Direct Lenders and Financial Stability*

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Abstract

Direct lenders have gained substantial market share in lending to middle-market firms. We assess their implications for financial stability across three channels: (1) contagion via funding chains and fire sales, (2) weaker monitoring due to close ties with private equity sponsors, and (3) reduced lending in distress. The first two risks are largely mitigated by institutional factors. The third, lending pullbacks during downturns, remains uncertain due to limited empirical evidence. Overall, we argue that direct lenders pose no greater systemic risk than banks, though this assessment may evolve as the sector grows and new vulnerabilities emerge.

Introduction

Since the 2008 Global Financial Crisis (GFC), corporate lending has increasingly migrated away from traditional banks to various nonbank entities (Chernenko et al., 2022; Davydiuk et al., 2024a; Gopal and Schnabl, 2022). Among them, so-called "direct lenders" have grown considerably. Direct lenders raise capital through closed-end funds in both private and public markets. They are "direct" in the sense that they typically originate loans without bank involvement. We estimate the size of direct lenders in North America at around $1.1 trillion as of December 2023, positioning them as major players alongside the $1.4 trillion leveraged loan and $1.6 trillion high-yield bond markets.[1]

Due to their rapid expansion and size, regulators and policymakers have initiated efforts to assess the direct lending space (Federal Reserve Board, 2024; International Monetary Fund, 2024; Brookings, 2024). These reports do not express pressing concerns about direct lenders regarding financial stability. Instead, they primarily highlight that the general lack of data in this space makes it difficult to conduct a thorough analysis of potential risks.

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[1]Sources: LSTA US Leveraged Loan Index and S&P US High Yield Corporate Bond Index as of December 2023.

This point is often contended by industry participants. While direct lenders are not subject to centralized data collection by regulators and policymakers similar to traditional banks, Managed Funds Association (2024) details the wealth of information available on private credit from various data sources.

In this article, we provide our own assessment of financial stability concerns related to direct lenders. We do so through a combination of literature review and independent analysis. We focus on private credit funds and business development companies given their data availability and that they constitute around 95% of private credit investment vehicles (International Monetary Fund, 2024).[2] Our goal is to provide a comprehensive list of concerns alongside quantitative guidance that will be useful to policymakers. We also tailor our discussion to the unique institutional features of direct lenders and the private credit market. As such, we hope that our insights will help to shape ongoing discussions among industry members and the regulatory community.

Background and Key Institutional Details

Despite their growing prominence, direct lending is still esoteric in many ways. In this section, we provide context for their growth over the past 20 years. In addition, we present essential details on the structure and business model of direct lenders, highlighting their commonalities that also make them distinct from traditional commercial lenders.

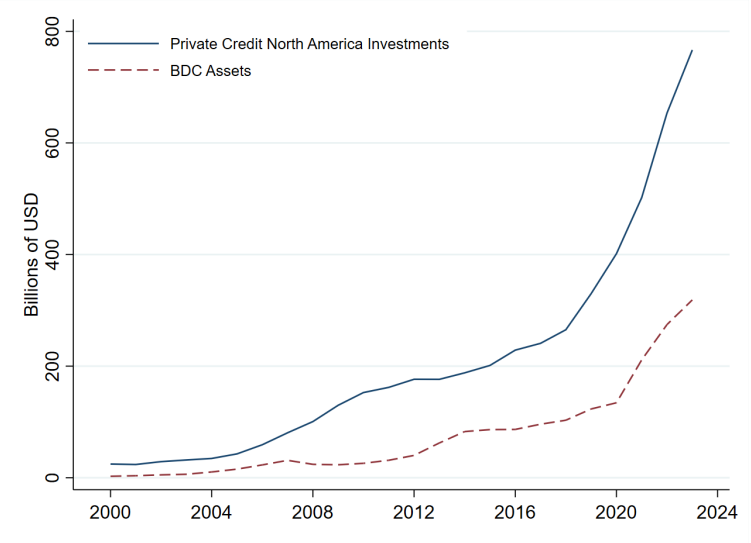
Post-GFC Rise of Nonbank Lenders

The 2008 Great Financial Crisis ("GFC") led to the introduction of banking regulations that effectively restricted credit supply from the banking sector (Erel and Inozemtsev, Forthcoming). On a global scale, "Basel III", coordinated by the Bank for International Settlements in 2013, aimed to increase bank capital and strengthen liquidity standards. In the U.S., stress tests mandated by the Dodd-Frank Act further raised regulatory scrutiny for large bank holding companies. Additionally, the Office of the Comptroller of the Currency, the Federal Reserve Board of Governors, and the Federal Deposit Insurance Corporation collectively revised the Interagency Guidance on Leveraged Financing in 2013 to tighten banks' underwriting practices and limit their exposure to leveraged lending.

A diverse range of nonbank lenders stepped in to fill the post-GFC lending gaps. In the bank-syndicated loan market, institutional investors such as hedge funds, mutual funds, and particularly collateralized loan obligations (CLOs) became major purchasers of term loans (Irani et al., 2021). Kim et al. (2018) find that supervisory guidance prompted nonbank entry, with their lending potentially supported by borrowing from traditional banks. The post-GFC shift away from traditional banks has been especially evident among small and mid-sized firms. For middle-market companies – those with annual revenues between $10 million and $1 billion – research by Chernenko et al. (2022), Davydiuk et al. (2024a), and Jang (2024) shows that nonbank lenders such as finance companies, insurance firms, hedge funds, and direct lenders have increasingly been originating loans without involving bank syndication. Davydiuk et al. (2024a) specifically show that direct lenders stepped in to substitute for

[2]CLOs represent nearly all of the remaining share but they are distinct in that they do not originate loans.

