

Market insights contributors



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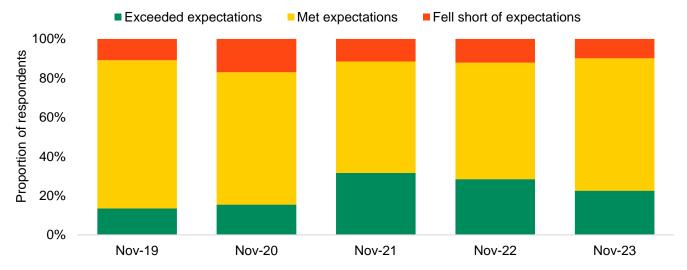
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Key takeaways

- Over the past two years as the Federal Reserve (Fed) embarked on its swift rate hiking cycle –
 many market observers have been watching closely for evidence of fundamental deterioration in
 USD corporate credit. This concern has been most pronounced in the floating rate debt markets
 (for example: syndicated leveraged loans and subsets of private debt, such as direct lending),
 where borrowing costs have moved higher in tandem with the Fed's policy rate. While higher
 interest rates can mechanically boost the returns of these floating rate asset classes, for some
 market observers this benefit has been overshadowed by concerns related to the negative
 fundamental impact of higher debt servicing costs at the company level.
- As it relates to the USD private debt market, recently released data for 4Q2023 continues to paint a relatively resilient picture on a multitude of fronts. Data from the Cliffwater Direct Lending Index highlights realized loss rates that remain modest both in absolute terms (when compared to the interest income of the index) and relative to the syndicated high yield bond and leveraged loan markets. Additionally, as of 4Q2023, the Lincoln International Proprietary Private Market Database generated three consecutive quarters of declining covenant default rates and proforma coverage ratios that remained steady. And a late 2023 investor survey conducted by Preqin illustrates that investor sentiment remains supportive for the private debt asset class, both in terms of targeted asset allocation plans and views on valuation. Stability in investors' views on private debt valuations was further echoed by recent data from KBRA DLD.
- That said, under the surface of these aggregated metrics, dispersion remains a meaningful theme
 in the asset class of private debt similar to its public market peer group. As we <u>outlined</u> in late
 February (and also detail within) we expect heightened dispersion to remain prominent across
 three dimensions in private debt: strategy, portfolio and vintage.

Exhibit 1: Private debt has increasingly 'met or exceeded' investor expectations

Investors in a November 2023 Preqin survey were asked: 'Have investments met expectations over the past 12 months?'



Source: BlackRock, Preqin. Preqin Investor Surveys collected November 2019 - November 2023.

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Private debt data continues robust performance

As the Fed has embarked on its rate hiking cycle, many market observers have been watching closely for evidence of fundamental deterioration in the USD private debt market. Recent data released for 4Q2023 shows that realized losses for U.S. private debt, according to the Cliffwater Direct Lending Index (CDLI), have been relatively benign.

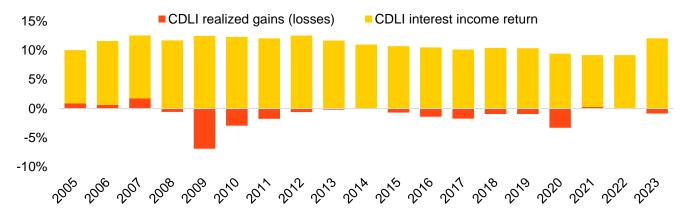
For context, the CDLI is an index of private U.S. middle market loans that was launched in 2015 and reconstructed back to 2004 using the SEC filings of business development companies. The CDLI tracks the U.S. direct lending market and captures roughly 14,800 directly originated middle market loans totaling \$315 billion as of December 31, 2023.

Exhibit 2 shows that the CDLI's realized losses for the full-year 2023 were 86bp. These are modest losses in absolute terms, and especially when compared to its 12.08% of interest income return.

And relative to our estimates of losses-given-default for the universe of USD high yield (HY) bonds and leveraged loans (LLs) tracked by Moody's, this level of realized loss also compares favorably to the syndicated markets (Exhibit 3).

Exhibit 2: Modest losses for the CDLI, in absolute terms

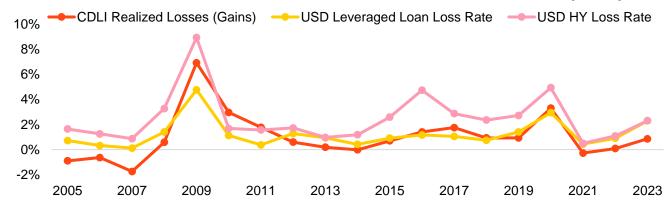
CDLI realized gains (losses) and interest income return, by annual period (2005 - 2023)



Source: BlackRock, Cliffwater. As of December 31, 2023 (most recent for CDLI). Excludes unrealized gains and losses.

