RETAIL ACCESS TO PRIVATE MARKETS

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In recent years, asset managers have launched dozens of products that provide ordinary investors with access to private market investments. Sponsors are promoting these funds as a way to "democratize" private markets and give everyday savers an unprecedented opportunity to diversify their portfolios and earn attractive risk-adjusted returns. However, the funds combine features of private funds and mutual funds in ways that create unique risks for investors.

In this paper, I explore the rise of these new "retail private funds" and the accompanying risks to investors. I study these funds' legal structures and analyze data collected from their public filings. First, I present evidence that the new funds, like private funds, report very low return volatility that understates their risk. However, because the new funds admit less sophisticated investors and provide periodic liquidity at their reported net asset values, the underreported volatility presents greater investor protection concerns than in private funds. Second, I provide suggestive evidence that some products that are restricted to wealthier investors perform better than products sold more broadly. This performance gap raises the possibility that sponsors are channeling products with poor performance to investors with low financial sophistication and little wealth.

I conclude by discussing legal and policy changes that would give retail investors the tools they need to avoid being taken advantage of as they invest in the new funds. As policymakers continue to consider ways to expand access to private markets, they should grapple with the risks I highlight and plan ways to mitigate them.

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"Assets that will define the future—data centers, ports, power grids, the world's fastest-growing private companies—aren't available to most investors. They're in private markets, locked behind high walls, with gates that open only for the wealthiest or largest market participants. … But nothing in finance is immutable. Private markets don't have to be … out of reach. Not if the investment industry is willing to innovate …."[2]

– Larry Fink, 2025 Annual Chairman's Letter to Investors

"If I told someone with even a little investing experience that I own an asset that pays like stocks but is stable like bonds, they would probably think I was a huckster or a fool. Yet many of the most sophisticated investors claim to own such a thing." [3]

– Nir Kaissar, Bloomberg Opinion columnist and founder of Union Advisors

INTRODUCTION

In 2012, CION Investment Group, a brand-new investment management company, launched a new fund.[4] CION's fund was a joint venture with the private equity giant Apollo Global Management.[5] The new fund would invest in "alternative," private investments sourced by CION and Apollo.[6] Additionally, unlike Apollo's private funds—which are available only to institutional investors and ultrawealthy individuals[7]—the fund would be open to individuals with modest means. Anyone with an annual income above

[2] Larry Fink, *Larry Fink's 2025 Annual Chairman's Letter to Investors*, BLACKROCK (2025), https://www.blackrock.com/corporate/investor-relations/larry-fink-annual-chairmans-letter.
[3] Nir Kaisasr, *Harvard and Yale Will Finally Lift the Veil on Private Assets*, BLOOMBERG (June 12, 2025), https://www.bloomberg.com/opinion/articles/2025-06-12/harvard-and-yale-will-finally-lift-the-veil-on-private-assets.
[4] *Who We Are*, CION INVS. (2025), https://cioninvestments.com/company/.
[5] CION Inv. Corp., Prospectus (Form 497) (July 2, 2012), https://www.sec.gov/Archives/edgar/data/1534254/000114420412037821/v317540_497.htm (cover page).
[6] *Id.* (pages 1–3 under "Prospectus Summary").
[7] Apollo's funds are typically private funds that rely on the Section 3(c)(7) exclusion in the Investment Company Act of 1940. See Apollo's most recent Form ADV filing, which is available for download at https://adviserinfo.sec.gov/firm/summary/143161, for information on these funds. 3(c)(7) private funds can only admit individuals with at least $5 million in investments and institutional investors. 15 U.S.C. § 80a-2(a)(51)(A), § 80a-3(c)(7).

$70,000 and a net worth above $70,000 would be allowed in invest.[8] Investors would also be allowed to withdraw money periodically.[9]

The new CION fund grew quickly, despite charging investors steep upfront fees.[10] By the end of 2015, it had brought in nearly $1 billion from investors.[11] Each year, the fund paid a healthy dividend,[12] very few investors tried to withdraw their money, and investors who did ask to withdraw money were repaid in full.[13]

A few years later, things headed south. 2018 was a rough year for the fund, and more investors started asking for their money back. By 2019, the fund was limiting how much money investors could withdraw, and when the COVID-19 pandemic hit in 2020, CION shut down withdrawals entirely. When CION started allowing withdrawals again the following year, requests came pouring in. Eventually, CION decided to list the fund's shares on a stock exchange. That way, investors who wanted to exit the fund could just sell their shares on the exchange instead of waiting for CION to cash them out.

Before the shares started trading, CION reported that they were worth $16.52 apiece. But when trading started, the going price was only $11.85. Investors who sold their shares ended up with almost 30% less than their shares were worth on paper.

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[8] *See* CION Inv. Corp., *supra* note 5 (page 143 under "Suitability Standards").

[9] *Id.* ("We intend to implement a share repurchase program, but only a limited number of shares will be eligible for repurchase by us.")

[10] Upfront fees could range up to 10% of the amount invested. *Id.* (see page 17 under "Fees and Expenses" and page 138 under "Compensation of the Dealer Manager and Selected Broker-Dealers").

[11] CION Inv. Corp., Annual Report (Form 10-K) (Mar. 14, 2016), https://www.sec.gov/Archives/edgar/data/1534254/000153425416000210/body.htm.

[12] For example, the fund paid an approximately 8% dividend to investors each year from 2014 to 2018. See CION Inv. Corp., Annual Report (Form 10-K) (Mar. 19, 2019), https://www.sec.gov/Archives/edgar/data/1534254/000153425419000004/cion2018123110k.htm.

[13] I hand collected data on CION's reported net asset values and shared repurchases from its Form 10-Ks, Schedule TO-Is, and Schedule TO-I amendments. These forms are available for download at https://www.sec.gov/edgar/browse/?CIK=1534254&owner=exclude. I used these data, along with share price data from the Center for Research in Security Prices (CRSP) database to construct Figure 1.

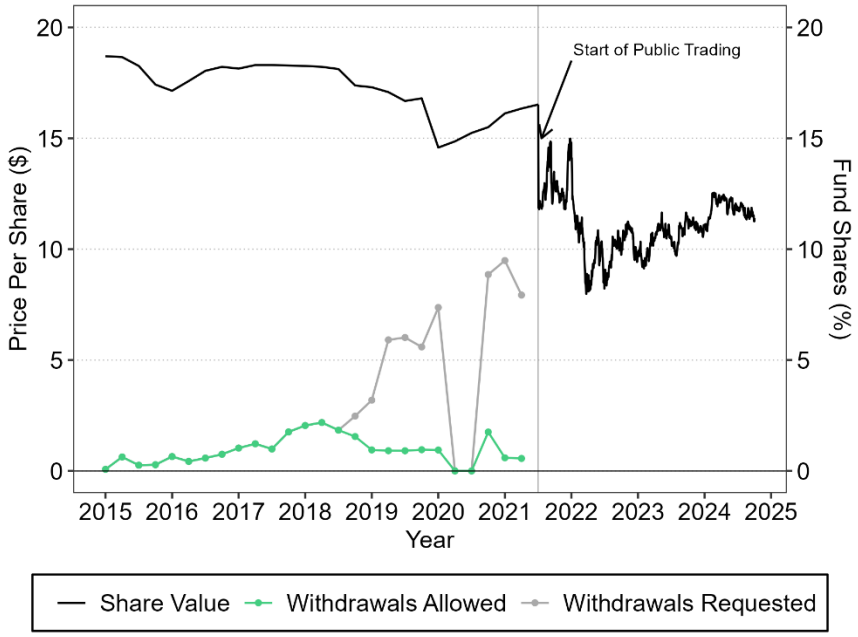

Figure 1: CION Investment Corp. Share Value and Share Repurchases

The U.S. securities laws distinguish between investments that are "public" and investments that are "private."[14] Public investments are available to everyone, are heavily regulated, and come with lots of mandatory disclosures. Private investments are reserved for investors who are wealthy and sophisticated and are subject to far fewer rules.

In recent decades, the number of companies with publicly traded stock has dropped dramatically,[15] and companies seem to increasingly prefer raising money from investors in the private markets.[16] These trends have fed into a powerful narrative that the wealthy individuals who can invest in private markets have access to all of the good investments while less wealthy, "main street" investors are stuck with the public market leftovers.[17] This

[14] See *infra* Section I.A for a discussion of the relevant legal rules.

[15] *See* Mark J. Roe & Charles C.Y. Wang, *Half the Firms, Double the Profits: Public Firms' Transformation, 1996 – 2022*, 8 J. L., FIN., & ACCT. 211 (2025).

[16] For example, data presented on the SEC's website show that private securities offerings under Regulation D have increased substantially over the past 15 years. See *Exempt Offerings – Regulation D*, U.S. SEC. & EXCH. COMM'N (May 5, 2025), https://www.sec.gov/data-research/data-visualizations/exempt-offerings-statistics/exempt-offerings-regulation-d.

[17] Nir Kaissar, *The Stock Market Is Becoming a Dumping Ground*, BLOOMBERG (Oct. 2, 2024), https://www.bloomberg.com/opinion/articles/2024-10-02/the-stock-market-is-becoming-a-dumping-ground ("It's time to consider the real possibility that the stock market has become a dumping ground for businesses too weak to attract capital in private markets.").

narrative has led retail investors to clamor for access to private markets, and the Securities and Exchange Commission (SEC) has seemed increasingly interested in helping them get it.[18]

To capitalize on this newfound demand from retail investors, private market heavyweights (like Apollo) have begun launching funds (like the CION fund) designed to bring private investments to the masses. Titans of the industry are heralding these new funds as a golden opportunity for everyday investors to reduce risk by diversifying their portfolios and to build wealth by investing in the "[a]ssets that will define the future."[19]

However, as CION's saga makes clear, these funds are full of risks for unwary investors. CION's investors found out the hard way that they could never be sure when they would be able to pull their money out. They also learned that the share valuations reported by the fund, as smooth and stable as they may have seemed, did not necessarily match what the shares could be sold for on the open market. Investors who managed to pull out early did just fine, but investors who waited too long suffered serious losses.

Another concern with retail-focused funds like CION's is that they are being filled with worse investments than the private funds being sold to more sophisticated investors. This concern is especially poignant now because, in recent years, institutional investors have reportedly become more reluctant to put money into private equity and venture capital as returns in these asset class have declined.[20] Media reports have also highlighted that private fund sponsors are having a hard time exiting their existing investments.[21] A big concern is that the new retail funds might be a way for the private fund sector

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[18] *See, e.g.*, Commissioner Hester M. Peirce, *Statement on Amending the "Accredited Investor" Definition*, U.S. SEC. & EXCH. COMM'N (Aug. 26, 2020), https://www.sec.gov/newsroom/speeches-statements/peirce-accredited-investor-2020-08-26 (" Why shouldn't mom and pop retail investors be allowed to invest in private offerings? … Private markets … are where a lot of the economic growth is happening."); Dylan Tokar & Matt Wirz, *SEC Chair Signals Investor Access to Private Markets Could Soon Broaden*, WALL. ST. J. (May 19, 2025), https://www.wsj.com/finance/investing/sec-chair-paul-atkins-private-markets-investors-d6d37e3a; Commissioner Mark T. Uyeda, *Remarks at the Florida Bar's 41st Annual Federal Securities Institute and M&A Conference*, U.S. SEC. & EXCH. COMM'N (Feb. 24, 2025), https://www.sec.gov/newsroom/speeches-statements/uyeda-remarks-florida-bar-022425 ("I have directed the Commission staff to explore regulatory changes that enable greater retail investor participation in the private markets ….").

[19] *See* Fink, *supra* note 2.

[20] *See* Leonard Kehnscherper, *Private Equity Fundraising Plunges Amid Struggles to Return Cash* (May 27, 2025), https://www.bloomberg.com/news/articles/2025-05-27/private-equity-fundraising-plunges-amid-struggle-to-return-cash.

[21] *Id.*

to bail itself out by using money from less discerning retail investors to buy investments that institutional investors increasing will not touch.[22]

In this paper, I study the rise of investment funds that provide broad access to private markets and evaluate the risks they pose to investors. Throughout, I refer to these funds as "retail private funds." I begin by explaining the funds' legal structures. Private fund sponsors have rediscovered and repurposed little-used areas of the federal securities laws to create these funds, which are predominantly structured as business development companies (BDCs) and non-traded (but semiliquid) closed-end funds (CEFs).[23] The funds blend characteristics of traditional private equity and private credit funds with characteristics of the mutual funds that many individuals hold in their retirement accounts: (1) They are accessible to individuals with modest wealth, (2) they invest in private markets—usually direct loans to small and mid-sized businesses—and (3) they provide investors with regular (but limited) opportunities to withdrawn their money.

Next, I provide an empirical account of the retail private fund landscape using data I collected from the funds' SEC filings. I show that, over the past five years, net assets invested in the most common fund types have nearly quadrupled, growing from just over $100B to more than $400B. I also provide evidence that retail private funds often charge fees that are much higher than the typical fees for mutual funds.

Additionally, I show that retail private funds report very attractive risk-adjusted returns. The funds' average reported returns are at least as high as—and in some cases much higher than—the returns on a portfolio of publicly traded, high-yield debt securities, but with lower volatility, which usually indicates lower risk. The funds' reported returns also have low correlations to stock market returns, which would typically be interpreted as evidence that these funds provide excellent diversification benefits.

I argue, however, that these rosy reported results should be viewed skeptically and may, in fact, be evidence of substantial risks. Traditional private funds often report returns with very low volatility, but these "smoothed" returns are a product of the fact that the funds' investments do

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[22] *See* Jonathan Weil, *Funds Are Booking Big One-Day Windfalls Buying Private-Equity Stakes*, WALL ST. J. (June 7, 2024), https://www.wsj.com/finance/investing/funds-are-booking-big-one-day-windfalls-buying-private-equity-stakes-664f3423; Dawn Lim, *Carlyle Makes New Retail Fund Push to Buy and Sell PE Stakes*, BLOOMBERG (June 26, 2025), https://www.bloomberg.com/news/articles/2025-06-26/carlyle-makes-new-retail-fund-push-to-buy-and-sell-pe-stakes.

[23] These are not the only structures being used to offer retail investors access to private markets, but they seem to have attracted the most investor dollars so far. In the Appendix, I walk through some of the other structures that are being used in order to situate my work within the space more broadly.

not have observable market values and are valued using financial models.[24] The new retail private funds hold similarly hard-to-value assets, so their reported returns rely on modelling assumptions that seem not to bake in the level of variability that is typical of public market prices. As a result, reported returns based on retail private funds' estimated net asset values may vastly understate their risk. Whether or not smoothed returns are a problem in traditional private funds, they create serious issues in retail private funds, setting retail investors up for unexpected losses during a downturn.

As evidence of the fact that the funds' reported performance understates their risk, I compare the reported performance and actual share price performance of the subset of BDCs that have shares trading on an exchange. An index constructed from the traded shares of these funds has more than four times the volatility of an index constructed from returns based on their self-reported net asset values. I use these publicly traded BDCs to calibrate a statistical model that I then use to estimate what returns would look like for non-publicly traded BDCs if they tied their investment valuations more closely to public market fluctuations. These simulation results suggest that, if non-publicly traded BDCs made this change, their risk-adjusted performance would flip from being more attractive than the public stock market to less attractive.

Next, I study how the performance of retail private funds differs across funds that are sold to different investor groups. I focus on non-publicly traded BDCs because BDCs are required by statute to hold certain types of investments, so they offer somewhat cleaner comparisons than other fund types.[25] I find suggestive evidence that BDCs that are sold only to relatively wealthy investors have better (reported) returns, on average, than BDCs sold to a broader range of investors. This gap persists even after controlling for fund size and leverage. These results are consistent with the possibility that worse performing funds are being offered to less sophisticated investors while better performing funds are being funneled toward wealthier and more sophisticated investors.

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[24] For commentary on the low volatility of reported private equity returns, compare Cliff Asness, *The Illiquidity Discount*, AQR (Dec. 19, 2019), https://www.aqr.com/Insights/Perspectives/The-Illiquidity-Discount and Cliff Asness, *Why Does Private Equity Get to Play Make-Believe With Prices?*, INSTITUTIONAL INV. (Jan. 6, 2023), http://institutionalinvestor.com/article/2bstqfcskz9o72ospzlds/opinion/why-does-private-equity-get-to-play-make-believe-with-prices (arguing that private equity funds understate their volatility and that investors may be worse off as a result) with Christopher Schelling, *Why Private Equity Gets Valuations Right*, INSTITUTIONAL INV. (Dec. 14, 2022), https://www.institutionalinvestor.com/article/2bstolqfnrubgolg5zj0g/opinion/why-private-equity-gets-valuations-right (arguing that private market valuations do a better job of representing companies' worth than volatile public market prices).

[25] See *infra* Part II for a description of the various fund types and their legal requirements.

I conclude by discussing the policy implications of my findings. The current SEC has expressed a great deal of interest in writing rules to facilitate retail access to private markets.[26] Because I retail private funds have become popular only in the last few years and because there are still relatively few funds, the conclusions I am able to draw are necessarily tentative. Even so, the patterns in the data raise important issues that investors should be wary of and that the SEC should take seriously.

First, my empirical results suggest that the SEC could play a much larger role in setting the tone for what valuation practices are acceptable in the industry. Funds are supposed to value their investments at prices that reflect what those investments could be sold for in the public markets.[27] If funds instead choose valuations that are smoother over time, they understate their risk. This gap between actual risk and reported risk sets up a situation where unwary investors may eventually end up with a nasty surprise: they will discover either (1) that they are more likely to lose a substantial portion of their investment in a downturn than they expected or (2) that they are less able to withdraw their money than they expected. As one journalist put it, "an alternative fund can claim to be low risk and to be at least partly liquid—but, sooner or later, it won't be able to sustain both claims at once."[28] The fact that many of these funds allow investors to periodically withdraw money at reported net assets values also creates a situation where substantial value could be transferred from some shareholders to others, particularly during a prolonged downturn. The SEC could reduce these problems by pushing fund sponsors to make sure their fair value estimates align with contemporaneous market movements.

Second, my results suggest that the SEC should take seriously the possibility that the least wealthy and sophisticated investors able to access retail private funds are being offered the worst products. The SEC could take steps to reduce this selection effect by streamlining product offerings and fee reporting to make funds easier for investors to evaluate and by reducing incentives for funds to sort by quality across distribution channels.

If the SEC enacts sensible reforms in this area, it can further its aims of protecting investors and facilitating capital formation by creating a structure with enough flexibility that it works well for sponsors while still retaining the safeguards necessary for investors to protect themselves.

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[26] See sources cited *supra* note 18.

[27] See *infra* Section IV.A.2 for a discussion of the current legal rules and accounting standards.

[28] Jason Zweig, *Wall Street's Big, Bad Idea for Your 401(k)*, WALL ST. J. (July 25, 2025), https://www.wsj.com/finance/investing/wall-streets-big-bad-idea-for-your-401-k-f1003137.

More broadly, my work contributes to the literature on the public-private divide in U.S. securities law by (1) highlighting ways that practitioners are using existing legal structures to blur the public-private boundary and (2) providing suggestive empirical evidence of the risks that await retail investors if they are granted increased private market access.

The paper proceeds as follows. Part I provides background information about the public/private divide in the federal securities laws. It explains why it has historically been difficult to provide retail investors with access to private securities and why retail investors might want such access. Part II describes and analyzes the new products being created to provide retail access to private markets. It also presents some basic data on the funds' growth, leverage, and fees. Part III empirically assesses the funds' performance and risks, and Part IV discusses my policy recommendations. Part V concludes.

I. BACKGROUND ON PRIVATE SECURITIES MARKETS

Historically, the United States' securities markets have been divided into two spheres: public and private. In the "public" sphere, public companies and registered investment funds disclose lots of information to the public and anyone is allowed invest in them.[29] Private companies and private funds, on the other hand, generally do not make public disclosures,[30] and they are only open to investors who pass wealth or sophisticated tests set by the SEC.[31] The traditional rationale for these tests is that wealthy or financially sophisticated investors are presumed to be able to "fend for themselves" even without public disclosure.[32]

Over time, the wall that separates public and private markets and the paternalistic rationale for keeping poor and unsophisticated investors out of

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[29] Regarding public companies, see Elisabeth de Fontenay & Gabriel Rauterberg, *The New Public/Private Equilibrium and the Regulation of Public Companies*, 2021 Colum. Bus. L. Rev. 1199, 1209 – 13 (2021). Regarding registered funds, see *id.* at 1213 – 15; INV. CO. INST., HOW US-REGISTERED INVESTMENT COMPANIES OPERATE AND THE CORE PRINCIPLES UNDERLYING THEIR REGULATION 2–3, 20 (May 2022), https://www.ici.org/system/files/2023-06/us-reg-funds-principles.pdf.

[30] *See* de Fontenay & Rauterberg, *supra* note 29 at 1209–15.

[31] *See Accredited Investors*, U.S. SEC. & EXCH. COMM'N (June 13, 2025), https://www.sec.gov/resources-small-businesses/capital-raising-building-blocks/accredited-investors; Private Funds, U.S. SEC. & EXCH. COMM'N (May 15, 2025), https://www.sec.gov/resources-small-businesses/capital-raising-building-blocks/private-funds.

[32] U.S. SEC. & EXCH. COMM'N., REVIEW OF THE "ACCREDITED INVESTOR" DEFINITION UNDER THE DODD-FRANK ACT 7 (Dec. 14, 2023), https://www.sec.gov/files/review-definition-accredited-investor-2023.pdf (describing the test used by the Supreme Court in *SEC v. Ralston Purina Co.*, 346 U.S. 119, 125 (1953) to determine whether a securities offering qualified for the 4(a)(2) private placement exemption).

private markets have generated a lot of scrutiny. The tension has grown in recent years as two narratives about private markets have become "conventional wisdom." The first narrative is that companies and funds are increasingly choosing private markets over public markets, so investors who are stuck in the public markets have less opportunities to diversify away risk than they used to. The second narrative is that the investments in private markets are better than the investments in public markets. These claims have led to intense interest among policymakers from both political parties in expanding access to private markets.[33]

Unfortunately, there are reasons to worry that expanding private market access will not lead to increased wealth for individuals with modest means, as many hope. Some of the products and practices prevalent in private markets contain traps for unwary retail investors that could lead to disappointment and losses.

In the next section, I briefly review the securities law frameworks that separate public and private markets. I highlight throughout the laws that have historically blocked most individual investors—even those who are moderately wealthy—from accessing private markets. Next, I explain why retail investors want access to private markets, and I review the evidence that supports and undermines the view that they are missing out. Finally, I discuss reasons to be worried that retail investors might be harmed by expanding access to private markets.

A. What Are the "Private" Markets?

1. Public and Private Companies

When people say that a company is "public," they are using a shorthand that reflects the company's status under two federal statutes: the Securities Act of 1933 ('33 Act) and the Securities Exchange Act of 1934 ('34 Act). The '33 Act requires companies who sell securities in the U.S. to register those securities with the SEC by filing a registration statement and a

[33] See sources cited *supra* note 18 for examples of comments by SEC officials on the subject. *See also Rep. Flood, Rep. Fields, and a Group of Bipartisan Legislators Introduce Bipartisan Equal Opportunity for All Investors Act*, CLEO FIELDS: SERVING LA.'S 6TH DIST. (May 14, 2025), https://fields.house.gov/media/press-releases/rep-flood-rep-fields-and-group-bipartisan-legislators-introduce-bipartisan (describing a bipartisan bill to allow any individual who passes a FINRA-administered test to access private markets).

prospectus.[34] The '34 Act requires companies to make ongoing disclosures about their business, financial health, and corporate governance.[35]

The '33 and '34 Acts do a good job of forcing lots of information about public companies into the marketplace, but they are very expensive for companies to comply with.[36] The Acts therefore contain a variety of exemptions. For instance, there is very important exemption to the '33 Act in Regulation D ("Reg D") for companies who (1) do not offer their stock to the public [37] and (2) only sell their stock to "accredited investors."[38] Accredited investors, under SEC rules, can be either large institutions or individuals, and individuals qualify by having (1) a net worth of more than $1 million or (2) an individual income greater than $200,000 per year.[39]

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[34] 15 U.S.C. § 77e; *see also* U.S. Sec. & Exch. Comm'n, *The Laws That Govern the Securities Industry*, INVESTOR.GOV, https://www.investor.gov/introduction-investing/investing-basics/role-sec/laws-govern-securities-industry (last visited July 28, 2025).

