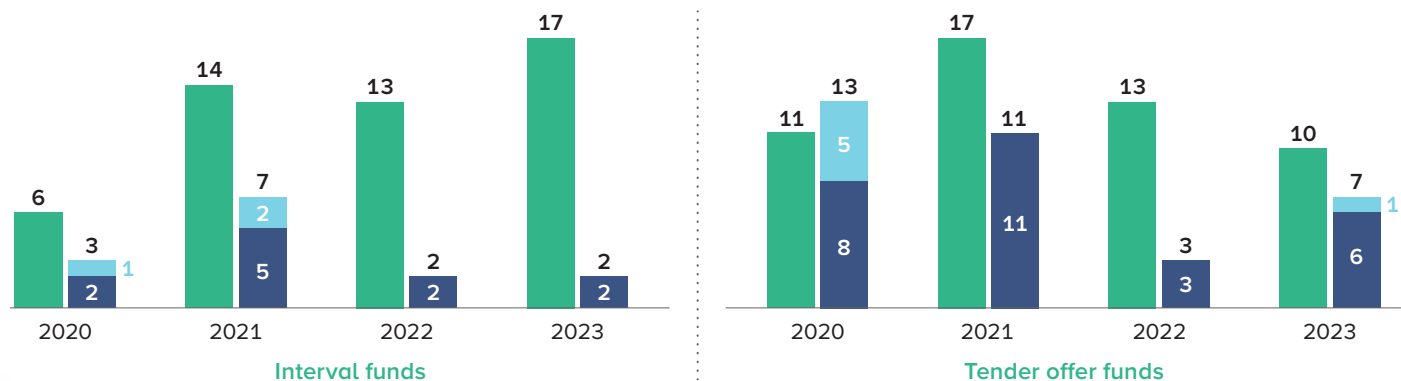
Competitive dynamics also affect the number of CEFs offered in any given year. In particular, CEF sponsors launch new CEFs to meet investor demand, and they merge or liquidate those that do not attract sufficient investor interest. In recent years, traditional CEF sponsors have also merged funds with similar strategies to improve trading efficiency and build economies of scale.

Consequently, the number of traditional CEFs available to investors has declined steadily since year-end 2011. And from 2014 through 2023, more traditional CEFs were merged or liquidated, and others converted into open-end mutual funds or ETFs, than new traditional CEFs were launched (Figure 13). Some traditional CEFs have also converted to interval or tender offer funds during this time.

**FIGURE 13**  
**No Traditional CEFs Entered the Market in 2023**



**Meanwhile, a Substantial Number of Interval and Tender Offer Funds Continued to Launch**



\* Data prior to 2018 may include a small number of interval funds or tender offer funds.  
 Note: Data include CEFs that do not report statistical information to the Investment Company Institute and CEFs that invest primarily in other CEFs.  
 Source: Investment Company Institute

Like any registered fund, CEFs adapt to investor demand and investor needs to better compete with other funds in the marketplace. For example, CEF launches often occur in batches for specific asset classes that are in high demand or trading at premiums.<sup>38</sup> In particular, most CEF launches since 2020 have been interval or tender offer funds because of substantial demand for the strategies those funds offer (e.g., access to private credit, private funds, and private real estate). Also, traditional CEFs historically passed start-up costs onto investors through certain fees, but now most traditional CEFs incur those costs instead. In recent years, some traditional CEFs have even adopted different structures such that some funds no longer launch as “perpetual” funds, but instead launch as “term” funds with a pre-specified liquidation date for investors to get out at NAV after some number of years.<sup>39</sup> Since 2015, the majority (53 percent) of all traditional CEFs launched as “term” funds.<sup>40</sup>

## Characteristics of Households Owning CEFs

An estimated 3.2 million US households owned CEFs in 2023.<sup>41</sup> These households tended to include investors who owned a range of equity and fixed-income investments. More than eight in 10 households owning CEFs also owned mutual funds, and almost seven in 10 also owned ETFs.<sup>42</sup>

Because households that owned CEFs often also owned individual stocks and mutual funds, the characteristics of each group were similar in many respects. For instance, households that owned CEFs (like households owning individual stocks and mutual funds) tended to have household incomes and financial assets above the national median and were more likely to own retirement accounts (Figure 14). Nonetheless, households that owned CEFs also exhibited certain differences from mutual fund–owning households. For example, 43 percent of CEF–owning households were retired from their lifetime occupations, compared with 35 percent of households owning mutual funds. Households owning CEFs also expressed more willingness to take financial risk—40 percent were willing to take above-average or substantial risk, compared with 30 percent of mutual fund–owning households.

