Same Loan, Different Marks: Fees, Governance, and Valuation in Private Credit*

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Abstract

This paper studies how fund structure and fee design are related to loan valuations in private credit. We focus on Business Development Companies (BDCs), which collectively manage a quarter of the $1.6 trillion U.S. private credit market and disclose portfolio holdings quarterly. Since roughly two-thirds of loans are held by multiple BDCs, we are able to compare valuation of the same loan while holding borrower, seniority, and reporting date fixed. We combine BDC loan-level holdings from PitchBook with hand-collected data on PE affiliation and a new panel of 6,148 BDC-quarter fee contract observations for 231 BDCs from 2003Q4 through 2026Q2. We begin by observing that nearly 30% of loans are marked exactly at par, but valuations of the same loan vary widely across BDCs. We then present three main results. First, PE-affiliated BDCs are about 5 percentage points more likely to mark at par, even controlling for fee contract terms. Second, valuations of PE-affiliated BDCs are also 40% more responsive to changes in credit conditions. Third, "high fee" contract variations are also correlated with near-par marks. These results suggest that private credit valuations are influenced by fund-level factors unrelated to portfolio company fundamentals, although they do not establish that either fund structure or fee design causes valuation differences.

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I Introduction

Since the Great Recession, the private credit market has grown from a $200 billion corner of the financial system into a major asset class, with more than $1.6 trillion in U.S. assets under management in 2024 (Ivashina, 2025; Haque et al., 2024). Private credit loans are customized loans made to privately held companies by private investment vehicles. Very little information about the loans' terms or the borrowers' underlying quality is available to the public.

Even though private credit loans are inherently opaque, how lenders value those loans has become increasingly important in at least four ways. First, private credit marks impact funds' reported performance, so valuations impact how investors evaluate private credit performance relative to other asset classes (Suhonen, 2024). Second, many individual and institutional investors access private credit through semi-liquid investment funds, and these funds' valuations set the prices at which investors enter and exit. Third, private credit marks affect leverage constraints and creditor rights when banks make loans to private credit funds that are collateralized by the funds' loan portfolios (Jang, 2025). Fourth, valuations impact the stability of the life insurance sector, which has rapidly expanded its exposure to private credit, often through partnerships with alternative asset managers and private-equity-owned insurer platforms (Meisenzahl et al., 2025; Carlino et al., 2025; Kirti and Sarin, 2023). Smoothed or biased valuations weaken insurance regulators' ability to properly monitor insurers' balance sheets and affect risk-based capital charges (Ellul et al., 2011; Becker and Ivashina, 2015).

Because of their opacity and importance, private credit valuations are attracting intense scrutiny. Commentators have highlighted multiple instances in which different lenders have used widely differing valuations for the same loans[1] or have held loans near par only for the borrowers to collapse a short time later.[2] These valuation discrepancies, along with several high-profile borrower meltdowns, have triggered investigations by federal officials.[3] Academic papers have also drawn attention to the fact that private credit loan valuations are much less volatile than traded leveraged loan prices and warned that private credit funds' risk-adjusted performance metrics may be overstated (Bates, 2026).

In this paper, we probe the reliability and validity of private credit valuations by testing whether factors other than the borrower's financial health predict loan valuations. Specifically, we examine whether the affiliations and fee design of private credit funds structured as Business Development Companies (BDCs) are correlated with their valuation practices. We focus on BDCs because they manage a significant proportion of all private credit assets ($482 billion) and, unlike their private counterparts, disclose portfolio holdings quarterly (Lokey, 2025). This transparency creates an opportunity to study valuation practices that remain opaque in the broader private credit market (Davydiuk et al., 2024b).

[1] https://know.creditsights.com/us-insight-the-opaque-side-of-bdcs-private-credits-most-transparent-market/
[2] https://www.bloomberg.com/news/articles/2025-11-10/blackrock-eyes-100-loss-on-private-loan-amid-debate-over-marks
[3] https://www.bloomberg.com/news/articles/2026-06-03/private-credit-marks-drawing-more-scrutiny-from-sdny-prosecutors

Many BDCs are also available to retail investors and offer period liquidity at their reported net asset value (NAV), so their valuation reporting has real economic consequences. We argue that, if lender characteristics unrelated to borrower health or macroeconomic conditions systematically predict reported valuations, then private credit valuations may be biased and should be approached with caution.

Our core finding is that BDCs' affiliations and fee contract terms predict differences in loan valuations. This finding is based on three key results. First, we show that BDCs affiliated with private equity firms are about 5 percentage points more likely than other BDCs to report loan valuations near par. We show this by comparing the reported valuations of PE-affiliated and non-PE-affiliated BDCs for loans made to the same issuer at the same seniority level and valued in the same quarter. This valuation gap persists even when we control for key terms of the BDCs' fee contracts.

Second, we find that PE-affiliated BDCs and non-PE-affiliated BDCs update their valuations differently in response to credit shocks. When credit spreads rise, we find that the fraction of loans marked near par drops more for PE-affiliated BDCs than non-PE-affiliated BDCs. Similarly, when credit spreads shrink, PE-affiliated BDCs report more loans marked near par than other BDCs. The net effect is that the valuation gap between PE-affiliated and other BDCs compresses during periods of credit market stress but rebounds during more stable periods.

Thirds, we find that fee contract variations that typically result in higher fees being paid by fund investors also predict differences in loan valuations. For example, funds that charge their management fee based on gross assets are about 5 percentage points more likely to mark loans near par than funds that charge management fees based on net assets (holding management fee percentage fixed). Additionally, funds that charge a higher percentage management fee (e.g., 2% rather than 1% of net assets) are more likely to mark loans near par. Conversely, funds that have an "incentive fee cap" that reduces their interest income-based incentive fees when the book values of their loan falls are *less* likely to mark loans near par.

It is important to note that our findings regarding private equity affiliation and fee design are not overlapping. PE-affiliated BDCs do not appear to have materially different fee contracts that other BDCs on average, other than perhaps having slightly lower management fees and being somewhat more likely to include "catch-ups" for their income-based incentive fees. In our most stringent specifications, adding fee contact controls only lowers the valuation gap based on PE-affiliation from 4.6 percentage points to 4 percentage points.

Taken together, our results confirm that differences in reported loan valuations between BDCs are not purely random noise but instead have a predictable component that is correlated with the BDCs' characteristics. Our results do not, however, allow us to pinpoint the mechanisms that cause BDCs to value their loans differently. For private equity-link BDCs, differences in loan valuations could reflect differences in sponsors' access to information about borrowers' financial health and prospects. This seems plausible given the tight links between private equity

investing and private credit lending documented in Robinson and Wallskog (2026). On the other hand, it seems unlikely that PE-affiliated BDCs' superior information reliably leads them to more optimistic than other BDCs' about their investments' values. Another possible explanation for the difference between PE-affiliated and other BDCs is that smoothed valuations are part of the culture in the private equity industry that has been carried over to these sponsors' private credit funds.

The link between fee contracts and valuation smoothing is also susceptible to multiple interpretations. Sponsors' fee contracts likely do not cause them to smooth valuations (or vice versa) because contract provisions like incentive fee caps increase funds' incentive to mark loans at par, but funds with these provisions are less likely than others to mark loans at par. It is more probable that sponsors simultaneously choose to adopt high fee contract designs and smooth their loans valuations. This combination of behaviors would increase the funds' appeal to investors (i.e., through apparently high risk-adjusted returns) and maximize the sponsors' ability to extract fees from those investors (through high fees), especially if the target investors are less sophisticated, retail investors. However, the data do not indicate what forces drive some sponsors choose this approach while others do not.

Ultimately, our results caution against taking private credit valuations too literally, even when they are prepared in consultation with valuation consultants, approved by independent boards, and reported by SEC-regulated funds. We show that funds' affiliations and sponsor compensation arrangements are all plausibly correlated with valuation practices in ways that seem unrelated to portfolio company fundamentals. The result is that investors in two separate semiliquid private credit funds could perceive materially different risk profiles for their investments or exit on different terms, even if their funds were invested in identical assets. The risks created by these systematic valuation differences are not widely understood, especially by retail investors.

Related Literature. This paper relates to three literatures. The first studies valuation behavior in private credit. Current research mostly studies how valuation works in the industry as a whole. Jang and Kim (2025) link loan-level marks reported by BDCs to ranges recommended by third-party valuation consultants. They find that third-party appraisals are widespread (more than 76% of BDCs used them as of 2022) and that reported values rarely exceed the recommended range (only 4% of fair values do). They reject a simple agency story tied to fundraising incentives. Instead, finding that deviations from third-party marks reflect differences in information between lead and participant lenders and soft information around renegotiations. This is one of the first paper's to study *cross-sectional* differences in valuation behavior. We study how often reported fair values are anchored at par across the full universe of BDC valuations. This margin matters because third-party appraisals are not universal, rotate across holdings, and mainly constrain the upper tail. Marks can stay too smooth even within appraiser ranges if losses are recognized late,

values round toward salient anchors, or discretion operates through the timing of markdowns. Our hand-collected data on sponsors' compensation contracts let us further test whether these practices vary with contractual incentives.

The second literature studies the growth, institutional structure, and market discipline of private credit (Davydiuk et al., 2024b,a). Ivashina (2025) synthesizes evidence that private credit has expanded alongside private equity and identifies mark-to-model valuation and disclosure lags as central frictions. Davydiuk et al. (2024b) use BDC index exclusion as a shock and show that BDCs cut portfolio risk and contract investment when their access to capital tightens. Because reported NAVs shape BDCs' ability to raise both debt and equity, valuation practices carry real economic consequences. We add loan-level evidence of systematic differences in marking behavior across funds, holding fixed the borrower, claim seniority, and reporting date, and show that these differences move with aggregate credit conditions.

The third literature studies the organizational links between private equity and private credit and the rise of retail-facing "alternative" asset products. Robinson and Wallskog (2025) argue that private lending has grown intertwined with private equity organizations and the engineering of products for retail investors, pointing to PE-affiliated BDCs, PE-like incentive-fee structures, and the growing use of complex securities. We provide loan-level evidence that PE affiliation predicts valuation practices. We also use hand-collected compensation-contract data to show that high-fee contract variations also predict valuation smoothing, which is consistent with some sponsors choosing arrangements that both cater to and extract value from less sophisticated investors.

