January 23, 2025

BlackRock.

Global Credit Weekly:

Separating signal from noise



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Key takeaways

- Last week, we <u>discussed</u> the signaling from default trends in the liquid corporate credit market. The key takeaway: while there are some visible pockets of financial stress (smaller firms, loanonly capital structures, repeat defaulters, etc.), we view the bar as quite high for a widespread disruption in performance. Instead, we expect a continuation of the trend of dispersion – which underscores the importance of granular credit selection in the current environment.
- This week, we turn our focus to the private credit market, and address a few of the most cited questions related to valuations (in aggregate, and across private credit lenders) and fundamental trends (non-accrual rates, payment-in-kind (PIK) utilization).
- On valuations, we find that private credit implied recoveries do indeed reflect potential credit stress in the three and six months prior to default – similar to the trends visible in the liquid credit market. And while valuation differentials can exist (for the same loan) across lenders, data from multiple third-party sources shows this is relatively modest, in aggregate. We believe residual post-pandemic shifts may be playing a role, as some business disruptions have yet to normalize.
- On fundamentals, we find that non-accrual rates remain below the long-term average. On PIK, the distinction between PIK *inclusion* (in a deal) and PIK *utilization* (due to cash flow stress) is notable, in our view. We favor the latter and find that PIK as a percentage of total interest income has been relatively range-bound (and moderate, at 7%-8%) for the past several quarters.
- We attribute much of this fundamental resilience in aggregate to the supportive growth backdrop in the U.S. For example, as of January 17th, the <u>Atlanta Fed GDPNow</u> continued to track U.S. real GDP at an above-trend pace of 3.0% – extending the pattern which has been in place for much of the past several quarters. This is similar to the "warranted resilience" we have previously identified in the USD HY bond market. That said, as we outlined in our <u>1Q2025 Global Credit</u> <u>Outlook</u>, we expect dispersion to remain a key theme in 2025 – especially given the <u>significant</u> policy shifts anticipated following the U.S. presidential election.

International's Proprietary Private Market Database 100% 80% 60% Below 80% of par 80% to 89% of par

Exhibit 1: Private credit valuations have shown sensitivity to the growth backdrop

Fair value distribution of the U.S. portfolio companies (5,750+ as of September 30, 2024) tracked by Lincoln International's Proprietary Private Market Database

0% 1Q2018 1Q2019 1Q2020 1Q2021 1Q2022 1Q2023 1Q2024 Source: Lincoln International Proprietary Private Market Database, BlackRock. As of September 30, 2024 (most recent available). FOR QUALIFIED, PROFESSIONAL, INSTITUTIONAL AND WHOLESALE INVESTORS/ PROFESSIONAL CLIENTS ONLY | NOT FOR PUBLIC DISTRIBUTION

2

90% to 97% of par
Above 97% of par

Private credit: Separating signal from noise

Last week, we <u>discussed</u> the signaling from default trends in the liquid corporate credit market, amid a backdrop of structurally higher interest rates. The key takeaway: while there are some visible pockets of financial stress (smaller firms, loan-only capital structures, repeat defaulters, etc.), we view the bar as quite high for widespread disruption in performance. Instead, we expect a continuation of the trend of dispersion – which underscores the importance of granular credit selection in the current environment.

This week, we turn our focus to the private credit market, and address a few of the most cited questions related to valuations and fundamental trends. These include:

- **Valuations:** Given the lack of a daily mark-to-market, do private credit valuations anticipate financial stress in default situations? And is it common for valuations of individual loans to vary across private credit lenders?
- **Fundamentals:** Beyond more traditional metrics, what are non-accrual rates and utilization of payment-in-kind (PIK) features signaling about potential stress from private credit portfolios?

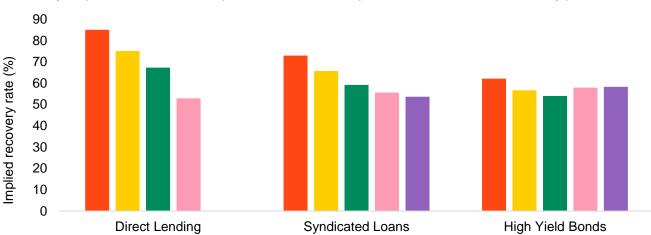
Valuations: Responsive to distress, in advance of a default

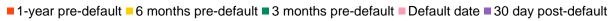
Starting with the questions related to valuations, we first turn to the KBRA Direct Lending Deals (DLD) database, which captures implied recovery rates for direct lending loans, syndicated leveraged loans and high yield bonds. As shown in Exhibit 2, we find that for the 37 direct loan defaults which occurred in 2024, these loans were (in aggregate) reflecting a level of distress in the months prior to default. Most notably, the aggregate marks were below \$80 (which we view as a rough proxy for distress) in the three and six months leading up to the default. The ultimate implied recovery rate (at default) is also generally consistent with those captured for syndicated leveraged loan and high yield bond defaults (all are in the \$53 to \$57 context; again Exhibit 2).