Figure 1: Growth in Direct Lenders



Sources: Preqin, Refinitiv, and SNL Financial.

middle-market lending done by banks that were effectively hampered by regulatory stress tests and new accounting standards for off-balance sheet assets. In the small business sector, Gopal and Schnabl (2022) report that finance companies and fintech lenders have significantly expanded their lending activities.

Shown in Figure 1, the outstanding investments of private credit funds in North America as of December 2023 is $800 billion and $300 billion for business development companies.[3] Taken together, direct lenders are around $1.1 trillion. Some in the industry believe the sector to be even larger (see, e.g., Robin Wigglesworth, 2024), but these types of calculations depend on the types of investment funds included.

The precise causes of the growing market share of direct lenders are still up for debate. For example, Chernenko et al. (2024) argue that it is simply more profitable for banks to lend to direct lenders than to the underlying companies directly. This view aligns with the broader notion that private credit serves as a substitute for bank lending, though it can also be seen as a complement. For example, Haque et al. (2024) document that private credit funds often cater to bank borrowers by providing more junior debt alongside banks' senior secured debt.

Direct Lending Funds

There are two main types of direct lending funds: private credit funds and business development companies (BDCs). Both types are structured as closed-end funds, but they differ in how they raise capital and are regulated.

[3]The $800 billion in investments by private credit funds is estimated based on the difference between total funds raised and dry powder according to Preqin. This figure does not account for the leverage employed by these funds and is therefore an underestimate. If one assumes leverage of 25% (Block et al., 2024), the total investments made by private credit funds exceed $1 trillion.

Similar to private equity and venture capital funds, private credit funds raise capital through a limited partnership structure with a defined lifespan. The investors in these funds, known as limited partners, are typically institutional investors such as pension funds, sovereign wealth funds, insurance companies, endowments, and high-net-worth individuals (Block et al., 2024; Federal Reserve Board, 2023).

Established under the Small Business Investment Incentive Act of 1980, BDCs exist solely in the U.S. and were designed to promote investments in small and mid-sized businesses. Like private credit funds, BDCs operate as closed-end funds. Unlike private credit funds, BDCs are subject to specific SEC regulations, receive special tax treatment, and can raise capital through public equity markets. Non-traded BDCs, similar to private credit funds, primarily raise capital from institutional investors, while traded BDCs, due to their listing status, also attract capital from retail investors and mutual funds (Davydiuk et al., 2024a,b).

Despite the differences noted above, private credit funds and BDCs share similar key features.

First, both primarily focus on "direct lending", which means that they originate loans directly without involving bank syndication (Block et al., 2024).

Second, there is a significant overlap in deals across private credit funds and BDCs. Not only do they target similar types of borrowers, notably middle-market firms often backed by private equity, but also many asset managers allocate loans belonging to the same deals across both their private credit funds and BDCs. Using Pitchbook data, Jang (2024) shows that, among asset managers with private credit funds and BDCs, 43% of the loans held by their private credit funds also appear in their BDCs.

Third, private credit funds and BDCs rely heavily on "mark-to-model" valuations for their loan assets rather than "mark-to-market" valuations. This aspect differentiates them from CLOs and other credit funds whose assets (e.g., broadly syndicated loans) are relatively more liquid (i.e., they frequently trade on the secondary market). Because model-based valuations inherently rely on subjective inputs, many private credit funds and BDCs also rely on external review provided by third-party appraisal firms (Jang, 2024; Jang and Kim, 2024).

Fourth, while private credit funds and BDCs may differ on their reliance on debt – e.g. the former relying mostly on bank loans while the latter relying also on publicly issued bonds – they are both heavily equity financed. Private credit funds (BDCs) typically have debt-to-asset ratios around 25% (50%).[4]

Lastly, because most private credit funds and BDCs are structured as closed-end funds, investors cannot easily withdraw their shares at their net asset value until fund liquidation.[5] As we discuss later in this article, this feature is critical to assess the financial stability con-

[4]Block et al. (2024) report an average (median) debt-to-asset ratios of 40% (25%) for private debt funds in the US. Loan Syndications and Trading Association (2025) report a similar figure of 30% (debt-to-equity ratio of 0.42) for non-BDC private corporate credit funds based on a weighted average of AUM. In the past, BDCs tended to have ratios between 30-50% (Davydiuk et al., 2024a). However, the Small Business Credit Availability Act of 2018 increased the maximum allowable debt-to-equity ratio for BDCs from 1:1 to 2:1. Since then, the leverage of BDCs have increased to be in the 40-60% range.

[5]Recently, there has been a rise of perpetual-life BDCs, which allows for quarterly investor redemptions capped typically at 5% of net asset value. This strategy made its debut in early 2021 with the introduction of the Blackstone Private Credit Fund (BCRED). As of 2023, perpetual-life BDCs managed around $112 billion, representing around a third of total BDC assets. See, e.g., the LSTA website.

cerns regarding direct lenders as it mitigates the possibility of bank-style runs and associated financial fire sales as in CLOs.

Risks of Individual Institution Failures

Before proceeding to an analysis of financial stability, we must confront the primary question of whether and how individual direct lenders can fail. After all, financial crises typically involve the simultaneous distress and failures of multiple financial institutions. We will explore later the potential channels through which the failure of individual institutions can propagate, but for now, we focus on the primary stage.