Roadmap. The paper proceeds as follows. Part 2 provides an overview of BDC structure, function, and valuation practices and motivates the empirical strategy. Section 3 describes the data. Section 4 outlines the empirical approach. Section 5 presents results on par bunching, PE affiliation, and sensitivity to credit spreads. Section 6 discusses next steps and concludes.

II BDC Background and Motivation

II.A BDC Primer

Business Development Companies (BDCs) are a type of SEC-regulated, closed-end investment fund. They were created by Congress in the 1980 to increase the amount of funding available to small and mid-sized businesses.[4] For this reason, BDCs are required to invest 70% of their assets in private companies or microcap public companies.[5] These required investments could be debt or equity investments, but as a practical matter, BDCs primarily invest in private credit loans.[6]

[4] https://icapital.com/insights/private-credit/what-are-non-traded-business-development-companies-bdcs/
[5] https://www.blueowlcapitalcorporation.com/about-blue-owl-capital-corp/what-is-a-bdc
[6] https://icapital.com/insights/private-credit/what-are-non-traded-business-development-companies-bdcs/

In other words, BDCs' main business is direct lending to middle market companies.

In return for funding small businesses, BDCs enjoy lighter regulatory treatment under the Investment Company Act of 1940 than mutual funds and closed-end funds. Like traditional registered funds, BDCs are required to make regular public filings that disclose their income statements, balance sheets, and portfolio holdings. But unlike other closed-end funds, BDCs have higher leverage limits ("up to 2.0x debt-to-equity")[7] and can charge performance fees even if they accept retail investors.

Types of BDCs

BDCs come in a variety of flavors based on their legal and economic structures. They vary in two primary dimensions: (1) the relationship between the BDC and its investment managers, and (2) the BDC's funding and liquidity model (with their accompanying legal implications).

Internal vs External Management. In their early days, many BDCs were "internally managed," meaning that BDC directly employed investment professionals, rented office space, and paid all of its operating expenses. For the past 20 years or so, however, almost all BDCs have been "externally managed." Externally managed BDCs do not hire their own investment staff, but instead have a contract with an advisory firm to manage fund's investments. The BDC then pays a management fee and incentive fees to the advisor according to the terms of the advisory agreement. Externally managed BDCs also generally reimburse some or all of their operating expenses that are incurred by the external advisor.

Most BDCs today are launched and externally advised by a large asset management firm. These firms include large private equity shops, like Blackstone, Apollo, and KKR; traditional asset managers, like BlackRock and T. Rowe Price; and private credit specialists, like Blue Owl.

Funding and Liquidity Models. BDCs can differ significantly from one another in the channels through which they raise money, the investors they target, and the paths through which they offer liquidity to their investors. These different and liquidity models can be loosely grouped into three primary BDC types: public, non-traded, and private.

Public BDCs are the most similar to traditional closed-end funds. They launch by raising money from investors in the public markets via a traditional initial public offering (IPO). Public BDCs then list their shares on an exchange, which gives their investors access to continuous liquidity at market prices. Because Public BDCs are publicly traded, any investor can purchase shares, regardless of wealth, income, or sophistication. In fact, "[r]etail investors have become the dominant owners of publicly traded BDCs" over the past several decades (Robinson and

[7] https://www.blueowlcapitalcorporation.com/about-blue-owl-capital-corp/what-is-a-bdc

Wallskog, 2026).

After they launch, it becomes much more difficult for Public BDCs to raise money. They can borrow through the debt markets, but only up to their statutory leverage limits. Furthermore, they are generally not allowed to issue new shares if those shares are priced bellow. This condition makes raising equity capital impossible for most BDCs most of the time because BDC shares — like other closed-end fund shares — tend to trade at a discount to NAV.

In the first several decades after BDCs were created, Public BDCs were the most common structure (Bates, 2026). But they have become less common in recent years as newer structures have been developed and popularized.

Non-traded BDCs are similar to Public BDCs in that they raise money from a broad cross-section of investors in public markets. However, they have a very different liquidity profile than Public BDCs. The reason is that, unlike Public BDCs, Non-traded BDCs do not list their shares on an exchange. As a result, investors can only purchase new shares or sell their shares by transacting with the fund, rather than other investors.

Non-traded BDCs typically offer their shares to investors continuously. Investors who would like to purchase shares are required to fill out and submit subscription paperwork, and then the BDC issues new shares on a regularly scheduled (perhaps monthly or quarterly) purchase date. For individual investors, the subscription process is handled by the individual's broker or wealth manager. These intermediaries in many cases earn sales commissions on the non-traded BDC shares they sell to investors.

Because Non-traded BDCs offer shares continuously, they can continue to grow after they have been launched, unlike Public BDCs. The largest BDC on the market today — Blackstone's BCRED, which alone had $45 billion in net assets in Q1 2026 — is structured as a Non-traded BDC.

Non-traded BDCs offer their investors only periodic, limited liquidity. Most Non-traded BDCs offer to repurchase shares from investors at NAV once per quarter. However, they typically limit their repurchase offers to 5% of shares outstanding. During normal times, this limit is seldom binding, and investors who want to exit Non-traded BDCs are able to do so easily. But during periods of stress, repurchase offers are frequently oversubscribed. BDCs usually handle oversubscribed repurchase offers by repurchasing shares from investors pro rata (based on the number of shares each investor requested to sell) until they reach the 5% cap.[8] In some cases, BDCs have offered to repurchase more than typical 5% to satiate investor demand although this is rare.[9]

Private BDCs are the least accessible of the three main BDCs types. They raise money from investors through private offerings, which are more flexible and less expensive to conduct than

[8] https://www.bloomberg.com/news/features/2026-03-08/blackrock-blackstone-confront-withdrawals-as-private-credit-redemptions-surge

[9] https://www.bloomberg.com/news/articles/2026-03-03/blackstone-senior-staff-opened-wallets-with-bcred-under-pressure

public offerings. The disadvantage of private offerings is that they are only open to "accredited investors," a category that includes institutional investors and individual investors who have an annual income above $200,000 or a net worth above $1 million. Even with this restriction, however, Private BDCs are available to a much larger pool of investors than traditional private credit and private equity funds, which can only accept investors with at least $5 million in investments.

Private BDCs manage the process of bringing money in from their investors in one of two ways. In the first model, the Private BDC accepts the money right when investors put in orders for shares — perhaps all at once or perhaps in regular "'intermediate funding' closings"[10] — and then the fund deploys that cash over time by making loans. In the second model, which mimics the way traditional private credit funds' operate, the investor holds onto their money until the Private BDC identifies a deal worth making. Then, the fund calls the investors and the investors send in the money necessary to do the deal.

Private BDCs have also taken several different paths to provide liquidity to their investors. When sponsors first began using the Private BDC model, they would usually give investors liquidity by (1) listing the Private BDC's shares on an exchange, in effect converting it to a Public BDC, (2) merging the Private BDC with an existing Public BDC (perhaps run by the same sponsor), or (3) liquidating the fund. More recently, Private BDCs have begun offering liquidity through regular share repurchases, similar to those of Non-traded BDCs.[11]

Private BDCs have become very popular, and many have been launched in recent years. They are now the most popular BDC by number, though not by assets under management (Bates, 2026).

BDC Reporting

BDCs file quarterly and annual reports on Forms 10-K and 10-Q, like regular public companies, regardless of how they are structured. In these reports, BDCs are required to include a "Schedule of Investments" that lists each of their portfolio holdings and provides basic information about the investment. For a private credit loan, that information generally includes the borrower's name, the interest rate, and the maturity date.

Most importantly for this paper, the Schedule of Investments lists three valuation figures for each loan: (1) the loan's "fair value," (2) the loan's face value, or principal, and (3) the loan's amortized cost. The fair value is the most important of these because, under the '40 Act, BDCs are required to use the fair value of their portfolio investments to calculate the value of the assets on their balance sheets. This means that BDCs' NAVs — which determine the price at which investors enter and exit non-traded and private BDCs — are determined by these fair value

[10] https://www.dechert.com/knowledge/the-cred/2024/7/demystifying-the-three-main-bdc-structures.html
[11] https://www.dechert.com/knowledge/the-cred/2024/7/demystifying-the-three-main-bdc-structures.html

estimates.

What does “fair value" mean in this context? Under the relevant accounting rules, “fair value" is “the price at which an orderly transaction to sell the asset ... would take place between market participants at the measurement date under current market conditions."[12] Because private credit loans very rarely trade, BDCs are required to estimate what their loans could be sold for if they were traded. Some BDC sponsors have in-house or affiliated valuation staff who construct these fair values estimates. But many, and likely most, BDCs outsource a substantial portion of this work to third-party valuation consultants (Jang and Kim, 2025). These valuation consultants use information provided by the lender to estimate a range of valuations that could be considered fair value for each loan.[13] Then, it is up to the BDC’s board to select a valuation (almost always within the provided range) that, in their judgment, reflects the loan’s market value.

The two figures, face value and amortized cost, are not market-based estimates. Face value is simply the outstanding amount that the borrower still has to repay on the loan. The face value can increase over the life of the loan if some interest is paid “in kind," or it can decrease if the borrower prepays some of the loan principal early. The loan’s amortized cost is derived from the amount of money the lender actually dispersed to make the loan (or buy it from another lender). If a loan was made with an Original Issue Discount (OID), then the loan’s amortized cost will be below its face value, for instance. The loan’s amortized cost can adjust over time as the original discount (or premium, if the loan was purchased at a price above face value) is amortized over the loan’s life. In many cases, a loan’s amortized cost and face value are equivalent.

If the borrower’s enterprise value exceeds its debt load, then a private credit loan is typically valued using a technique called “yield analysis."[14] The basic idea of “yield analysis” is to estimate what interest rate a lender would require to make the loan under current market conditions. If interest rate spreads have tightened since the loan was originally made, then the new yield might be lower than the contracted rate. On the other hand, if spreads have widened or the borrower’s condition has deteriorated, then the new yield could be higher.

Once the valuation analyst has determined an updated, required rate of return for the loan, the analyst uses this rate to discount the expected interest and principal payments under the loan contract to obtain an estimate of the loan’s fair value.