Data from Lincoln International's Proprietary Private Market Database (which included 5,750+ U.S. portfolio companies as of 3Q2024), provides another view on how valuations have trended over the past several years (Exhibit 1). As expected, valuations demonstrated significant variation during the onset of the pandemic (early 2020), and during 2022 (when the Federal Reserve and European Central Bank began their respective rate hiking cycles and there were widespread market concerns about a sharp downturn in growth). We believe that some of those post-pandemic structural shifts are still in the process of normalizing, which also likely contributes to valuation differentials across private credit managers (as discussed later).

Exhibit 2: Implied recovery rates anticipate financial distress in default situations

Average implied trailing 12-month recoveries (equal weighted) for defaulted direct lending loans (count: 37 defaults), syndicated leveraged loans (count: 77 defaults) and high yield bonds (count: 26 defaults).





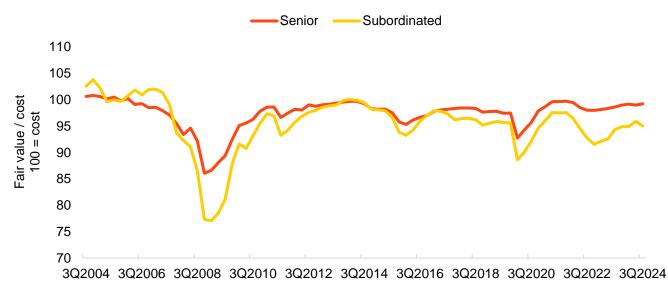
Source: KBRA DLD, Solve, BlackRock. Captures data through year-end 2024. **There can be no guarantee any forecasts may come to pass.** Implied recovery rates are calculated as fair value / principal.

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A third data source – the Cliffwater Direct Lending Index (CDLI) – unsurprisingly shows that valuation volatility is more pronounced among subordinated credits, as opposed to senior loans (Exhibit 3). For context, the CDLI is an asset-weighted index of approximately 17,000 directly originated U.S. middle market loans (totaling \$393 billion) as of September 30, 2024¹. This, in our view, reflects the potential benefit from capital structure seniority in a restructuring (or other downside) scenario.

Exhibit 3: Subordinated valuations exhibit more volatility, relative to senior

Historical market value as a percentage of cost, for the senior and subordinated loans included in the Cliffwater Direct Lending Index. 100 = cost.



Source: Cliffwater Direct Lending Index, BlackRock. As of September 30, 2024 (most recent available for CDLI). ¹ Launched in 2015, the CDLI was reconstructed back to September 30, 2004 using publicly available quarterly SEC filings required of business development companies.

Valuations: Modest variation (in aggregate) across private credit lenders

An analysis of publicly traded business development company (BDC) holdings by KBRA DLD also sheds some light on the degree of variation in loan valuations across private credit managers. Using loans held by two or more BDCs providing marks – which equates to a universe of 700 sponsored issuers' loans, or roughly 35% of KBRA DLD's overall sponsored universe – KBRA found that only 4% of loans had a fair value discrepancy greater than 5 percentage points (as of 3Q2024).

A separate February 2024 analysis by Cliffwater found an expected valuation estimation error for any individual private credit loan to be plus or minus 3 percentage points. That estimation error at the *portfolio level* drops to 0.5 percentage points, however, for a portfolio of 30 loans. And at one thousand loans, Cliffwater found the valuation estimation error to be negligible.

Like investors in the public debt and equity markets, private credit lenders can have differing expectations for the future paths of business fundamentals, capital management priorities, and even binary outcomes such as patents and litigation. All of these factors can contribute to divergent views on relative value. This is especially pertinent in the context of the post-pandemic environment, in our view, as some business models are likely still working though the residual impacts and structural shifts.