It is well known that banks can, and do, fail. Banks are highly-levered financial institutions whose solvency is therefore threatened by seemingly small declines in the values of their assets. This potential instability is further heightened by the fact that banks fund themselves primarily with demandable debt in the form of deposits. For these reasons, banks are heavily monitored and regulated by various federal and state agencies tasked with ensuring the soundness of the banking system. Despite their efforts, however, individual banks still fail due to various reasons ranging from poor risk management to adverse economic conditions. When banks approach insolvency, regulators such as the Federal Reserve and FDIC step in, often providing backstop liquidity and facilitating a takeover by another bank.

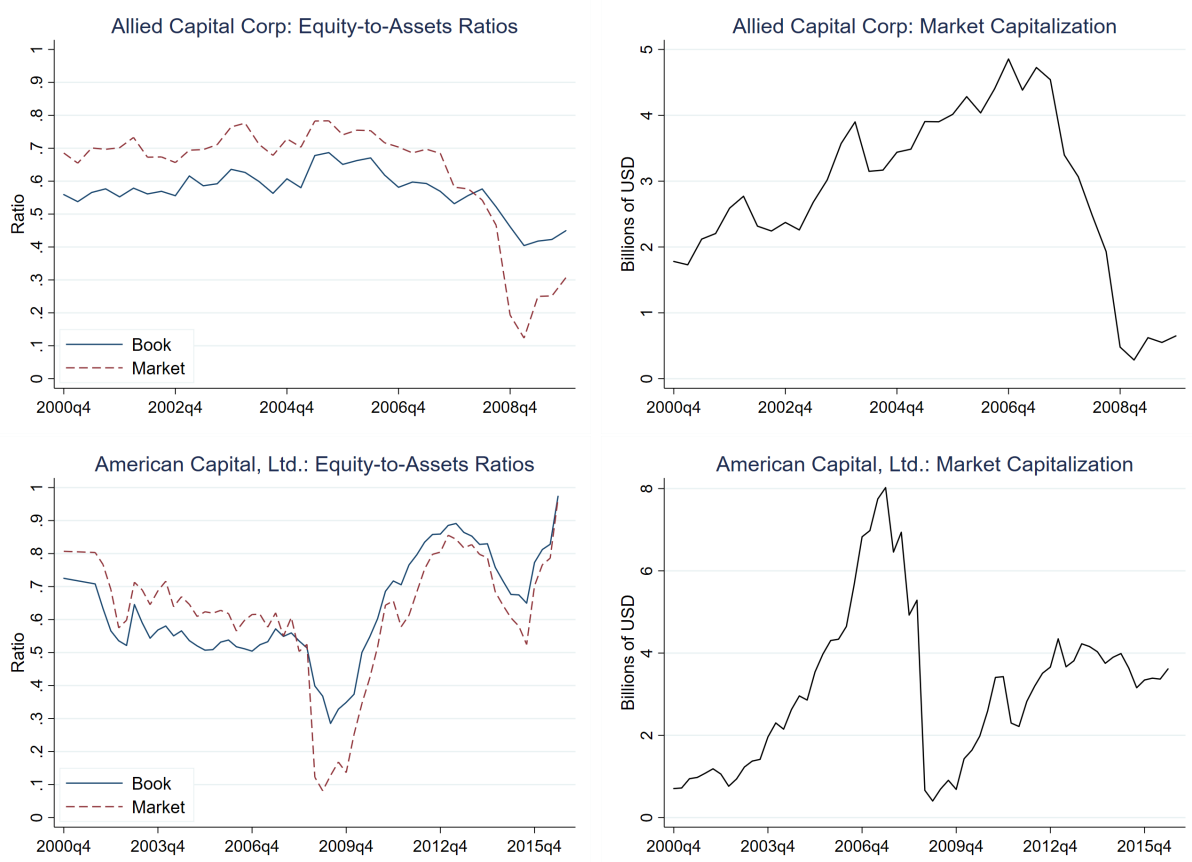
What about direct lenders? Can they fail and, if so, how? The answer to the first question is, of course, yes. Any institution that is at least partially funded by debt can become insolvent if the value of its assets declines. It may seem that direct lenders are less likely to fail than banks because they maintain much lower leverage. As described previously, direct lenders typically operate with debt-to-asset ratios below 50% versus above 90% for banks. However, the portfolios of direct lenders are also riskier and less diversified. Therefore, whether banks or direct lenders are more prone to failure remains an empirical question, albeit a challenging one given the opacity of assets and rarity of such events.

Instead of conducting a quantitative analysis using today's markets, we take a different approach. To assess how direct lenders can fail, we consider a few notable historical examples. Specifically, we focus on failures of publicly-traded BDCs and study their market values before collapse. We believe this approach is instructive as the cases we discuss below are relatively unknown compared to those in the banking sector given the historically small size of the direct lending sector.

Perhaps the most prominent collapse of a direct lender in recent memory is Allied Capital Corp ("Allied"), one of the largest BDCs operating during the 2000s. Allied's share price declined by over 90% during the GFC amid concerns about its loan portfolio (Figure 2). For several years prior, hedge fund manager David Einhorn had scrutinized Allied and its loan portfolio, suspecting that the BDC was inflating its asset values. Einhron detailed this saga in his book, *Fooling Some People All the Time*. Ultimately, Einhorn's hypothesis was validated as the GFC revealed the true deterioration of Allied's loan assets. In early 2010, Allied was acquired at a steep discount by Ares Capital Corp ("ARCC"), a rival and one of the largest BDCs at the time.