FIGURE 14

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

2023

	All US Households	Households owning closed-end funds	Households owning mutual funds	Households owning individual stocks
<b>Median</b>				
Age of household survey respondent	52	53	54	54
Household income <sup>1</sup>	\$74,000	\$104,000	\$100,000	\$125,000
Household financial assets <sup>2</sup>	\$87,500	\$350,000	\$225,000	\$375,000
<b>Percentage of households</b>				
<b>Household survey respondent</b>				
Married or living with a partner	63	71	71	73
College or postgraduate degree	40	58	54	60
Employed (full- or part-time)	58	58	64	61
Retired from lifetime occupation	33	43	35	37
<b>Household owns</b>				
IRA(s)	42	71	66	70
DC retirement plan account(s)	59	72	82	77
<b>Household's willingness to take financial risk</b>				
Substantial risk for substantial gain	5	12	5	7
Above-average risk for above-average gain	17	28	25	30
Average risk for average gain	39	41	50	47
Below-average risk for below-average gain	12	16	12	10
Unwilling to take any risk	27	3	8	6

<sup>1</sup> Total reported is household income before taxes in 2022.

<sup>2</sup> Household financial assets include assets in employer-sponsored retirement plans but exclude the household's primary residence.

Source: Investment Company Institute Annual Mutual Fund Shareholder Tracking Survey

## Notes

- <sup>1</sup> For more information on these types of offerings, see our “Glossary of Investing Terms” at [www.ici.org/fb-glossary](http://www.ici.org/fb-glossary).
- <sup>2</sup> Qualified buyers include people or entities that are classified as “accredited investors” or “qualified institutional buyers.” These definitions were modernized by the Securities and Exchange Commission (SEC) in August 2020. For more information about accredited investors, see US Securities and Exchange Commission 2021.
- <sup>3</sup> A repurchase or tender is “oversubscribed” if the number of shares submitted for repurchase or tender exceeds the percentage of shares for which the CEF is willing to repurchase or tender.
- <sup>4</sup> Section 18 of the Investment Company Act of 1940 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; they continue to be entitled to elect a majority of the directors until all dividends in arrears are paid.
- <sup>5</sup> For more information on CEF discounts and premiums, see Lee, Shleifer, and Thaler 1991, Cherkes, Sagi, and Stanton 2009, and Cherkes 2012.
- <sup>6</sup> In recent years, some CEFs and ETFs have launched with investment objectives to arbitrage CEF discounts.
- <sup>7</sup> In some cases, multiple activists pursue a single fund. Also, Schedule 13D and contested preliminary proxy (PREC 14A) filings are cleaned somewhat to avoid double counting, among other things.
- <sup>8</sup> The data show that discounts for some CEFs do not widen out in the year following the tender offer. In most of these cases, however, the CEF had publicly announced other measures it would take to manage a fund’s discount. For example, some CEFs implement managed distribution plans (MDPs) to ensure that investors received stable levels of income for some pre-defined period. MDPs have been shown to have an impact on CEF discounts, as well as activism more generally. For more information, see Cherkes, Sagi, and Wang 2014.
- <sup>9</sup> In order to implement a managed distribution policy, a CEF must apply for, and the SEC must provide, an exemption from Section 19(b) of the Investment Company Act of 1940 and Rule 19b-1 thereunder.
- <sup>10</sup> According to Morningstar data, 32 percent of traditional CEFs had managed distribution policies as of April 2024—the vast majority of these were in multi-strategy or equity-based CEFs.
- <sup>11</sup> For more information on dividend policy and discounts on CEFs, see Johnson, Lin, and Song 2006.
- <sup>12</sup> For more information on CEF distributions, see Nuveen, “Understanding Managed Distributions.”
- <sup>13</sup> For more information on MLPs, see Tortoise Capital Advisors 2018.
- <sup>14</sup> For additional information, see Investment Company Institute, “Frequently Asked Questions About Closed-End Funds and Their Use of Leverage.”
- <sup>15</sup> More CEFs may be using portfolio leverage, but data are available only on the use of reverse repurchase agreements and tender option bonds. 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.
- <sup>16</sup> For more information on the different types of CEF preferred shares, see Investment Company Institute, “Frequently Asked Questions About Closed-End Funds and Their Use of Leverage.”
- <sup>17</sup> All CEFs registered under the 1940 Act are subject to the same leverage requirements. BDCs have similar, but slightly more relaxed, limits on their use of leverage. BDCs, subject to certain conditions, have a 2:1 debt-to-equity ratio.
- <sup>18</sup> 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.
- <sup>19</sup> See, e.g., Galley 2010 and Investment Company Institute, “Frequently Asked Questions About Closed-End Funds and Their Use of Leverage.”
- <sup>20</sup> For more information on the types of CEF leverage, see Nuveen, “Understanding Leverage in Closed-End Funds.”