If the borrower is distressed, then estimating the loan’s value is less about determining an appropriate rate of return for the loan and more about determining a lender’s likely recovery in a bankruptcy scenario. An analyst would estimate the borrower’s enterprise value and determine, on the basis of the firm’s capital structure and the terms of its outstanding contracts, how much of the loan’s value a lender could expect to recover.

[12] ASC 820, https://asc.fasb.org/1943274/2147482282
[13] https://debtserious.substack.com/p/podcast-episode-7-how-lenders-value
[14] https://debtserious.substack.com/p/podcast-episode-7-how-lenders-value

How BDC Sponsors Make Money

BDCs sponsors earn fees that have a similar structure to fees that are standard in the private equity and private credit space. Sponsors earn a management fee that is a percentage of assets under management and a performance fee that is a percentage of the BDC's returns.

Management Fees. Early on, the standard BDC management fee was 2 percent of gross assets under management. Because BDCs use significant fund-level leverage, this meant that investors paid fees as high as 3-4 percent of their invested capital. Some public BDCs, especially those that have been around for a long time, still charge fees in this range. More recently launched BDCs charge fees that are much lower. The standard over the past several years has been 1.25 percentage of net assets, which is about 60-70 percent lower than the management fees of older funds. The switch from gross assets to net assets as the management fee base has also reduced sponsors' incentive to increase their fees by increasing the BDC's leverage. In either case, the fee base is constructed using the sponsor's fair value estimates.

Performance Fees. Most BDCs have two components to their performance fee. The first is based on net investment income, which is essentially interest income minus management fees and operating expenses. These range from 5 to 20 percent of net investment income, with 12.5 percent being the most common for new funds. The net investment income incentive fee is typically paid quarterly subject to a hurdle rate of around 6-8 percent (annualized) with a full catch up. In most cases, the net investment income incentive fee is calculated independently in each quarter. If the net investment income in the quarter exceeds the hurdle rate, then the sponsor is entitled to a performance fee payable in that quarter. However, if quite a few cases, the net investment income incentive fee has a "lookback" period, often about 3 years (12 quarters). For BDCs with a lookback, cumulative net investment income throughout the lookback period has to have exceeded the hurdle rate for the sponsor to earn a fee, so a period of subpar returns can reduce performance fees due in future quarters.

The second portion of the performance fee is the capital gains incentive fee. It is calculated as a percentage of realized capital gains, to the extent they exceed both realized and unrealized capital losses. This percentage is usually the same percentage the sponsor earns on net investment income. Capital gains incentives fees are generally not subject to a hurdle rate, and they are usually payable annually. Capital gains incentive fees also generally have an lookback period that runs back to the fund's inception, so fees are only payable in a given year if the fund's realized gains exceed realized and unrealized capital losses over the fund's life. Because sponsors do not frequently sell loans, they do not frequently realize capital gains, so capital gains incentive fees are a much less significant part of sponsors' compensation than other fees.

In most BDCs, net investment income incentive fees and capital gains incentive fees are calculated independently and have no effect on one another. In a significant minority of BDCs, however, they are linked by an incentive fee, or "total return," cap. In these BDCs, incentive fees,

from whatever source, cannot exceed a certain percentage of the BDC's total return, which is calculated as net investment income plus realized and unrealized capital gains minus realized and unrealized capital losses. This percentage is usually the same percentage used to calculate the incentive fees.

The total return cap, in effect, reduces the fees a BDC sponsor can earn on net investment income if it has realized or unrealized losses that exceed its realized capital gains. Total return caps usually have a lookback period of twelve quarters (or 3 years).

II.B Should We Be Worried About Valuations?

In the previous section, we discussed why the values of BDCs' assets are hard to determine and explained how BDC managers estimates those values for reporting purposes. In this section, we explain why BDC valuation practices are more than just an accounting curiosity. BDC's loan valuations are substantively important in a wide range of areas, and sponsors have a strong incentive to manipulate them to maximize their fee income. Various governance provisions in the '40 Act exist to mitigate these incentives, but it is an open and important question whether these legal protections are serving their intended purpose.

Why Valuations Matter

BDC valuation practices matter in at least five contexts that are broader than pure accounting. We discuss each in turn.

1. Fees. The fees that BDC investors (many of whom are retail investors) pay are calculated with formulas that directly incorporate BDCs' valuations. Management fees, for instance, are calculated as a percentage of BDCs' total portfolio valuations, perhaps net of liabilities. Capital gains incentive fees are reduced by unrealized losses, and net investment income incentive fees are also reduced by unrealized losses in BDCs with total return caps. If BDC managers do not mark down the value of their assets during periods of market distress or higher credit spreads, then their investors will pay higher fees than they otherwise would, reducing the investors' returns.

2. Performance Evaluation. When wealth managers and investors decide which products to invest in, they rely on performance metrics that are affected by BDCs' valuations. The investment returns used to calculate these metrics have two components: dividends and capital gains/losses. The dividends a BDC pays are not affected by valuation practices, but capital gains and losses are because they measure the change in the reported value of the BDCs' portfolios. If BDC managers were to adjust their valuations less in response to market than they should, then they could increase their risk-adjusted returns. This practice would make their performance look very attractive relative to other asset classes without requiring the managers to make misleading

statements about their interest income.

To see how this would work, consider two commonly cited performance metrics: an investment's Sharpe ratio and its alpha. The Sharpe ratio is defined as the investment's expected return (minus the risk-free rate) divided by the standard deviation of its returns. The less a BDC's returns fluctuate from quarter to quarter — perhaps because its valuations are consistently held close to par — the lower the standard deviation of its returns is. A lower return standard deviation translates to a higher Sharpe ratio and a better relative performance.

Alpha is similarly affected by valuation choices even though it is a more sophisticated metric. Alpha measures the persistent component of an investments' returns that is not explained by fluctuations in the market portfolio. If a BDC's investment valuations did not increase and decrease along with market fluctuations, then market returns would explain less of the BDC's returns, and its alpha would increase, making its performance look more attractive. Consistent with this logic, Suhonen (2024) show that BDC alpha is sensitive to whether performance is measured using market prices versus NAV-based valuations.

3. Entry and Exit Prices. Investors enter and exit non-traded and (semiliquid) private BDCs at their reported net asset values. If a BDC's investments are not marked at prices that reflect what those investments could be sold for on the secondary market, then every transaction where an investor enters or exits the BDC transfers value between investors. For example, suppose market prices for leveraged loans fall, but a BDC does not market down the value of its investments. Any investor who exits the BDC during this period will be paid out more than her fair share of the funds' assets, siphoning off value from the remaining investors. On the other hand, any investor entering the fund would be overpaying for fund shares, in effect subsidizing other investors.

Investors who understand this dynamic have an incentive to exit non-traded BDCs when their investment valuations seem high relative to similar public-market investments. If they do, they can maintain their portfolio compositions and improve their returns by purchasing public market investments with similar characters for prices cheaper than the non-traded BDC exit prices while at the same time avoiding the risk of being the last investor in the BDC, stuck with a disproportionate share of the losses. This incentive can stimulate exit behavior in non-traded BDCs that looks like a slow motion (because of redemption limits) bank run. Persistently high exits put liquidity stress on non-traded BDCs and can limit their ability to make loans.

4. Lending to BDCs. As discussed in the previous Section, BDCs are allowed to take on a significant amount of leverage. The debt BDCs sell may be collateralized by the BDCs' loans. A BDC inflates the value of its portfolio investments might be able to borrow on better terms than it would otherwise. Anyone lending to such BDC would then be taking on more risk for the contracted loan terms than comparable market transactions.

5. Life Insurer Risk. Life insurers are investing a growing percentage of their investments

in private credit and private credit-backed assets. Many of these insurers are owned by asset managers that also sponsor BDCs. Insurance regulations require insurers to maintain capital cushions that vary based on the riskiness of their investment portfolios. If private credit assets were made to look less risky by artificially compressing fluctuations in their reported valuations, especially during downturns, then these assets and derivative products (like CLOs) might win more favorable regulatory risk weights than they should, leaving life insurers undercapitalized.

Sponsors' Incentives to Manipulate Valuations

In most of the contexts discussed in the previous subsection, BDC sponsors have an incentive to smooth fluctuations in their investments valuations. By doing so, they stand to (1) increase their management and performance fees directly, (2) decrease perceptions of their risk, increasing capital inflows from investors (and therefore fees) and improving the profitability of their life insurance affiliates, and (3) improve their borrowing terms.

This paper asks whether structural characteristics (particularly affiliation with private equity and fee design) predict systematic valuation smoothing in private credit. The sign of the governance effect is not obvious ex ante. PE affiliation and retail-facing incentives could increase the benefit of smooth reported NAVs and expand discretion via more complex securities. Alternatively, PE-affiliated platforms may have better information, stronger monitoring, and more frequent engagement with borrowers, which could improve valuation inputs and reduce noise (Jang, 2025; Jang and Kim, 2025).

III Data

This project uses three primary data sources: loan-level portfolio holdings from PitchBook, hand-collected data on BDC private equity affiliation, and a quarterly panel of BDC fee contracts collected from SEC filings.

Pitchbook

The core dataset contains quarterly portfolio holdings for Business Development Companies from Q1 2010 through Q2 2025, sourced from PitchBook. Each observation represents a single investment held by a BDC in a given quarter so each row is defined by BDC name, borrower (issuer) name and ID, and reporting quarter.

The primary analysis variables are principal amount, cost basis, and fair value (all in millions USD). We construct two key ratios: fair value divided by principal and fair value divided by cost. The fair value to principal ratio is the central outcome variable used to identify loans marked at

par (ratio equals 1.0) or near par (ratio between 0.99 and 1.01). Specifications using fair value to cost are reported as robustness checks.

Crucially, Pitchbook includes information Investment type captures the position in the capital structure (Senior Secured First Lien Term Loan, Unitranche, Subordinated Debt, Equity). There are close to 25 types of investments which we hand classify into: Senior Secured, Senior Secured 1L, Senior Secured 2L, Subordinated, Unitranche and Unsecured. We delete all loans that represent any equity portions (only 0.05% of observations). The data also contains binary indicators flag whether the loan is on accrual status, held through a CLO structure, structured as a unitranche facility, or syndicated.