American Capital Ltd ("ACAS") also suffered during the GFC due to the performance of its investments and it actually defaulted on its debt in June 2008. Unlike Allied, however, ACAS managed to survive the GFC. It spent the next several years trying to recover and

Figure 2: GFC-Induced BDC Failures



Sources: Refinitiv and SNL Financial.

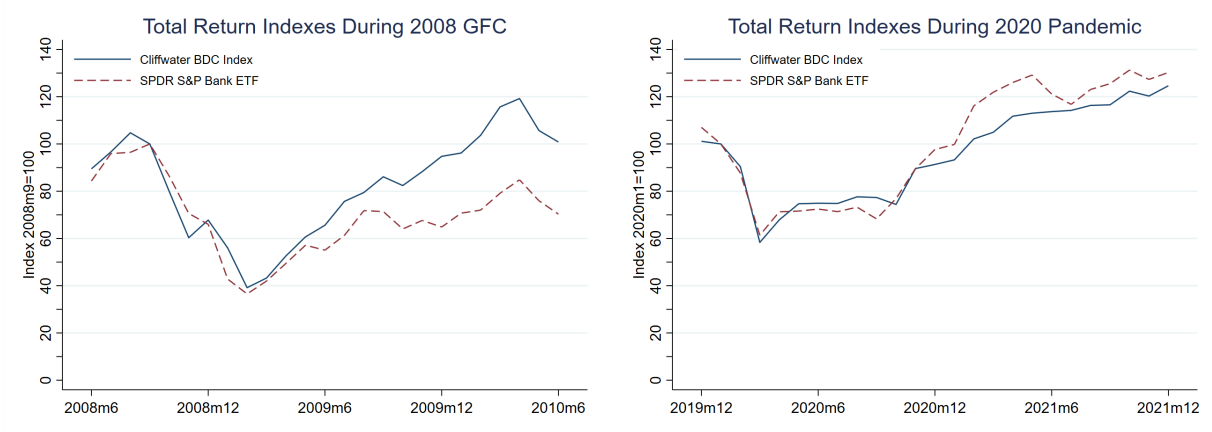
managed to do so with some success. However, it never quite regained its footing and ultimately sold itself to ARCC in 2016, just like Allied.

Taken together, the Allied and ACAS cases illustrate several points about distress and failure of direct lending funds. Just like banks and other financial institutions, direct lenders can fail due to losses associated with poor investments. In Allied's case, this was arguably due to poor risk management and reluctance to recognize losses. Also just like banks and other financial institutions, direct lending funds are vulnerable to sudden failures during episodes of financial distress. However, unlike banks, large direct lending fund failures – even in the absence of regulatory oversight – appear to be handled smoothly in the private market through M&A transactions without triggering further failures.

As another relevant historical episode, we can consider what happened to direct lending funds during the COVID-19 pandemic in 2020 to 2021. Although not as severe as the GFC, this time period represented significant financial market distress and large declines in valuations. In contrast to the failures of large BDCs during the GFC, we only observed the effective failure of smaller BDCs. HCAP and Garrison were both purchased by Portman Ridge in 2021 while MVC capital was purchased by Barings in December 2020. Other BDCs that experienced stress on their investments were able to weather the market turmoil.

But what about the quantitative risk of failure? So far we have only discussed individual

Figure 3: Equity Returns During Crises: BDCs vs Banks



Sources: Bloomberg, CRSP, and authors' calculations.

instances of direct lender collapses and distress. Chernenko et al. (2024) attempt to quantify the risk of failures among BDCs. They apply the Federal Reserve's bank stress test methodology to BDCs and find that, even after accounting for the riskiness of BDC assets, BDCs are significantly better capitalized than typical banks. For our purposes, we can also look to the past for guidance. Interestingly, we observe in Figure 3 that the declines in market values of equity in banks and BDCs (i.e., the only publicly traded direct lenders) are relatively similar during periods of crisis. This suggests that, to the extent that BDC assets are riskier is offset by lower leverage. These observations also support the view that market discipline, which Davydiuk et al. (2024b) shows to be important in shaping BDC investments, helps to ensure similar risk-adjusted performance across lender types.

In conclusion, our observations suggest that the sources of distress and failure risk for direct lenders are comparable to those faced by banks. This view differs slightly from the more optimistic tone of Chernenko et al. (2024), who find less risk to solvency among BDCs compared to banks. Our view is in line with the growing consensus that the ultimate cause of bank failures is almost always a deterioration of bank fundamentals (Correia et al., 2024).

Financial Stability Analysis

We now shift our focus to the central issue: financial stability. Our discussion examines how individual risks are amplified or mitigated compared to a hypothetical scenario in which commercial banks, rather than direct lenders, serve as the primary debt providers. This framing is motivated by the significant expansion of direct lending over the past decade as a replacement for traditional bank financing. In this context, we also seek to compare financial stability in the current environment with that of the pre-GFC era.

Financial fragility extends beyond the distress or failure of individual institutions. Regulators, in particular, focus on the connections between financial institutions to assess "systemic risk" and when designing macroprudential policies.

Leveraging the existing institutional knowledge and academic findings, we assess direct lenders' contribution to systemic risk in the following forms: (1) contagion through funding

chains and fire sales, (2) looser monitoring from close ties with the private equity industry, and (3) reduced lending following financial distress.