- <sup>21</sup> See SEC Rule 23c-3 and US Securities and Exchange Commission, “Investor Bulletin: Interval Funds” for information on the structure and characteristics of interval funds.
- <sup>22</sup> See note 2.
- <sup>23</sup> Interval funds must adopt a fundamental policy to repurchase shares on 3-, 6-, or 12-month frequencies (additional frequencies may be permitted by SEC exemptive order).
- <sup>24</sup> ICI calculations of data from the SEC’s Electronic Data Gathering and Retrieval (EDGAR) website. Data only include funds that were still active at the end of 2023.
- <sup>25</sup> See note 24.
- <sup>26</sup> BDCs must file a Form N-54A, which signifies they are electing to be subject to Sections 55 through 65 of the 1940 Act.
- <sup>27</sup> For more information, see US Securities and Exchange Commission, “Investor Bulletin: Publicly Traded Business Development Companies (BDCs).”
- <sup>28</sup> More specifically, BDCs must invest at least 70 percent of their assets in “eligible portfolio companies” as defined in Rule 2a-46 under the 1940 Act.
- <sup>29</sup> For more information on BDCs, see Horowitz and Gaines 2019.
- <sup>30</sup> See Flynn, McCulloch, and Perry 2023.
- <sup>31</sup> See Lynam 2023.
- <sup>32</sup> Publicly traded REITs are primarily classified under public equity in Figure 11.
- <sup>33</sup> Private funds typically include private equity funds, hedge funds, and venture capital funds. For more information on private funds, see US Securities and Exchange Commission, “Private Fund” and “Starting a Private Fund.”
- <sup>34</sup> Primary limited partnerships are initial investments in private funds by limited partners alongside a general partner that manages the fund. Secondary limited partnerships are stakes in private funds purchased from primary limited partners that seek to exit the private fund before it liquidates. Co-investments are investments made directly in companies outside of a private fund, typically by limited partners to reduce the fees incurred by their stake in the private fund. For more information, see Shah and Leung 2024 and Hamlin and Shi 2023.
- <sup>35</sup> As of June 2023, nearly 30 percent of interval fund assets were in funds that required investors to be accredited and about 74 percent of tender offer fund assets were in funds with limited ownership to accredited investors. See UMB Fund Services 2024.
- <sup>36</sup> See Figure S6 in the statistical appendix for more information.
- <sup>37</sup> See Investment Company Institute 2024 for more information. The number of mutual funds includes mutual funds that invest primarily in other mutual funds. The number of ETFs includes ETFs not registered under the Investment Company Act of 1940 and ETFs that invest primarily in other ETFs.
- <sup>38</sup> See Cherkes, Sagi, and Stanton 2009.
- <sup>39</sup> There are two types of term funds—traditional term funds and target term funds. Traditional term funds allow investors to liquidate at the CEF’s NAV at the termination date. Target term funds seek a target NAV at the fund’s termination date (e.g., the liquidation NAV will equal the IPO NAV). For more information on CEF term structures, see Nuveen, “Understanding Closed-End Fund Structures.”
- <sup>40</sup> Information derived from ICI calculations of Morningstar data.
- <sup>41</sup> See Holden, Schrass, and Bogdan 2023.
- <sup>42</sup> See Figure S7 in the statistical appendix for more information.

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**James Duvall**

James Duvall is an economist in the industry and financial analysis section of ICI's research department. Since joining in 2012, Duvall has primarily participated in research examining US mutual fund fees across the industry and in retirement plans, and more recently, the costs and charges of UCITS. He also contributes to research on closed-end funds, worldwide regulated funds, and environmental, social, and governance (ESG) issues. He graduated from Virginia Tech with a BS in mathematics and a BA in economics and holds a master's degree in computer science from Johns Hopkins University.



**Kevin Ercoline**

Kevin Ercoline is assistant general counsel, securities regulation for the Investment Company Institute. His responsibilities include advocating for the Institute's membership on closed-end fund issues and securities market reforms, as well as variable insurance product and unit investment trust issues. Before ICI, Kevin was in private practice at Morgan Lewis & Bockius LLP. Kevin received his JD from American University Washington College of Law and graduated summa cum laude. He received a B.S. from the University of Texas at Austin.



**Casey Rybak**

Casey Rybak is a senior research associate in the industry and financial analysis section of ICI's research department. Since joining in 2019, Rybak has participated in research examining trends in US mutual funds and ETFs. He also contributes to research on target date funds, closed-end funds, and systemic risk. He graduated from the University of Florida with a BA in economics.



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