Exhibit 3: CDLI losses also continue to compare favorably versus public markets

Historical loss rates (%) for the CDLI and the universe of USD HY bonds and LLs tracked by Moody's



Source: BlackRock, Moody's, Cliffwater. As of December 31, 2023 (most recent for CDLI). We assume a 40% recovery rate for HY and a 60% recovery rate for leveraged loans, to arrive at estimated loss rates given the Moody's issuerweighted, trailing 12-month default data.

For both charts: 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 result.** Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index.

Declining covenant defaults reflect flexibility, in our view

Beyond realized losses, we also track covenant defaults as another fundamental barometer in the private debt market. That said, defaulting on a covenant in private debt does not necessarily mean lenders will incur losses. Rather, it often provides lenders the time and legal position to address issues (related to a borrower's limited financial flexibility) before a payment default.

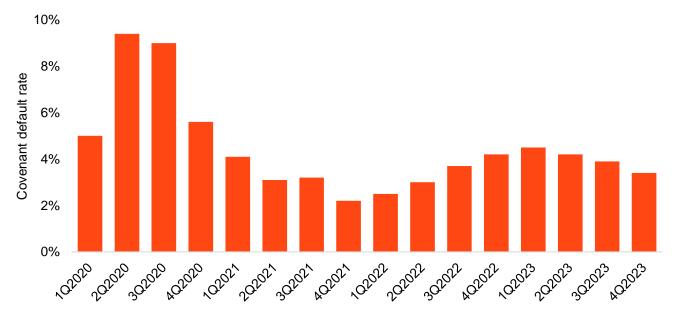
The covenant default rate for the companies included in the Lincoln International Proprietary Market Database has *decreased* over the past three quarters (Exhibit 4). For context, Lincoln is an independent valuation advisor specializing in illiquid alternative investments. As of 4Q2023, Lincoln's Valuations and Opinions Group Proprietary Private Market Database included approximately 5,000 U.S. operating companies, representing over \$175 billion of privately held principal and invested capital (primarily by private equity sponsors).

A decline in covenant defaults may seem counterintuitive given the sharp increase in interest rates over the past several quarters. But from our perspective, it is indicative of the flexibility inherent in the long-term relationship between a borrower and lender (or small group of lenders) in the private debt market. This dynamic can allow for financial stress to be addressed more proactively and efficiently relative to what may take place in the public universe (where many more lenders are typically involved).

Indeed, according to data complied by Lincoln International, more than 740 covenant amendments were completed in 2023 (involving 18% of the companies that Lincoln tracks). As Exhibit 5 illustrates, flexibility within existing leverage covenants varies considerably by size. The smallest company cohort tracked by Lincoln (i.e., those with annual EBITDA of less than \$10 million) have much less "headroom" under their leverage covenants, relative to their larger peers. In our view, the patterns related to amendments and covenant flexibility underscore the importance of credit selection and diversification, especially in a "high-for-longer" cost of capital environment.

Exhibit 4: Covenant default rates have declined for the past three quarters

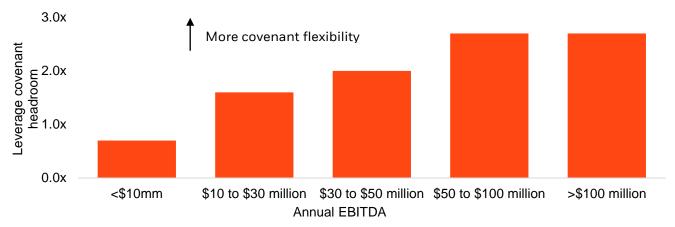
Aggregate covenant default rate for the U.S. portfolio companies included in the Lincoln International Proprietary Private Market Database



Source: BlackRock, Lincoln International Valuations & Opinions Group Proprietary Private Market Database. As of 4Q2023 (most recent). 5,000 U.S. operating companies included as of 4Q2023. Note: A default is defined as a covenant default and not a monetary default. Analysis done using a size-weighted approach, which considered the total net debt balance for each of the portfolio companies that had a defaulting security in the respective quarter.