Moreover, a working academic paper recently found that information asymmetry between lead lenders and participating lenders may also contribute to valuation differences for the same loan (see Jang, Y., Kim, G., "Valuation Discipline in Private Credit", Working Paper, 2025).

Fundamentals: Non-accruals and PIK are largely contained

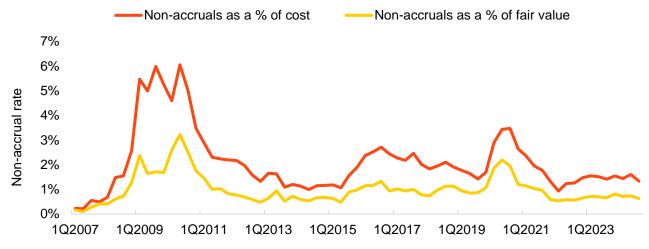
On the fundamental side, we take a closer look at two specific metrics: non-accrual rates and payment-inkind (PIK) utilization. While not as frequently cited as covenant default and loss rate measures (discussed later), they are nonetheless informative indicators, in our view, regarding potential financial stress.

Exhibit 4 illustrates the trend for non-accruals (again using the CDLI), which represent the share of loans that are no longer current in paying interest income and would therefore be considered in default. As shown below, this trend has been relatively contained over the past few years. In fact, the average non-accrual rate (as a percentage of cost) of 1.33% as of 3Q2024 is below the long-term (18-year) average of 2.1%.

Payment-In-Kind (PIK) reflects interest that is "paid" in the form of additional non-cash principal, as opposed to cash interest income. There are two ways to track PIK: (1) the share of *deals* which include PIK as an option and (2) the share of PIK as a percentage of *interest income*. We view the second metric as more informative for credit deterioration, as it reflects a company's liquidity management choices in times of stress. This contrasts with, for example, a private credit lender including a PIK option for a higher-quality borrower to "win" a deal (owing to the competitive environment), where that PIK option may never be utilized. As Exhibit 5 shows, PIK as a percentage of total interest income has been in the 7%-8% range for most of the past few years. While higher vs. the pre-pandemic trend, it is not outsized.

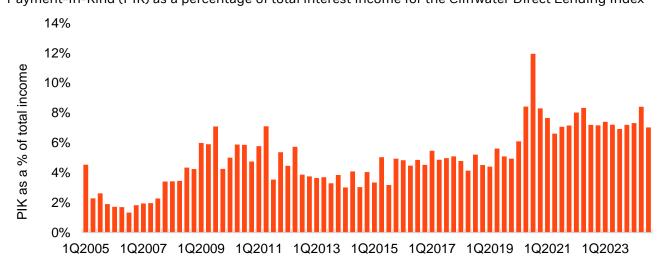
Exhibit 4: Non-accrual rates, in aggregate, are below the long-term average

Non-accrual rates (as a percentage of cost and fair value) for the Cliffwater Direct Lending Index



Source: Cliffwater Direct Lending Index, BlackRock. As of September 30, 2024 (most recent available for CDLI).

Exhibit 5: PIK as a % of interest income has been relatively rangebound in recent years Payment-In-Kind (PIK) as a percentage of total interest income for the Cliffwater Direct Lending Index



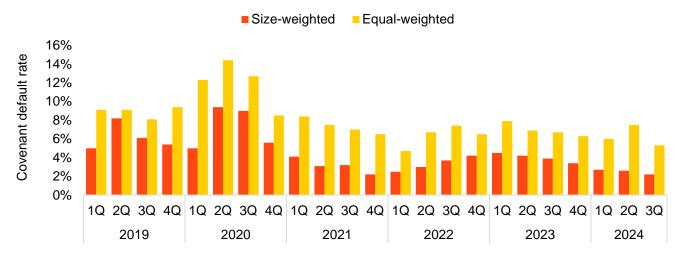
Source: Cliffwater Direct Lending Index, BlackRock. As of September 30, 2024 (most recent available for CDLI). FOR QUALIFIED, PROFESSIONAL, INSTITUTIONAL AND WHOLESALE INVESTORS/ PROFESSIONAL CLIENTS ONLY | NOT FOR PUBLIC DISTRIBUTION

Dispersion, not disruption

We attribute much of this fundamental resilience – in aggregate – to the supportive growth backdrop in the U.S. For example, as of January 17^{th} , the <u>Atlanta Fed GDPNow</u> continued to track U.S. real GDP at an above-trend pace of 3.0% - extending the pattern which has been in place for much of the past several quarters. That said, as we outlined in our <u>1Q2025 Global Credit Outlook</u>, we expect dispersion to remain a key theme in 2025 – especially given the <u>significant policy shifts</u> anticipated following the U.S. presidential election.