Contagion Risk

We examine the extent to which distress or failure in a direct lender could spread to other financial institutions. The concept that the distress or failure of one institution can impact others is broadly known as "contagion." Contagion may occur either directly through funding chains or indirectly via fire sales of assets.

Banks are often seen as having substantial contagion risk due to their funding structure. They frequently lend to each other and depend heavily on short-term debt, such as demandable deposits and repurchase agreements. This reliance generates significant counterparty, rollover, and run risk, especially when there are concerns about their solvency.

In contrast, we believe that direct contagion risk from the distress of direct lenders via funding channels is relatively limited. Unlike banks, direct lenders seldom lend to one another and raise capital through long-term sources. Their funding generally comes from buy-and-hold investors, such as pension funds and insurance companies, through limited partnership equity commitments and publicly issued bonds, and from banks in the form of revolving loans with typical five-year maturities. While publicly traded BDCs may raise equity from retail investors, their closed-end fund structure inherently protects against redemption risk.

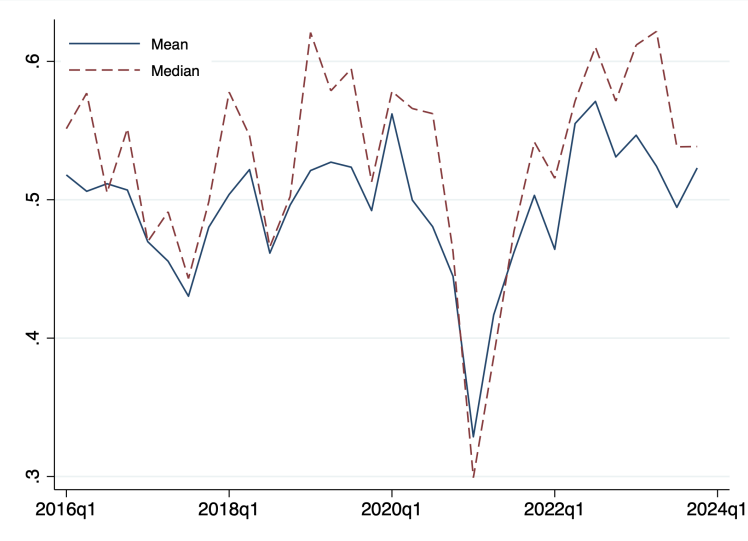
There could be some concern that direct lenders might transmit distress to banks through their credit lines. For instance, during the COVID-19 pandemic, banks experienced significant credit line drawdowns by large firms (Greenwald et al., 2023) and nonbanks such as REITs (Acharya et al., 2024).

However, we do not believe direct lenders' reliance on bank credit lines poses a significant risk for several reasons. First and foremost, direct lenders likely represent a modest share of bank credit line portfolios. Even when using aggressive assumptions in back-of-the-envelope calculations, it is hard to generate meaningful capital losses to banks through their financing to direct lenders. Specifically, we estimate hypothetical losses from direct lender leverage in a crisis would be less than 1% of bank capital in such scenarios.[6] Second, although bank credit line commitments to direct lenders have increased substantially in recent years, these credit lines are more heavily collateralized and, therefore, have a significantly lower loss-given-default than those extended to other corporate borrowers (Haque et al., 2025).

Third, as shown in Figure 4, we did not observe a substantial increase in credit line utilization by BDCs during the pandemic. While BDCs slightly increased drawdowns in the first quarter of 2020, likely as a precaution, they paid them down by early 2021, even below pre-pandemic levels. This suggests that banks actively monitor BDC performance (e.g.,

[6]We approximate the exposure of banks to direct lenders as of December 2023 at $532 billion. BDCs contribute $105 billion through revolving credit facilities and term loans based on data from Capital IQ. The $427 billion contribution from private debt funds relies on an aggressive assumption that 40% of their assets are financed through bank debt (Block et al., 2024). If we assume a 15% default rate and 20% recovery rate, which roughly capture the performance of junk-rated debt during the GFC, aggregate losses from direct lender leverage would be $45 billion. This amount represents around 5% of the $1.2 trillion of aggregate equity capital for the subset of banks that we observe lending to direct lenders. Furthermore, if we use default and recovery rates consistent with the BBB ratings more typical of BDCs, the hypothetical losses from direct lender leverage in a crisis would be less than 1% of bank capital.

Figure 4: BDC Credit Line Utilization/Commitment (2016-2023)



Sources: Capital IQ.

through financial covenants) and impose restrictions on debt capacity as needed. Fourth, many large direct lending fund managers diversify their funding across multiple private credit funds and BDCs, so unless they all rely on the same bank, credit line drawdown risk is likely spread across several banks.

Lastly, financial institutions that invest in illiquid assets while funding themselves with liquid assets, such as deposits or open-end funds, are well-known to face fire sale risk due to strategic complementarities in investor redemptions (Diamond and Dybvig, 1983; Goldstein et al., 2017). While one might assume that closed-end funds are immune to fire sale risk, research on CLOs suggests that this isn't entirely the case; closed-end funds can still be vulnerable depending on the contractual design of their funding structures such as through covenants (Kundu, 2023). Such fire-sale risk has been shown to exist and studied in the leveraged loan market (Elkamhi and Nozawa, 2022). For the case of BDCs and private credit funds, Chernenko et al. (2024) argue that fire sales could occur as they approach their leverage constraints (regulatory for BDCs and financial covenants for other funds). In their deleveraging exercise, they predict that BDCs would sell up to 10% of their assets in a stressed scenario.