The data also includes base rate type (LIBOR, SOFR, PRIME), spread over the base rate, all-in interest rate, cash interest, and payment-in-kind (PIK) interest. Pitchbook also includes industry codes at three levels: sector (top level), industry group (middle), and even more granular. We use the middle 2-digit codes. The dataset also includes the industry classification as reported in regulatory filings which is not harmonized and largely unusable. The data also include deal and debt identifiers, related deal and debt types (LBO, Dividend Recap, PE Growth etc.), maturity date, acquisition date, and first and last reporting periods for each investment. The current version doesn't utilize this data.

Private Equity Affiliation

For every BDC in Pitchbook, we hand collect whether it is PE affiliated. We follow the approach of Robinson and Wallskog (2025) which basically involves searching the internet to figure out whether the BDC has a separate PE business. A vast majority of PE owned BDCs are household names (Blackstone, Apollo, KKR etc.). A few require more work like going to SEC filings. We verify this classification by feeding my final classifications to ChatGPT 5.2 xHigh.

BDC Fee Contracts

We construct a quarterly panel of fee contracts from SEC filings. The panel contains 6,148 BDC-quarter observations for 231 BDCs from 2003Q4 through 2026Q2. It records 17 substantive contract terms covering management fees, income and capital-gains incentive fees, hurdle and catch-up provisions, lookbacks, caps, and the treatment of payment-in-kind income. We match contracts to PitchBook holdings by BDC CIK and calendar quarter, so each loan-quarter receives the terms in force at the end of the quarter, which is also the date of the loan valuations. The matched analysis is limited to the PitchBook sample period from 2010Q1 through 2025Q2. The BDC-quarter-weighted mean management fee declined from 1.91% in 2010 to 1.29% in 2025. This change reflects both contract revisions and changes in the composition of reporting BDCs.

Adviser Families

We also collect data from co-investment applications and exemptive orders filed with the SEC under Sections 17(d) and 57(i) of the Investment Company Act and Rule 17d-1. These filings seek SEC permission for affiliated funds and BDCs to invest alongside one another in the same portfolio companies, notwithstanding statutory restrictions on joint transactions with affiliates. This provides a more precise legal grouping than sponsor names because they identify common asset managers for a family of funds.

For each BDC in the PitchBook universe, we link the standardized fund name to its SEC CIK, retrieve its Form 40-APP and 40-APP/A filing history, identify the most recent qualifying co-investment application, and verify whether the SEC issued a notice or final order. We define an adviser family using the normalized SEC application file number, such as 812-15715 for the current Blue Owl co-investment family. The crosswalk also records the application date, accession number, order status, release number, source links, and the portion of the filing identifying the relevant advisers.

We use the adviser-family grouping to test whether BDCs that share an investment adviser . Moreover, an application number identifies a legal co-investment family rather than a broad sponsor brand. A single platform may appear under several application numbers, while an application may cover several advisers under common control. The adviser-level results should therefore be interpreted as comparisons across the current legal families identified in SEC filings, rather than as a complete history of every platform-level relationship.

Credit Spreads

To measure credit spreads, we use 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. This index is suitable for the analysis here because BDCs predominantly invest in private, high yield debt and because the index's performance is a good approximation for the performance of low-cost, high yield bond funds that retail investors can easily invest in. We collect daily data from FRED and then aggregate to the quarter level by simply taking the spread on the last trading date. To study change quarter-over-quarter, we estimate regressions both for absolute and percentage changes in spread.

IV Empirical Strategy

The three main result tables study (i) whether PE-affiliated BDCs are more likely to report loans near Par, (ii) whether PE-affiliated BDCs respond to credit changes differently, and (iii) whether features of BDC sponsors' fee contracts explain the gap in valuations between PE-affiliated and

other BDCs or, in the alternative, whether they independently predict valuations.

To construct Table 3 (PE vs. non-PE bunching), we define a near-par indicator for each investment i held by BDC b in quarter t as 1 when fair value is within 1% of principal. we exclude observations with $FV/Principal > 1$. We then estimate a regression with this indicator on the left hand side while controlling for loan characteristics and using fixed effects. The most restrictive specification compares PE and non-PE BDCs within the same borrower and at the same seniority level, so identification comes from differences in marking behavior across BDCs holding observationally comparable claims. Specifically, we estimate:

$$NearPar_{ibt} = \alpha + \beta\, PE_b + \Gamma' X_{ibt} + \xi_{ibt} + \varepsilon. \tag{1}$$

where X_{ibt} denotes loan characteristics and ξ_{ibt} are borrower-loan-level fixed effects. We cluster standard errors at the BDC level.

To construct Table 7, we study how near-par marking changes with credit conditions and if this varies for PE vs. non-PE BDCs. We estimate:

$$NearPar_{ibt} = \alpha + \beta\, PE_b + \delta\, \Delta HY_t + \eta\, (PE_b \times \Delta HY_t) + \Gamma' X_{ibt} + \varepsilon_{ibt}. \tag{2}$$

where ΔHY_t capturing quarterly changes in the ICE BofA U.S. High Yield OAS. Columns (1)–(3) use the quarter-over-quarter level change in end-of-period HY OAS (in percentage points), while Column (4) uses the quarter-over-quarter percent change in average HY OAS. The coefficient δ measures how near-par marking changes with spreads for non-PE BDCs, while η captures whether PE-affiliated BDCs have a different sensitivity of near-par marking to spread changes.

To construct Table 5, which explores the predictive value of fee contract terms, we start with the specification used to construct Table 3 and add controls for the various contract terms, including management fee percentage, management fee base, income fee percentage, and existence of an incentive fee cap, among others.

V Results

This section begins by documenting that BDC loan fair values concentrate heavily at or near par, measured relative to principal. The fraction of loans held near par remains relatively stable over time. Next, the section presents our three main empirical results: First, PE-affiliated lenders are more likely to report fair values near principal even after controlling for the borrower and the loan's position in the capital structure. Second, when the macroeconomic environment changes and high-yield spreads expand, PE-affiliated BDCs are more likely to move off of the anchor points but also more likely to move back afterward. Third, BDCs with fee contract terms that tend to result in investors paying higher fees are also more likely to mark loans near par, and

this gap is indepedent of the PE-affiliation gap.

V.A Bunching

In Figure 1(a), we document substantial bunching in reported valuations. Panel (a) plots the distribution of the fair value-to-principal ratio ($FV/Principal$) across BDC portfolio investments, after trimming extreme observations to the $[0, 1.10]$ interval. The key feature is a large spike at $FV/Principal = 1$, indicating that reported values frequently remain exactly at face value. In this trimmed sample, 26.6% of investments are reported exactly at par relative to principal. Beyond the point mass at one, the distribution exhibits a longer left tail, consistent with episodic markdowns for distressed or deteriorating credits rather than continuous repricing. We retain $FV/Cost$ as a robustness denominator.

Figure 1(b) traces the share of investments held "near par" over time, defining near-par as fair value within $\pm 1\%$ of principal. Two facts stand out. First, near-par marking is pervasive even outside stress episodes: across much of the 2010–2019 period, a large fraction of the portfolio is reported within a tight band around this anchor. Second, near-par shares drop sharply during periods of market stress (most notably around 2020), but then recover relatively quickly, suggesting that reported marks adjust discretely rather than drifting smoothly with changing credit conditions.

V.B PE and Valuation Bunching

Figure 3 describes how the PE-affiliated segment evolves in the sample period. It shows that the amount of money measured by both PE and non-PE funds has risen sharply for both groups. Notably, PE-affiliated BDCs are roughly half the market by AUM. The number of unique BDCs has also increased over this time period and most of this growth has actually come from non-PE affiliated BDCs (not reported here). For instance, in 2025, the number of non-PE BDCs was 100 while the number of PE-affiliated BDCs was 60. In 2010, there were 10 BDCs in each category so the non-PE segment has grown more, in number while staying roughly flat in proportion of AUM.

Table 1 reports loan-level summary statistics separately for PE-affiliated and non-PE BDCs. PE-affiliated loans are substantially larger on average. Mean principal is \$21.83 million for PE-affiliated BDC loans versus \$8.06 million for non-PE loans (a difference of \$13.77 million), with similar gaps for cost and fair value. This indicates that PE-affiliated platforms disproportionately hold larger exposures, which may reflect differences in sourcing, deal capacity, or borrower mix. Loans held by PE-affiliated BDCs have slightly lower average spreads and all-in rates: the mean spread is 5.98 versus 6.15, and the mean all-in rate is 9.11% versus 9.31%. PE-affiliated loans are more likely to use Payment-in-kind (PIK)—the mean PIK rate is 5.86% versus 5.32%.

Average valuation ratios are close to par in both groups. For example, mean FV/Principal is 0.95 (PE) versus 0.94 (non-PE), and mean FV/Cost is 0.97 in both groups (with a small but statistically significant difference). The economically salient differences appear more clearly in the anchor indicators. PE-affiliated BDCs are 1 percentage point more likely to report exactly at par relative to principal (FV/Principal = 1: 0.26 vs. 0.25) and 3 percentage points more likely to report near-par within ±1% (0.50 vs. 0.47). These raw gaps are modest in magnitude, but the regression evidence below shows that they understate the within-borrower differences once loan and issuer composition are accounted for.

Table 3 tests whether PE affiliation is associated with near-par marking after including a rich set of fixed effects. All specifications exclude observations with $FV/Principal > 1$. In Column 5, the estimate is 0.059 and statistically significant at the 1% level. Relative to the 0.493 outcome mean, PE affiliation is associated with a 12% higher probability of a near-par mark.

After we compare the same loan at the same level of capital structure, we find that PE-affiliated BDCs are more likely to mark the loans near par. The most restrictive specification should now be read as the likelihood of reporting $FV/Principal$ within 1% of principal, with $FV/Cost$ retained as a robustness specification.

Table 4 holds the controls and issuer $\times$ seniority fixed effects from Column 5 of Table 3 constant and varies the outcome threshold. PE affiliation is associated with a 5.9 percentage point increase under the 1% band, a 5.0 percentage point increase under the 5% band, a 4.4 percentage point increase in the probability that a mark is not distressed ($FV/Principal \geq 0.90$), and a 4.2 percentage point increase above the 0.80 cutoff. All four estimates are statistically significant at the 1% level.