[35] *See* de Fontenay & Rauterberg, *supra* note 29 at 1211–12 (citing "Sections 12 and 12 of the Exchange Act and the SEC rules that implement it").

[36] Alix Stuart, *The True Costs of Being Public: More Than You Think*, CFO.COM (Nov. 18, 2011), https://www.cfo.com/news/the-true-costs-of-being-public-more-than-you-think/667737/.

[37] 15 U.S.C. § 77d(a)(2).

[38] 17 C.F.R. § 230.506(b)(2)(i), (c)(2)(i); § 501(e). See also 17 C.F.R. § 230.506(b), (c); U.S. Sec. & Exch. Comm'n, *Rule 506 of Regulation D*, INVESTOR.GOV, https://www.investor.gov/introduction-investing/investing-basics/glossary/rule-506-regulation-d. In 2024, companies raised $2.15 trillion through Reg D offerings compared with $896 million through Regulation A offerings and $179 million through Regulation Crowdfunding offerings. (Reg A and Reg CF are two other popular exempt offering frameworks.) *Exempt Offering Statistics*, U.S. SEC. & EXCH. COMM'N (May 5, 2025), https://www.sec.gov/data-research/data-visualizations/exempt-offerings-statistics. 506(b) allows up to 35 non-accredited investors, as long as those investors have sufficient financial sophistication. 17 C.F.R. § 506(b)(2)(i). 506(b) also prohibits "general solicitations." *Id.* § 502(c). 506(c) allows "general solicitations" but requires more stringent procedures for verifying accredited investor status. *Id.* § 506(c).

[39] 17 C.F.R. § 501(a)(5). The $1 million net worth requirement excludes the value of the investor's primary residence. Additionally, couples can qualify if their joint income is greater than $300,000. The accredited investor rules also allow some individuals to qualify based on their professional qualifications. For example, investment professionals who hold certain licenses (Series 7, 65, or 82) qualify automatically, as do "knowledgeable employees" of private funds (for purposes of investing in their funds). *Accredited Investors*, U.S. SEC. & EXCH. COMM'N (June 13, 2025), https://www.sec.gov/resources-small-businesses/capital-raising-building-blocks/accredited-investors; 17 C.F.R. § 501(a)(10), (11).

The ’34 Act also does not apply to all companies. A company is only covered by the ’34 Act if either (1) its stock is listed on a national stock exchange[40] or (2) its stock is “held of record” by at least 2,000 people.[41]

Most of the time, companies that sell stock to the public also list their shares on an exchange, so they have to comply with both the ’33 Act and the ’34 Act. For this reason, it is useful shorthand to think of “public” companies as those with shares that anyone can trade on an exchange and lots of public disclosures. Conversely, when people talk about “private” companies, they tend to mean companies that avoid both the ’33 and ’34 Acts by selling shares to less than 2,000 accredited investors through private placements.[42]

Together, the ’33 and ’34 Acts’ requirements make direct investment in private companies unrealistic for most individual investors. First, private companies can only sell shares to accredited investors, which excludes most individuals in the U.S.[43] Second, most private placements are Rule 506(b) offerings require the company selling shares (or the broker-dealers helping sell shares) to have a “pre-existing substantive relationship” with all investors.[44] This requirement excludes even some wealthier investors who do not have the necessary connections. Finally, private companies have to have fewer than 2,000 shareholders, so they prefer shareholders like ultrawealthy individuals and institutions who can write really large checks. The 2,000-investor limit also leads many private companies to restrict their shareholders’ ability to sell their shares on the secondary market. These resale restrictions make direct private company investments even more impractical for most individuals.

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[40] 15 U.S.C. § 78l(b).

[41] 15 U.S.C. § 78l(g). For the second prong to apply, the company also has to have at least $10 million in assets. The second prong also applies if the company has $10 million in assets and at least 500 investors who are not accredited investors.

[42] While the classic public/private distinction is useful, it is important to mention that securities issuers can *decouple* some of these features of public or private status. For example, an issuer could register shares under the ’33 Act (and even the ’34 Act) and sell them to the public without listing those shares on an exchange. An issuer could also sell shares through a private placement but then register those shares under the ’34 Act to be able to exceed the 2,000-investor limit. In the Appendix, I discuss some innovative, but relatively uncommon, fund structures that use these strategies to expand access to private markets.

[43] U.S. SEC. & EXCH. COMM’N., REVIEW OF THE “ACCREDITED INVESTOR” DEFINITION UNDER THE DODD-FRANK ACT, *supra* note 32 at 26 (estimating that 18% of U.S. households met the accredited investor standard in 2022 and predicting that 30% will meet the standard by 2032).

[44] *General Solicitation*, U.S. SEC. & EXCH. COMM’N (Aug. 30, 2024), https://www.sec.gov/resources-small-businesses/capital-raising-building-blocks/general-solicitation.

2. Public and Private Funds

Many individuals and institutions invest in securities primarily through investment funds. Funds pool money from lots of investors to buy a portfolio of investments. Like companies, funds are divided by the securities laws into two markets, one that is available to the public and one that is not.[45] "Registered funds" or "'40 Act funds"—like the mutual funds many people hold in their retirement accounts—can be sold to the public and are regulated under the Investment Company Act of 1940 ('40 Act).[46] "Private funds" are not regulated by the '40 Act, and they can only accept money from sufficiently wealthy or sophisticated investors.[47] Private equity, private credit, venture capital, and hedge funds are all typically structured as private funds.[48]

The '40 Act and its accompanying rules require registered funds to disclosure lots of information to investors about their management, investments, and fees.[49] The Act also restricts registered funds' activities, often with the goal of reducing conflicts of interest between the fund's manager (or "sponsor") and its investors.[50] For example, the '40 Act requires registered funds to include independent directors on their boards, limits fund transactions involving affiliated parties, constrains funds' use of leverage (including through derivatives), and limits funds' investments in other funds.[51]

Historically, there have been two main flavors of registered funds. "Open-end funds" (more commonly called "mutual funds") allow investors to enter and exit every day.[52] Investors who enter the fund purchase new shares from the fund at the fund's net asset value (or "NAV").[53] NAV is the value of the fund's investments (assets) minus any money owed by the fund (liabilities),

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[45] de Fontenay & Rauterberg, *supra* note 29 at 1213–15.
[46] INV. CO. INST., *supra* note 29 at 2–3, 20.
[47] *Private Funds*, U.S. SEC. & EXCH. COMM'N (May 15, 2025), https://www.sec.gov/resources-small-businesses/capital-raising-building-blocks/private-funds.
[48] *Starting a Private Fund*, U.S. SEC. & EXCH. COMM'N (Sept. 19, 2024), https://www.sec.gov/resources-small-businesses/capital-raising-building-blocks/starting-private-fund.
[49] *See* de Fontenay & Rauterberg, *supra* note 29 at 1215.
[50] *See* 15 U.S.C. § 80a-1(b) (describing the purpose of the '40 Act).
[51] *See, e.g.*, *Investment Company Act*, CORNELL L. SCH. LEGAL INFO. INST. (Feb. 2025), https://www.law.cornell.edu/wex/investment_company_act; MORGAN LEWIS, 1940 ACT REGULATORY CHECKLISTS (May 2021), https://www.morganlewis.com/-/media/files/publication/report/1940-act-regulatory-checklists.pdf
[52] *Mutual Funds*, FINRA https://www.finra.org/investors/investing/investment-products/mutual-funds (last visited July 28, 2025).
[53] *Id.*

divided by the number of fund shares.[54] Investors who exit a mutual fund sell their shares back to the fund, also at NAV.[55] Because open-end funds have to be able to handle daily redemptions, the SEC has adopted rules under the '40 Act that require open-end funds to investment primarily in "liquid" assets that they can sell quickly for cash if needed.[56] For this reason, mutual funds are generally not a practical vehicle for providing retail access to private investments.

The other main type of registered fund is the "closed-end fund." Traditional closed-end funds do not usually investors to enter and exit at NAV.[57] Instead, they issue shares that trade on an exchange.[58] If an investor wants to exit the fund, they sell their shares to another investor. Similarly, if an investor wants to invest in the fund after its initial sale of shares, they buy shares from a current investor. The market price of a closed-end fund's shares does to have to equal the fund's NAV.[59] In fact, most closed-end fund shares trade at a discount to NAV.[60] A minority of funds trade at a premium.[61] Because closed-end funds do not allow redemptions, SEC rules allow them to "hold a greater percentage of illiquid securities."[62]

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[54] U.S. Sec. & Exch. Comm'n, *Net Asset Value*, INVESTOR.GOV, https://www.investor.gov/introduction-investing/investing-basics/glossary/net-asset-value (last visited July 28, 2025).

[55] *Mutual Funds*, FINRA, https://www.finra.org/investors/investing/investment-products/mutual-funds (last visited July 28, 2025),.

[56] Formally, the rule prohibits a fund from "purchas[ing] additional illiquid investments if more than 15 percent of its net assets are illiquid investments that are assets." *Investment Company Liquidity Risk Management Program Rules*, U.S. SEC. & EXCH. COMM'N (May 1, 2019), https://www.sec.gov/resources-small-businesses/small-business-compliance-guides/investment-company-liquidity-risk-management-program-rules; *see also* 17 CFR § 270.22e-4. "An illiquid investment is an investment that the fund reasonably expects cannot be sold in current market conditions in seven calendar days without significantly changing the market value of the investment." *Investment Company Liquidity Risk Management Program Rules*, U.S. SEC. & EXCH. COMM'N (May 1, 2019), https://www.sec.gov/resources-small-businesses/small-business-compliance-guides/investment-company-liquidity-risk-management-program-rules.

[57] *Opening Up About Closed-End Funds*, FINRA (June 28, 2023), https://www.finra.org/investors/insights/opening-up-closed-end-funds.

[58] *Id.*

[59] *Id.*

[60] *Id.* ("Most closed-end funds have historically traded at a discount to NAV—a market price lower than the fund's NAV."); INV. CO. INST., THE CLOSED-END FUND MARKET, 2024 4 (Apr. 2025), https://www.ici.org/system/files/2025-04/per31-04.pdf.

[61] For example, Destiny Tech100 (DXYZ) has averaged around a 450% premium to NAV over the past year. *Destiny Tech100 Inc:DXYZ*, CEF CONNECT, https://www.cefconnect.com/fund/DXYZ (last visited July 28, 2025).

[62] *Opening Up About Closed-End Funds*, FINRA (June 28, 2023), https://www.finra.org/investors/insights/opening-up-closed-end-funds.

Even though traditional closed-end funds are allowed to invest in private investments and can be sold to retail customers, they have never really caught on as a vehicle for providing retail access to private markets. Several of the reasons why trace back to the fact that closed-end funds generally trade at a discount to NAV. First, the '40 Act prohibits closed-end funds from selling shares at a discount to NAV without shareholder approval.[63] This limitation makes it hard for a sponsor to grow a closed-end fund after it has launched. Second, in recent years, a handful of hedge funds have developed a strategy of buying up discounted shares in a fund and then using their voting rights to pressure the fund's boards to take actions that close the discount.[64] These actions include buying back shares at NAV (and shrinking the fund in the process), converting the fund to an open-end fund, or liquidating and closing the fund altogether.[65] These hedge fund campaigns have, over time, made closed-end funds a less popular vehicle among sponsors.[66]

Private funds are investment funds that are exempt from '40 Act registration. To qualify for an exemption, private funds have to limit the number of investors they accept, and they can generally accept only wealthy individuals and institutions.[67] In fact, the wealth thresholds that apply to

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[63] 15 U.S.C. § 80a-23(b).

[64] For one prominent example, see Jack Pitcher, *BlackRock Clashes With Hedge-Fund Giant Over Control of Funds*, WALL ST. J. (July 23, 2023), https://www.wsj.com/finance/investing/blackrock-clashes-with-hedge-fund-giant-over-control-of-funds-15c00a2.

[65] *Id.*

[66] *Id*. (quoting an "associate general counsel at the Investment Company Institute" as saying that, depending on the outcome of certain cases involving closed-end fund activism, "'there's real concern about the closed-end fund as a viable vehicle going forward.'"); see also *Closed-End Fund Activism Surges, Shows Need for Congressional Action*, INV. CO. INST. (May 14, 2024), https://www.ici.org/news-release/24-news-cef-update (suggesting that no new traditional CEFs are forming because of activism, while interval and tender offer funds continue to launch).

[67] Private funds are funds that would be required to register under the '40 Act but for one of two exemptions under section 3(c) of the Act. *See Private Funds*, U.S. SEC. & EXCH. COMM'N (May 15, 2025), https://www.sec.gov/resources-small-businesses/capital-raising-building-blocks/private-funds. Section 3(c)(1) exempts funds who only sell fund shares through private placements (e.g., under Reg D 506(b) or (c)) as long as they have no more than 100 investors (or 250 investors for a "qualifying venture capital fund"). 15 U.S.C. § 80a-3(c)(1). The private placement requirement means that 3(c)(1) funds can sell shares only to accredited investors. However, many 3(c)(1) funds charge performance fees and have a sponsors that is registered with the SEC under the Advisers Act. As a result, 3(c)(1) funds often can accept only "qualified clients." "Qualified clients" are individuals with at least $1.1 million under management by the investment adviser or a $2 million net worth (excluding their primary residence). 15 U.S.C. § 80b-5(a) (restricting investment adviser compensation based on "capital gains" but not based on income); 17 C.F.R. § 275.205-3 (creating the "qualified client" exception). However, 3(c)(1) funds whose sponsors are not registered with the SEC under the Investment Advisers Act of 1940 do not have this limitation. Venture

private fund investors are usually much higher than the usual wealth threshold that applies to investing in private companies.[68] These restrictions mean that investing directly in private funds is out of reach for the vast majority of individuals.

Even for the mass affluent who qualify under the stricter private fund standards, however, private funds tend not to be a great option. For one thing, because each fund can only accept a limited number of investors, private fund sponsors generally prefer to raise money from the individuals who will write the biggest checks.

In addition, most private funds give their investors few, if any opportunities to pull their money out during the fund's life.[69] This weakness is especially true for private equity, venture capital, and private credit funds, where investors have to wait for the sponsor to distribute profits, which can take years.[70] If an investor wants to exit early, they have to sell their stake in the fund to another investor, which typically requires approval from the fund sponsor.[71] Additionally, sales take time to negotiate and may occur at a

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capital fund advisers and private fund advisers with less than $150 million in assets under management are generally not required to register with the SEC. That said, some states have adopted versions of the NASAA Registration Exemption for Investment Advisers to Private Funds Model Rule, which limits non-venture capital, 3(c)(1) funds to qualified clients even if their adviser is not registered with the SEC. NASAA Model Rule (as amended Oct. 8, 2013), https://www.nasaa.org/wp-content/uploads/2011/07/NASAA-Registration-Exemption-for-Investment-Advisers-to-Private-Funds-Model-Rule-Amended-Oct.-8-2013.pdf; Alexander J. Davie, *Guide to State Investment Adviser Registration Exemptions for Private Fund Advisers*, STRICTLY BUS. (Mar. 27, 2023), https://www.strictlybusinesslawblog.com/guide-state-investment-adviser-registration-requirements-for-private-fund-advisers/. Section 3(c)(7) exempts funds from registration if they sell fund shares only through private placements and admit only investors who are "qualified purchasers." 15 U.S.C. § 80a-3(c)(7). To qualify as a "qualified purchaser," an individual needs to own at least $5 million "in investments." 15 U.S.C § 80a-2(a)(51). A 3(c)(7) fund must have fewer than 2,000 investors or else it must register with the SEC under the '34 Act. *See supra* note 41 and accompanying text.

[68] For example, a "qualified client" must have a net worth of $2 million, and a "qualified purchaser" must have $5 million in investments. *See supra* note 67. An "accredited investor" needs only a $1 million net worth. *See supra* note 39 and accompanying text.

[69] U.S. Sec. & Exch. Comm'n, *Private Equity Funds*, INVESTOR.GOV, https://www.investor.gov/introduction-investing/investing-basics/investment-products/private-investment-funds/private-equity (last visited July 28, 2025).

[70] *Id.*

[71] Caroline Pimpaud, Bahya Bouharati & Nelly Rugambage, *LP-led Secondaries: Trends, Opportunities and Key Considerations*, DLA PIPER (Nov. 10, 2023), https://www.dlapiper.com/en/insights/publications/2023/11/lp-led-secondaries-trends-opportunities-and-key-considerations.

significantly discounted price.[72] Hedge funds are more likely to give investors some opportunities to cash out, but they may do so infrequently, with limits, and after imposing a lengthy lockup on new investors.[73]

Finally, the capital call model used by many private funds also presents a headache for individual investors and fund sponsors who accept individual investors. When a sponsor launches a new fund, they do not collect money from investors right away. Instead, they wait to collect money until they find an attractive investment opportunity to put the money toward.[74] Investors therefore have to make sure that they have cash or liquid assets on hand so they can respond promptly when a sponsor calls for capital. On the other side, sponsors face the risk that their individual investors will not have money ready when the fund is ready to make an investment or will respond too slowly.[75]

B. Why Retail Investors Want Access to Private Markets

Over the past couple of decades, two narratives about private markets have spurred interest among retail investors and policymakers in expanding access to private markets. The first is that, over time, investment opportunities have shifted from public markets to private markets, so investors who invest only in the public markets have less opportunities to diversify their portfolios than investors who have access to private markets as well.[76] The second is that private market investments just perform better than public market investments.[77]

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[72] Laura Benitez, Dawn Lim & Allison McNeely, *Elite Colleges Lead a Rush for the Exits of Private Equity*, BLOOMBERG (May 6, 2025) (discussing the challenges faced by university endowments that are trying to get out of private equity funds).

[73] U.S. Sec. & Exch. Comm'n, *Hedge Funds*, INVESTOR.GOV, https://www.investor.gov/introduction-investing/investing-basics/investment-products/private-investment-funds/hedge-funds (last visited July 28, 2025).

[74] *Capital Calls*, CARTA (July 11, 2025), https://carta.com/learn/private-funds/management/capital-calls/.

[75] Matt Levine, *Individual Investors Put Up the Cash*, BLOOMBERG (Nov. 14, 2024), https://www.bloomberg.com/opinion/articles/2024-11-14/individual-investors-put-up-the-cash (explain the problems with using the capital call model with retail investors).

[76] Commissioner Hester M. Peirce, *Remarks by Commissioner Peirce at the Third Annual Conference on Emerging Trends in Asset Management*, HARV. L. SCH. FORUM ON CORP. GOVERNANCE (June 10, 2025), https://corpgov.law.harvard.edu/2025/06/10/remarks-by-commissioner-peirce-at-the-third-annual-conference-on-emerging-trends-in-asset-management/ ("But some asset classes are not fit for the public markets. Accordingly, retail investors and the financial professionals that serve them also are looking for additional diversification in the private markets.").

[77] *See, e.g.*, *Reassessing Private Equity*, CHICAGO BOOTH REV. (Oct. 1, 2012) (highlighting research finding "that buyout funds did better than public markets in most vintage years since 1984").

1. Investments Are Shifting Out of Public Markets

The number of public companies trading on national exchanges has fallen sharply over the past two decades. The number of public companies peaked during the Dot-Com boom at more than 7,000, and it currently sits at around 4,000.[78] Over the same period, private markets have exploded in size. According to SEC data, capital raised through Regulation D private placements (the most popular exemption to '33 Act public offering disclosure requirements) has increased from $588B in 2009 to $2.15T in 2024.[79] Similarly, gross reported assets under management for SEC-reporting private funds has increased from $8T in the first quarter of 2013 to $24.3T in the third quarter of 2024.[80]

These trends seem to indicate that private market investment opportunities are growing exponentially while public market investment opportunities are shrinking. These trends have prompted a lot of handwringing by SEC Commissioners, academics, industry professionals, and journalists about whether individual investors are missing out on important investment opportunities.[81]

A shrinking public market is bad for public market investors if these investors are left with fewer opportunities to diversify their investment portfolios. A core principle of modern finance is that diversification reduces risk. The more different types of investments that an investor has in their portfolio, the more the individual, idiosyncratic risks of those investments

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[78] Roe & Wang, *supra* note 15 at 219.

[79] *Exempt Offering Statistics*, U.S. SEC. & EXCH. COMM'N (May 5, 2025), https://www.sec.gov/data-research/data-visualizations/exempt-offerings-statistics.

[80] *Private Fund Statistics*, U.S. SEC. & EXCH. COMM'N (June 13, 2025), https://www.sec.gov/data-research/data-visualizations/private-fund-statistics.

[81] *See, e.g.*, Commissioner Hester M. Peirce, *Remarks by Commissioner Peirce at the Third Annual Conference on Emerging Trends in Asset Management*, HARV. L. SCH. FORUM ON CORP. GOVERNANCE (June 10, 2025), https://corpgov.law.harvard.edu/2025/06/10/remarks-by-commissioner-peirce-at-the-third-annual-conference-on-emerging-trends-in-asset-management/ ("The breadth of the public markets, where retail investors do most of their investing, has suffered as the number of listed companies has declined …."); Jamie Dimon, Chairman and CEO Letter to Shareholders, JPMorganChase (Apr. 7, 2025), https://www.jpmorganchase.com/ir/annual-report/2024/ar-ceo-letters ("Our public markets have been shrinking dramatically, which I do not believe is a good thing."); Jeff Sommer, *The Stock Market Is Shrinking. That's a Problem for Everyone.*, NEW YORK TIMES (Aug. 4, 2018), https://www.nytimes.com/2018/08/04/business/shrinking-stock-market.html; René M. Stulz, *Are There Too Few Publicly Listed Firms in the US?*, HARV. L. SCH. FORUM ON CORP. GOVERNANCE (Apr. 2, 2025), https://corpgov.law.harvard.edu/2025/04/02/are-there-too-few-publicly-listed-firms-in-the-us/.

cancel each other out, reducing the risk of the overall portfolio.[82] If large segments of the economy are shifting out of public markets and into private markets, then public market investors may have fewer opportunities to spread their assets out across geographies, firms sizes, industries, or asset types, leaving these investors more exposed to risk as a result.

If this story is true, then retail investors would be able to reduce the risk they bear in their investment portfolios if the securities laws changed to allow them increased access private market investments.

It is worth mentioning, however, that not everyone agrees that public markets are shrinking. In a recent paper, Professors Mark Roe and Charles Wang point out that the aggregate net income of public companies has actually *increased* over the past 30 years even as the number of firms has decreased.[83] This is true even when aggregate net income is scaled by GDP.[84] The same is true for aggregate market value: the aggregate value of public companies has steadily increased, even when scaled by GDP.[85] Roe and Wang conjecture that the declining number of public companies is driven more by factors that have made it more attractive over time for companies to consolidate.[86] If their story is true, then investors who are investing solely in the public markets have access to roughly the same set of investments that they did 30 years ago, though those investments are now packaged into a smaller number of listed corporate entities.

2. Private Markets Perform Better

The growth of private markets has prompted a lot of research into how the performance of private market investments compares to returns available in the public markets. One view motivating this research is that all of the good, high-growth companies are choosing private markets over public markets, so public markets have "become a dumping ground for businesses too weak to attract capital in private markets."[87] Most of the research has

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[82] *See Asset Allocation and Diversification*, FINRA, https://www.finra.org/investors/investing/investing-basics/asset-allocation-diversification (last visited July 28, 2025).

[83] Roe & Wang, *supra* note 15 at 226.

[84] *Id.* at 227.

[85] *Id.* at 230.

[86] *See id.* at 237–45.