However, we do not believe indirect contagion via fire sales is a significant risk for direct lenders for two reasons. First, the loan assets of direct lenders infrequently trade unlike, e.g., the broadly syndicated loans of CLOs. Therefore their market values cannot observably decline because they mostly do not exist. Second, even if an individual direct lender sold its loan assets at a deep discount, other direct lenders that hold loans to the same company would not be forced to update their fair values accordingly. This is because direct loans are classified as Level 3 assets whose fair valuations are determined using model-based approaches. Without being forced to recognize declines in market value, financial fire sales would not spread or further depress prices. This is not to suggest that investors are incapable of discerning inflated Level 3 asset values – Allied's failure in 2008 serves as a notable

counterexample. Instead, the key point is that the primary mechanism by which financial fire sales trigger indirect contagion is absent in the case of direct lenders.

In conclusion, risks of contagion seem to be lower overall in direct lending sector compared to the banking sector.

Looser Monitoring Risk

The private equity (PE) industry has historically been marked by significant cyclicality, exemplified by the junk bond crash of the late 1980s. This event highlighted the dangers of excessive leverage with weak credit risk monitoring (Kaplan and Stein, 1993). In response, stability was fostered by the syndicated loan market. Loan-originating banks, through the use of covenants and the cultivation of long-term relationships with PE sponsors, played a critical role in monitoring credit risk and resolving financial distress (Nini et al., 2012; Ivashina and Kovner, 2011).

Block et al. (2024) report that 78% of US direct lending activity now supports PE buyouts, with leading direct lending funds operated by traditional PE firms such as Blackstone, Carlyle, and KKR. Such close ties between direct lenders and PE sponsors raises a critical question: can direct lenders replicate the stabilizing role that banks historically played in the PE industry? Answering this question is central to understanding financial stability, as PE sponsors inherently strive to maximize returns and benefit their equity stakes by exploiting cheap debt and leveraging their financial sophistication to negotiate looser credit terms (Axelson et al., 2013; Ivashina and Vallee, 2022).

We identify two potential risks that can arise from such close ties between the private credit and PE industries. First, as direct lenders rely heavily on deal flows coming from PE sponsors, a potential bargaining power imbalance may incentivize direct lenders to act as superchargers for PE sponsors, facilitating riskier deals. Second, the growing prevalence of PE-affiliated direct lending introduces concerns about PE firms using their direct lending arms to finance its own buyout deals at terms below market standards.

The findings by Jang (2024) suggest that both risks are likely to be low. Examining a large sample of PE-backed firms borrowing from both direct lenders and banks, the auothor finds that direct lenders tend to impose stricter protective covenants than banks. Moreover, during the COVID distress period, direct lenders required more equity injections from PE sponsors during renegotiations, demonstrating their ability to enforce greater "skin-in-the-game" from sponsors. These findings align with survey results from Block et al. (2024), which indicate that direct lenders build stable relationships with PE sponsors without compromising their bargaining power.

Furthermore, using PitchBook data – a leading database on US PE buyouts and private credit deals – the author finds that "sponsor-levered" deals have become increasingly rare. As of today, they account for less than 10% of loans issued by PE-affiliated lenders. An industry practitioner interviewed on the matter noted that such deals are often stigmatized by the investors of the involved funds due to concerns over potential wealth transfers across funds, documented by Buchner et al. (2022).

Reduced Lending Risk

Thus far we have focused on financial stability concerns from the perspective of distress at financial institutions. However, it is often argued that financial crises are only "bad" if they negatively impact the real economy. The underlying theory is that under-capitalized financial institutions cannot intermediate as well and thus causes real economic activity to decline (Acharya et al., 2016). This perspective underlies well-known systemic risk measures such as $SRISK$, which is publicly available on NYU's V-Lab website.

In short, it is unclear whether direct lenders would cut back lending more so than banks that are similarly distressed. The main reason for our uncertainty is lack of comparable empirical evidence. While many studies have used financial accounts data or loan-level data from Dealscan or the Shared National Credit (SNC) Program to examine differences in bank and nonbank lending across economic cycles (Boyarchenko and Elias, 2024; Fleckenstein et al., 2024), these databases do not distinguish between lending by direct lenders and lending by other nonbanks, such as insurance companies, pension funds, and mutual funds.

A relevant empirical example for direct lenders comes from the context of BDCs, where Davydiuk et al. (2024b) document substantial negative impacts on BDC lending following the exclusion of BDCs from stock indexes in 2014. This is likely due to BDCs operating as perpetual-life vehicles, which typically fund investments using capital markets. In contrast, private credit funds, as fixed-life vehicles, draw on capital commitments as they make investments. Consequently, the extent to which private credit funds reduce lending in response to distress likely depends on their available dry powder, which is not systematically tracked in existing databases. Moreover, even if we obtain reliable estimates of dry powder to quantify private credit funds' lending responses under distress, we have not observed a similar natural experiment in the banking sector to which we can compare the magnitudes of the responses.