Covenant default rates highlight this dispersion. The size-weighted covenant default rate for the U.S. portfolio companies in the Lincoln International Proprietary Private Market Database has declined for six consecutive quarters through 3Q2024 (Exhibit 6). But the equal-weighted covenant default rate is more elevated, indicating smaller companies are defaulting more frequently. Indeed, the companies on the smallest end of the size spectrum – those with less than \$10 million in annual EBITDA – have the highest rate of covenant defaults (Exhibit 7).

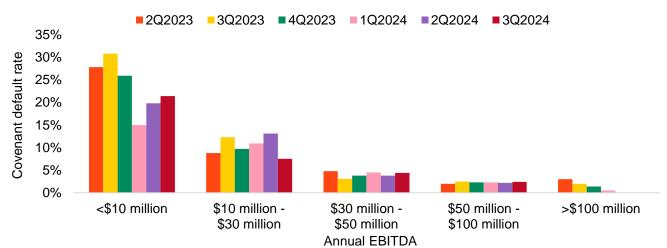
Exhibit 6: In the private credit market, a divergence between size-weighted and issuerweighted covenant default metrics exists



Aggregate covenant default rate, including size-weighted and instance-weighted, for the U.S. portfolio companies included in the Lincoln International Proprietary Private Market Database

Exhibit 7: The smallest firms continue to generate the highest covenant default rates

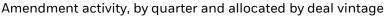
Covenant default rates (size-weighted, by annual EBITDA) for U.S. portfolio companies in the Lincoln International Proprietary Private Market Database

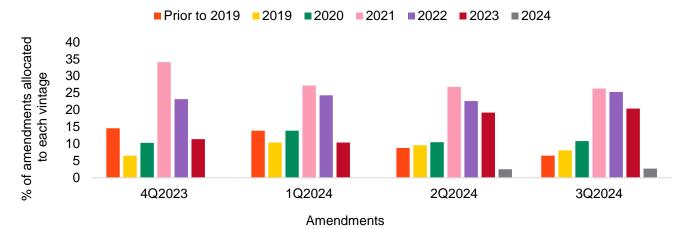


Source for both charts: Lincoln International Valuations & Opinions Group Proprietary Private Market Database, BlackRock. As of 3Q2024 (most recent). A default is defined as a covenant default (not necessarily a monetary default). The size-weighted approach considers the total net debt balance for each of the portfolio companies that had a defaulting security in the respective quarter. © 2025 Lincoln Partners Advisors LLC. All rights reserved. Used with permission. Third party use is at user's own risk. FOR QUALIFIED, PROFESSIONAL, INSTITUTIONAL AND WHOLESALE INVESTORS/ PROFESSIONAL CLIENTS ONLY | NOT FOR PUBLIC DISTRIBUTION

The long-term relationship between the borrower and lender has played a role in the consistent decline of size-weighted covenant default rates in the U.S. private credit market. 16% of the companies valued by Lincoln International over the past 12 months had amendments to their credit agreement (pricing amendments were the most common). And as Exhibit 8 illustrates, the 2021 vintages (which were formed amid an exceptionally low-interest rate environment) have generated a large portion of the covenant amendments completed over the past four quarters. Again, this highlights the trend of dispersion.

Exhibit 8: The distribution of recent covenant amendments has skewed toward vintages formed in ultra-low-interest rate environments

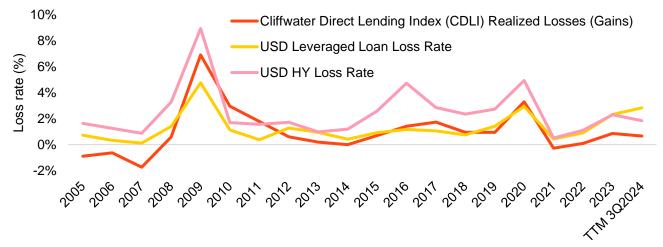




Source: Lincoln International Valuations & Opinions Group Proprietary Private Market Database, BlackRock. As of 3Q2024 (most recent as of January 14, 2025). Note: A default is defined as a covenant default (not necessarily a monetary default). The analysis is based on a size-weighted approach, which considers the total net debt balance for each of the portfolio companies that had a defaulting security in the respective quarter. © 2025 Lincoln Partners Advisors LLC. All rights reserved. Used with permission. Third party use is at user's own risk.