V.C PE and Response to Credit Shocks

Figure 5 connects these valuations to broad credit-market conditions. The figure overlays the time series of the near-par share for PE and non-PE BDCs with the ICE BofA U.S. High Yield option-adjusted spread (HYS). The near-par share declines when HY spreads widen (worse credit conditions) and rises when spreads tighten. It is hard to discern whether the PE-affiliated BDCs react more or less.

Table 7 formalizes this relationship in a loan-quarter panel regression with issuer, seniority, industry, year, and quarter fixed effects (and loan size controls). The dependent variable is again a near-par indicator. Column 1 shows that a 1 percentage point quarterly increase in HY OAS is associated with a 2.0 percentage point decline in the probability that a loan is held near par. Broad credit-market repricing is strongly reflected in whether reported values remain near par. This, of course, makes sense as credit conditions should affect how loans are valued by BDCs.

Column 3 shows that PE affiliated BDCs are more sensitive to credit spread changes. In the

baseline group of non-PE BDCs, a 1 percentage point increase in High Yield OAS is associated with a 2.3 percentage point decrease in the probability of a loan being marked near par. However, the interaction term for PE-affiliated BDCs is negative and statistically significant at -0.010, indicating that these funds are approximately 43% more sensitive to widening spreads than their non-affiliated counterparts. Once we bring in credit spread changes, the gap between PE-affiliated BDCs and non-PE BDCs shrinks to half the magnitudes in Table 3. Column 4 estimates the same relationship except it measures changes in spreads in percent change.

These findings suggest that while PE-affiliated funds are more likely to anchor valuations at or near principal in stable environments, they mark valuations lower more aggressively when broader credit market risks materialize.

V.D Fee Contracts

Next we test whether fee contract terms predict differences in valuations. This test is motivated by the idea that observable differences in the way sponsors have structured their compensation contracts might contain information about the forces that push sponsors to smooth their valuations. One possibility is that fee contract terms that directly incentive sponsors to smooth valuations to maximize fee income could largely explain differences in valuations, including the PE-affiliation gap.

To the contrary, however, we find that PE-affiliated BDCs do not appear to have systematically different contract terms than other BDCs. Table 2 presents basic summary statistics for the fee terms of PE-affiliated and other BDCs. PE-affiliated BDCs seem to have slightly lower management fee rates on average, and are more likely to have income-fee catch-up provisions, but otherwise, their fee contracts are essentially indistinguishable from those of non-PE-affiliated BDCs.

We also find that some contract terms do seem to predict loans being marked near par. Table 5 presents the key regression results, which test the likelihood that a loan is marked near par in a given quarter based on the reporting BDC's PE-affiliation status and fee contract terms. (As with the regressions in Table 3, the regressions control for borrower, seniority, and time period using stringent fixed effect specifications.) The results in Table 5 quantify how much observable contract terms account for the PE gap. On the complete-contract sample, the same-loan PE coefficient is 0.046 without fee controls and 0.040 with them. The 13% reduction is modest, and the coefficient remains statistically significant. Contract terms also have independent associations with marks. In the most restrictive specification, three contract variables stand out for having coefficients that are statistically significant and meaningful in size: the management fee rate, the management fee base, and the presence (or lack) of an incentive fee cap. (The coefficient on the capital gains incentive fee hurdle rate is also statistically significant in some specifications, but the magnitude is relatively small.) For each of these three variable, values that indicate higher fees —

i.e., higher management fee rate, base as gross (rather than net) assets, and lack of an incentive fee cap — predict a higher likelihood of near par valuation. These estimates are conditional associations, not causal effects of contract design.

VI Discussion

Under construction ...

We consider three explanations for the valuation gap between PE and non-PE funds: fees, investor monitoring, and superior information. The quarterly contract panel allows us to directly test the first explanation. The monitoring and information tests are.

VII Conclusion

This paper studies how fund structure and fee design shape loan valuations in private credit. BDC disclosures make practices visible that are hard to observe in the broader market. Because roughly two-thirds of BDC loans are held by more than one BDC, we compare loan marks across BDCs while holding borrower, seniority, and reporting date fixed. We document that nearly 30% of investments are marked exactly at par, yet valuations of the same loan vary widely across BDCs. We next highlight three main findings. First, PE-affiliated BDCs are about 5 percentage points more likely to report values near par even when comparing claims on the same issuer at the same seniority. In the complete-contract sample, fee controls reduce the conditional gap from 4.6 to 4.0 percentage points but do not eliminate it. Second, PE-affiliated BDCs respond roughly 40% more strongly to changes in high-yield spreads, so the valuation gap compresses during stress and rebounds in calmer periods. Third, fee contract terms independently predict near par valuations, and terms associated with higher fees generally predict more near par marking. These associations are consistent with sponsor-level incentives affecting valuations, but they do not establish causation or isolate why PE affiliation predicts marking behavior.

To our knowledge, this is the first paper to assemble a quarterly panel of BDC fee contracts at scale and to show that PE-affiliated funds mark their loans systematically differently than others. The fee panel contains 6,148 BDC-quarter observations for 231 BDCs from 2003Q4 through 2026Q2.

These issues we study are important beyond accounting. If governance and fee design systematically smooth reported valuations, investors in two semiliquid private credit funds could experience materially different performance even when holding identical assets. This risk is not widely understood, especially by retail investors that enter and exit at NAV. Regulators setting capital charges for insurers may likewise rely on carrying values that lag economic reality. Understanding the extent to which reported marks are driven by forces other than borrower

fundamentals is a first-order question for a market where assets are illiquid, verification is costly, and a growing share of credit risk sits outside the banking system.

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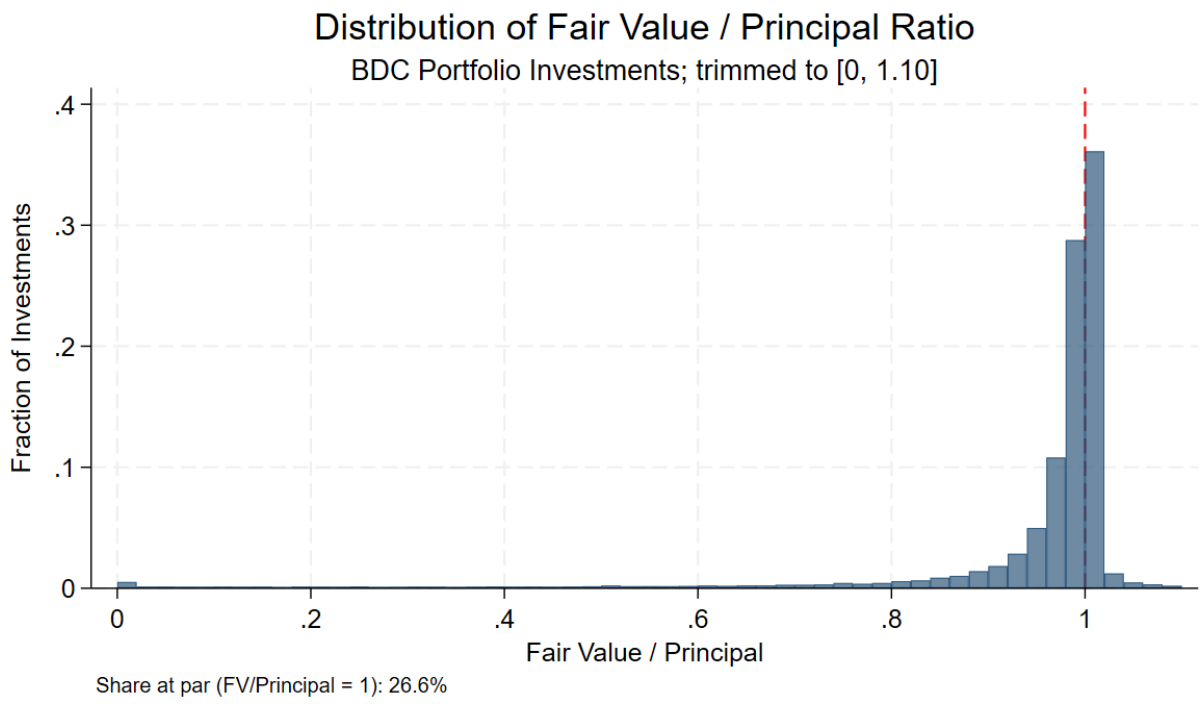
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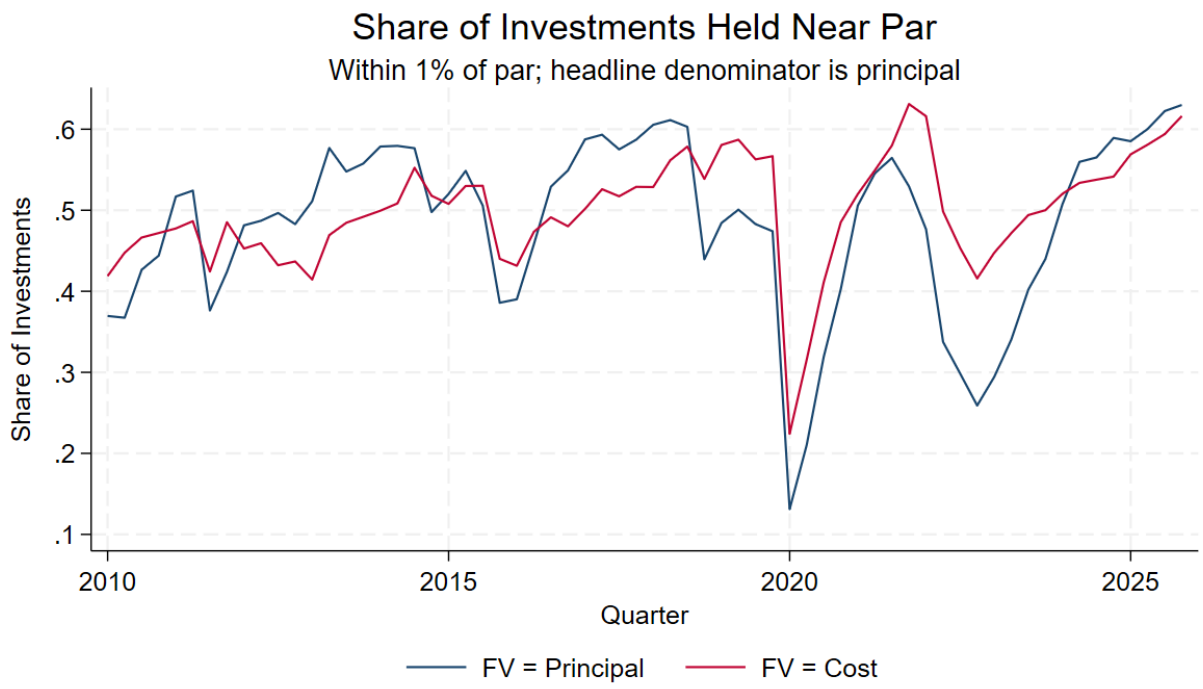
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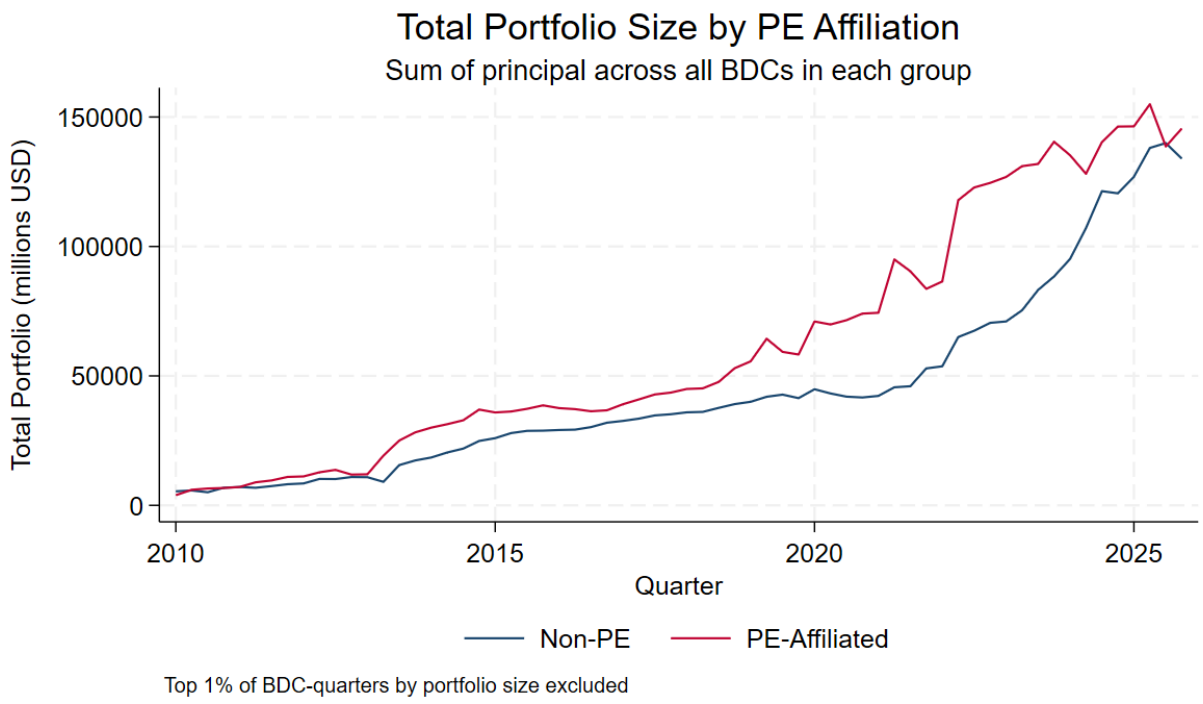