[87] Nir Kaissar, *The Stock Market Is Becoming a Dumping Ground*, BLOOMBERG (Oct. 2, 2024), https://www.bloomberg.com/opinion/articles/2024-10-02/the-stock-market-is-becoming-a-dumping-ground (arguing that "the quality of small public companies … has deteriorated significantly"). *Cf.* Cliff Asness et al., *Size Matters, If You Control Your Junk*, 129 J. FIN. ECON. 479 (2018) (finding that small public companies outperform large public companies but that the outperformance only shows up strongly if you control for company quality).

focused on private fund performance because most investors who invest in private markets do so through private funds.

The private fund performance literature has generally concluded that, net of fees, private equity and venture capital funds generally perform at least as well as, and sometimes significantly better than, the public stock market. Researchers seem to agree that the performance of early private equity and venture capital funds (i.e., those launched before about 2006) was very good.[88] This early impressive performance has likely contributed to the enduring impression the private equity and venture capital outperform. Additionally, research seems to agree that a subset of private fund sponsors appears to consistently outperform public markets.[89]

However, research also seems to show that the performance of private equity and venture capital funds has been less impressive at times. Sources seem to agree that the average, net of fees returns of private equity buyout funds have been "roughly equal to those of public markets" over the past twenty years.[90] Additionally, venture capital funds struggled during the early 2000s.[91]

Research on private credit fund performance is less well-developed than research on other private funds, but early evidence suggests that private credit funds perform at least as well as, and likely better than, a variety of publicly traded fixed income benchmarks.[92]

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[88] See, e.g., Ludovic Phalippou, An Inconvenient Fact: Private Equity Returns & The Billionaire Factory 10 (2020) (unpublished manuscript) ("Vintage years 1996-2005 strongly outperform the S&P 500."); Robert S. Harris, Tim Jenkinson & Steven N. Kaplan, *Private Equity Performance: What Do We Know?*, 69 J. FIN. 1851, 1851 (2014) ("Outperformance versus the S&P 500 averages 20% to 27% over a fund's life and more than 3% annually."); Gregory W. Brown et al., What Do Different Commercial Data Sets Tell Us About Private Equity Performance? 4 (Dec. 21, 2015) (unpublished manuscript) ("The typical North American buyout fund return has exceeded those from public market in almost all vintage years before 2006. … North American venture funds started in the 1990s substantially outperform public equities.").

[89] *See, e.g.*, Robert Kosowski, Narayan Y. Naik & Melvyn Teo, *Do Hedge Funds Deliver Alpha? A Bayesian and Bootstrap Analysis*, 84 J. FIN. ECON. 229, 229 (2007) ("[W]e find that top hedge fund performance cannot be explained by luck, and hedge fund performance persists at annual horizons."); Robert S. Harris et al., *Has Persistence Persisted in Private Equity? Evidence from Buyout and Venture Capital Funds*, 81 J. CORP. FIN. 1, 1 (2023) ("Venture capital (VC) performance remains remarkably persistent across funds raised by the same general partner (GP).").

[90] Brown et al., *supra* note 88 at 4 ("Since 2006, [typical North American] buyout funds' performance has been roughly equal to those of public markets.").

[91] *Id.* (finding that "North American venture funds … started since 2000 have generally underperformed").

[92] *See, e.g.*, Pascal Böni & Sophie Manigart, *Private Debt Fund Returns, Persistence, and Market Conditions*, 78 FIN. ANALYSTS J. 121, 121 (2022) ("We document that private debt funds outperform bond and equity market benchmarks in the cross-section); Pascal Böni &

Finally, a recent working paper by Professors Cynthia Balloch, Federico Mainardi, Sangmin Oh, and Petra Vokata finds that the private equity investments of wealthy individuals who are able to access private equity do not generally underperform public markets, even net of fees.[93] However, they also present evidence that the wealthiest investors in their sample perform much better than the least wealthy investors, with the least wealthy investors (<$3 million net worth) performing in line with public markets net of fees and the wealthiest investors (>$100 million net worth) performing much better.[94] According to the paper, much of this gap in performance appears to be attributable to the fact that the wealthiest investors and the least wealthy investors access private equity through different financial advisors.[95]

C. Reasons to Worry About Giving Retail Investors Access

If it is indeed true that throwing open access to private markets would give retail investors access to additional opportunities to diversify by investing in private funds that perform at least as well as (and perhaps better than) public markets on average, then it is natural to wonder why policymakers have not done it yet. There are, of course, problems associated with private funds' capital call model and the fact that private fund investments are often locked up for extended periods of time, but as I discuss in the next Part, these problems are being solved by new products that have a more retail-friendly structure. So why have retail investors not been granted full private market access?

The answer is that there are at least two related reasons why retail investors might have a bad experience if they participate in private markets. The first is that retail investors might struggle to evaluate the risks inherent in private market investments due to reporting practices common in the industry. The second is that, if retail investors struggle to evaluate the investments they are offered, then they are vulnerable to adverse selection. In other words, retail investors might be offered (and purchase) lots of funds that are inferior to the funds being offered to sophisticated investors. Retail

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Frans de Roon, Risk-Adjusted Private Debt Fund Performance and the Term Structure of Alphas 1 (Nov. 10, 2023) (unpublished manuscript) ("[W]e find annual alphas over six percent."); Shawn Munday et al., Performance of Private Credit Funds: A First Look 1 (May 7, 2018) (unpublished manuscript) ("Measures of relative performance (PMEs) suggest that private credit funds have performed about as well, or better than, leveraged-loan, high yield, and BDC indexes.").

[93] Cynthia Balloch et al., Democratizing Private Markets: Private Equity Performance of Individual Investors 2 (June 2025) (unpublished manuscript).

[94] *Id.*

[95] *Id.* at 3.

investors might then end up achieving performance that is much worse than we observe among large institutions and wealthy individuals.

1. Private fund risks are hard for retail investors to evaluate

In the public market investment world, portfolio risk is often measured by the volatility of the portfolio's returns. If a portfolio's returns are consistent from month to month, then it is less risky for investors than if its returns vary significantly. A portfolio with low volatility has a smaller chance of experiencing a crushing loss. All else equal, investors tend to prefer portfolios with high returns and low risk.

Finance researchers and industry commentators alike have noted, however, that the reported returns of private funds—including private equity, venture capital, and hedge funds—often seem unusually "smooth" relative to public market investments.[96] In other words, they vary less from month to month than portfolios of public market investments with similar returns.

The typical explanations for the low volatility of private fund returns all relate to the fact that private funds invest in assets that do not trade in public markets. Because private assets trade rarely, if at all, fund managers have to value them using financial models in order to estimate fund performance. These valuations can be sticky and slow to change, leading to low volatility in reported returns.[97]

The problem with artificially smooth returns is that they can make private funds appear less risky than they really are. Low variation in returns makes the chance of a large loss seem remote. Additionally, smooth returns are less correlated with public markets, making it look private funds provide excellent diversification benefits. These apparent benefits would make it easy for someone who does not understand the private fund industry well to get overly excited about its performance.

The truth is that the smooth returns of private funds are actually evidence of the illiquidity risks that are present in private markets but not in public markets. Private market valuations may not fluctuate as wildly as public market valuations, but a high and stable valuation is cold comfort to an investor who needs cash but cannot get it because they are unable to sell their private assets. Investors in private funds need to be prepared for extreme uncertainty around the timing of when they will be paid back. In an economic downturn, private fund investors might not see their reported performance

[96] See sources cited *supra* note 24.

[97] *See* Spencer J. Couts, Andrei S. Goncalves & Andrea Rossi, *Unsmoothing Returns of Illiquid Funds*, 37 REV. FIN. STUD. 2110, (2024) (discussing the problem of artificially smooth returns in illiquid asset classes like commercial real estate and presenting a method to unsmooth returns that are autocorrelated).

dip as much as public market investors, but they are less likely to receive cash distributions because their fund managers are less likely to be able to exit their investments. On the flip side, public market investors are almost always able to sell their investments to get cash, even when markets head south.

Smooth reported returns also do not prevent private fund's exit opportunities from being correlated with public market conditions. If a fund manager chooses to sell an investment during a downturn, the investment will sell at a low valuation, even if the fund's returns previously seemed uncorrelated with public markets.

2. Retail Investors are vulnerable to adverse selection

Because private fund performance and risks are not very transparent, it may be relatively easy for poorer performing funds to entice retail investors to invest in them. If retail investors were granted increased access to private markets, they might end up in a situation where they attract swarms of subpar fund managers clamoring for their money. They may then end up investing in funds whose performance is much worse than the average fund performance documented in the finance literature. In fact, the recent paper by Professor Balloch and coauthors is consistent with this theory because it shows that ultrawealthy individuals consistently end up in better funds than less wealthy individuals, perhaps because the wealthier individuals are more discerning and perhaps because they (or their advisors) are being offered better products.[98]

Private fund managers have a big incentive to sell private market products to as many investors as possible because private funds have historically had extremely high fees. The classic private fund fee model is "2-and-20": the sponsor earns two percent of invested capital each year plus twenty percent of profits.[99] Additionally, sponsors typically charge a variety of other expenses (e.g., legal fees) to their funds. In comparison, passively managed, public market funds (like ETFs and mutual funds) charge only 0.52% of

[98] Balloch et al., *supra* note 93 at 2–3. *Cf.* Onur Sefiloglu, In Pursuit of Information: Investment Consultants and Private Equity Fund Selection 4 (July 25, 2025) (unpublished manuscript) (finding that public pension funds pick better private equity investments when they use outside, expert private equity consultants than when they invest on their own).

[99] Matthew Speiser et al., *Venture Capital Fee Economics*, ANGELLIST, https://www.angellist.com/learn/management-fees (last visited July 28, 2025) ("You'll often hear the term 'two and twenty' to describe funds because many charge a 2% management fee and 20% carried interest."); Wei Dai et al., *On Performance Fees*, DIMENSIONAL (Sept. 14, 2020), https://www.dimensional.com/us-en/insights/on-performance-fees ("[H]edge funds often employ a 'Two and Twenty' fee structure, which consists of a 2% base management fee charged on AUM and a 20% performance fee charged on outperformance above a certain benchmark.")

investment capital per year on average with no performance fees.[100] Even actively managed, public market funds charge only about 1% of invested capital.[101] This big gap in fees mean that every investor dollar that moves from public market funds to private market funds is very valuable to asset managers, so they have a big incentive to make that happen.

The current environment is a particularly dangerous time for retail investors to gain increased private market access because the financial press has been reporting that many private funds are struggling to exit investments they have held for a long time and many institutional investors are pulling out of private funds, in part due to concerns about poor performance.[102] Some commentators have expressed concern that funds targeted toward retail investors could become a place for private fund sponsors to offload investments they have been stuck with at inflated prices in order to generate returns for more sophisticated investors.[103]

Note that these risks are important to confront, even under the current regulatory regime. In Part II, I discuss new retail-focused, private market products that are currently feasible and currently being sold to retail investor. If these risks infect the new funds, they might warrant increased caution from retail investors and action from the SEC. I examine evidence for these risks in Part III.

II. GETTING RETAIL INTO PRIVATE MARKETS

As individual investors and policymakers have become interested in expanding access to private market investments, private fund sponsors have become interested in capitalizing on this demand by creating products targeted at retail investors. As a result, private fund sponsors have launched an array of products over the past decade that combine features of private funds and registered funds and can be sold to retail investors under current law. Most of the new fund's investment have private credit strategies rather than the private equity and venture capital strategies that retail investors seem most keen on accessing. Even so, they provide a small window into a world would look like with full retail access to private markets.

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[100] *Fund Fees Are Still Declining, But Not as Quickly as They Once Were*, MORNINGSTAR (July 16, 2024), https://www.morningstar.com/business/insights/blog/funds/us-fund-fee-study (last updated May 28, 2025).

[101] *Id.*

[102] *See supra* notes 20–22 and accompanying text.

[103] *See* Matt Wirz, *Moody's Sounds Alarm on Private Funds for Individuals*, WALL ST. J. (June 10, 2025) https://www.wsj.com/finance/investing/moodys-sounds-alarm-on-private-funds-for-individuals-8cd268c5 ("Some of the investments 'funneled' into retail funds may be leftover investments from funds previously sold to institutional investors who wanted to get out.").

In this Part, I explain and analyze the legal structure of the new funds being launched by private fund sponsors for retail investors. Most of the funds use a variation of one of two previously unpopular fund types: (1) closed-end funds, which were discussed in the previous section, and (2) Business Development Companies (or "BDCs"), which are essentially closed-end fund with a few regulatory quirks.[104] Sponsors have been using these fund structures to combine features of classic private and registered funds and solve some of the problems associated with those vehicles. As I describe the new funds, I also present some data collected from the funds' SEC filings to illustrate their remarkable growth and their characteristics.[105]

A. BDCs

1. Legal Structures

BDCs were created by statute in 1980. Their purpose was to increase financing available to "small and middle-market businesses, which were struggling for access to debt and equity capital following the recession in the 1970s."[106] BDCs are not true registered funds, but they are subject to some of the requirements in the '40 Act.[107] They also have several regulatory requirements that are different from closed-end funds. The most important is that BDCs are required to invest at least 70% of their assets in private companies or small cap public companies.[108] These investments can either be debt or equity investments, though most BDCs today primarily make

[104] For a thorough academic treatment of BDCs along with some data about their development through 2017, see generally A. Joseph Warburton, *Business Development Companies: Venture Capital for Retail Investors*, 76 BUS. LAW., Winter 2020-2021, at 59.
[105] I describe my data sources and data collection process in detail in the Appendix. In the Appendix, I also describe a variety of other vehicles that investment managers are experimenting with to expand retail access to private markets. None of these vehicles has gained as much traction as BDCs and non-traded closed-end funds, so I do not discuss them in the body of the paper. However, they are innovative and worth watching because they may lay the foundation for future trends.
[106] *What is a BDC*, Blue Owl Cap. Corp., https://www.blueowlcapitalcorporation.com/about-blue-owl-capital-corp/what-is-a-bdc (last visited July 28, 2025).
[107] U.S. Sec. & Exch. Comm'n, *Publicly Traded Business Development Companies (BDCs)*, INVESTOR.GOV, https://www.investor.gov/introduction-investing/investing-basics/investment-products/closed-end-funds/publicly-traded-business-development-companies-bdcs.
[108] *Id.*

loans.[109] BDCs must also offer "significant managerial assistance" to their portfolio companies.[110]

In exchange for providing loans to small and mid-sized business, BDCs get a few special benefits. One benefit is that BDCs are allowed to use more leverage than closed-end funds.[111] Another benefit is that BDC sponsors are allowed to charge performance fees on interest income and capital gains without limiting their investors to qualified clients.[112]

Today, BDC sponsors structure their offerings in one of three different ways. These structures differ in the way they are distributed to end investors, which means they have slightly different regulatory requirements.

The first type of BDC is the *public BDC*. Public BDCs have shares that are traded on a stock exchange, so they are very similar to traditional closed-end funds.[113] Until recently, most BDCs were publicly traded.[114] Public BDCs launch with a traditional initial public offering ("IPO").[115] They sell shares to the general public and immediately list their shares on a national stock exchange.[116] If investors want to exit their investment in the BDC, they can sell their shares on the secondary market.

Like traditional closed-end fund shares, publicly traded BDC shares can trade at either a discount or premium to NAV. This fact makes it challenging for publicly traded BDCs to grow once they have launched. BDCs, like traditional closed-end funds, are not generally allowed to issue shares below

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[109] *What is a BDC*, *supra* note 106 ("[M]ost BDCs provide financing solutions to U.S. domiciled middle-market businesses by raising equity capital from retail and institutional investors and deploying the equity capital in the form of *senior secured, floating rate loans*." (emphasis added)).

[110] Harry S. Pangas, *Everything You Need to Know About BDCs*, DECHERT LLP (Mar. 9, 2020), https://www.dechert.com/content/dam/dechert%20files/people/bios/p/harry-pangas/HarryPangasAllYouNeedToKnowAboutBDCs.pdf (slide 32).

[111] *Id.* (describing BDCs and other investment companies' asset coverage requirements on slide 30).

[112] *Id.* (slide 42). A third benefits is that BDCs have fewer statutory restrictions on their ability to engage in transactions with affiliated parties. That said, much of the current practice around affiliated transactions by BDCs and closed-end funds is governed by a framework for seeking exemptive relief operated by the SEC. *Id.* (slide 31).

[113] *Id.* (slide 10).

[114] *See infra* Section II.A.2 for data on the number of BDCs by type.

[115] Pangas, *supra* note 110 (slide 10).

[116] *Id.*

NAV.[117] It also means that investors in the IPO could bear significant losses if their shares start trading at a discount.[118]

The second type of BDC is the *non-traded BDC*. Like publicly traded BDC shares, non-traded BDC shares are registered under the '33 Act and sold to the public.[119] However, they are not listed on an exchange.[120] Because there is no liquid secondary market for non-traded BDC shares, investors in a non-traded BDC cannot exit their investments unless the BDC sponsor provides them with a path to liquidity. Typically, non-traded BDCs offer to repurchase shares from investors at NAV at set intervals.[121] For example, a BDC might offer to purchase up to 5% of outstanding shares at NAV every quarter. If investors owning more than 5% of shares ask to exit in one quarter, then the BDC repurchases shares proportionally from each investor until it reaches 5% of shares outstanding. Non-traded BDC sponsors typically have discretion over how many shares they offer to repurchase in a given quarter. Investors might also have to pay a penalty if they exit the BDC within a short time after investing.

In some cases, like the CION case discussed in the introduction, non-traded BDCs list their shares on an exchange after several years to given investors additional flexibility to exit.[122]

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[117] Richard Horowitz & Jonathan Gaines, *The Growth of Private BDCs*, 26 INV. LAW. 1, 4 (2019), https://www.peievents.com/en/wp-content/uploads/2019/09/10.-Dechert-The-Growth-of-Private-BDCs.pdf (noting that BDCs do have somewhat more flexibility to issue shares below NAV than closed-end funds, for example in connection with an IPO).

[118] Another problem that publicly traded BDCs face is that once they raise a pot of money in an IPO, it takes time for the sponsor to fully invest the money and start generating an attractive return. This means that publicly traded BDC returns follow a "J-curve": returns are initially negative but flip to being positive once the fund is invested and generating a return. *Introductory Content: J-Curves*, HAMILTON LANE, https://www.hamiltonlane.com/en-us/education/private-markets-education/j-curves (last visited July 29, 2025). In some cases, sponsors have been able to mitigate this problem by using warehousing transactions. *See* Horowitz & Gaines, *supra* note 117 ("[I]t is possible to effect formation transactions with warehousing entities, including affiliated entities, in order to provide a BDC with a sizeable initial portfolio of investments."). In a warehousing transaction, the sponsor commits to buy a pool of investments owned by an intermediary once the BDC's fundraising is complete. *See, e.g.*, Jonathan H. Talcott & Janis F. Kerns, *Trends in BDC Formation Transactions*, 21 INV. LAW. 1, 5–6 (2014), https://www.nelsonmullins.com/storage/9d2c3db2c88ea417bea59e248945ac54.pdf (providing examples of these transactions). This transaction allows the BDC to fully invest its capital quickly after being launched.

[119] Pangas, *supra* note 110 (slide 20); *see also* Christopher P. Healey & Jasmin Ali, *BDCs 101: The Board Perspective*, SIMPSON THACHER (Oct. 13, 2021), https://www.mfdf.org/docs/default-source/default-document-library/archive-material/bdcs-101-the-board-perspective.pdf (slide 7).

[120] Pangas, *supra* note 110 (slide 20).

[121] *Id.*

[122] *See id.*

The partial liquidity of non-traded BDCs solves several of the problems associated with public BDCs. First, it guarantees that investors will be able to exit their investments at NAV (as long as they are sufficiently patient) rather than having to sell at a discount. Second, it allows the BDC to continually offer shares priced at NAV to the public.[123] These continuous offerings allow non-traded BDCs to continue to grow after they launch.

The disadvantage of partial liquidity is that it makes it harder for investors to pull their money out whenever they want to. An investor might have to wait multiple months or quarters in order to fully exit an investment if repurchase offers are oversubscribed or if the BDC sponsor decides not to repurchase shares at all. Repurchase offers may be especially likely to be delayed or oversubscribed during downturns, when losses start piling up and liquidity is at a premium. That said, access to partial liquidity is likely a better option for retail investors than having no liquidity, which is common among traditional private funds.

For several years, non-traded BDCs had an advantage over other types of BCDs when it came to distribution. In 2020, the SEC started approving multiple share class structures for non-traded BDCs but not other types of BDCs.[124] Having multiple share classes allows a fund to charge different fees to different investors. They usually also have different minimum investment requirements. Mutual funds and closed-end funds have long used multiple share classes to make it easier for them to market a single fund to lots of different types of investors. The fees on the different share classes are used, at least in part, to compensate the financial advisors (like brokers and registered investment advisers) who sell the fund's shares to investors. Non-traded BDCs are therefore able to market their BDCs broadly through a variety of paid distribution channels that are less accessible to other BDCs.[125]

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[123] Investors may not be able to acquire shares on any given day. Investors may be allowed to submit orders for shares continually, but non-traded BDCs often only issue shares at set intervals, such as once a month.

[124] *Challenges and Progress in Multi-Share Class Exemptive Relief for BDCs*, DECHERT: THE CRED (Oct. 25, 2024), https://www.dechert.com/knowledge/the-cred/2024/10/challenges-and-progress-in-multi-share-class-exemptive-relief-fo.html. Multiple share classes with different fees are allowed for open-end funds under Rule 18f-3 of the '40 Act, 17 C.F.R. § 270.18f-3, and the SEC has long allowed traditional closed-end funds to seek exemptive relief to be able to sell multiple share classes, *Good News Coming Out of the SEC for BDCs (and Hopefully More to Come)*, DECHERT (Mar. 21, 2025), https://www.dechert.com/knowledge/onpoint/2025/3/good-news-coming-out-of-the-sec-for-bdcs--and-hopefully-more-to-.html.

[125] As an example, Blackstone Private Credit Fund (BCRED) the largest BDC, is a non-traded BDC with a typical multiple share class structure. Blackstone Private Credit Fund, Registration Statement (Form N-2) (Apr. 25, 2022), https://www.sec.gov/Archives/edgar/data/1803498/000119312522117898/d356740dn2.htm (see "Plan of Distribution" on page 284). BCRED has three share classes: Class I, Class S,

It is worth noting that multiple share class structures could be good or bad for retail investors. They could be good because they allow sponsors to serve multiple investor groups with one fund, reducing administrative and overhead costs. They also reduce incentives for sponsors to create different funds for different investor groups, with the worst funds being marketed primarily to retail. However, multiple share classes may also allow sponsors to price discriminate among investors and charge higher fees to investors who are less sophisticated.

Finally, non-traded BDCs have a significant disadvantage to other types of BDCs in that they are generally more expensive to launch. Public offerings of non-traded BDCs have to be conducted in compliance with state securities laws, known as "blue sky" laws.[126] For many categories of securities,[127] the federal securities laws preempt state laws.[128] This preemption holds for securities listed on national stock exchanges (e.g., public BDC shares), securities issued by registered investment companies (e.g., mutual funds and

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and Class D. *Id.* Class S shares are "available through brokerage and transactional-based accounts" of the type that a typical retail investor might use and have the highest fees. *Id.* (see pages 284–86). In addition to the management fees, performance fees, interest payments, and other expenses that all the classes share, Class S shares have additional "shareholder servicing and/or distribution fees" of 0.85% of NAV per year. *Id.* (see pages 285–86). They also allow intermediaries selling the shares to charge up to 3.5% of NAV as an "upfront placement fee[]" or commission *Id.* (see page 285). Class D shares are available through registered investment advisers, in "wrap accounts," and through certain "participating brokers." *Id.* (see page 284). (Wrap accounts are accounts where a financial advisor charges their client a single fee that covers all "management, brokerage, and administrative expenses for the account." U.S. Sec. & Exch. Comm'n, *Wrap Account*, INVESTOR.GOV, https://www.investor.gov/introduction-investing/investing-basics/glossary/wrap-account (last visited July 29, 2025). Typically, the fee is a percentage of the total assets in the account. *Id.*) Class D distribution fees are lower than Class S shares (0.25% per year) and they allow selling agents to charge placement fees up to 1.5%. Blackstone Private Credit Fund, Registration Statement (Form N-2) (Apr. 25, 2022), https://www.sec.gov/Archives/edgar/data/1803498/000119312522117898/d356740dn2.htm (see pages 285–86). Class I shares are available through the same channels as Class D shares and are also available directly to institutional investors. *Id.* (see page 284). Class I shares have no shareholder servicing or distribution fees, and financial professionals who sell Class I shares are not allowed to charge "placement fees or brokerage commissions." *Id.* (see pages 285–86). BCRED also has a minimum initial investment of $1 million for its Class I shares and a minimum initial investment of $2,500 for its Class S and D shares. *Id.* (see page 14).