Exhibit 9: Direct lending loss rates have compared favorably vs. public markets in recent years

Realized annual and trailing 12-month 3Q2024 loss rates for the CDLI, and trailing 12-month estimated loss rates for the universe of USD leveraged loans and HY bonds tracked by Moody's (calculated as the actual issuer-weighted trailing 12-month default rate per Moody's multiplied by one minus the average historical recovery rate)



Source: BlackRock, Moody's, Cliffwater LLC. For the CDLI, we show annual and trailing 12-month realized loss rate data for 3Q2024 (most recent available for the CDLI). We assume a 40% recovery rate for HY and a 60% recovery rate for leveraged loans (both in line with the historical average), to arrive at estimated loss rates given the Moody's issuer-weighted, trailing 12-month default data. The HY and leveraged loan loss rates reflect the universe of HY bonds and leveraged loans tracked by Moody's. **The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results.** Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index. Realized gains can be driven by equity stubs, warrants, and gains on exited investments. These were more common in 2005-2007, when second lien and mezzanine loans were a greater portion of the CDLI.

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That said, for investors looking to compare public and private credit fundamental trends, we prefer to use loss rates over default rates (owing to the <u>different definitions of "default"</u> across the two markets). As Exhibit 9 highlights, private credit loss rates continue to compare favorably to their public market peers. This is especially notable considering the yield "pick-up" available in the private credit market (Exhibit 10). And on an absolute basis, again using the CDLI, realized loss rates have remained modest in the context of the overall income generation of the asset class (Exhibit 11).

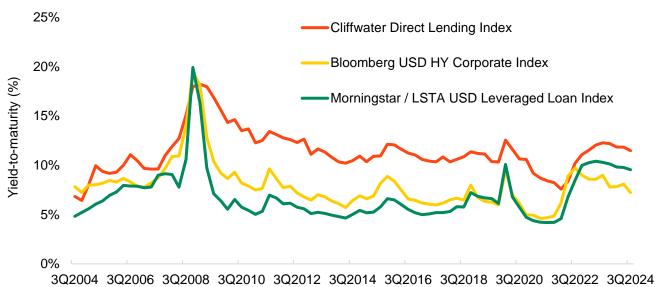
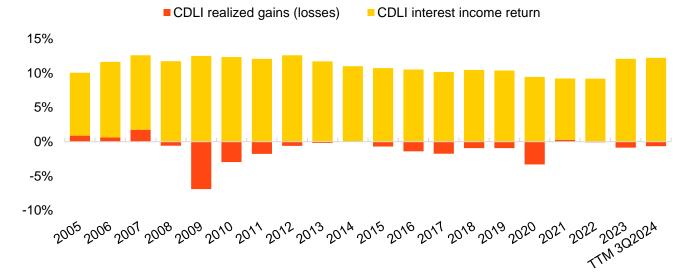


Exhibit 10: Direct lending has historically offered a yield "pick-up" vs. public markets Average index yield-to-maturity levels

Source: Cliffwater LLC, Bloomberg, Morningstar / LSTA, Pitchbook LCD. Private debt, leveraged loan and high yield as of 3Q2024. Chart shows yield-to-maturity for all three indices. **The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results.** Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index.

Exhibit 11: Realized losses for the CDLI have been contained, despite borrowers' elevated debt service costs

Trailing 12-month income return and realized gains (losses) for the Cliffwater Direct Lending Index



Source: Cliffwater Direct Lending Index, BlackRock. As of September 30, 2024. Realized gains can be driven by equity stubs, warrants, and gains on exited investments. These were more common in 2005-2007, when second lien and mezzanine loans were a greater portion of the CDLI. **The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results.** Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index. We exclude unrealized gains and losses in this chart. Long-term unrealized gains (losses) are approximately zero, as they either convert to net realized losses upon a credit default, or are reversed when principal is fully repaid. : FOR QUALIFIED, PROFESSIONAL, INSTITUTIONAL AND WHOLESALE INVESTORS/ PROFESSIONAL CLIENTS ONLY | NOT FOR PUBLIC DISTRIBUTION

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