(a) Distribution of Fair Value to Principal Ratio

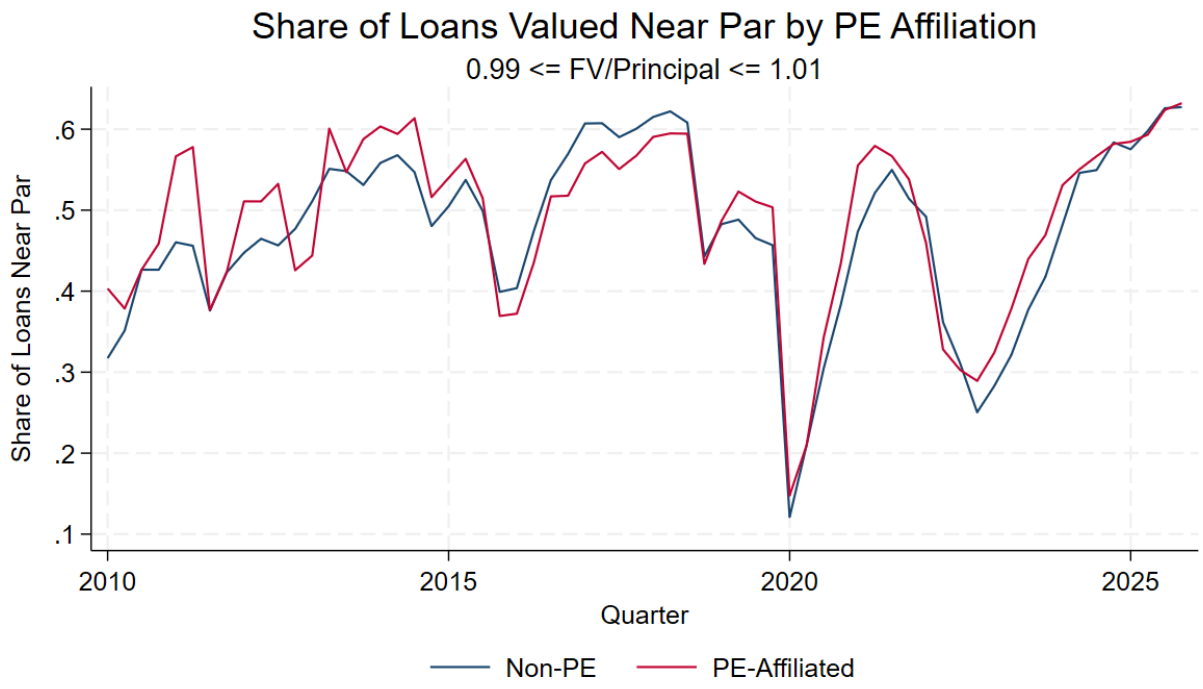


(b) Time Series of Share of Loans Held Near Par

Figure 1: Distribution and Time Series of BDC Loan Valuations



(a) Total Portfolio Size (PE and Non-PE)



(b) Share of Loans Marked Near Par (PE and Non-PE)

Figure 2: BDC Portfolio Growth and Near-Par Marking by PE Affiliation

Table 1: Summary Statistics: Loan-Level Data

	PE-Affiliated				Non-PE				Diff.
	Mean	SD	P25	P75	Mean	SD	P25	P75	
Panel A: Loan Characteristics									
Principal (Mil. USD)	21.58	251.77	1.99	19.73	7.93	14.77	0.98	9.64	13.65***
Cost (Mil. USD)	20.53	142.58	1.95	19.24	7.84	24.24	0.91	9.52	12.68***
Fair Value (Mil. USD)	20.03	139.61	1.87	18.60	7.47	14.20	0.82	8.98	12.56***
FV / Principal	0.95	0.14	0.97	1.00	0.93	0.18	0.97	1.00	0.02***
FV / Cost (Robust.)	0.98	0.10	0.99	1.01	0.97	0.12	0.99	1.01	0.01***
Spread (bps)	5.89	1.68	5.00	6.75	6.03	1.74	5.00	6.75	-0.14***
All-In Rate (%)	9.13	2.64	7.50	10.84	9.27	2.84	7.83	11.01	-0.13***
PIK Rate (%)	5.94	8.37	2.00	9.00	5.41	4.69	2.00	8.00	0.54***
At Par (FV/Principal = 1)	0.27	0.44	0.00	1.00	0.27	0.44	0.00	1.00	0.00
Near Par (FV/Principal $\pm$1%)	0.51	0.50	0.00	1.00	0.49	0.50	0.00	1.00	0.02***
Has PIK Component	0.10	0.30	0.00	0.00	0.08	0.28	0.00	0.00	0.01***
Accrual Status	0.98	0.13	1.00	1.00	0.98	0.15	1.00	1.00	0.00***
CLO	0.02	0.14	0.00	0.00	0.01	0.09	0.00	0.00	0.01***
Unitranche	0.03	0.16	0.00	0.00	0.14	0.34	0.00	0.00	-0.11***
Syndicated	0.06	0.23	0.00	0.00	0.03	0.18	0.00	0.00	0.02***
Panel B: Sample Composition									
Unique BDCs		81				127			
Unique Issuers		9989				12286			
Loan-Quarter Obs.		275,256				372,654			

Notes: This table reports loan-level summary statistics from PitchBook BDC portfolio data. PE-Affiliated indicates BDCs with private equity sponsor affiliation. Principal, Cost, and Fair Value are in millions of USD. The headline valuation ratio is FV/Principal; the sample trims FV/Principal to [0, 1.10]. FV/Cost is reported as a robustness ratio and is separately trimmed to [0, 1.10]. The Diff. column reports the difference in means (PE minus Non-PE).