Exhibit 5: Covenant flexibility varies by company size

Leverage covenant headroom (size-weighted and as of 4Q2023), for the U.S. portfolio companies included in the Lincoln International Proprietary Private Market Database



Source: BlackRock, Lincoln International Valuations & Opinions Group Proprietary Private Market Database. As of 4Q2023 (most recent). 5,000 U.S. operating companies included as of 4Q2023.

Investor sentiment toward private debt remains supportive

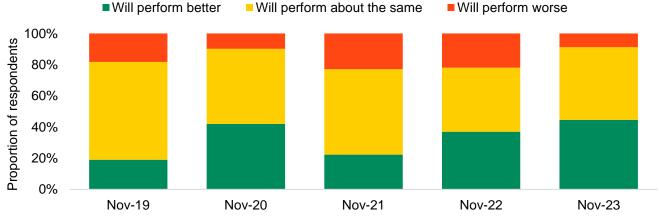
Investor sentiment has also been critical to track in this asset class, as capital inflows have allowed private debt to reach a sizable and scalable level on a "stand alone" basis. Here too, so far the recent data has been encouraging – likely supported by the fundamental trends mentioned earlier.

For example, In November 2023, Preqin, a third-party alternative asset data provider, surveyed a wide range of global institutional and retail investors to understand their views on alternative assets. 90% of investors surveyed noted that private debt has met or exceeded their expectations over the past 12 months (Exhibit 1).

Investors were also relatively supportive about the outlook for private debt, with 91% of respondents to Preqin's survey expecting private debt to perform better or about the same in the next 12 months, as it did in the last 12 months (Exhibit 6). This marks the most positive outlook since the survey began in 2019 (according to Preqin), suggesting that while higher rates have imposed a larger burden on floating rate borrowers, impairments and defaults have not become a notable issue for the investors surveyed. And leaving the fundamental impact on borrowers aside, as a floating rate asset class, the elevated interest rate environment has also been supportive for the income generation (and performance) of the private debt asset class.

Exhibit 6: Investors are optimistic on future private debt performance

Investors in a November 2023 Preqin survey were asked: 'How will the next 12 months' performance compare to the previous 12 months?'



Source: BlackRock, Pregin. Pregin Investor Surveys collected November 2019 - November 2023.

Private debt asset values gain additional consensus

As time has passed from the pandemic-related economic volatility – and the swift rise in interest rates – investors also appear more confident that private debt valuations are priced appropriately.

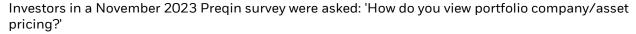
According to data compiled by Preqin, 68% of investors surveyed believe private debt positions are "fairly valued" as of November 2023, the highest level recorded over the last five years (Exhibit 7). Further, only 2% of investors surveyed believe private debt assets are "considerably" over- or under-valued, versus an average of 15% in the preceding surveys, according to data by Preqin. In our view, this indicates that investor expectations of asset prices may be narrowing as the asset class moves farther away from the various economic disruptions sparked by the pandemic.

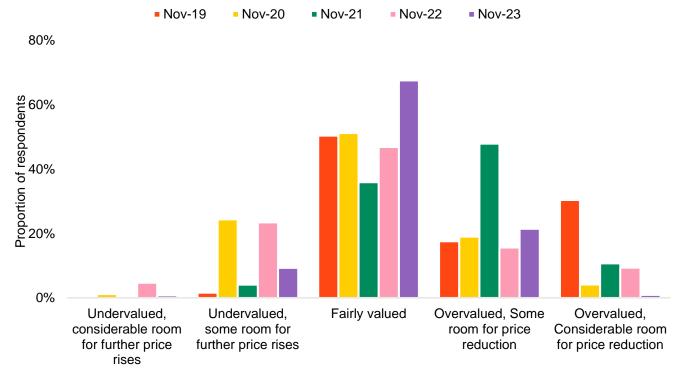
Similarly, private debt prices appear to be stabilizing following volatility over the last few years. 59% of investors surveyed believe private debt asset prices have stayed the same over the last 12 months, versus an average of 38% in preceding years (Exhibit 8).

While many factors likely contributed to this stance, we believe perceived clarity on monetary policy (i.e., market pricing largely reflects a view that peak policy rates have been reached for this cycle in both the U.S. and Euro Area) played a role in bolstering investor confidence. Increased optimism regarding the ability of the U.S. to avoid a sharp growth downturn has also likely contributed, in our view.