[126] *SEC Multi-Class Exemptive Relief for Privately Offered BDCs and Closed-End Funds*, PROSKAUER (Mar. 19, 2025), https://www.proskauer.com/alert/sec-multi-class-exemptive-relief-for-privately-offered-bdcs-and-closed-end-funds.

[127] These securities are called "covered securities" under the National Securities Markets Improvement Act of 1996 (NSMIA). *Federal Covered Securities*, STATE OF WIS. DEP'T OF FIN. INST., https://dfi.wi.gov/Pages/Securities/Filings/FedCoveredSecuritiesGeneralInfo.aspx (last visited July 29, 2025); 15 U.S.C. § 77r.

[128] 15 U.S.C. § 77r.

closed-end funds), and securities issued in Reg D private placements (e.g., most private fund interests).[129]

Because non-traded BDCs are sold publicly but not listed, and because BDCs are not registered investment companies under the '40 Act, non-traded BDC shares fall through the cracks of this federal preemption. Non-traded BDC offerings therefore need to be structured to comply with the securities laws of each of states in which the offering will be sold (usually all 50 states). The process of ensuring compliance with state blue sky laws can be time consuming and expensive.[130]

The third type of BDC is the *private BDC*. Private BDCs are sold through Reg D private placements only to accredited investors, so they should be thought of as targeting the "mass affluent" (like lawyers, dentists, and business owners, for example) rather than true retail investors.[131] Unlike private funds, private BDCs can accept an unlimited number of investors.

Private BDCs can be structured in two different ways, the first of which is similar to the traditional private fund model and the second of which is similar to the non-traded BDC model. In the first option, a private BDC signs up investors to commit a certain amount of capital to the BDC. Investors do not put their money in up front, however. Rather, the BDC calls for capital from investors once it has identified worthwhile investments, just like PE and VC funds do.[132] (This method reduces the "J-curve" in returns.) Private BDCs that use a private fund-like model may provide liquidity to their investors after several years by listing their shares on an exchange or by liquidating the fund.[133]

In the second option, a private BDC operates like a non-traded BDC. The BDC receives capital from investors up front, invests that capital, and then provides liquidity to investors by periodically repurchasing shares.[134]

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[129] 15 U.S.C. § 77r(b).

[130] State blue sky laws may also require that securities be sold only to investors who meet minimum "suitability standards." Pangas, *supra* note 110 (slide 23). The standards are lower than the accredited investor requirements in Reg D, but they still exclude some investors. For example, it is common for non-traded BDCs to sell only to investors who have (1) "a net worth of at least $250,000" or (2) "a gross annual income of at least $70,000 and a net worth of at least $70,000." Blackstone Private Credit Fund, Registration Statement (Form N-2) (Apr. 25, 2022), https://www.sec.gov/Archives/edgar/data/1803498/000119312522117898/d356740dn2.htm (see page i). Some states also limit the amount each investor can invest in non-preempted offerings to a certain percentage of the investor's net worth. *Id.* (see pages i–ii).

[131] Pangas, *supra* note 110 (slide 10).

[132] *Id.* (slide 15).

[133] *Id.* (slide 10).

[134] *Demystifying the Three Main BDC Structures*, DECHERT: THE CRED (July 19, 2024), https://www.dechert.com/knowledge/the-cred/2024/7/demystifying-the-three-main-bdc-structures.html (describing the rise of "perpetual-life" private BDCs).

Private BDCs do not have to comply with state blue sky laws because their securities are sold through Reg D offerings to accredited investors. They have historically not been allowed to issue multiple share classes, which has limited their flexibility in selecting distribution channels. However, in March 2025, the SEC approved multiple share class structures for seven new private BDC.[135] This structure may become popular as a result of this change.[136]

Like non-traded BDCs, private BDCs usually have a minimum investment requirement.

2. Growth, Leverage, and Fees

Figure 2 shows the total NAV of the three types of BDCs in each quarter from Q1 2015 through Q4 2024. The figure shows that BDC net assets have grown significantly over the past decade, from around $50B in 2015 to more than $200B by the end of 2024. The growth has been particularly fast over the past five years. Figure 2 also highlights that public BDCs used to be the most common type but have now been surpassed by non-traded BDCs. Private BDCs are least common by net assets, but they are growing quickly.

Figure 3 shows the number of BDCs in each category over time, at it tells a slightly different story. Non-traded BDCs are actually the least common BDC by number even though they hold the most net assets. This divergence is driven by the fact that the largest BDC (Blackstone Private Credit Fund, or "BCRED") is a non-traded BDC, and by itself, BCRED had $38.9B in net assets at the end of 2024. The second largest BDC by net assets in Q4 2024, Blue Owl Credit Income Corp., was also a non-traded BDC, with another $14.5B in net assets. Private BDCs, on the other hand, have become the most common BDC type by number. Finally, Figure 3 shows that the number of public BDCs has been dwindling over time.

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[135] *Good News Coming Out of the SEC for BDCs (and Hopefully More to Come)*, DECHERT (Mar. 21, 2025), https://www.dechert.com/knowledge/onpoint/2025/3/good-news-coming-out-of-the-sec-for-bdcs--and-hopefully-more-to-.html.

[136] *SEC Multi-Class Exemptive Relief for Privately Offered BDCs and Closed-End Funds*, PROSKAUER (Mar. 19, 2025), https://www.proskauer.com/alert/sec-multi-class-exemptive-relief-for-privately-offered-bdcs-and-closed-end-funds ("With the new Private Placement Multi-Class Relief, we believe that there will likely be a significant shift within the non-listed BDC space towards private placement offerings, which avoids the need for the more cumbersome state "blue sky" registration process.").

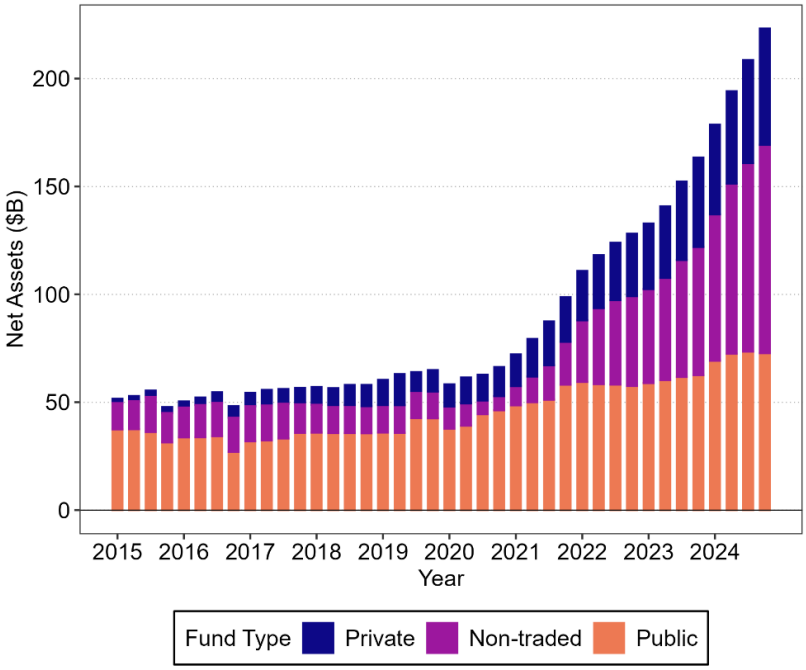

Figure 2: Net Assets in BDCs, 2015-24

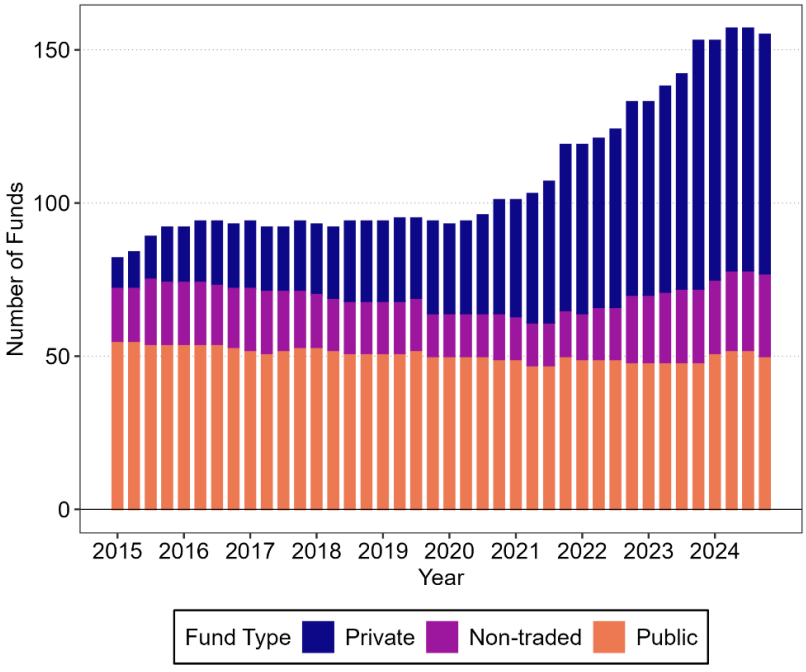

Figure 3: Number of BDCs, 2015-24

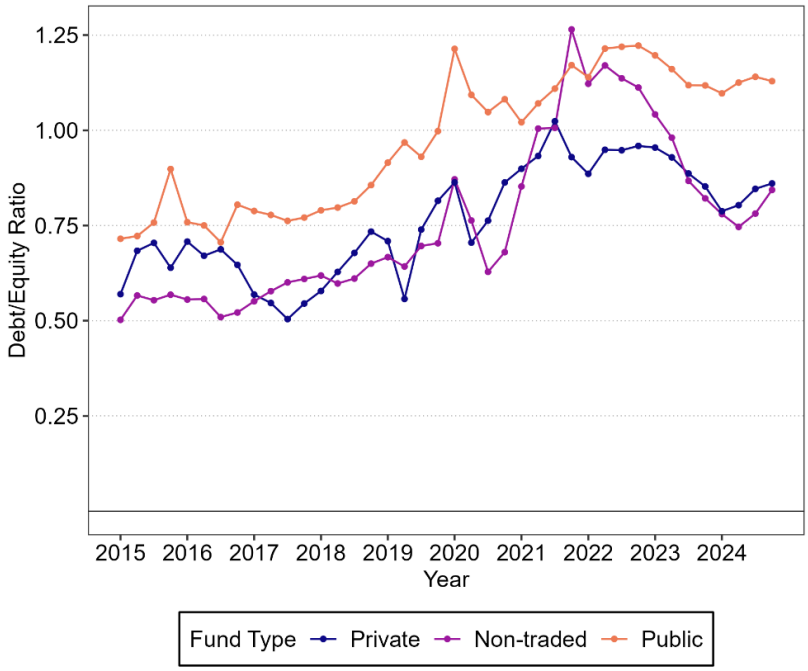

Figure 4: BDC Leverage, 2015-24

Figure 4 shows the amount of leverage BDCs use, by BDC type. By statute, BDCs are allowed to use up to $1 of debt for every $1 they raise from investors (debt-to-equity ratio of 1).[137] If a BDC receives shareholder approval and complies with additional disclosure requirements, it can then use up to $2 of debt for every $1 from investors (debt-to-equity ratio of 2).[138] According to Figure 4, most BDCs have a debt-to-equity ratio around 1, the standard statutory limit. Private and non-traded BDCs are just below this threshold on average, which public BDCs are slightly above it, suggesting that some public BDCs may have received shareholder approval to go above the 1:1 limit.

Finally, Table 1 shows some basic information about BDC fees for a subset of BDCs over the past few years.[139] The table reveals that BDC fees

[137] 15 U.S.C. § 80a-60(a)(2).
[138] *Id.*
[139] Fee data were collected from the SEC's XBRL API, which pulls figures that firms have tagged in their financial statements. BDCs were not required to tag data in their financial statements until 2020, U.S. SEC. & EXCH. COMM'N, SECURITIES OFFERING REFORM FOR CLOSED-END INVESTMENT COMPANIES 2, 14–15, https://www.sec.gov/files/rules/final/2020/33-10771.pdf, so data come from quarterly and annual filings after 2020. See Guy Stanzione, *The Impact of SEC Rulemaking on Business*

are much higher than typical mutual fund fees and are instead in line with private fund fees. Each year, on average, investors' fees and expenses eat up 4-5% of net assets. In other words, if a BDC generated a 15% return on its investments before fees, its investors would earn only 10-11% returns.

Item	Mean	Median	25th Pct	75th Pct	n
Management Fee	2.22	2.05	1.04	3.04	446
Performance Fee	1.45	1.37	0.70	2.11	275
Other Expenses	1.18	0.74	0.53	1.20	98
Total Fees and Expenses (%)	**4.85**	**4.16**	**2.27**	**6.35**	*

Table 1: BDC Fees and Expense as % of NAV[140]

B. Non-traded Closed-end Funds

1. Legal Structures

After BDCs, non-traded closed-end funds have become the next most popular vehicle (by total net assets) to sell private market access to retail investors. As their name suggests, non-traded closed-end funds do not have shares trading on an exchange. The lack of traded shares solves some of the problems associated with traditional closed-end funds.

Non-traded closed-end funds come in two common flavors: *tender offer funds* and *interval funds*.[141] Both tender offer and interval funds function like non-traded BDCs. Their shares are generally registered under the '33 Act so they can be sold publicly to all kinds of investors.[142] Sometimes, usually in tender offer funds, sales are restricted to accredited investors. Sponsors in both types of funds periodically offer to buy back a set number of shares at

Development Companies, TOPPAN MERRILL (Aug. 21, 2024), https://www.toppanmerrill.com/blog/sec-rulemaking-impact-bdcs/ for basic information about BDC tagging requirements. Additionally, my data are incomplete because the SEC API's collection of firms' tagged, disaggregated fee information in their quarterly and annual filings seems to be somewhat sporadic and inconsistent.

[140] I collected data on quarterly management fees and performance fees directly for each fund with available data and divided these figures by estimates of the fund's average net assets during each quarter. I calculated other expenses by starting with total operating expenses and subtracting off interest expense, management fees, and performance fees. The final row in the table simply sums the prior three rows. All figures are annualized. Each observation is a fund-quarter.

[141] *What Are Interval and Tender Offer Funds?*, ICAPITAL (May 29, 2022), https://icapital.com/insights/private-equity/what-are-internal-and-tender-offer-funds/.

[142] *Id.*

NAV.[143] The big difference between tender offer and interval funds is that interval funds commit at their inception to repurchase shares on a set schedule while tender offer funds do not.[144] For example, interval funds are generally required to offer to repurchase at least 5% of shares during each repurchase offer, and they are required to commit ex ante to conducting repurchases on a set interval of "three, six, or twelve months."[145]

Tender offer funds do not commit to a set repurchase schedule.[146] Their repurchases are governed by the '34 Act's tender offer rules.[147] These rules requires a process that "is generally more burdensome" than the interval fund repurchase process but that allows "a higher degree of discretion and flexibility."[148] Some tender offer funds say in their registration statements that they intend to provide predictable, periodic liquidity through tender offers from the start. Others announce an intent to conduct tender offers after a waiting period that may range from one to several years after the fund launches.[149] Still other tender offer funds say that they may provide liquidity through tender offers without announcing any concrete plans.

As a practical matter, the interval structure seems to be used more frequently for credit-focused funds, whereas the tender offer structure seems

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[143] *Id.*

[144] *Id.*

[145] 17 C.F.R. § 270.23c-3(a)(1), (3). Interval fund repurchases are governed by Rule 23c-3 under the '40 Act. The interval fund rule requires, among other things: (1) that the sponsor repurchase shares at NAV, *id.* at (b)(1); (2) that the sponsor's repurchase policy be changed only by a majority vote of shareholders, *id.* at (b)(2); (3) that a repurchase only be suspended or postponed by vote of the disinterested directors and only in certain circumstances, *id.* at (b)(3); (4) that shareholders be given adequate notice and information about upcoming repurchases, *id.* at (b)(4); and (5) that the fund's NAV be calculated at least weekly, *id.* at (b)(7).

[146] Tender offer funds also do not have to calculate NAV at least weekly.

[147] James Audette et al., *Interval and Tender Offer Closed-end Funds: Investment Company Alternatives to Traditional Funds*, 20 J. INV. COMPLIANCE 21, 26 (2019), https://www.chapman.com/media/publication/947_Chapman_Interval_Tender_Offer_Closed-End_Funds.pdf.

[148] *Id.*

[149] *See, e.g.*, First Trust Private Assets Fund, Registration Statement (Form N-2) (Apr. 12, 2022), https://www.sec.gov/Archives/edgar/data/1912938/000110465922045129/tm2210143d2_n2.htm (see page 49 under "Tender Offers/Offers to Repurchase") ("The Fund is not expected to conduct any repurchase offer before [June 30, 2023]."); Variant Alternative Lending Fund, Registration Statement (Form N-2) (Sept. 27, 2024), https://www.sec.gov/Archives/edgar/data/0002022674/000121390024082747/ea0215517-01_n2a.htm (see page 36 under "Tender Offers/Offers to Repurchase") ("The Fund is not expected to conduct any repurchase offer before February 15, 2025.").

to be more common for other types of funds, like private equity-like funds and infrastructure funds.[150]

Like non-traded and private BDCs, non-traded closed-end funds also typically have a minimum investment requirement. The minimum initial investment can range from quite low to prohibitively high for many individual investors depending on the fund type, share class, and target clientele.

A third type of non-traded closed-end fund that is used on occasion does not provide any preannounced path to liquidity. These unlisted funds operate like private funds in that they return capital to investors only through distributions and the ultimate winddown of the fund's operations. These totally illiquid closed-end funds seem to be especially common among "access funds" that invest primarily in or alongside private funds.[151] They also usually offer shares through Reg D private placements, and many appear to sell only to qualified clients so they can charge performance fees.

Tender offer, interval, and other non-traded funds differ from non-traded BDCs in a few key ways. First, these funds are not required like BDCs to allocate a large percentage of their assets to direct investments in private companies or small publicly traded companies. This flexibility allows tender offer and interval funds to invest more freely in publicly traded securities. In theory, this flexibility also makes non-traded closed-end funds a good vehicle to give retail investors access to private funds (e.g., as "funds of funds"). However, under longstanding, informal SEC guidance, closed-end funds that allocated more than 15% of their net assets to private funds could accept only

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[150] Active Interval Fund, Interval Fund Tracker, https://intervalfundtracker.com/data/active-interval-funds/ (last visited July 29, 2025) (showing that 66.2% of interval fund net assets are in credit products); *Interval Funds vs. Tender-offer Funds: An Overview for Investment Managers Considering a Launch*, UMB BLOG (June 4, 2025), https://blog.umb.com/institutional-banking-perspective-tender-offer-and-interval-fund-formation/ ("Practically speaking, managers sometimes hope to offer an interval fund structure but run into a roadblock because the industry still primarily expects interval funds to be valued daily. At least weekly valuations are required, except during the open repurchase period which must be daily. Some investments, such as private equity, are challenging to value daily."). For examples of private equity-type funds structured as tender offer funds, see North Haven Private Assets Fund, Registration Statement (Form N-2) (Feb. 19, 2025), https://www.sec.gov/Archives/edgar/data/2029010/000119312525029581/d837242dn2a.htm and Ares Private Markets Fund, Registration Statement (Form N-2) (Mar. 23, 2022), https://www.sec.gov/Archives/edgar/data/1876006/000110465922037102/tm224118d2_n2a.htm.

[151] *See, e.g.*, UST Global Private Markets Fund, LLC, Registration Statement (Form N-2) (May 21, 2007), https://www.sec.gov/Archives/edgar/data/1399793/000119312507119495/dn2.htm; Hatteras VC Co-Investment Fund II, LLC, Registration Statement (Form N-2) (Jan. 5, 2009), https://www.sec.gov/Archives/edgar/data/1450150/000114420409000293/v136081_pos-ami.htm.

accredited investors and had to have at least a $25,000 minimum investment.[152] However, the SEC has recently signaled that it is abandoning this practice,[153] so retail-focused access funds may become an area of growth. Second, sponsors of these funds are generally allowed to charge performance fees only on divided and interest income, but not on capital gains.[154]

Third, non-traditional closed-end funds are not allowed to take on as much leverage as BDCs. They can only take on $1 of debt for every $2 of equity.[155]

The '40 Act prohibits closed-end funds from offering multiple share classes, but the SEC "routinely" grants exemptions to tender offer and interval funds "in a timely fashion."[156] This exemptive relief allows these funds to distribute their shares through different channels.[157]

2. Growth, Leverage, and Fees

Figures 5, 6, and 7 show the number of non-traded closed-end funds as well as their net assets and leverage for each quarter from 2020 through 2024. Overall, non-traded closed-end funds have shown similar growth to BDCs over the past five years. They have growth from just north of $50B in net assets in Q1 2020 to a bit less than $200B in net assets by the end of 2024. The size of the sector at the end of 2024 was roughly the same size as the BDC sector, though a bit smaller. One interesting feature of Figure 6, however, is that there are significantly more funds structured as non-traded closed-end funds (around 250) than BDCs (around 150), meaning that non-traded closed-end funds are smaller than BDCs on average.

Figure 7 also shows that non-traded closed-end funds use far less leverage than BDCs. Interval funds have the highest debt-to-equity ratios on average, using about $1 of debt for every $3 dollars of equity. Tender offer funds and

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[152] *SEC Drops 15% Limit in Private Funds for Retail Closed-End Funds*, ROPES & GRAY (May 23, 2025), https://www.ropesgray.com/en/insights/alerts/2025/05/sec-drops-15-limit-in-private-funds-for-retail-closed-end-funds.

[153] *Id.*

[154] Audette et al., *supra* note 147 at 30. See sources cited *supra* note 67 for a further discussion of the rules on performance fees. A few exceptions apply. If the fund accepts only qualified clients, the sponsor can charge performance fees. Audette et al., *supra* note 147 at 30. Additionally, a specific kind of performance fee that increases with overperformance and decreases with underperformance called a "fulcrum fee" is allowed, though these are quite rare in practice. *Id.*

[155] *Id.*

[156] *Id.* at 29.

[157] To achieve "maximum flexibility" in being able to offer shares with different fee structures to different clients, some tender offer and interval fund sponsors adopt master-feeder fund structures where multiple "feeder" funds (all registered tender offer or interval funds) invest all of their assets in a shared "master" fund that makes investments. *Id.*

other non-traded closed-end funds use much less leverage. Part of the difference in leverage is statutory: closed-end funds are only allowed to have debt-to-equity ratios up to 0.5.[158] But funds do not appear to be getting close to this limit, with the possible exception that interval funds may get close if their pattern of increasing leverage continues.