Table 2: Quarterly BDC Fee Terms by PE Affiliation

	PE				Non-PE				Diff.
	Mean	SD	P25	P75	Mean	SD	P25	P75	PE - Non-PE
Management fee (%)	1.38	0.41	1.15	1.75	1.58	0.42	1.25	2.00	-0.20**
Management fee based on NAV	0.17	0.37	0.00	0.00	0.21	0.41	0.00	0.00	-0.04
Management fee stepdown	0.13	0.34	0.00	0.00	0.12	0.32	0.00	0.00	0.02
Income fee (%)	15.57	5.85	12.50	20.00	16.45	6.14	15.00	20.00	-0.88
Income fee hurdle (%)	6.07	2.14	5.00	7.50	6.30	2.30	6.00	7.50	-0.23
Income fee catch-up	0.99	0.10	1.00	1.00	0.90	0.30	1.00	1.00	0.09*
Capital gains fee	0.92	0.28	1.00	1.00	0.93	0.26	1.00	1.00	-0.01
Capital gains fee (%)	15.67	5.89	12.50	20.00	17.00	5.51	15.00	20.00	-1.34
Capital gains fee hurdle (%)	0.48	1.76	0.00	0.00	1.10	2.67	0.00	0.00	-0.62
PIK deferral fee	0.04	0.20	0.00	0.00	0.09	0.28	0.00	0.00	-0.05
Incentive fee cap	0.16	0.37	0.00	0.00	0.23	0.42	0.00	0.00	-0.07
BDC private	0.38	0.49	0.00	1.00	0.34	0.47	0.00	1.00	0.05
BDC public	0.44	0.50	0.00	1.00	0.50	0.50	0.00	1.00	-0.06
BDC non-traded	0.17	0.38	0.00	0.00	0.16	0.37	0.00	0.00	0.01

Notes: The unit of observation is a BDC-quarter in `bdc_fees_panel.csv`, covering 2003Q4 through 2026Q2. Statistics weight each BDC-quarter equally. The Diff. column reports PE minus non-PE; significance uses standard errors clustered by BDC CIK. Missing contract terms are excluded variable by variable. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

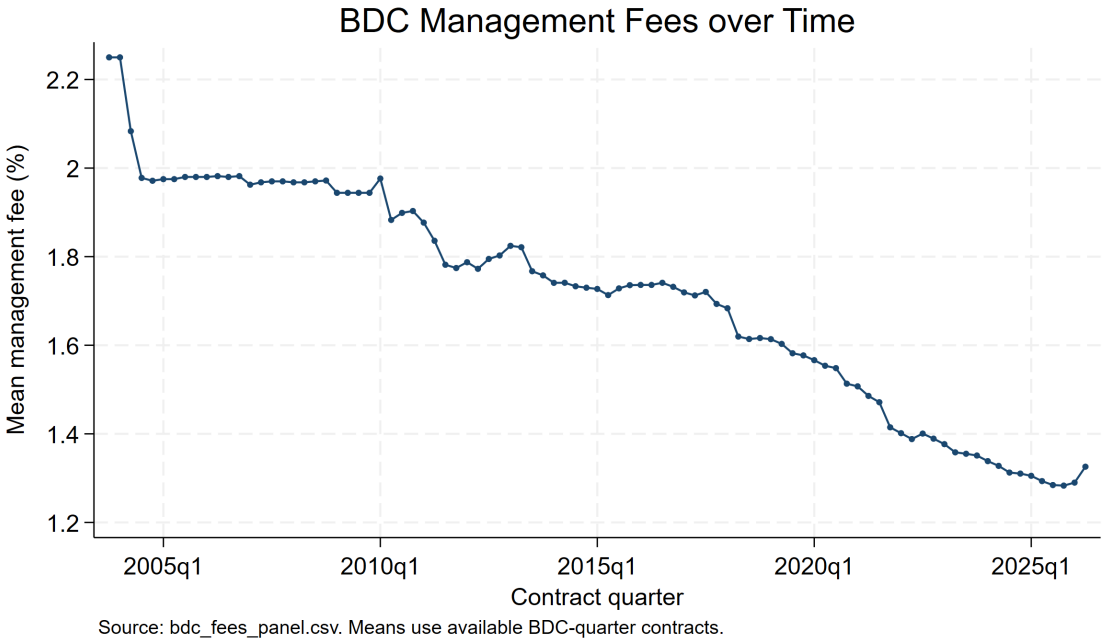


Figure 3: Average BDC Management Fee by Contract Quarter

Table 3: PE Affiliation and Near-Par Valuation Bunching

	(1)	(2)	(3)	(4)	(5)
PE-Affiliated	0.017	0.046	0.048**	0.059***	0.059***
	(0.040)	(0.035)	(0.021)	(0.022)	(0.020)
Loan-level Controls	No	Yes	Yes	Yes	Yes
Year-Quarter FE	No	Yes	Yes	Yes	Yes
Industry FE	No	Yes	Yes	Yes	Yes
Issuer FE	No	No	Yes	Yes	Yes
Seniority FE	No	No	No	Yes	Yes
Issuer × Seniority FE	No	No	No	No	Yes
Adj. R-squared	0.000	0.109	0.319	0.322	0.354
Observations	571,739	479,086	477,776	477,776	475,209
Outcome Mean	0.478	0.493	0.493	0.493	0.493

Notes: The dependent variable is *Near Par*, equal to one if the loan's fair value to principal ratio is between 0.99 and 1.01. Observations with FV/Principal above 1 are excluded, so the estimation sample is restricted to FV/Principal in [0, 1]. *PE-Affiliated* is a hand-coded indicator equal to one if the BDC has a private equity sponsor. *Seniority* classifies each loan's position in the capital structure (Senior Secured 1L, Senior Secured 2L, Senior Secured, Unitranche, Subordinated, Unsecured, Other Debt) based on the PitchBook investment type field. In the most restrictive specification, *Issuer* × *Seniority* is a unique identifier for each issuer–seniority pair, so the corresponding fixed effect compares PE and non-PE BDC holdings of the same borrower at the same level of the capital structure. Controls (not reported) include loan principal (millions USD), spread, accrual status, CLO, unitranche, syndicated, and maturity year. Standard errors are clustered at the BDC level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: PE Affiliation Across Valuation Thresholds

	(1) Within 1% of Par	(2) Within 5% of Par	(3) Not Distressed	(4) At Least 0.80
PE-Affiliated	0.059***	0.050***	0.044***	0.042***
	(0.020)	(0.009)	(0.008)	(0.008)
Loan-level Controls	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Issuer × Seniority FE	Yes	Yes	Yes	Yes
Adj. R-squared	0.354	0.370	0.353	0.355
Observations	475,209	475,209	475,209	475,209
Outcome Mean	0.493	0.811	0.887	0.935

Notes: Each column uses the controls and fixed effects from Column (5) of Table 3. The sample excludes observations with FV/Principal above 1. Column (1) defines the outcome as FV/Principal within 1% of par. Column (2) uses a 5% band around par. Column (3) follows the industry convention that prices below 0.90 are distressed; its outcome equals one for FV/Principal of at least 0.90. Column (4) equals one for FV/Principal of at least 0.80. Standard errors are clustered at the BDC level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: PE Affiliation and Near-Par Valuation Bunching

	(1)	(2)	(3)	(4)	(5)
PE-Affiliated	-0.012	0.001	0.004	0.046**	0.040**
	(0.039)	(0.028)	(0.027)	(0.018)	(0.016)
Management fee (%)			0.027		0.052**
			(0.052)		(0.024)
Management fee based on NAV			-0.071**		-0.053**
			(0.031)		(0.022)
Management fee stepdown			-0.017		0.013
			(0.036)		(0.020)
Income fee (%)			0.004		0.001
			(0.009)		(0.006)
Income fee hurdle (%)			-0.003		0.004
			(0.017)		(0.010)
Income fee catch-up			0.016		0.026
			(0.048)		(0.025)
Capital gains fee			0.168		0.060
			(0.122)		(0.085)
Capital gains fee (%)			-0.005		-0.001
			(0.009)		(0.006)
Capital gains fee hurdle (%)			0.005		0.008**
			(0.007)		(0.004)
PIK deferral fee			-0.010		0.023
			(0.039)		(0.025)
Incentive fee cap			-0.038		-0.056**
			(0.034)		(0.022)
Loan-level Controls	No	Yes	Yes	Yes	Yes
BDC Fee Controls	No	No	Yes	No	Yes
BDC Type Controls	No	Yes	Yes	Yes	Yes
Year-Quarter FE	No	Yes	Yes	Yes	Yes
Industry FE	No	Yes	Yes	Yes	Yes
Issuer FE	No	No	No	Yes	Yes
Seniority FE	No	No	No	Yes	Yes
Issuer-Seniority FE	No	No	No	Yes	Yes
Adj. R-squared	0.000	0.129	0.134	0.372	0.374
Observations	282,274	242,685	242,685	240,009	240,009
Outcome Mean	0.512	0.530	0.530	0.530	0.530

Notes: Near Par equals one when FV/Principal is between 0.99 and 1.01; FV/Principal is trimmed to [0, 1.10]. *PE-Affiliated* is a hand-coded sponsor indicator. Fee terms are matched by BDC CIK and quarter from the 2003Q4–2026Q2 panel. Columns 2–3 and 4–5 use identical samples and specifications within each pair; only fee controls change. Issuer-seniority fixed effects compare BDC holdings of the same borrower at the same capital-structure level. Unreported controls include principal, spread, accrual status, CLO, unitranche, syndicated, maturity year, and BDC type. The sample keeps loan-quarters held by multiple BDCs. Standard errors are clustered by BDC. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 6: BDC Fee Terms and Near-Par Valuation Bunching

	(1)	(2)	(3)	(4)
Management fee (%)	-0.097	0.027	0.055**	0.059**
	(0.073)	(0.053)	(0.026)	(0.025)
Management fee based on NAV	-0.051	-0.073**	-0.073***	-0.069***
	(0.047)	(0.030)	(0.021)	(0.020)
Management fee stepdown	0.004	-0.016	0.007	0.012
	(0.055)	(0.037)	(0.022)	(0.021)
Income fee (%)	0.003	0.004	0.007	-0.002
	(0.008)	(0.008)	(0.006)	(0.006)
Income fee hurdle (%)	0.009	-0.004	-0.008	-0.003
	(0.028)	(0.017)	(0.010)	(0.010)
Income fee catch-up	-0.019	0.021	0.064**	0.047*
	(0.044)	(0.049)	(0.029)	(0.026)
Capital gains fee	0.467**	0.170	0.110	0.032
	(0.180)	(0.119)	(0.087)	(0.082)
Capital gains fee (%)	-0.013	-0.005	-0.008	-0.000
	(0.010)	(0.009)	(0.007)	(0.006)
Capital gains fee hurdle (%)	-0.006	0.004	0.008*	0.009**
	(0.010)	(0.007)	(0.004)	(0.004)
PIK deferral fee	-0.043	-0.006	-0.003	0.017
	(0.051)	(0.043)	(0.026)	(0.025)
Incentive fee cap	-0.004	-0.038	-0.043*	-0.057**
	(0.049)	(0.036)	(0.026)	(0.023)
Loan has PIK	-0.111***	-0.103***	-0.074***	-0.076***
	(0.022)	(0.014)	(0.014)	(0.015)
PIK deferral $\times$ PIK loan	0.016	-0.030	-0.044	-0.031
	(0.087)	(0.073)	(0.047)	(0.053)
Loan-level Controls	No	Yes	Yes	Yes
BDC Fee Terms	Yes	Yes	Yes	Yes
BDC Type Controls	No	Yes	Yes	Yes
Year-Quarter FE	No	Yes	Yes	Yes
Industry FE	No	Yes	Yes	Yes
Issuer FE	No	No	Yes	Yes
Seniority FE	No	No	Yes	Yes
Issuer-Seniority FE	No	No	No	Yes
Adj. R-squared	0.016	0.137	0.340	0.375
Observations	282,274	242,685	241,665	240,009
Outcome Mean	0.512	0.530	0.530	0.530