Even if one studied the lending responses of banks and direct lenders to the same shock (e.g., the GFC), it would be difficult to account for the fact that direct lenders tend to fund riskier borrowers whose demand for credit would differ compared to bank-only borrowers. Chernenko et al. (2024) argue that the reduced lending risks stemming from the deleveraging of BDCs during a stress scenario are substantial. In their analysis of hypothetical stress scenarios, they predict that the assets of BDCs would shrink on the order of 10-20% as they cut lending and pay down debt. They conclude that "[s]uch reductions in lending could adversely affect their middle market borrowers and the broader economy."[7] However, their analysis does not tell us how banks would cut lending to the same set of borrowers in a hypothetical world without direct lenders. Aramonte and Avalos (2021) find that aggregate private credit flows are equally as procyclical as leveraged loan flows, which would suggest that the lending responses of direct lenders and banks would be similar all else equal.[8]

Taking a step back, the business model of the lending institution (i.e., direct lending fund versus bank) may not even be the most important factor affecting lending in future crises.

[7] Moody's (2024) also conducts similar stress tests on BDCs using more conservative estimates of loan loss rates given default. Although they do not explicitly model deleveraging dynamics as Chernenko et al. (2024) do, their report similarly concludes that a handful of BDCs may violate covenants on existing credit lines and, as a result, may be forced to deleverage and reduce lending.

[8] The similar observed procyclicality in both markets may also stem from their historical reliance on private equity deal flow. In this context, it could be useful to assess how direct lenders and banks will compare in terms of deal origination capabilities moving forward.

Rather, we suspect that policy interventions aimed at stimulating lending will be the driving force in shaping such credit decisions. From this perspective, the question of whether direct lenders would reduce their lending more than similarly-distressed banks during a future crisis is a moot one.

Developing Risks into the Future

The direct lending sector continues to grow given the recent outperformance of private credit and corresponding investor optimism (J.P. Morgan Asset Management, 2024).[9] Alongside this growth, the sector continues to evolve. Therefore, it is possible that significant risks will arise in the future that are not as meaningful in today's markets. In this section, we consider such potential risks that will be substantial in the future if current trends continue.

The first potential concern is that resolving the failure of individual direct lenders will be more challenging in future crises. To date, we have not observed a case in which a relatively healthy and large direct lender (e.g., ARCC) was not available to purchase a struggling competitor (e.g., Allied). If such an entity was not available, large direct lending failures could hypothetically be more catastrophic. Then again, we suspect that two relevant factors would assuage such concern. The first is that the funding structure of BDCs (i.e., lack of large-scale demandable equity and debt) would prevent the "forced" sales of assets in the first place. Rather, bankruptcy proceedings should instead lead to an orderly liquidation over time if needed. Second, even if one distressed fund began selling its illiquid loan assets and creating negative price pressure, the ability of direct lending funds to mark their investments to model in times of market distress would prevent indirect contagion as discussed earlier.

Another potentially concerning trend is the increasing complexity of direct lenders. For example, BDCs in the past few years have begun to fund more of their investments through vehicles such as sub-funds and joint ventures. The additional layers created by such investment strategies may make it more difficult for investors to assess the riskiness of private debt investments. They may also enable BDCs to discreetly increase their leverage beyond those captured by typical balance sheet measures.[10] As such, excessive risks can build up to a greater extent, leading to an eventual crisis to be more substantial. This was the case of asset-backed commercial paper conduits created by banks leading up the GFC (Acharya et al., 2013). We cannot point to specific elements of direct lending activity today that would suggest a similar potential for hidden risks. However, we acknowledge that such concerns could become more valid if the complexity of direct lending funds continues to increase.

Related to complexity, one might also be concerned about the increasing opacity of direct lending investments. Much of the post-pandemic growth in BDCs has come from private BDCs, with Blackstone Private Credit Fund (BCRED) managing $53 billion – over one-sixth of all BDC assets – as of December 2023. As fewer of these investments are held by publicly

[9] Erel et al. (2024) document that this outperformance mostly accrues to the general partners of private credit funds while providing insignificant abnormal returns to the limited partners after accounting for fees and the riskiness of the underlying assets.

[10] BDCs' ability and usage of joint ventures and structured products to increase leverage is well-known and understood by industry participants. O'Shea et al. (2024) describe "Effective Leverage" as one of eight key factors in their BDC scorecard. Nonetheless, the potential for such strategies to mask leverage exists especially when less information is provided as in the cases of junior debt and specialty finance companies.

traded BDCs, whose equity prices serve as useful benchmarks, the pricing transparency of these investments diminishes. Rintamaki (2024) also finds that private BDCs are more likely to lend to smaller, opaque firms. This decline in publicly traded BDCs raises questions about whether investors, such as limited partners or creditors, can provide adequate oversight over direct lenders' valuation practices. Jang and Kim (2024) find that many direct lenders (e.g. 76% of BDCs) obtain independent valuation opinions from third-party appraisal firms, as frequently required by their own creditors (typically banks). Considering the difficulties in directly regulating private credit valuation practices, a practical policy approach would involve ensuring that banks actively monitor the valuations of direct lenders' portfolios that serve as collateral for loans. As previously mentioned, banks are already implementing this through the secured credit lines they extend to direct lenders.

Another potential emerging risk arises from the expanding role of direct lenders as they enter new markets in which they may lack expertise. Historically, direct lenders have specialized in cash flow-based financing for middle-market firms (Block et al., 2024). Recent evidence suggests that direct lenders are expanding into asset-based, consumer finance, filling gaps left by regional banks since the collapse of Silicon Valley Bank (Faridi et al., 2024). This shift raises concerns, as diversification away from core business lines can lead to adverse outcomes for financial institutions, e.g., the excessive securitization that contributed to the GFC. Relatedly, there is a concern that growing competition from direct lenders may weaken credit standards if banks opt to compete more aggressively rather than cede further market share.