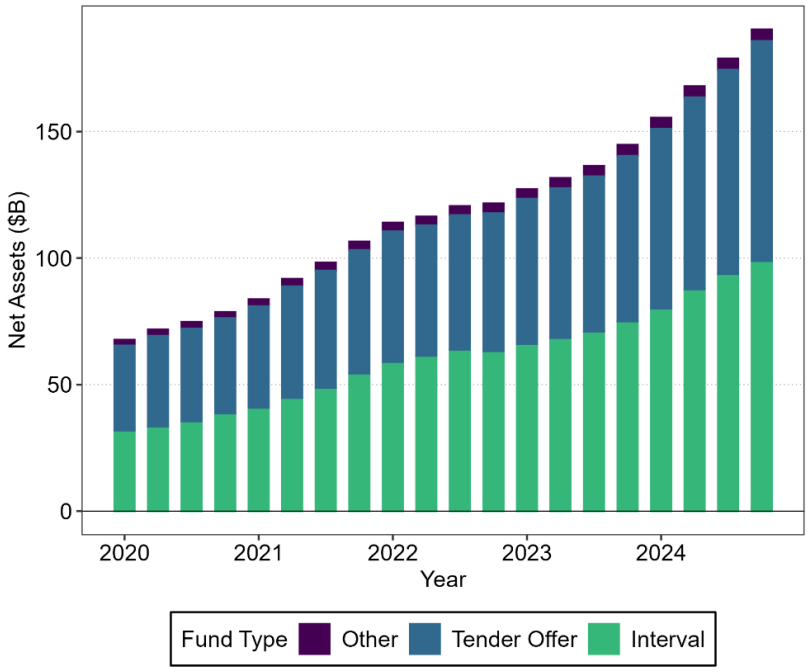

Figure 5: Net Assets in Non-traded CEFs, 2020-24

[158] *See supra* note 155 and accompanying text.

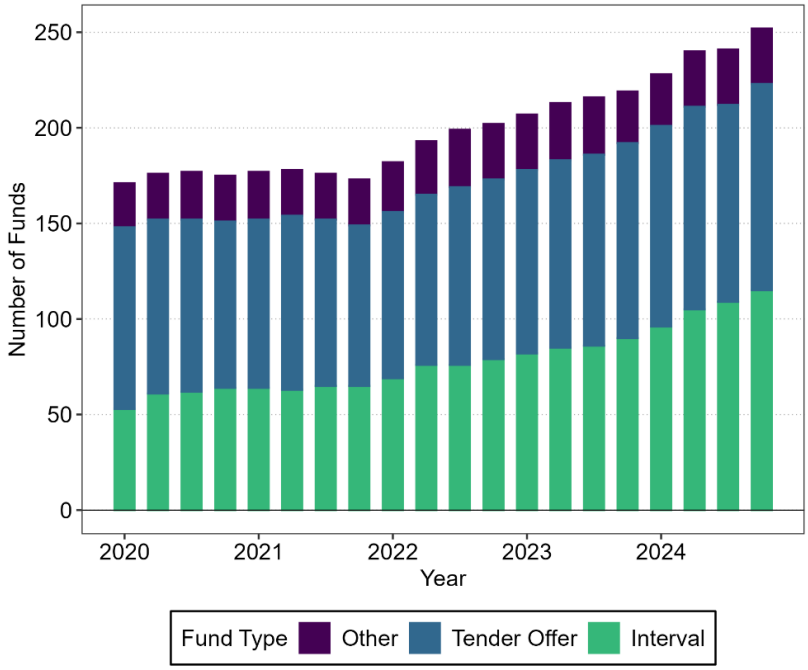

Figure 6: Number of Non-traded CEFs, 2020-24

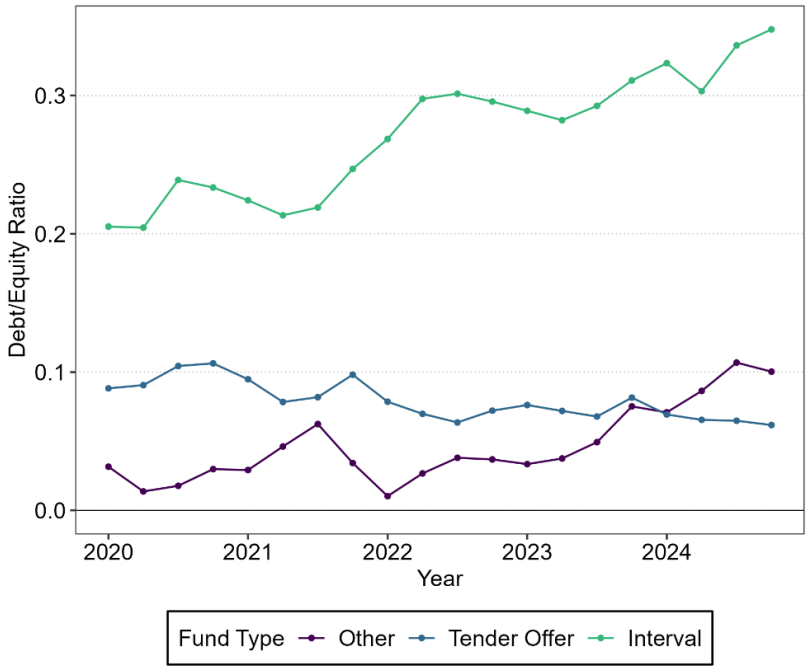

Figure 7: Non-traded CEF Leverage, 2020-24

Table 2 presents some basic information about non-traded closed-end fund fees. I have less disaggregated fee information for these funds than BDCs, but I have better coverage across funds. A few observations: first, management fees for closed-end funds are about half of management fees for BDCs on average. Second, even including interest expense (which is likely small because closed-end funds do not use much leverage), total fees and expenses are much lower than BDC fees and expenses on average, again by about half. Even so, non-traded closed-end fund fees are likely a bit higher than actively managed mutual fund fees, especially for funds that charge performance fees.

Item	Mean	Median	25th Pct	75th Pct	n
Management Fee	1.03	0.97	0.5	1.3	1103
Total Fees and Expenses (%, including Interest Expense)	**2.69**	**1.95**	**1.2**	**2.8**	**1103**

Table 2: CEF Fees and Expense as % of NAV[159]

III. WHAT ARE THE RISKS?

In this Part, I present empirical evidence about the performance of retail-focused, private market investment funds. I do so with an eye to understanding the risks that these funds might pose to retail investors. My results highlight two areas of concern. The first is that the funds' reported performance is much less volatile from year to year than the performance of similar, publicly traded investments. The second is that worse-performing products are generally being sold to less sophisticated investors.

Throughout, I focus on funds structured as BDCs. I focus on BDCs because they are the most popular investment type by net assets and because I was able to collect a high-quality, quarterly dataset for the universe of BDCs covering at least the past 10 years. Additionally, different types of BDCs generally hold comparable investments because of the statutory requirement that they predominantly hold direct investments in small to mid-sized companies.

I do not focus on non-traded closed-end funds in this Part even though they are also popular and well-established because I have data from a much

[159] Closed-end funds are required to report their annual management fee and their expense ratio (net of reimbursements from the sponsor) each year on Form N-CEN. The expense ratio includes management fees, performance fees (if any), other expenses, and interest expense. I removed interest expense in Table 1 from the BDC expense estimates, so the comparison is not perfectly apples-to-apples. Each observation is a fund-year.

shorter stretch of time and because I have less complete data. Different types of non-traded closed-end funds are also less comparable. Their holdings run the gamut from real estate to infrastructure assets to private equity to private credit. Even among credit products, funds are not necessarily comparable because some hold a much higher percentage of publicly traded assets than others in order to facilitate liquidity. However, in the Appendix, I include a couple of figures illustrating some basic results about the risk-adjusted performance of these funds. The figures show similar patterns to the risk-adjusted performance of BDCs.

The data show that, over the past ten years, the absolute, reported returns of BDCs have been at least as good as, and in many cases higher than, publicly traded, high yield debt but lower than the stock market. On a risk-adjusted basis, these funds' reported returns have been exceptional. All types of BDCs have delivered roughly equivalent or better returns than publicly traded, high-yield bonds with lower volatility, and the risk-adjusted returns of these funds have generally been better than or about the same as, to the risk-adjusted returns of public stocks. The reported returns of private BDCs have been particularly impressive.

I argue, however, that these exceptional risk-adjusted returns are evidence of lurking risks for retail investors. The BDCs' reported returns are based on the funds' self-reported investment valuations. BDCs' investments rarely, if ever, trade, so they cannot be valued using actual market prices. BDCs boards have an incentive to report valuations that appear smooth and stable over time. Smooth valuations lead to smooth returns that make funds seem like more attractive investments. Smooth reported valuations are common among private equity funds, leading some academics, and even some financial professionals, to accuse the industry of "volatility laundering"[160] and artificially smoothing returns to cater to investors.[161]

Whether or not smoothed valuations are a problem in true private funds, they are a major concern in funds that have retail investors. Retail investors might be more likely that large institutional investors to take reported performance at face value, leading them to overinvest in these funds. Additionally, if the non-traded funds are committed to providing liquidity to

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[160] Cliff Asness, *Why Does Private Equity Get to Play Make-Believe With Prices?*, INSTITUTIONAL INV. (Jan. 6, 2023), http://institutionalinvestor.com/article/2bstqfcskz9o72ospzlds/opinion/why-does-private-equity-get-to-play-make-believe-with-prices; *see also* sources cited *supra* note 24.

[161] Blake Jackson, David C. Ling & Andy Naranjo, Catering and Return Manipulation in Private Equity (May 2, 2024) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4244467 ("This paper provides evidence … that PE fund managers strategically report boosted and smoothed returns because doing so allows their investors to report artificially higher and less volatile headline returns to their own stakeholders.").

investors at reported net asset values, even during a downturn, then (1) they are more exposed to market risk than their reported returns suggest and (2) they may be transferring money from some investors to others. If the funds intend not to provide liquidity during a downturn to avoid transferring value between investors, then their funds may be less liquid than investors anticipate. I discuss these issues in more detail in Part V.

I also explore the extent to which funds that are sold to different investors perform differently. I find that private BDCs, which are sold only to accredited investors and did not have multiple share classes during my sample period, reported significantly better performance than non-traded BDCs, which were sold more broadly but at a greater cost. I find that this difference in performance was driven in large part by differences in the gross returns that these BDCs earned on their assets rather than by differences in fees. Public BDCs, in contrast, earned higher gross returns than non-traded BDCs, but they also had higher expense ratios, so in the end, they did not outperform non-traded BDCs by a statistically significant amount.[162]

This finding raises the possibility that, among BDCs that are sold directly to investors through intermediaries rather than by being listed on an exchange, the higher performing products are being sold to wealthier investors while the worse performing products are being offered to less wealthy and sophisticated investors.

A. Performance: Returns and Volatility

This section presents data on the performance of retail private funds, as reported in their SEC filings and compared to several public benchmarks. Throughout, I use net-of-fees returns so my results capture investors' performance.

1. Absolute Performance by Fund Type

I begin by constructing an index for each of the three types of BDCs.[163] I do so by calculating quarterly, net-of-fees, reported returns for each fund and averaging these returns across BDCs within each type, weighted by average

[162] The differences between non-traded and public BDCs likely reflect differences in leverage.

[163] I repeat this exercise for non-traded closed-end funds in the Appendix. For the closed-end funds, the index-construction process is simpler because closed-end funds are required to report monthly net-of-fees returns on their N-PORT filings. To obtain quarterly returns for each fund, I compound the monthly returns within each fund-quarter. Then I average quarterly returns across funds in each category, weighted by beginning-of-quarter net assets.

invested net assets during the quarter.[164] The reported returns capture (1) dividends paid by the fund to investors during the quarter and (2) changes in the reported value of the investments (i.e., changes in NAV).

Figure 8 plots the cumulative returns of the three BDC indices from 2015 through 2024. It also plots a public benchmark: the ICE BofA High Yield Index, which is an index tracking the performance of publicly traded, below-investment-grade (or "high yield" or "junk") debt.[165] I chose this index because BDCs predominantly invest in private, high yield debt and because the index's performance approximates the performance of low-cost, high yield bond funds that retail investors can easily invest in.

[164] I estimate net-of-fees returns by dividing each fund's net increase in net assets (as reported on Forms 10-Q and 10-K) by an estimate of the fund's average invested capital during the quarter. Net increase in net assets is net investment income (which is typically paid out as a dividend for tax reasons) plus realized and unrealized capital gains. *See What is a BDC*, Blue Owl Cap. Corp., https://www.blueowlcapitalcorporation.com/about-blue-owl-capital-corp/what-is-a-bdc (last visited July 28, 2025) (explaining that "[m]ost BDCs elect to be treated as a regulated investment company (RIC)," which requires them to "distribute at least 90% of taxable income to shareholders"). I calculate average invested capital as the average of two figures (1) starting net assets (from the end of the previous quarter and (2) ending net assets minus capital gains (or losses). This approximation essentially assumes that fund flows (changes in total NAV not due to capital gains or losses, i.e., money invested or withdrawn by investors) are uniform throughout each quarter. If fund inflows in a given quarter occur primarily toward the end of the quarter, then my approximation exaggerates average invested capital and underestimates the absolute value of the quarterly return. (In other words, I will estimate positive returns to be lower and negative returns to be higher than they truly are.) If the fund inflows instead occurred primarily toward the beginning of the quarter, then my estimate underestimates invested capital and inflates the absolute value of the quarterly return. The reverse is true in quarters with net outflows.

[165] *ICE BofA US High Yield Index Total Return Index Value*, FRED: FED. RSRV. BANK OF ST. LOUIS, https://fred.stlouisfed.org/series/BAMLHYH0A0HYM2TRIV (last visited July 29, 2025).

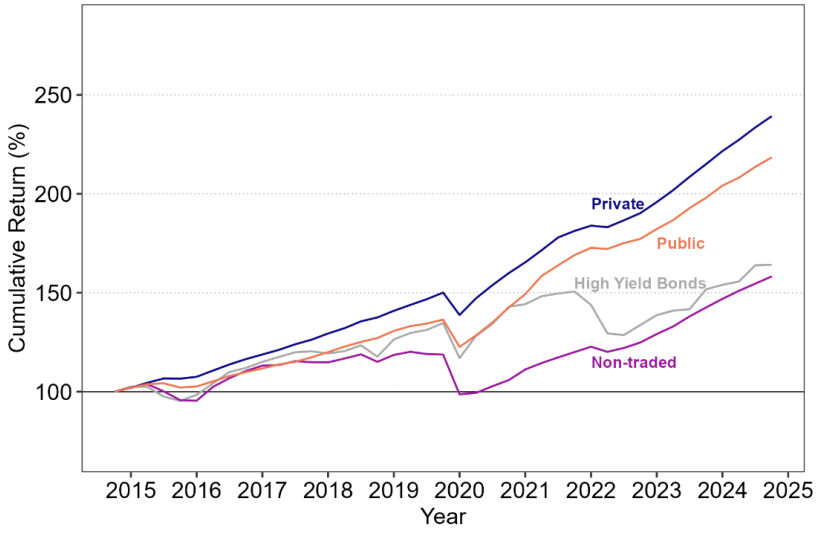

Figure 8: Performance of BDC Indices, 2015–2024

Figure 8 shows that, based on their absolute, reported returns, public and private BDCs both substantially outperformed the high yield bond index. Non-traded BDCs performed very similarly to the index, though its returns were slightly lower. Among the BDCs, private BDCs performed the best, and public BDCs were a close second. Non-traded BDCs lagged considerably.

2. Risk-Adjusted Performance by Fund Type

One of the most often mentioned selling points of private investments is that they deliver attractive *risk-adjusted* returns and that their returns are uncorrelated with public markets.[166] Figure 8 shows that this appears to be true: the cumulative returns of the BDC indices increase smoothly over time with very few significant dips. Non-traded BDCs showed a little more variability through the beginning of 2020, but since then, their performance has been remarkably consistent. The consistency of BDCs' reported returns is particularly striking when juxtaposed with the high yield bond index's returns. In 2022, for example, the high yield bond index took a nosedive, but the BDC indices barely flinched.

In Figure 9, I formalize this comparison between the BDCs' performance and their volatility. Figure 9 plots each BDC type's annualized average return

[166] *See, e.g.*, Baldric Todeschini, *Private Markets: An Investment Haven in an Uncertain World?*, ABERDEEN INVS. (Apr. 15, 2025), https://www.aberdeeninvestments.com/en-gb/intermediary/insights-and-research/private-markets-an-investment-haven-in-an-uncertain-world.

(in excess of a risk-free interest rate) and annualized volatility (measured as the standard deviation of quarterly returns). I also plot the average excess return and volatility for three public benchmarks: the S&P 500 Index, which tracks a diverse basket of large public companies, the ICE BofA High Yield Index (used previously), and an index I constructed using the actual performance of the traded shares of the public BDCs. I include the S&P 500 because it is one of the most popular reference indices for low-cost, stock funds that are easily accessible to retail investors.

Figure 9 uses excess returns above a risk-free interest rate rather than normal returns because the ratio of an investment's excess returns to its volatility is an important figure that investment professionals call the investment's Sharpe Ratio.[167] The Sharpe Ratio is a measure of risk-adjusted performance, and finance theory suggests that investors should prefer investments with higher Sharpe Ratios.[168]

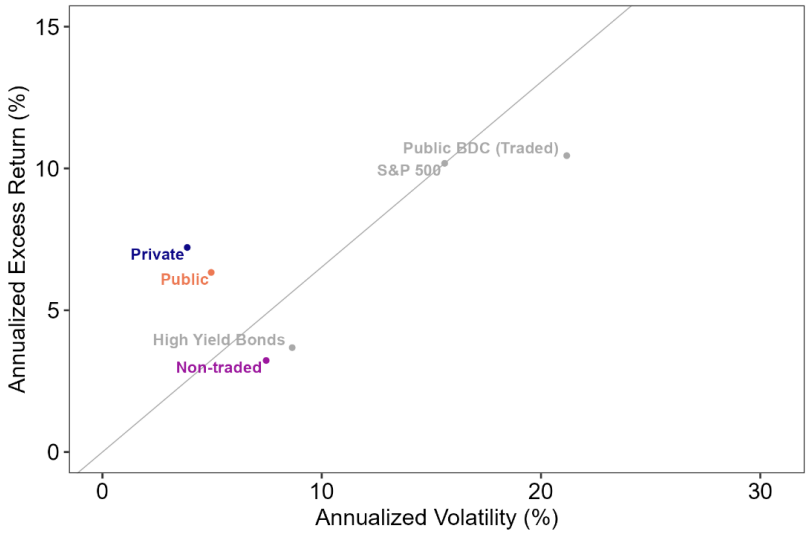

Figure 9: Average Return and Volatility of BDC Indices, 2015–2024[169]

[167] *Calculate the Sharpe Ratio to Gauge Risk*, CHARLES SCHWAB (Apr. 3, 2024), https://www.schwab.com/learn/story/calculate-sharpe-ratio-to-gauge-risk; William F. Sharpe, *Mutual Fund Performance*, 39 J. BUS. 119, 122 (1966).

[168] *See* Sharpe, *supra* note 167 at 122 ("The best portfolio will be the one giving the best boundary; clearly it is the one for which [the Sharpe ratio] is the greatest.").

[169] The annualized average return is calculated as the arithmetic mean of quarterly returns, minus the risk-free rate, from 2015 through 2024, annualized by multiplying by 4. I obtain data on the risk-free rate from Professor Ken French's website: https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html. Annualized volatility is the standard deviation of quarterly index returns over the same period, annualized by multiplying the quarterly standard deviation by the square root of 4.

Figure 9 shows that the reported, risk-adjusted performance of BDCs is generally very good. Public BDCs and especially private BDCs have very high Sharpe Ratios based on their reported returns because their reported returns are high and their reported volatility is very low. These BDCs' Sharpe Ratios are higher than the Sharpe Ratio of the S&P 500. Even non-traded BDCs, which have worse risk-adjusted performance than the other categories, still a Sharpe Ratio that is similar to the S&P 500.

If these BDCs' reported performance accurately reflects investors' performance and risk exposure, then Figure 9 is good news for retail investors, especially those in the mass affluent category who qualify as accredited investors. These investors are eligible to invest in the private BDCs that have demonstrated impressive performance. For less wealthy investors, non-traded BDCs may be an interesting opportunity to diversify their portfolios, and at the worst, they do not seem to perform worse than public options.

Unfortunately, two warnings signs in Figure 9 suggest the reported performance of these new products does not adequately reflect their risks. First, the reported volatility of all of the new fund types is lower than the volatility of the high yield bond index. This difference is surprising. BDCs invest in high yield loans, and they finance about half of their investments with borrowed money. When a fund uses leverage, it increases the volatility of investors' returns and the risk investors bear. The high yield bond index tracks a portfolio of high yield debt securities that does not use leverage. It would therefore be natural to expect BDCs to exhibit substantially higher volatility than the high yield bond index.[170]

Second, and more troubling, the reported performance of the public BDCs differs wildly from the actual performance of those same BDCs' publicly traded shares. The compounded, or geometric average, returns of these BDCs' reported returns and actual returns have been approximately the same

[170] A casual glance at the investments disclosed in many BDC's SEC filings reveals a majority of loans with higher yields than the current high yield bond index average. This would typically indicate that BDC loans are higher risk. Eric Jacobson, 6 Critical Lessons for Bond Investors, Morningstar (Dec. 26, 2023), https://www.morningstar.com/bonds/6-critical-lessons-bond-investors ("Higher yields are a reliable risk indicator."). For instance, on March 31, 2025, the reported composite effective yield to maturity of the ICE BofA High Yield Index was 7.53%. *ICE BofA US High Yield Index Effective Yield*, FRED: FED. RSRV. BANK OF ST. LOUIS, https://fred.stlouisfed.org/series/BAMLH0A0HYM2EY (last visited July 29, 2025). As of the same date, Golub Capital BDC 4 (a mid-sized private BDC from a well-known issuer) reported a weighted-average yield of 10.5% over the prior three months. Golub Capital BDC 4, Inc., Quarterly Report (Form 10-Q) (May 8, 2025), https://www.sec.gov/Archives/edgar/data/1901612/000190161225000028/gbdc4-20250331.htm (page 73).

over the past 10 years.[171] Any differences can be attributed to the fact that BDC shares do not have to trade at NAV. However, the volatilities were extremely different. The volatility of the publicly traded BDC shares was *higher* than the volatility of the S&P 500 and was more than 4x higher than the public BDC's reported volatility (based on NAV). This gap suggests that public market investors thought that public BDCs' value was fluctuating much more during the past 10 years than the public BDCs reported.

In Part V, I discuss why BDCs reported returns have such low volatility and why this presents a problem for retail investors. In short, reported volatility is low because BDCs' investments do not trade publicly, so they do not have readily observable prices. BDC boards have to value them using financial models, and their practices for updating their models over time do not generate the level of volatility that we see in public markets. If private and non-traded BDCs are committed to providing liquidity to their investors even during downturns, then they are exposed to movements in public markets and their stable reported NAVs can create problems for investors. If they instead intend not to sell investments to fund liquidity during downturns, then their illiquidity risk may be higher than investors anticipate, which can create different problems.

In a later section, I use a simulation analysis to highlight what the volatility of private and non-traded BDCs would look like if their investments were marked more closely to public market fluctuations.

3. Outperformance and Correlations with Public Markets

Next, for each BDC index, I estimate the degree to which the index is correlated with public markets and the amount by which each index has outperformed (or underperformed) public markets over the past ten years.

To estimate each index's relationship with public markets and its over- or under-performance, I use the standard Fama-French 3-factor model from the asset pricing literature in finance.[172] The Fama-French model tries to explain

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[171] See *infra* Figure 10, which plots the cumulative performance of public BDC's trading returns and reported returns. The arithmetic average returns plotted in Figure 9 are very different because an investment with high volatility needs to have higher arithmetic average returns to generate the same compounded return over time as an investment with low volatility. This mathematical relationship is commonly referred to as "volatility drag," Mark Henricks, *Guide to Volatility Drag for Financial Advisors*, SMARTASSET (Mar. 3, 2025), https://smartasset.com/advisor-resources/volatility-drag, and can be summarized by the approximation: $\mu_G \approx \mu_A - \frac{\sigma^2}{2}$, where μ_G is the geometric average (or compounded) return, μ_A is the arithmetic average return, and σ is the standard deviation of returns, *Volatility Tax*, WIKIPEDIA, https://en.wikipedia.org/wiki/Volatility_tax (last visited July 29, 2025).