Notes. Near Par equals one when FV/Principal is between 0.99 and 1.01; FV/Principal is trimmed to [0, 1.10]. Fee terms are matched by BDC CIK and quarter from the 2003Q4–2026Q2 panel. Fee and hurdle rates are percentage points; the other contract terms are indicators. NAV-based fees use net assets or net assets less cash. PIK deferral postpones fees on payment-in-kind income until cash receipt; *Loan has PIK* is based on the PitchBook PIK component. Unreported controls include principal, spread, accrual status, CLO, unitranche, syndicated, maturity year, and BDC type. The sample keeps loan-quarters held by multiple BDCs. Standard errors are clustered by BDC. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

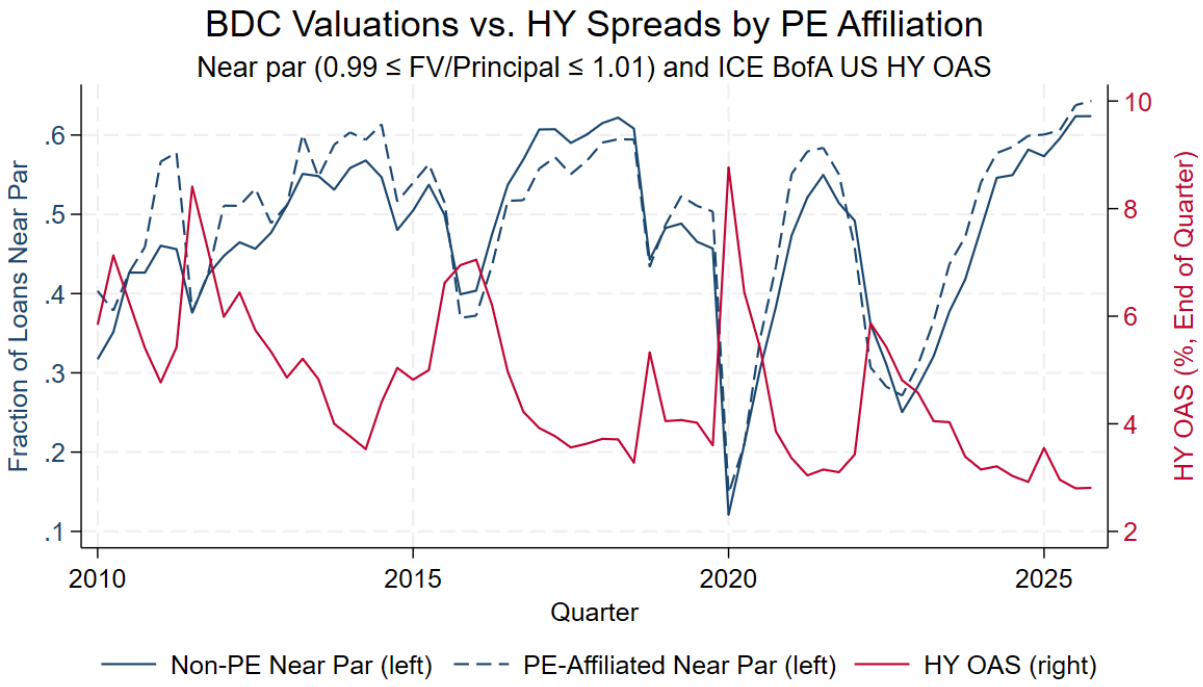


Figure 4: Change in BDC Valuations (PE vs. non-PE) in response to High Yield Spreads

Table 7: PE Affiliation and the Sensitivity of BDC Valuations to High Yield Spread Changes

	(1) Baseline	(2) + PE	(3) PE × Δ HY OAS (pp)	(4) PE × Δ HY OAS (%)
Δ HY OAS (pp)	-0.016***	-0.016***	-0.014***	
	(0.002)	(0.002)	(0.002)	
Δ HY OAS (%)				-0.001***
				(0.000)
PE × Δ HY OAS (pp)			-0.004	
			(0.003)	
PE × Δ HY OAS (%)				-0.001*
				(0.000)
PE-affiliated BDC		0.048***	0.047***	0.047***
		(0.017)	(0.017)	(0.017)
Year FE	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes
Issuer × Seniority FE	Yes	Yes	Yes	Yes
Adj. R-squared	0.322	0.323	0.323	0.323
Observations	537,971	537,971	537,971	537,971
Outcome Mean	0.515	0.515	0.515	0.515

Dependent variable: Near Par (= 1 if $0.99 \leq$ FV/Principal ≤ 1.01).

The sample trims FV/Principal to [0, 1.10].

Cols. (1)–(3): spread change = QoQ level change in EOP HY OAS (pp).

Col. (4): spread change = QoQ percentage change in avg HY OAS.

Controls: loan size (principal), initial spread, accrual, maturity year and indicators for CLO and Syndicated. All specifications include fixed effects for issuer, loan seniority, industry, year, and quarter.

Standard errors are clustered at the BDC level.

Source: ICE BofA US High Yield Index OAS (FRED).

Table 8: Distribution of BDC Holders per Loan-Quarter

Holders (N)	Count	Share (%)
2	20,988	66.82
3	5,708	18.17
4	2,196	6.99
5	1,088	3.46
6	506	1.61
7	299	0.95
8	240	0.76
9	119	0.38
10+	267	0.85

Notes: The table reports the distribution of the number of BDC holders across debt_id-quarter cells in the residualized dispersion sample. Counts above nine holders are top-coded at 10+.

Table 9: Dispersion in Residual BDC Marks Within Loan-Quarter Cells

Metric	Mean	SE	P25	P75	Obs.
Residual variance	0.010083	0.000260	0.000000	0.000241	31,411
Residual SD	0.035074	0.000531	0.000471	0.015515	31,411
Residual range	0.060113	0.000910	0.000715	0.026159	31,411
Residual IQR	0.049037	0.000778	0.000654	0.021088	31,411
Residual mean abs. deviation	0.025446	0.000385	0.000338	0.011252	31,411

Notes: The sample is restricted to debt-like investments with non-missing `debt_id`. Each observation is first collapsed to one BDC $\times$ debt_id $\times$ quarter cell. Residual marks come from a regression of FV / Principal on principal, spread, accrual, CLO, unitranche, syndicated, and maturity year, with year-quarter and issuer $\times$ seniority fixed effects. Dispersion is then computed across BDCs within the same debt_id-quarter cell after excluding cells with only one BDC holder. In addition to variance and range, the table reports residual standard deviation, residual interquartile range, and residual mean absolute deviation as alternative dispersion measures.

Table 10: Dispersion in Residual BDC Marks by Number of Holders

BDC holders (N)	Avg. variance	SE	Avg. range	SE	Obs.
N > 1	0.010083	0.000260	0.0601	0.0009	31,411
2	0.009039	0.000330	0.0412	0.0009	20,988
3	0.011328	0.000594	0.0746	0.0023	5,708
4	0.013924	0.000925	0.1082	0.0047	2,196
5	0.011317	0.001086	0.1073	0.0065	1,088
6	0.014361	0.001685	0.1478	0.0114	506
7	0.015240	0.002092	0.1757	0.0162	299
8	0.011873	0.001905	0.1726	0.0167	240
9	0.013850	0.003799	0.1817	0.0265	119
10	0.011685	0.002793	0.1829	0.0284	91
11	0.022654	0.007569	0.2574	0.0513	51
12	0.008221	0.003087	0.1688	0.0355	58
13	0.007070	0.004232	0.1630	0.0598	19
14	0.008702	0.005221	0.2240	0.0815	12
15	0.002830	0.001153	0.1464	0.0374	15
16	0.013222	0.009160	0.2623	0.1007	10
17	0.000287	0.000211	0.0424	0.0210	3
18	0.000390	.	0.0923	.	1
20	0.005484	0.003539	0.2533	0.1029	3
22	0.005697	.	0.3677	.	1
23	0.008626	.	0.3844	.	1
24	0.008143	.	0.3754	.	1
25	0.008661	.	0.4056	.	1

Notes: Each row reports the mean residual mark variance and mean residual mark range across debt_id-quarter cells with the indicated number of BDC holders. Residual marks come from a regression of FV / Principal on principal, spread, accrual, CLO, unitranche, syndicated, and maturity year, with year-quarter and issuer $\times$ seniority fixed effects. Standard errors are the standard error of the row-specific mean across loan-quarter cells. The first row pools all cells with more than one BDC holder.

Table 11: BDC Type and At-Par Marks Within Loan-Seniority-Quarter Cells

Sample	Outcome	NT mean	Private coef.	SE	Public coef.	SE	
All mixed-type cells	FV / Principal = 1	0.2009	0.0381	0.0271	0.0999	0.0601	1
All mixed-type cells	FV / Cost = 1	0.0484	0.0490	0.0185	0.1026	0.0624	1
Mixed cells incl. non-traded	FV / Principal = 1	0.2009	0.0292	0.0264	0.1158	0.0661	1
Mixed cells incl. non-traded	FV / Cost = 1	0.0484	0.0474	0.0174	0.1053	0.0708	1

Notes: The sample starts from the type-classified PitchBook data and keeps debt-like positions with non-missing issuer and debt identifiers. Observations are first collapsed to one BDC $\times$ debt_id $\times$ quarter cell. The analysis then compares BDCs within the same issuer $\times$ debt_id $\times$ seniority $\times$ quarter cell and restricts to cells held by more than two BDCs. Coefficients come from regressions of the at-par indicator on private and public BDC indicators, with non-traded BDCs omitted and loan-seniority-quarter fixed effects absorbed. The main outcome is an indicator for FV/Principal $= 1$; FV/Cost $= 1$ is reported as a secondary specification. Standard errors are clustered at the BDC level.