Another perspective suggests that banks and direct lenders are becoming increasingly complementary. In particular, banks' credit lines to direct lenders create a channel through which stress in direct lending can spill over to the banking sector. Earlier in this article, we argued – based on back-of-the-envelope calculations – that current exposures remain modest. However, if these exposures continue growing at recent rates, potential losses to banks will rise (Haque et al., 2025). Moreover, our earlier calculations did not account for the possibility that regulators might increase the risk weights assigned to banks' credit lines as the assets of direct lending funds deteriorate. While such an adjustment would not directly reduce bank capital, it would inflate the denominator in capital ratio calculations, further weakening banks' capital positions (Chernenko et al., 2024). More fundamentally, one might question whether banks' support for direct lenders represents a form of regulatory arbitrage – whereby the current risk weights on these credit lines underestimate the true risks of the underlying collateral. If so, the systemic vulnerabilities stemming from these exposures may be greater than they appear.

Finally, many private credit fund managers anticipate increased consolidation within the industry.[11] For example, in December 2024, BlackRock acquired HPS for $12 billion.[12] This trend is not necessarily negative, especially considering the role that reputation plays in reducing asymmetric information in this market. For instance, Demiroglu and James (2010) suggest that the reputation of private equity firms plays a critical role in securing favorable

[11] https://www.bloomberg.com/news/articles/2024-02-14/bain-capital-s-lavine-sees-more-consolidation-in-private-credit?sref=lnqdp1gH

[12] https://ir.blackrock.com/news-and-events/press-releases/press-releases-details/2024/BlackRock-to-Acquire-HPS-Investment-Partners-to-Deliver-Integrated-Solutions-Across-Public-and-Private-Markets/default.aspx

financing terms in leveraged buyouts, as it helps mitigate perceived risks among lenders. However, if consolidation continues, the largest direct lenders may become "too big to fail" (TBTF), which could lead to a situation where the creditors of direct lenders fail to adequately monitor their investments, assuming they would be bailed out in the event of a crisis. This poses a significant risk, as the lack of oversight and market discipline would encourage excessive risk-taking by TBTF direct lenders, ultimately shifting the burden of potential losses onto taxpayers. Although the TBTF problem is commonly associated with banks, it also applies to nonbank institutions, as seen with AIG during the GFC. Furthermore, historical examples, such as the 1998 collapse of Long-Term Capital Management, demonstrate that regulators have previously intervened to resolve the failure of large investment funds. In conclusion, the emergence of TBTF direct lenders would be detrimental to the sector, reducing its efficiency and transferring risks to taxpayers.

Conclusion

This article examines the financial stability risks posed by direct lenders – private credit funds and business development companies (BDCs) – which have significantly expanded over the past two decades, replacing banks as key lenders to middle-market firms. We believe that direct lenders face risks of failure similar to those of banks, which are weak risk management, adverse economic conditions, and declining asset values. Unlike banks, however, direct lender failures have so far been managed through private market mergers and acquisitions. We explore three pathways through which direct lenders might contribute to systemic risk: (1) contagion through funding chains and fire sales, (2) looser monitoring from close ties with the private equity industry, and (3) reduced lending during periods of distress.

First, the contagion risk posed by direct lenders appears relatively low compared to banks. Banks face significant contagion risks due to their reliance on short-term debt and interbank lending. In contrast, direct lenders primarily raise capital from long-term investors and avoid heavy dependence on short-term funding or inter-lender borrowing. Although direct lenders' use of credit lines from banks may introduce some vulnerability, this exposure appears modest in aggregate. Moreover, direct lenders are not exposed to indirect contagion risk given their illiquid assets and ability to rely on model-based valuations.

Second, while direct lenders' close ties to PE sponsors raise concerns about weakening credit standards, evidence suggests that direct lenders retain significant bargaining power in these relationships. They often impose stricter covenants than banks and require greater equity contributions from PE sponsors during periods of distress. Moreover, concerns about PE sponsors exploiting their affiliated credit arms to finance deals below market standards also seem mitigated given the rarity of sponsor-levered deals.

Third, whether direct lenders reduce lending more severely than banks during a crisis remains uncertain. This uncertainty largely reflects a lack of empirical evidence. Direct lenders primarily serve riskier borrowers, and no comparable natural experiments exist to evaluate their behavior alongside banks in a crisis. Ultimately, policy interventions that target lending activity during crises may shape credit decisions more than the differences in business models between banks and direct lenders.

Going forward, new risks may emerge in the direct lending sector. As the sector grows in

size and significance, it remains unclear whether large direct lender failures can be as easily absorbed by competitors during a major downturn without central bank support. Increasingly complex structures – such as sub-funds and joint ventures – may obscure underlying risks, and the decline of publicly traded BDCs raises concerns about pricing opacity and weakened valuation discipline among direct lenders. Additionally, banks' expanding credit exposure to direct lenders could amplify financial stress, particularly if exposures continue rising or if it is being driven by regulatory arbitrage. The sector's expansion into non-core businesses, including asset-based and consumer finance, along with increasing consolidation, also warrants close scrutiny. Lastly, the consolidation of direct lenders raises concerns that they may become "too big to fail," leading to moral hazard, reduced market discipline, and potential taxpayer burdens. As such, continued research into these directions is essential for informing future policy discussions on financial stability.

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