[172] *See* Eugene F. Fama & Kenneth R. French, *Common Risk Factors in the Returns on Stocks and Bonds*, 33 J. FIN. ECON. 3 (1993).

the return on an asset in excess of the risk-free interest rate during a given time period using three risk factors:[173]

(1) A "market" factor, which is the overall return on the stock market in excess of the risk-free rate,
(2) A "size" factor, which captures the fact that small stocks generally outperform large stocks, and
(3) A "value" factor, which captures the fact that stocks with high book values relative to their market values also outperform.

The extent to which an asset's returns depend on the "market" factor (the first factor) is commonly referred to as the assets' "beta" (β). A beta of 1 means that, on average, the asset goes up 1% when the market goes up 1% and down 1% when the market goes down 1% A beta of 0 means that the asset's returns have no relationship with the markets' returns. The extent to which an asset consistently outperforms a blend of the three factors is referred to as the asset's "alpha" (α). Alpha is commonly used to measure funds' outperformance.

Table 3 provides the results of Fama-French three-factor regressions for each of the BDC types' reported returns. It also includes Fama-French regressions for three public market indices: (1) a Morningstar-LSTA index of CCC-rated, floating-rate leveraged loans,[174] (2) the high yield bond index used previously, and (3) the index I constructed using public BDC's trading returns. The Morningstar index is not easily investible like the high yield bond index, but it tracks assets whose characteristics are closer to BDC's underlying investments.[175]

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[173] *See id.* at 7–10.

[174] I obtained data for this index from the Morningstar website: https://indexes.morningstar.com/indexes/details/morningstar-lsta-us-ccc-ratings-loan-FS0000HRDW?currency=USD&variant=TR&tab=overview.

[175] BDC investments tend to be high yield, floating rate loans. The high yield bond index does not track assets with floating interest rates, so it's performance during times of changing interest rates is not necessarily reflective of the performance of BDC's investments. *ICE BofA US High Yield Index Total Return Index Value*, FRED: FED. RSRV. BANK OF ST. LOUIS, https://fred.stlouisfed.org/series/BAMLHYH0A0HYM2TRIV (last visited July 29, 2025). The Morningstar CCC index tracks floating rate leveraged loans. *Morningstar LSTA US CCC Ratings Loan*, MORNINGSTAR, https://indexes.morningstar.com/indexes/details/morningstar-lsta-us-ccc-ratings-loan-FS0000HRDW?currency=USD&variant=TR&tab=overview (last visited July 29, 2025). These loans are not necessarily publicly traded, so the index is constructed using a proprietary mark-to-market model. MORNINGSTAR INDEXES, MORNINGSTAR LEVERAGED LOAN INDEXES METHODOLOGY 7 (July 2025), https://indexes.morningstar.com/docs/rulebook/morningstar-lsta-us-ccc-ratings-loan-FS0000HRDW ("Average bid price from LSTA/LSEG Mark-to-Market Pricing is used to determine the market value of each loan."). "CCC" refers to the credit rating of the investments in the index. In a figure in the Appendix, I show that the CCC loans have interest

Dependent Variable:	r_rf					
Model:	Non-traded (1)	Private (2)	Public (3)	CCC (4)	High Yield Bonds (5)	Public BDC (Traded) (6)
Variables						
Constant	0.1861	1.389***	1.132***	-0.0344	-0.3072	-0.2214
	(0.5270)	(0.2843)	(0.3467)	(0.6613)	(0.3859)	(0.8697)
mkt_rf	0.2492***	0.1554***	0.1777***	0.4979***	0.4314***	1.041***
	(0.0845)	(0.0494)	(0.0595)	(0.0976)	(0.0494)	(0.1361)
hml	0.2119**	0.0790	0.1212**	0.1812*	0.0342	0.4135***
	(0.0842)	(0.0474)	(0.0587)	(0.1010)	(0.0445)	(0.1340)
smb	0.0554	0.0287	0.0549	0.2091*	0.1110	0.1969
	(0.0842)	(0.0371)	(0.0447)	(0.1132)	(0.0760)	(0.1346)
Fit statistics						
Observations	40	40	40	40	40	40
R^2	0.54262	0.56789	0.54323	0.64586	0.79569	0.81757
Adjusted R^2	0.50451	0.53188	0.50516	0.61634	0.77866	0.80237
Heteroskedasticity-robust standard-errors in parentheses						
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*						

Table 3: Fama-French Three-Factor Regressions, BDC Reported Returns

The first line of regression coefficients (after "Constant") captures each index's alpha. The results on this line indicate that all of the reported return BDC indices have demonstrated outperformance over the past 10 years. For private and public BDCs, that outperformance is statistically significant. For

income yields that are closer to typical BDC loan interest rates than other credit rating categories.

non-traded BDCs, it is not. The alpha coefficient can be interpreted as each fund's quarterly average excess returns. In annual terms, private BDCs reportedly outperform by almost 5.6 percentage points after adjusting for their risk. Non-traded BDCs outperform by 0.74 percentage points per year, though is estimate is not statistically significantly different from 0.

In contrast to the BDC reported return indices, however, all of the other public indices show no statistically significant risk-adjusted under- or over-performance. If anything, they have underperformed slightly over the past 10 years. In other words, even though public BDCs' reported returns suggest persistent, risk-adjusted outperformance, their actual returns have been in line with (or slightly worse than) what would be expected given their risk.

The second row of coefficients lists each index's market beta. All of the BDC types have betas of 0.25 or less, meaning that their returns move only 0.25 percentage points for each 1 percentage point change in the stock market returns. On the other hand, the two fixed income indices (the high yield bond index and the CCC loan index) both have betas between 0.4 and 0.5. The public BDCs' traded shares have the highest market beta at just above 1. Note that the public BDCs' beta is about what we would expect if the typical BDC invests in loans like those in the CCC leveraged loan index and is financed with a 1:1 ratio of debt to equity. A back-of-the-envelope calculation would predict that a portfolio of CCC-rated leveraged loans with 1:1 debt to equity would have a market beta of 0.996.[176]

Overall, Table 3 illustrates why retail private funds are commonly touted as providing returns that are uncorrelated with public markets. However, the huge gap between the betas of publicly traded BDC shares and those funds' financial statement returns highlights that these low correlations may be more of a reflection of these funds' valuation choices than their underlying economic performance.

B. Unsmoothing Returns

In this section, I use a simple but transparent simulation approach to estimate how the risk-adjusted performance of non-traded and private retail

[176] Financial analysts use the following formula to "lever" the beta of a pool of assets:

$$\beta_{levered} = \beta_{unlevered} \times \left[1 + (1 - \tau)\left(\frac{D}{E}\right)\right]$$

τ is the tax rate, which is 0 here because BDC are structured to avoid entity-level taxes. $\frac{D}{E}$ is the debt-to-equity ratio. *Unlevered Beta / Asset Beta*, CORP. FIN. INST., https://corporatefinanceinstitute.com/resources/valuation/unlevered-beta-asset-beta/ (last visited July 29, 2025).

private funds might change if their asset values fluctuated along with public markets.

The basic idea of the simulation is that I use public BDCs to estimate a statistical model that predicts a BDC's trading returns based on its reported returns and the contemporaneous returns on public market risk factors. I use the three Fama-French factors as risk factors in the model.[177] Next, I feed the reported returns of private and non-traded BDCs into the model to obtain predicted trading returns for each BDC. Finally, I aggregate these predicted returns into indices by BDC type, weighted by reported average NAV as before.

Figure 10 plots the reported returns, trading returns, and estimated, counterfactual returns of public BDCs from 2015 through 2024. The solid orange line represents the reported returns, the solid gray line captures the trading returns, and the dashed yellow line plots the simulated returns. The Figure confirms what previous figures have shown, which is that public BDC's traded returns have generally followed their reported returns but with much higher volatility. Over the ten-year sample period, cumulative traded returns have slightly exceeded cumulative reported returns, likely because public BDCs ended the period trading at less of a discount, or more of a premium, than at the beginning of the period. The figure also shows that the simulated returns fit the shape of the traded returns quite closely, albeit imperfectly.

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[177] Specifically, I estimate the following linear regression model:

$$R_{it}^{o} = \beta_1 \cdot (R_t^{mkt} - E[R_t^{mkt}]) + \beta_2 \cdot (R_t^{HML} - E[R_t^{HML}]) + \beta_3 \cdot (R_t^{SMB} - E[R_t^{SMB}]) + \beta_4 \cdot (R_{it}^{r} - E[R_{it}^{r}]) + \gamma_i + \epsilon_{it}$$

R_{it}^{o} is the log observed trading return for BDC i at time t,and R_{it}^{r} is the log reported return for BDC i at time t. R_t^{mkt}, R_t^{HML}, and R_t^{SMB} are the log returns on the market, value, and size factors at time t. Log returns are defined as the natural logarithm of one plus the normal return. I use log returns because summing log returns over time has the same effect as compounding normal returns. γ_i is an individual fixed effect for each BDC. I de-mean each of the independent variables so $\gamma_i = E[R_{it}^{o}]$ for each BDC.

If a BDC's stock price more or less tracks its reported NAV over time (subject to periodic deviations), then $E[R_{it}^{o}] \approx E[R_{it}^{r}]$ for each BDC over time. I verify this by estimating a regression model with the following form:

$$E[R_{it}^{o}] = \alpha + \beta \cdot E[R_{it}^{r}] + \epsilon_i$$

The results of this regression are reported in an Appendix Table. The intercept (α) is close to zero, and the slope (β) is close to 1. I use this regression model to estimate the γ_i fixed effects from each of the BDCs without reported returns. Then, I feed these fixed effects into the previous regression model to estimate counterfactual log trading returns (denoted $\hat{R}_{it}^{o}$) for each BDC in each quarter. The returns I use to construct counterfactual indices are equal to $e^{\hat{R}_{it}^{o}} - 1$.

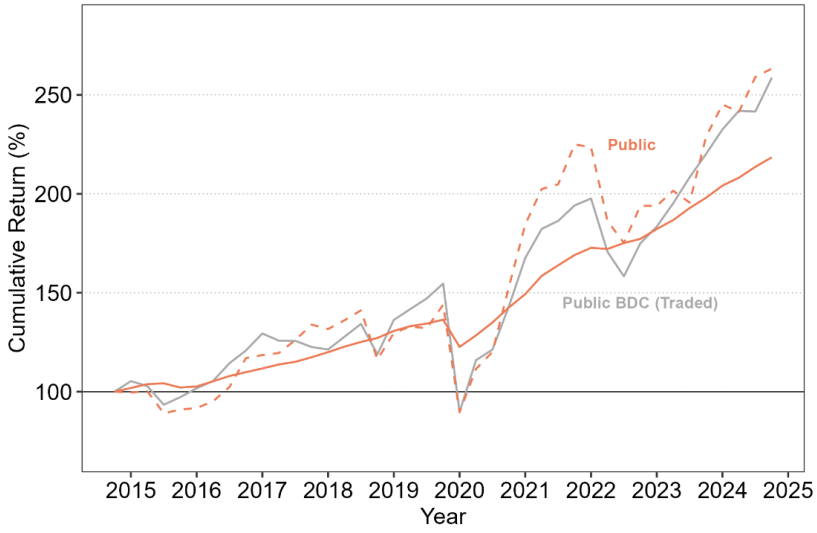

Figure 10: Counterfactual Public BDC Index Performance Compared to Trading Performance, 2015–2024

Figure 11 plots the reported (solid line) and simulated (dashed line) cumulative returns of private and non-traded BDCs from 2015 to 2024. As with the public BDCs, the absolute performance of the simulated indices is similar to that of the reported indices. However, the simulated indices have much higher volatility. At several points during the 10-year period, the simulated indices are 20-30% higher or lower than the reported indices.

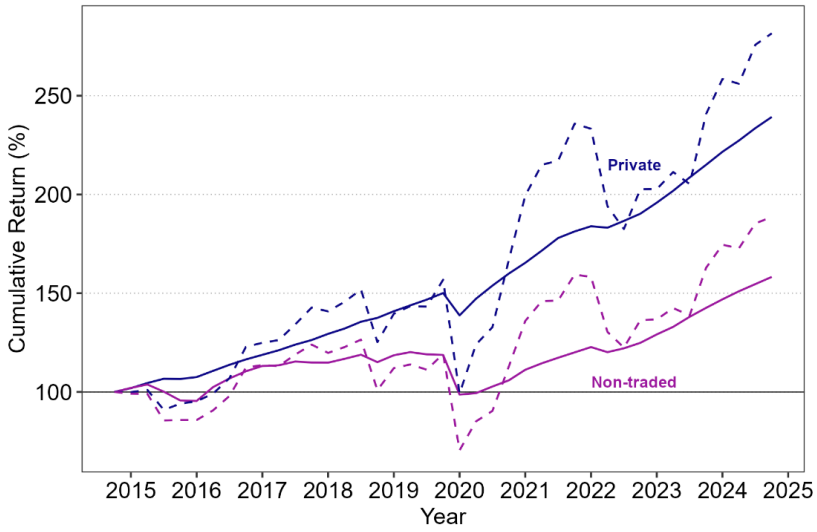

Figure 11: Counterfactual BDC Index Performance, 2014–2024

Figure 12 reproduces the risk-return chart from Figure 9 and adds points for the new counterfactual indices. Compared to Figure 9, all of the BDC points in Figure 12 are shifted significantly to the right, indicating much higher volatility, and upward, indicating higher (arithmetic) average returns.[178] As expected, the simulated public BDC point is now positioned close to the traded BDC index point.

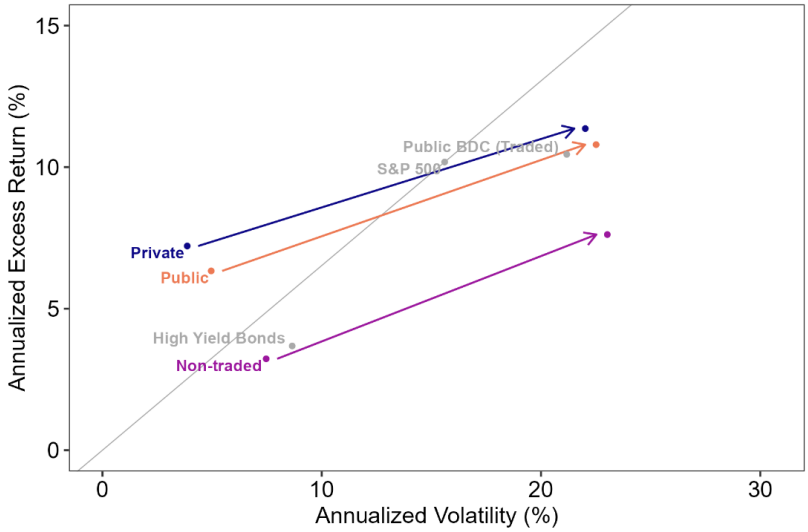

Figure 12: Risk-Return Profiles of Counterfactual BDC Indices, 2015–2024

The most worrisome feature of Figure 12 is that all of the simulated BDC indices have moved from having Sharpe ratios that are similar to or better than the S&P 500 to having Sharpe Ratios that are noticeably worse. The simulated private BDC index has similar annualized returns to the S&P 500 but higher volatility, and the simulated non-traded BDC index has both higher volatility and lower returns.

C. Comparing Performance Among Fund Types

One concerning feature of the index results presented in the previous sections is that non-traded BDCs appear to perform worse than private and public BDCs. This difference could be evidence that there is adverse selection happening in the retail private fund space. In other words, it may be evidence that the products being distributed to true retail investors are worse than the other BDC products being sold at the same time.

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[178] See *supra* note 171 for an explanation of why the arithmetic average return is much higher even though the compounded performance is quite similar.

In contrast to private BDCs, which are also not listed on a stock exchange, non-traded BDCs can be sold to less wealthy, and perhaps less sophisticated customers.[179] Their shares are generally sold by wealth advisors and brokers to investors. Additionally, non-traded BDCs are more costly to launch because they must be sold in compliance with state blue sky laws.

Together, these factors create a risk of adverse selection across BDC fund types because the funds who choose to launch non-traded BDCs may be precisely those who want to access intermediary-driven distribution channels that go directly to less sophisticated customers. These funds might perform worse, on average, than other funds and have a harder time selling to more sophisticated customers, so their sponsors may be willing to pay the extra cost to get wider distribution. Stronger funds that can sell easily to sophisticated investors, on the other hand, may prefer to avoid the extra costs of launching a non-traded BDC, sticking with a private BDC instead.

Despite these concerns, however, it is possible that the performance gap between non-traded BDCs and private BDCs is a chance statistical result or is driven by other differences between non-traded BDCs and others, such as fund size, leverage, or investment risk.

In this section, I test whether non-traded BDCs perform worse than other types of BDCs conditional on the few fund characteristics for which I am able to control. I then explore the drivers of the differences in performance.

Table 4 reports the results of a regression analysis that tests whether the quarterly net returns of non-traded BDCs are different from the other two varieties after controlling for fund size, fund leverage, and time.

Table 4 shows that, on average, private BDCs perform significantly better than non-traded BDCs to an economically significant degree when controlling for fund size and leverage. I estimate the average difference in performance to be between 67 and 112 basis points per quarter, depending on the specification, or around 3 to 4 percentage points per year. On the other hand, the difference in performance between non-traded and public BDCs is not statistically significant in most specifications and is smaller in magnitude or negative.

[179] For an overview of the differences between private and non-traded BDCs, see *supra* Section II.A.1.

Dependent Variable:	Net Return (%)			
Model:	(1)	(2)	(3)	(4)
Variables				
Constant	1.096***		1.100***	
	(0.2305)		(0.3851)	
Private	0.9039***	0.6785**	1.120***	1.007**
	(0.2664)	(0.3421)	(0.4094)	(0.4036)
Public	0.2786	-0.0779	0.7802*	0.3638
	(0.3041)	(0.3400)	(0.4352)	(0.3656)
log(Total Assets)		0.3716*		0.3355
		(0.2241)		(0.3423)
Total Liabilities/Total Assets		1.525		2.247
		(2.373)		(3.232)
Fixed-effects				
Year-Quarter		Yes		Yes
Sample				
Years	2015–24	2015–24	2020–24	2020–24
Fit statistics				
Observations	4,022	4,022	2,294	2,294
R^2	0.00191	0.11107	0.00150	0.11142
Within R^2		0.01023		0.00831

Clustered (cik) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 4: Quarterly Net Returns by BDC Type

What accounts for this difference in performance between private and non-traded BDCs? In Table 5, I report the results of a regression analysis that examines differences in three different components of net returns and controls for the same variables as in Table 5. The three return components I examine are (1) gross returns on net assets (before fees and interest expense), (2) fees and expenses (as a percentage of average net assets), and (3) returns from capital gains.

According to the results in Table 5, private BDCs and public BDCs both appear to generate higher returns on their net assets than non-traded BDCs before fees. For public BDCs, these higher returns appear to be entirely offset by higher expenses. This likely reflects that fact that public BDCs have tended to be more highly leveraged than private and non-traded BDCs. However, the higher returns of private BDCs do not appear to be offset by higher fees. If anything, the fees for private BDCs may be slightly lower than the fees for non-traded BDCs, though the difference is not statistically significant. Private BDCs and public BDCs also may have somewhat higher capital gains returns than non-traded BDCs on average, these differences are also not statistically significant.

Dependent Variables:	Gross Return (%)		Expense Ratio (%)		Cap. Gains Return (%)	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Private	0.3788**	0.4622**	-0.0634	-0.1045	0.2363	0.4406
	(0.1842)	(0.2056)	(0.2046)	(0.2537)	(0.2729)	(0.3349)
Public	0.4035**	0.6069***	0.5167***	0.6007**	0.0353	0.3575
	(0.1737)	(0.2166)	(0.1688)	(0.2398)	(0.2380)	(0.2741)
log(Total Assets)	0.2456**	0.2623	-0.1445	-0.0855	-0.0185	-0.0123
	(0.1063)	(0.1695)	(0.1095)	(0.1581)	(0.2202)	(0.3539)
Total Liabilities/Total Assets	5.464***	5.409***	3.231**	3.002	-0.7072	-0.1599
	(0.6597)	(1.043)	(1.348)	(2.074)	(1.635)	(2.184)
Fixed-effects						
Year-Quarter	Yes	Yes	Yes	Yes	Yes	Yes
Sample						
Years	2015–24	2020–24	2015–24	2020–24	2015–24	2020–24
Fit statistics						
Observations	4,022	2,294	4,022	2,294	4,022	2,294
R^2	0.31278	0.25012	0.03523	0.02596	0.09605	0.09855
Within R^2	0.26467	0.21614	0.02566	0.01780	0.00058	0.00027

Clustered (cik) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table 5: Quarterly Return Components by BDC Type

While these results are not sufficient to prove the theory that the worst retail private funds are being funneled to retail investors as non-traded BDCs, they certainly do not rule the theory out. The most plausible alternative explanation for the performance gap that does not involve sorting is that private BDCs make riskier investments than non-traded BDCs (perhaps because the portfolio companies are distressed or because the investments are

more illiquid), so they are compensated appropriately for bearing increased risk. One fact that counts against this alternative theory is that private BDCs have consistently reported lower volatility than non-traded BDCs. Still, further works is needed to rule out this explanation.

Regardless, the large performance gap between private and non-traded BDCs, along with the theoretical reasons to worry about adverse selection, are strong evidence that retail private fund industry dynamics warrant careful scrutiny, both from investors and the SEC.

The possibility that non-accredited investors are getting worse products is especially concerning given that the result in Tables 4 and 5 (and the results from the previous section) do not fully account for the impact of fees on the returns of individual investors in non-traded BDCs. The returns I use for non-traded BDCs are averaged across all share classes, including those sold to institutional investors with lower fees. Because retail investors hold shares with higher fees than this average, their performance is worse, and perhaps significantly so. Nowadays, it is common for certain retail share classes to charge fees that are 85 basis points per year higher than the fees on the institutional share classes.[180] In addition, brokers are allowed to charge commissions on sales of certain retail shares that today are often as high as 3.5% of NAV.[181] In prior years, brokers were sometimes allowed to charge even higher sales loads on non-traded BDC share sales. For example, the CION BDC discussed in the introduction allowed sales loads that could be as high as 10% of NAV.[182] Upfront charges significantly dampen returns, especially for investors with relatively short holding periods. Additionally, some non-traded BDCs (and private BDCs) have penalty fees for shareholders who exit the fund too early. These fees could make some individual investors' returns even worse.

While my results focus on BDCs, concurrent research by Professors Stefano Pegoraro, Sophie Shive, and Rafael Zambrana documents similar underperformance among interval funds that appear to be geared toward less wealthy investors.[183] They show, for example, that among interval funds with a single share class, funds with higher minimum investments perform better relative to their benchmarks than funds with lower minimum investments.[184]

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[180] See *supra* note 125 for a detailed example of the differences in fees across share classes in the Blackstone Private Credit Fund.
[181] *See supra* note 125.
[182] *See supra* note 10 and accompanying text.
[183] Stefano Pegoraro, Sophie Shive & Rafael Zambrana, Democratizing Illiquid Assets: Liquidity Transformation and Performance in Interval Funds 21–22 (July 24, 2025) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5365061.
[184] *Id.*

Similarly, interval funds that also include an institutional share class perform better relative to their benchmarks than other interval funds.[185]

In the following Part, I discuss ways that the SEC might be able to reduce adverse selection in retail private funds if it is happening.

IV. POLICY

In this Part, I address the key policy questions motivating this paper and currently facing the SEC: To what extent should retail investor be allowed to invest in vehicles that invest in private market assets, and what guardrails should be in place? I do so in light of the institutional information and data presented in the previous parts.

I focus on the two risks facing retail investors about which I supplied evidence in the previous Part. I discuss whether each risk can be addressed through corrections to disclosure practices or with substantive restrictions, and I discuss specific reforms that could correct the risk factors I identify.

The first risk I address is that retail investors will buy into retail private funds without understanding the risks they are taking on because the funds are not adequately disclosing the volatility in the market values of their underlying assets. The second is that, within the private investment asset class, retail investors will be sold the worst performing products, so even if performance of the class as a whole is fine, retail investors will do much worse than average.

A. Inadequate Disclosure of Investment Volatility

1. What Is the Risk?

The evidence that asset price volatility is inadequately disclosed is troubling for at least two reasons.[186] The first is that it might lead investors to pay high fees for a product whose performance ultimately does not justify those fees. When fund managers report very low volatilities for their funds, their risk-adjusted performance looks better relative to other investments, and investors are likely to allocate more money to them.[187] As the hedge fund manager Cliff Asness has pointed out, if people pile into private market

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[185] *Id.*

[186] For an argument that low reported volatility in private funds is good thing, see Schelling, *supra* note 24.

[187] Charlie Munger—Warren Buffet's longtime business partner—once apparently remarked that, "all [PE managers are] doing is lying a little bit to make the money come in." *Warren Buffest on Private Equity*, CASTLE HALL (May 13, 2019), https://www.castlehalldiligence.com/blog/warren-buffet-on-pe. To this, Buffet reportedly replied, "Yeah. Yeah, well that sums it up." *Id.*

investments, "future expected returns" in the asset class will go down.[188] In the end, retail investors might be stuck with investments that seemed good on paper at the outset, but that provide disappointing returns over time, particularly relative to their true (but underreported) risks. This critique also applies to traditional private funds, but it is likely to be more severe in funds that allow less sophisticated investors.

The second reason underreported volatility is troubling is that it creates special issues in funds that allow investors to withdraw their money periodically at NAV. These issues become acute during a prolonged downturn when a fund cannot sell assets at their reported values.[189] If market values are low and investors start asking for their money back, the fund has three options, none of which are pleasant for investors. The first option is for the fund to sell assets to honor the redemption requests. If the fund does this, it will book losses on its investments, NAV will fall, and investors may be surprised to learn that their shares were not worth what they thought. Additionally, if the fund does not mark down the value of its unsold assets, then investors who withdraw early will get more than their fair share of the fund's value, and investors who stick around will be left with less.[190]

Honoring redemption requests can even create problems for investors even if the fund initially has some assets that are low risk and can be sold without taking losses during a downturn. If a fund sells all of its safe assets to cash out some investors, then the investors who stay are left with progressively riskier and riskier assets.[191] These investors might have been comfortable with the fund's risk profile when they invested, but they might not be happy to find themselves invested in only the fund's riskiest assets.

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[188] Asness, *The Illiquidity Discount*, *supra* note 24; Asness, *Why Does Private Equity Get to Play Make-Believe With Prices?*, *supra* note 24.

[189] Asness, *Why Does Private Equity Get to Play Make-Believe With Prices?*, *supra* note 24 (commenting on how some risks only become a pressing issue during a prolonged downturn).

[190] *Morningstar's Guide to Interval Funds: Strengths, Weaknesses, and Uses*, MORNINGSTAR (June 2024), https://marketing.morningstar.com/content/cs-assets/v3/assets/blt9415ea4cc4157833/blt3af71969abcb8268/671957947766495f7d51ab8e/Morningstar_s_Guide_to_Interval_Funds_2024.pdf ("Increasing potential outflows increases the portfolio's liquidity needs, thereby limiting the amount of less-liquid assets the managers can buy, potentially reducing total returns, and harming shareholders who stay invested during heavy outflows.")

[191] *Id.* ("Morningstar's fixed-income manager research analysts routinely monitor Level 3 assets in the funds they cover, as it is one of the best proxies for illiquidity in publicly disclosed materials. This is especially true for funds that are experiencing heavy withdrawals, as those outflows can lead to Level 3 assets taking up a larger and larger percentage of a portfolio as fund managers sell more liquid holdings to meet redemptions. This 'junking up' can put a fund in a precarious position, especially if exacerbated by leverage, perhaps ultimately forcing its liquidation if outflows do not abate." (footnote omitted)).

The second option is for the fund to block withdrawals during the downturn. As discussed in the Introduction, this option was used by CION during the COVID-19 pandemic. Shutting down withdrawals saves the fund from having to sell assets below their reported valuations. But investors who put money in with some expectation of liquidity might be surprised to learn that they have to wait for months in order to get any access to their money.

The third option, also used by CION, is to list the fund's shares on an exchange so investors can sell their shares in the public market. But when a fund lists its shares, its share price is not smoothed like its NAV, so investors are exposed to the full swings of the public market. As the data in the previous section make clear, publicly traded alternative investment fund shares have high volatility and high exposure to market risk, so their risk-adjusted performance is much less impressive than their NAV-based, reported performance. Additionally, listing a fund's shares makes it much harder to sell new shares in the fund if the shares trade below NAV, so listing shares has issues from the sponsor's perspective too.

These issues are not just hypothetical. They have already played out in the real estate investment fund sector, which has many of the same risks as the retail private fund space. Like private investments, large real estate properties do not trade often and are hard to value. Some investment managers have created funds that allow retail investors to invest in commercial real estate and that permit periodic withdrawals, just like retail private funds. Within the past few years, two of the largest of these retail, real estate funds—Blackstone Real Estate Income Trust (BREIT) and Starwood Real Estate Income Trust (SREIT)—have faced major issues and received negative press coverage.[192] Both funds received a flood of redemption requests that they could not meet without selling assets at a loss into a depressed commercial real estate market. Ultimately, both funds opted to heavily limit redemptions, frustrated investors and prompting negative press coverage.[193]

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[192] Miriam Gottfried, Peter Grant & Rebecca Feng, *Blackstone's Big New Idea Leaves It Bruised*, WALL ST. J. (Feb. 12, 2023), https://www.wsj.com/articles/blackstones-big-new-idea-leaves-it-bruised-d66de361 (discussing BREIT's issues); Peter Grant, *A $10 Billion Real-Estate Fund Is Bleeding Cash and Running Out of Options*, WALL ST. J. (May 20, 2024), https://www.wsj.com/real-estate/commercial/starwood-capital-group-real-estate-fund-cash-crunch-409f56d5 (discussing SREIT's issues).

[193] Peter Grant, *Withdrawal Requests at Starwood Property Fund Are at $850 Million*, WALL ST. J. (June 10, 2025), https://www.wsj.com/real-estate/commercial/withdrawal-requests-at-starwood-property-fund-are-at-850-million-0883e510 ("Rather than sell some of the fund's commercial property into a poor market to meet those requests, Starwood Chief Executive Barry Sternlicht decided to impose strict limits on the amount of money investors could withdraw."); Gottfried, Grant & Feng, *supra* note 192 (quoting a money manager who said that BREIT's decision to block redemptions was "'not very nice' for investors who are still in the fund").

Investors were not the only ones frustrated by how things played out for BREIT and SREIT. One article reported that Blackstone employees were "irked" by the fact that redemption requests were piling up despite the fact that BREIT's performance "remained strong."[194]

2. What Are the Solutions?

The good news about the myriad problems with retail private funds' low reported volatility is that they have a straightforward solution, at least in theory: force funds to report investment values that accurately match what the investments could be sold for in public markets. If funds did this, investors would see them as high risk, no one would be surprised by the sale prices of investments sold to meet redemptions during downturns, investors who exited during a downturn would not get more than their fair share of assets, and the volatility of fund shares would not increase dramatically if the shares were listed on an exchange.

As simple as it sounds, this solution is likely not easy to implement. The reason is that, under current SEC rules and accounting standards, funds are already required to report their assets at "fair value," which is the price they could reasonably fetch on the open market.[195] Funds also already employ sophisticated valuation consultants to help them value their portfolios,[196] and the apparent underreporting of asset price volatility persists despite the current standards and the complex valuation apparatus that goes along with them.

Part of the problem is that normal enforcement tools, like bringing enforcement actions against fund boards for garden variety securities fraud in connection with their valuations, seem unlikely to be successful here. Showing that volatility seems unreasonably low in aggregate across all funds in a category is much different than showing that a sponsor knowingly misrepresented the valuations of individual, private investments in a single fund.[197] The process of valuing an illiquid, private investment typically yields

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[194] Gottfried, Grant & Feng, *supra* note 192.

[195] The Financial Accounting Standards Board (FASB) defines "fair value" as "[t]he price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date." *820 Fair Value Measurement*, FIN. ACCT. STANDARDS BD.: ACCT. STANDARDS CODIFICATION, https://asc.fasb.org/820/showallinonepage (last visited July 29, 2025).

[196] Pangas, supra note 110 (slide 43) (discussing "[u]se of independent third-party valuation consultants to assist" in valuing BDC assets).

[197] For a summary ofo the elements of a securities fraud claim under Rule 10b-5, see *Rule 10b-5*, CORNELL L. SCH.: LEGAL INFO. INST. (Jan. 2022), https://www.law.cornell.edu/wex/rule_10b-5. These elements include knowingly misrepresenting a material fact. *Id.*

a range of defensible values. Additionally, there is no observable "true" valuation that can be used to show that a valuation used by the fund's board was false when reported. Compounding the problem is the fact that portfolio companies invested in by the funds likely do not have public-company quality financial statements available to support close scrutiny of the funds' valuation practices. Finally, if every retail private fund and private fund is valuing their assets the same way, then it gets harder to show than any particular fund's practices are improper.

So what tools are available to the SEC to improve things? One possibility, without changing the current rules, is for the SEC to play a more significant role in scrutinizing funds' valuation practices. The SEC examines investment advisers and investment companies and could make private asset valuations an exam priority.[198] It could ask hard questions about the assumptions used by funds and their valuation advisors and make it clear that it really expects funds to mark their illiquid assets to market based on what those assets could plausibly fetch in a market transaction. The SEC could also issue staff guidance on valuation practices and assumptions it finds particularly concerning. More guidance and pressure from the SEC could go a long way toward changing the culture in the industry around valuation practices.

The SEC could also require funds to make more disclosures about their valuation practices and assumptions. For example, the SEC could require funds to disclose the results of backtests that show often they sell assets for values that differ from the values at which those assets were held, and by what margin. Finally, the SEC could require funds to disclose information about how sensitive their NAV is to various valuation assumptions or how their NAV would be different if they marked their assets to follow a comparable index. None of these disclosures would force funds to behave differently, but they would shed more light on the industry's practices and could force a greater measure of discipline over time. Increased disclosure would likely increase the costs associated with valuing funds' assets, however, which could end up increasing investors' fees.

A third possibility would be for the SEC to allow retail investors to only purchase retail private funds in their retirement accounts.[199] To do so, the SEC would have to restrict retail private fund purchases more than they currently are. However, in theory at least, investors do not need short term access to their retirement funds, so they might be less likely to request redemptions during downturns and create problems for their funds.

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[198] *About the Division of Examinations*, U.S. SEC. & EXCH. COMM'N (June 29, 2024), https://www.sec.gov/about/divisions-offices/division-examinations/about-division-examinations.

[199] I am grateful to Professor Howell Jackson for encouraging me to think through this possibility.

B. Worst Investments Sold to the Least Sophisticated Investors.

1. What Is the Risk?

A second risk associated with letting more retail investors into private investment funds is that retail investors will systematically be sold more expensive and worse performing products than more sophisticated investors. If retail investors do not realize that this may be happening, they might sign up for retail private funds because they think the returns of the asset class as a whole are attractive only to end up with products that perform substantially worse than the class average.

Product sorting is possible in the market for semiliquid funds—like private and non-traded BDCs, tender offer funds, and interval funds—because of the way these products are distributed. Because these funds are not listed on exchanges, investors have to purchase them from financial professionals. For most individuals, this means purchasing shares through their wealth advisor or broker. For institutions and ultra-high-net-worth individuals, it may mean purchasing institutional-class shares in a private BDC or other private offering directly from a sponsor with whom they have a preexisting relationship, or through a distributor affiliated with the sponsor, or through a higher-end intermediary. One long-standing critique of traditional closed-end funds is that they are "sold, not bought,"[200] and that may be especially true with non-traded retail private funds.

Fund sponsors can choose how to distribute their fund shares based on their preexisting relationships and where they think they will find receptive investors. Consider, for example, a sponsor choosing between launching a private BDC and a non-traded BDC a decade ago. That sponsor would have faced a trade-off. A non-traded BDC could sold publicly and to true retail investors, but, on the other hand, non-traded BDC shares had to (and still have to) be registered with every state in which they would be sold, adding to the cost of launching the fund. Private BDCs, on the other hand, could be sold through Reg D private placements without state registration and at a lower cost. However, they could only be sold to accredited investors and with some restrictions on public advertising.

Faced with this tradeoff, a brand-name private equity sponsor with a strong product and a large rolodex of previous or current clients might have leaned toward a private BDC that it could then sell to its preexisting clients and through high-end wealth advisors. Conversely, a new sponsor, a sponsor with a weak track record, or even a solid sponsor with a subpar product, might

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[200] Diana Shao & Jay Ritter, *Closed-End Fund IPOs: Sold, Not Bought*, 7 CRITICAL FIN. REV. 201 (2018).

have leaned toward a non-traded BDC so it could advertise broadly and sell to less sophisticated investors through advisors with retail clients.

While these choices make sense from a sponsor's perspective, they are concerning from an investor protection perspective. They suggest that the products being sold to retail customers by their trusted financial advisors might not be the best products available on the market. In fact, it might be that the *worst* products are the only ones available to the least wealthy investors.

Unfortunately, the data in Part III seem to support this theory, or at least fail to undermine it. The data suggest that private BDCs do, in fact, perform better than non-traded BDCs, which can all be sold more broadly.

Even if the sponsors managing retail-focused products and the assets purchased by retail-focused funds are just as strong as those of products marketed more to institutions and high net worth individuals, funds with multiple share class structures guarantee that small investors will get substantially worse performance than institutions. This is because small dollar investors are generally only able to purchase only the highest fee share classes of multiclass products.

As multiclass funds become ubiquitous, policymakers will need to remember that average fund performance does not necessarily reflect retail performance. After all, over a five-year time period, a fund that returns 10% annually to an institutional investor would only return 8.49% to an individual paying an extra 0.85% per year in distribution fees and a 3% upfront sales load.

Of course, it is important to remember that it is not necessarily fair to expect fund managers to charge the exact same fees to all types of investors. The fact is that dealing with many retail investors is administratively more difficult than dealing with a few large institutions. Having a large number of retail investors requires a fund to, for example, send out more paperwork and rely on intermediaries to sell shares. These intermediaries do not work for free. The trouble is that it is not easy for an outside observer to tell the difference between a justifiable difference in fees based on administrative costs and someone blatantly taking advantage of less-sophisticated retail customers who do not have a great feel for whether the performance they are getting justifies the fees they are paying.

2. What Are the Solutions?

Banning multiple share classes might seem like a good idea, but it would likely make things worse. For one thing, multiple share class structures help funds save on administrative and legal expenses because these structures allow funds to serve multiple client bases with one fund. If multiple share

classes were banned, sponsors might respond by launching separate funds to target different customer bases. Not only would this not lead to fee parity across investors, it might also increase administrative costs for all investors and exacerbate sorting problems by increasing the risk of the retail funds getting stuffed with worse assets than the institutional funds. When there is only one fund, at least all investors have a stake in the same pool of assets. When there are multiple funds, this is not necessarily true. In fact, new research seems to suggest that, among interval funds with low minimum investments, funds that have retail and institutional share classes do better relative to comparable benchmarks than funds with single share classes.[201]

Counterintuitively, taking steps to (1) make it easier for sponsors to reach individual investors and (2) eliminate differences between the multitude of fund structures currently in use might improve the options available to retail investors. For example, if non-traded BDCs were deemed to be "covered securities" in the securities laws and therefore allowed to avoid state registration, launching a non-traded BDC would become much less expensive, and the advantages of choosing a private BDC would be diminished. This might cause some sponsors who would have otherwise opted for an evergreen private BDC to choose a non-traded BDC and allow a broader pool of investors into their fund. These new non-traded BDCs might then increase the overall quality of BDCs made available to non-accredited investors.

In a similar vein, eliminating the differences between some products would make fee structures more transparent and make it easier for investors to compare products. For instance, non-traded and private BDCs are allowed to charge (and generally do charge) performance fees on their income and capital gains. Interval and tender offer funds that are open to retail (non-qualified client) investors, on the other hand, sometimes do not charge performance fees, and sometimes charge performance fees on interest and dividend income (but not capital gains). It is much easier to compare the fees of two funds that charge the same types of fees on the same base figures than it is to compare the fees of two funds that charge different types of fees that operate differently. Allowing all registered funds and BDCs to charge performance fees on all income and capital gains might actually make life easier for less knowledgeable investors by making shopping for funds more straightforward.

Improvements in performance and fee disclosures could also help. Funds that file a Form N-2 registration statement are required to include a few nice tables that break down fund fees, but these tables have some weaknesses when it comes to the new semiliquid products, particularly those with

[201] *See Pegoraro, Shive & Zambrana*, *supra* note 183 at 21–22, 51. This result is stronger among fixed income products that among equity products. *Id.* at 51.

incentive fees. Many funds submit tables that report zeros in the table rows for incentive fees and merely drop a footnote that says something like, "As we cannot predict whether we will meet the necessary performance targets, we have assumed no incentive fee for this chart."[202] This disclosure is not particularly helpful to investors, nor is it totally accurate. Especially for funds that make mostly fixed income investments, sponsors can predict with a reasonably degree of certainty what their investment income and performance fees might be. Similarly, in another common table that estimates fees over the first several years of a fund's life, funds typically assume a 5% annual return,[203] which does not exceed the hurdle rate for some retail private funds[204] and is lower than most of the funds' anticipated returns.[205] As a result these examples underestimate likely fees.

Perhaps it would make more sense for these funds to calculate fees based on the historical performance of several comparable funds or some benchmark. In any case, predicting fees perfectly is not necessary. Any reasonable estimate of performance fees would be more useful to investors than the current zeros.

Another change that might help is one the SEC has already announced, which is to drop the staff guidance that requires registered funds of private funds to sell shares only to accredited investors and maintain a $25,000 minimum investment requirement.[206] This guidance has prevented the least wealthy and sophisticated investors from gaining access to funds of established private funds, which are arguably among the least risky and least controversial of private market investments. At a minimum, it seems odd to restrict these investments to accredited investors while letting retail investors invest in BDCs and non-traded CEFs that directly hold portfolios of private securities.

Finally, if retail investors were only allowed to invest in retail private funds in their retirement plans, they might get access to higher quality funds

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[202] Blackstone Private Credit Fund, Registration Statement (Form N-2) (Apr. 25, 2022), https://www.sec.gov/Archives/edgar/data/1803498/000119312522117898/d356740dn2.htm (pages 26–27 under "Fees and Expenses").

[203] *Id.* (pages 28–29).

[204] *Id.* (page 27) ("If we achieved an annualized total return of 5% for each quarter made up entirely of net investment income, no incentive fees would be payable to the Adviser because the hurdle rate was not exceeded.")

[205] *See* Brian Moriarty & Alex Lucas, *The Unappreciated Costs and Risks of Interval Funds*, MORNINGSTAR (May 13, 2025) https://www.morningstar.com/alternative-investments/unappreciated-costs-risks-interval-funds (explaining how managers can target high returns by loading up on junk bonds and leverage, earning consistently large incentive fees for themselves in the process).

[206] *SEC Drops 15% Limit in Private Funds for Retail Closed-End Funds*, ROPES & GRAY (May 23, 2025), https://www.ropesgray.com/en/insights/alerts/2025/05/sec-drops-15-limit-in-private-funds-for-retail-closed-end-funds.

on average. Retail private funds offered through workplace retirement plans would be subject to an extra level of scrutiny under ERISA, which might help ensure that retail investors are not getting stuck with the worst funds.[207]

V. CONCLUSION

Over the past 10 years, hundreds of billions of dollars have flowed into new investment funds that promise exclusive access to private market investments for retail investors. Some of these products target the "mass affluent," but many are open to ordinary folks with modest incomes and net worths. Proponents of the new retail private funds argue that they give investors an unprecedented opportunity to diversify their portfolios and build wealth with low risk. Critics, however, warn that these products contain subtle dangers for unwary investors.

As I have explained throughout this paper, the new funds are structured in a way that is both innovative and familiar: they use regulated fund structures (like BDCs and closed-end funds) that can be sold to retail investors to wrap private investments that cannot be sold directly to retail. But unlike traditional registered funds, the new funds are usually not listed on stock exchanges. Their shares can generally only be purchased through financial intermediaries, and investors receive liquidity only through periodic, limited share repurchases.

The way retail private funds are being structured creates several risks to investors. I highlight two. The first is that the lack of market share prices forces investors to rely on fund's self-reported performance data. I present evidence suggesting that the volatility of funds' reported returns is very low and understates the funds' risk. I also present evidence that, if funds' reported returns were tied more closely to public market fluctuations, these funds' performance would appear significantly less attractive. As it stands, current reporting practices set retail investors up for unpleasant surprises. Investors may discover during a downturn that they have taken on more risk than they anticipated or that their investments are less accessible than they anticipated.

The second risk I highlight is that sponsors may be selling worse performing products to true retail investors than the products they sell to the mass affluent. I also present some evidence consistent with this type of sorting, though my conclusions are necessarily tentative.

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[207] For an overview of the fiduciary responsibilities of those who oversee employee retirement plans, see generally U.S. DEP'T OF LABOR, EMP. BENEFITS SEC. ADMIN. (EBSA), MEETING YOUR FIDUCIARY RESPONSIBILITIES (Sept. 2021), https://www.dol.gov/sites/dolgov/files/EBSA/about-ebsa/our-activities/resource-center/publications/meeting-your-fiduciary-responsibilities-booklet-2021.pdf.

Given the risks inherent in the expanding class of retail private funds, I call on regulators to make thoughtful reforms to the regulatory and disclosure frameworks governing these funds. By improving the reporting of market-based asset valuations and fund fees and by streamlining the menu of legal structures available to sponsors, the SEC can give investors the tools they need to make wise decisions without choking off innovation in this burgeoning area.

APPENDIX

A. New Frontiers for Fund Development

BDCs and non-traded closed-end funds seem to be the largest and most established categories of products being used to provide retail access to private markets. But beyond these, sponsors have shown no shortage of creativity in devising other legal structures that serve essentially the same purpose. In this section, I highlight some of the other structures that are being used with varying levels of acceptance.

1. Registered Private Funds?

Recently, some private fund sponsors have decided to circumvent the 2,000-investor cap on private funds by registering limited partnership interests in some of their 3(c)(7) funds under the '34 Act. The shares of these funds are still sold through private placements (to avoid '33 Act registration) and are sold only to qualified purchasers (to avoid '40 Act registration). But registering the shares under the '34 Act allows the sponsor to sell the shares to an unlimited number of individual investors.

This approach was used by Blackstone in its recent launch of the Blackstone Private Equity Strategies Fund LP.[208] This fund is intended to provide broader access to Blackstone's private equity investments through direct investments in companies sourced by Blackstone, secondary market purchases of stakes in existing Blackstone funds, and commitments to new Blackstone funds.[209] As of March 31, 2025, the fund had $5.7B in net assets.[210] Including signed commitments, the fund has raised over $11B.[211] The fund has three share classes that mirror BCRED's classes for distribution purposes.[212]

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[208] *See* Blackstone Private Equity Strategies Fund L.P., General Form for Registration of Securities (Form 10) (July 15, 2022), https://www.sec.gov/Archives/edgar/data/1930054/000119312522195019/d292757d1012ga.htm (amended Form 10-12G registration statement).

[209] *Id.* (see pages 3–5 under "Item 1 Business").

[210] Blackstone Private Equity Strategies Fund L.P., Quarterly Report (Form 10-Q) (May 14, 2025), https://www.sec.gov/Archives/edgar/data/1930054/000119312525119825/d945051d10q.htm (see page 4 under "Item 1. Financial Statements").

[211] *Id.* (see page 57 under "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations").

[212] Blackstone Private Equity Strategies Fund L.P., General Form for Registration of Securities (Form 10) (July 15, 2022), https://www.sec.gov/Archives/edgar/data/1930054/000119312522195019/d292757d1012ga.htm (see page 97 under "Item 2 Financial Information").

2. Online Platforms

In recent years, several online investing platforms have sprouted up that provide retail access to private markets. Many of these platforms allow investors to verify their accredited investor status and purchase shares in private funds online. While the private funds offered by these platforms use the same legal exemptions as traditional private funds, they are innovative because they allow any investor who wants to access private investments to sign up for their funds rather than only admitting investors who are sought out by the fund sponsor.

The first type of platform to gain traction was the online, *venture capital investing platform*. Of these, AngelList is one of the most popular. In its SEC filings, AngelList Advisors listed 18,332 active venture capital funds and $13.3B in total assets under management at the end of 2023.[213] Its reach may be even broader than these numbers suggest. AngelList's website says that it had $171B in "[a]ssets on platform" in 2024.[214]

Platforms like AngelList allow individuals to invest in private companies (often those that are receiving venture capital funding) through venture capital funds. Sometimes these funds are traditional funds that invest in multiple startups, and other times they are single-purpose vehicles (SPVs) that invest in only a single private company. AngelList and similar platforms focus on venture capital investing to take advantage of looser restrictions on private funds that qualify as venture capital funds under SEC rules. For example, investment advisers that solely advise venture capital funds do not have to register as investment advisers with the SEC, and 3(c)(1) venture capital funds with less than $12 million in assets can admit up to 250 investors rather than the typical 100. Finally, venture capital fund advisers are allowed to charge performance fees without limiting their funds to only qualified clients.[215]

The second type of platform that is gaining prominence is the *private security marketplace*. EquityZen, Nasdaq Private Market, Forge, and Hiive are all examples of online private markets. These platforms allow accredited investors to buy and sell shares of private companies or shares of SPVs that

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[213] These figures are from my personal analysis of Form ADV data available from the SEC at https://www.sec.gov/foia-services/frequently-requested-documents/form-adv-data.

[214] *2024 Year in Review*, ANGELLIST (Dec. 31, 2024), https://www.angellist.com/2024. According to AngelList, "'[a]ssets on platform' refers to the amount of money being deployed by fund managers who use AngelList's software, which includes fund administration services. This does not refer to any amount of money being deployed with or managed by AngelList's affiliated exempt reporting adviser, AngelList Advisors, LLC ('AngelList Advisors')." *Id.*

[215] *See* sources cited *supra* note 67.

hold shares of private companies. These platforms may rely on the 4(a)(1½) exemption that has been interpreted into the '33 Act to allow resales of unregistered securities.[216]

The third type of platform is the *private fund access platform*. CAIS and iCapital are two of the two most popular. These platforms' purpose is to connect individual investors to private fund managers.[217] They do this by providing tools to professional wealth managers and asset managers (private fund sponsors) that make it easy for the asset managers to accept investments from the wealth managers' clients. These platforms do not change the wealth, income, and other restrictions on who can invest in a private fund, but they do make it easier for individuals to invest in private funds and easier for private funds to accept individual investments.

3. ETFs

In the past several years, several asset managers have launched ETFs that aim to give investors exposure to some private market assets. For example, State Street Global Advisors (one of the largest asset managers) and Apollo (an alternative asset manager) partnered to offer a "Public & Private Credit ETF."[218] The ETF invests in some traditional public credit investments and in private credit investments "sourced by Apollo Global Securities."[219] Another example is XOVR, the "Entrepreneur Private-Public Crossover ETF" launched by ERShares.[220] This ETF is an equity ETF that holds shares in "entrepreneurial" public and private stocks, including hot private stocks like SpaceX and Anduril.[221]

Exchange-traded funds are pooled investment vehicles that trade on national exchanges.[222] ETFs are different from open-end mutual funds because investors do not purchase and redeem shares directly from the fund

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[216] *Section 4(1½)*, CORNELL L. SCH.: LEGAL INFO. INST., https://www.law.cornell.edu/wex/section_4(1_%C2%BD) (last visited July 29, 2025).

[217] *See, e.g.*, *About iCapital*, ICAPITAL, https://icapital.com/about-us/ (last visited July 29, 2025) ("iCapital was founded in 2013 with the goal of making high-quality alternative investments accessible to wealth advisors and their high-net-worth investors, and enabling fund managers to reach new sources of capital.")

[218] SPDR SSGA IG Public & Private Credit ETF, Prospectus (Feb. 26, 2025), https://www.ssga.com/us/en/intermediary/resources/doc-viewer#priv&prospectus.

[219] *Id.*(page 1).

[220] *XOVR ETF*, ERSHARES, https://entrepreneurshares.com/ershares-etfs/entr-etf/ (last visited July 29, 2025).

[221] *Id.*

[222] U.S. Sec. & Exch. Comm'n, *Exchange-Traded Funds (ETFs)*, INVESTOR.GOV, https://www.investor.gov/introduction-investing/investing-basics/investment-products/mutual-funds-and-exchange-traded-2 (last visited July 29, 2025).

at NAV. Instead, they buy and sell their shares on the open market.[223] This means that ETF shares can trade at prices different from their NAV, like traditional closed-end funds.[224] However, unlike traditional closed-end funds, ETFs have a built-in mechanism that keeps their share price close to NAV.[225] Like open-end mutual funds, ETFs are subject to a 15% cap on the percentage of their net assets that they can invest in illiquid assets.[226]

Private asset ETFs have drawn criticism.[227] One worry is that the illiquidity of their underlying assets will make it harder to keep the market price of ETF shares close to NAV. If the market price and NAV diverge significantly, then investors in the ETF could experience unexpected performance that would make the ETF less attractive.

So far, the SSGA-Apollo ETF has experienced limited growth since its launch.[228] It had only around $145 million in AUM as of July 28, 2025.[229] But this tepid embrace from the markets has not dissuaded SSGA and Apollo from collaborating on another public/private credit ETF.[230] XOVR, on the other hand, has been somewhat more popular. It had $371 million in AUM as of June 30, 2025.[231]

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[223] *Id.*

[224] *Id.*

[225] ETFs contract with "Authorized Participants" (who are "typically large broker-dealers") to have the Authorized Participants create new shares and redeem shares directly from the ETF. U.S. SEC. & EXCH. COMM'N, OFF. OF INV. EDUC. & ADVOC., INVESTOR BULLETIN: EXCHANGE-TRADED FUNDS (ETFS) 2 (Aug. 2012), https://www.sec.gov/investor/alerts/etfs.pdf. Authorized Participants create new shares by assembling "a designated basket of securities" and transferring those securities to the fund in exchange for new shares (priced at NAV), which they can then sell on the open market. *Id.* Authorized Participants redeem shares by doing the opposite: sending shares they own to the fund in exchange for a basket of securities (again, priced at NAV). *Id.* If the market price of ETF shares gets too far above (below) NAV, Authorized Participants will find it profitable to create (redeem) shares, and their activities will push the price back toward NAV. *Id.* at 3.

[226] 17 C.F.R. § 270.22e-4.

[227] *See* Anna Gleason, *'Fell through the cracks': Controversial private credit ETF faces new regulatory hurdles*, CNBC (Mar. 6, 2025), https://www.cnbc.com/2025/03/06/sec-in-hot-seat-over-private-credit-etf-approval.html.

[228] Silas Brown & Kat Hidalgo, *State Street's Second Bid to Bring Private Credit to the Masses*, BLOOMBERG (May 28, 2025), https://www.bloomberg.com/news/newsletters/2025-05-28/state-street-launches-new-private-credit-etf (mentioning that the first State Street private credit ETF had "only recorded two days of net positive inflows" since its February 2025 launch).

[229] *SPDR SSGA IG Public & Private Credit ETF*, STATE ST. INV. MGMT., https://www.ssga.com/us/en/intermediary/etfs/spdr-ssga-ig-public-private-credit-etf-priv (last visited July 29, 2025).

[230] Brown & Hidalgo, *supra* note 228.

[231] *XOVR ETF*, *supra* note 220.

4. Private Company Conglomerates

In another recent development, several sponsors have launched private equity-style investment vehicles that are structured to avoid the '40 Act entirely without using either of the 3(c)(1) and 3(c)(7) private fund exemptions. To do this, the sponsors launched vehicles that do not fall within the definition of "investment company" under section 3(a)(1) of the '40 Act. Under 3(a)(1)(A), an issuer is an investment company if the issuer "is or holds itself out as being engaged primarily ... in the business of investing, reinvesting, or trading in securities."[232] Under 3(a)(1)(C), an issuer is an investment company it (1) "is engaged … in the business of investing, reinvesting, owning, holding, or trading in securities" and (2) owns securities worth more than 40% of its total assets (excluding government securities and cash). [233] Section 3(a)(2) defines "investment securities" to exclude "Government securities" and, most importantly, "securities issued by majority-owned subsidiaries of the owner."[234]

These new vehicles have avoided the investment company designation by not holding themselves out as being in the investment business and by primarily owning majority stakes in their portfolio companies. The investment vehicles are described as conglomerates of operating (portfolio) companies rather than investment funds. The sponsor typically controls the parent company through high vote shares, and outside investors invest in the parent company through a variety of other share classes.

The big benefits of this structure are that it avoids all of the strict requirements of the '40 Act and allows nearly unlimited flexibility for structuring the relationship between the outside investors, parent company, and sponsor. The parent company shares can be publicly traded, sold to the public but not listed, or sold through private placements. The parent can provide liquidity by listing shares, conducting repurchases, or not at all. It can create an unlimited number of share classes with different investment terms without seeking SEC exemptive relief.[235] The sponsor can also charge any combination of performance and management fees it wants to, regardless of the identities of the outside investors. Furthermore, the sponsor gets all of

[232] 15 U.S.C. § 80a-3(a)(1)(A).
[233] 15 U.S.C. § 80a-3(a)(1)(C).
[234] 15 U.S.C. § 80a-3(a)(2).
[235] For example, the Apollo Asset Backed Credit Company has "two registered series of limited liability company interest", Series I and Series II, which have different tax treatments. Apollo Asset Backed Credit Company LLC, Annual Report (Form 10-K) (Mar. 31, 2025), https://www.sec.gov/Archives/edgar/data/2000597/000095017025047639/ck0002000597-20241231.htm. Series I offers "ten types of Investor Shares" and Series II offers "eleven types of Investor Shares," all with "different upfront selling commissions and ongoing distribution and shareholder servicing fees." *Id.*

this flexibility without having to comply with the leverage and affiliated transaction restrictions in the '40 Act.

The downside of this structure is that it requires the sponsor to walk a tight rope with how it talks about the investment vehicle and how it structures its investments in its portfolio companies to avoid being deemed an investment company. If the parent company were to be deemed an investment company, then it could run into serious regulatory issues depending on how it was structured (likely not in compliance with the '40 Act).[236]

To my knowledge, only a few of these conglomerates have been launched. A few notable examples include the following:

- **Apollo Asset Backed Credit Company** ($277M in net assets on December 31, 2024), which runs its business through controlled subsidiaries that "focus on Asset-Backed Finance Assets";[237]
- **KKR Private Equity Conglomerate** ($4B in net assets on December 31, 2024), which holds controlling stakes in traditional PE portfolio companies;[238]
- **KKR Infrastructure Conglomerate** ($3B in net assets on December 31, 2024), which primarily owns controlling stakes in subsidiaries that own or operate infrastructure assets;[239] and
- **Apollo Infrastructure Company** ($940M in net assets on December 31, 2024), which also owns majority control of a portfolio of infrastructure businesses and assets.[240]

B. Data

The fund data that I analyze come from the SEC. First, to identify the list of all BDCs operating from 2012 onward, I relied on the annual BDC lists published by the SEC and available online.[241] I categorized the BDCs as public, private, or non-traded based on their SEC filing histories and (where

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[236] *Id.* ("We would not be able to operate our business according to our business plans if we are required to register as an investment company under the Investment Company Act.").
[237] *Id.*
[238] KKR Private Equity Conglomerate LLC, Annual Report (Form 10-K) (Mar. 12, 2025), https://www.sec.gov/Archives/edgar/data/1957845/000195784525000017/kkr-20241231.htm.
[239] KKR Infrastructure Conglomerate LLC, Annual Report (Form 10-K) (Mar. 12, 2025), https://www.sec.gov/Archives/edgar/data/1948056/000194805625000015/kkr-20241231.htm.
[240] Apollo Infrastructure Company LLC, Annual Report (Form 10-K) (Mar. 31, 2025), https://www.sec.gov/Archives/edgar/data/1971381/000119312525068918/d888030d10k.htm.
[241] *Business Development Company Report*, U.S. SEC. & EXCH. COMM'N, https://www.sec.gov/about/opendatasetsshtmlbdc (last updated June 2, 2025).

necessary) my reading of their Form N-2 registration statements. Second, to identify all non-traded closed end funds from 2020 onward, I started with the list of all closed-end funds published annually by the SEC.[242] Then, I removed all funds for which public trading price data is available on the CRSP database and also funds who list that they are traded on an exchange in a Form N-CEN. For the remaining funds, I categorized them as interval funds, tender offer funds, or other structures after manually reviewing their SEC filing histories and Form N-2s.

For all of the private and non-traded BDCs I identified, I hand collected[243] the following financial variables on a quarterly basis from the BDCs' 10-K and 10-Q filings:

- **Total assets**,
- **Total liabilities**,
- **Gross investment income** (essentially interest and dividends from investments),
- **Net investment income** (interest and dividend income minus operating expenses, which include interest expense on fund leverage, management fees, incentive fees, shareholder servicing and distribution fees, and adviser expenses passed to the fund),
- **Net increase in net assets from operations** (net investment income plus both realized and unrealized capital gains).

For public BDCs included in the Compustat database, I pulled these variables from Compustat and supplemented and corrected as necessary using the BDCs' quarterly filings.

I supplemented these core balance sheet and income statement variables by pulling more granular data on fund fees (e.g., management fees, interest expense, etc.) and performance using the SEC's XBRL API.[244] BDC data is only available through this API starting in about 2020, so these data are more limited. Additionally, BDC reporting and tagging of these more granular data points is somewhat inconsistent, so I was not able to obtain complete data across all BDCs.

For non-traded closed-end funds, I obtained monthly data on total assets, total liabilities, and returns net of fees from N-PORT filings. These filings

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[242] *Closed-End Fund Information*, U.S. SEC. & EXCH. COMM'N, https://www.sec.gov/about/opendatasetsshtmlclosed-end-investment_company (last updated June 2, 2025).

[243] As a first pass, I wrote a python script that scraped these values from BDC's quarterly filings. Then, I went over the scraped results manually to spot check them and fill in missing data points.

[244] For more information, see *EDGAR Application Programming Interfaces (APIs)*, U.S. SEC. & EXCH. COMM'N (Apr. 8, 2025), https://www.sec.gov/search-filings/edgar-application-programming-interfaces.

begin only in the latter half of 2019, so I have a shorter time series of data for closed-end funds. I supplemented these data with data from Form N-CEN filings about firms' management fees and operating expenses. The N-CEN data are available for roughly the same time period as the N-PORT data.

Throughout my analysis, I compare the performance of BDCs and non-traded closed-end funds to various public benchmarks. From the CRSP database, I obtain historical performance data for the popular S&P 500 index and the historical returns of public BDC's traded shares. From Morningstar's website, I obtain historical performance data for several indices that the performance of leveraged loans. From the Federal Reserve Bank of St. Louis's FRED API,[245] I obtain the historical performance of ICE BofA High Yield Bond Index.

[245] *FRED API*, FRED: FED. RSRV. BANK OF ST. LOUIS, https://fred.stlouisfed.org/docs/api/fred/ (last visited July 29, 2025).

APPENDIX TABLES

Dependent Variable:	Avg. Log R_s
Model:	(1)
Variables	
Constant	0.0024
	(0.0031)
Avg. Log R_r	1.128***
	(0.1560)
Fit statistics	
Observations	67
R^2	0.53803
Adjusted R^2	0.53092

Heteroskedasticity-robust standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A.1: Relationship Between Average Log Reported Returns and Average Log Observed (Stock) Returns for Public BDCs

Dependent Variable:	r_rf					
Model:	Non-traded (1)	Private (2)	Public (3)	CCC (4)	High Yield Bonds (5)	Public BDC (Traded) (6)
Variables						
Constant	-1.127***	-0.1431	-0.2996**	-0.0344	-0.3072	-0.2214
	(0.1795)	(0.1232)	(0.1476)	(0.6613)	(0.3859)	(0.8697)
mkt_rf	1.160***	1.131***	1.143***	0.4979***	0.4314***	1.041***
	(0.0243)	(0.0181)	(0.0204)	(0.0976)	(0.0494)	(0.1361)
hml	0.6130***	0.5389***	0.5649***	0.1812*	0.0342	0.4135***
	(0.0159)	(0.0134)	(0.0173)	(0.1010)	(0.0445)	(0.1340)
smb	0.3504***	0.3463***	0.3691***	0.2091*	0.1110	0.1969
	(0.0313)	(0.0223)	(0.0419)	(0.1132)	(0.0760)	(0.1346)
Fit statistics						
Observations	40	40	40	40	40	40
R^2	0.99076	0.99698	0.99357	0.64586	0.79569	0.81757
Adjusted R^2	0.98999	0.99673	0.99304	0.61634	0.77866	0.80237

Heteroskedasticity-robust standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A.2: Fama-French Three-Factor Regressions, BDC Simulated Returns

APPENDIX FIGURES

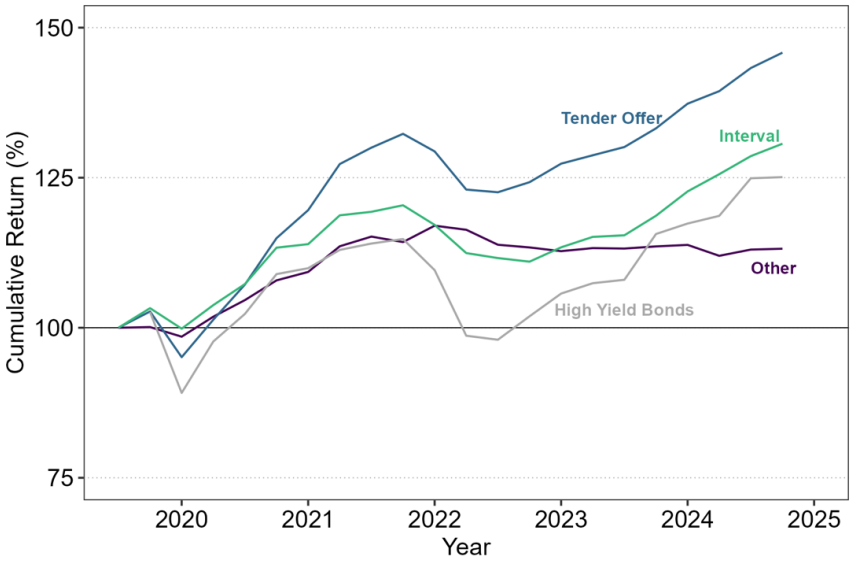

Figure A.1: Performance of BDC Indices, 2020-2024

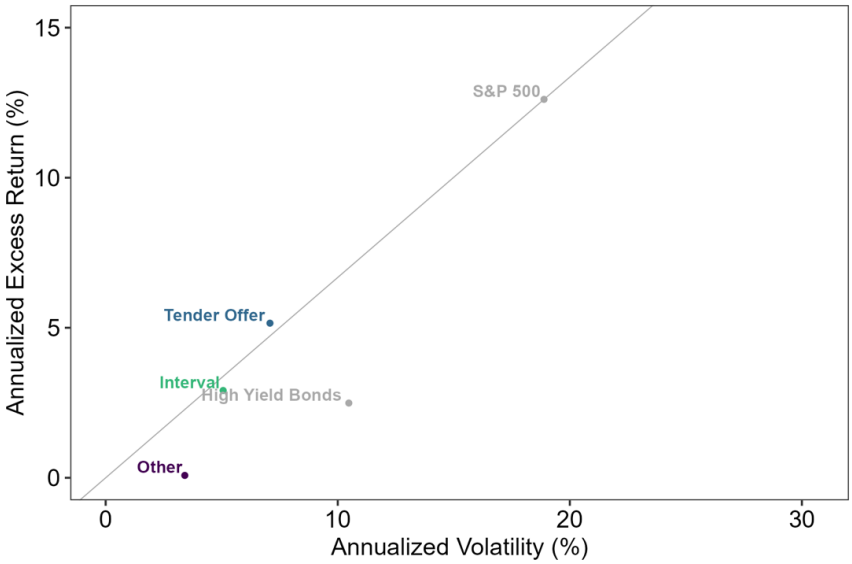

Figure A.2: Average Return and Volatility of CEF Indices, 2020–2024

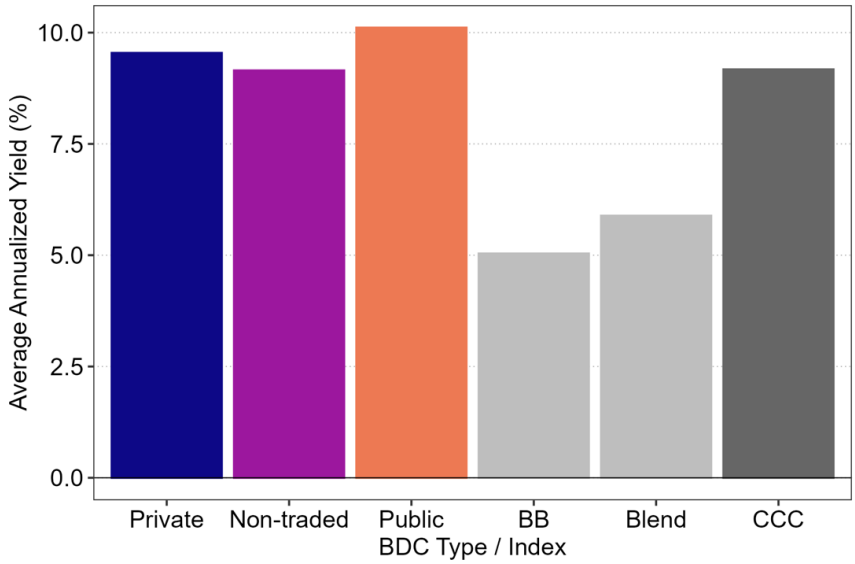

Figure A.3: Current Yields of BDCs and Morningstar-LSTA Leveraged Loan Indices

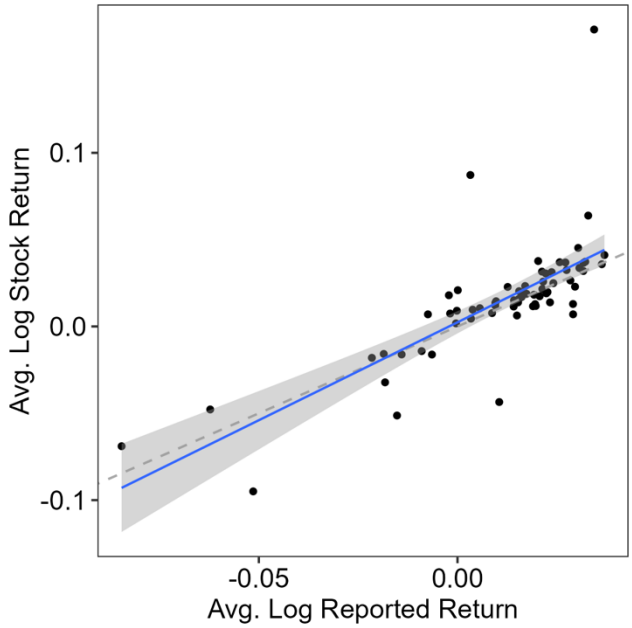

Figure A.4: Relationship Between Average Log Reported Returns and Average Log Observed (Stock) Returns for Public BDCs