This pattern of stability is illustrated in quarterly fair value data provided by KBRA DLD, a research provider that tracks senior U.S. direct lending activity, as well. The KBRA DLD Index covers roughly 2,400 borrowers, of which more than 80% reported fair values in both 3Q and 4Q 2023. From this dataset, KBRA DLD reports that 78% of fair values have remained steady or improved from 3Q to 4Q 2023 (Exhibit 9). Only 10% of the index experienced a decline of more than one point, the majority of which KBRA DLD already flagged as high potential to default, due to a confluence of factors such as a mark below 80. Only 4.1% of the index had a change in fair value greater than 5 points, reiterating the idea that investor expectations of asset prices may be narrowing.

Exhibit 7: Increasing confidence in fair value of private debt positions

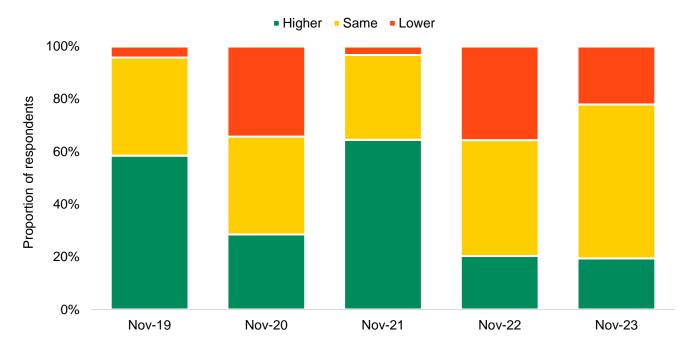




Source: BlackRock, Preqin. Preqin Investor Surveys collected November 2019 - November 2023.

Exhibit 8: Private debt pricing appears more stable

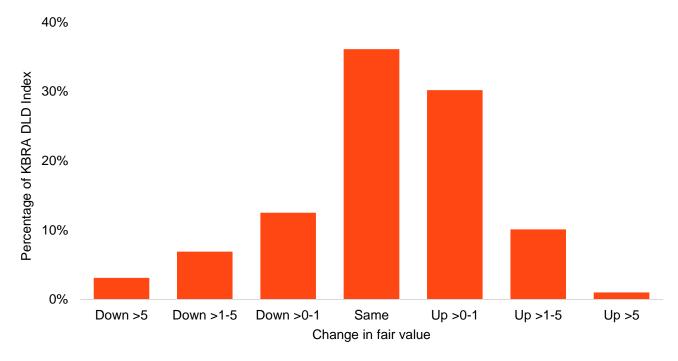
Investors in a November 2023 Preqin survey were asked: 'How has portfolio company/asset pricing changed versus 12 months ago?'



Source: BlackRock, Preqin. Preqin Investor Surveys collected November 2019 - November 2023.

Exhibit 9: Private debt fair values improve across the KBRA DLD Index

Change in fair values of private debt assets between 3Q and 4Q 2023, as percentage of KBRA DLD Index



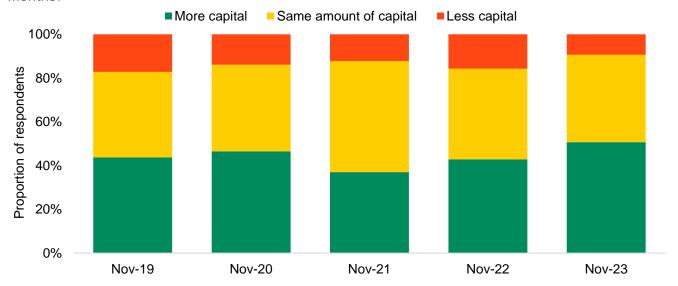
Source: BlackRock, KBRA DLD. Includes borrowers that reported fair values in both 3Q and 4Q 2023 (more than 80% of ~2,400 borrowers in KBRA DLD Index). As of December 31, 2023.

Investors are signaling an appetite to grow private debt allocations

In the 12 months following the November 2023 Preqin survey, 51% of investor respondents said they plan to commit more capital to private debt, while 40% expected to maintain their current allocation (Exhibit 10).

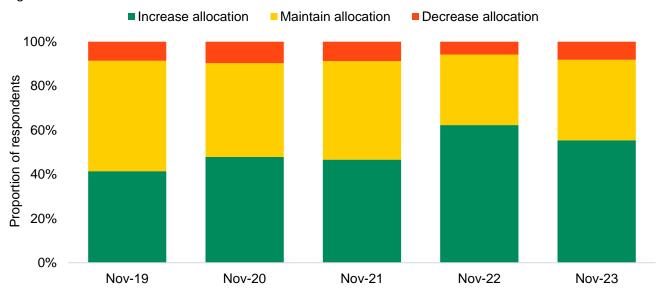
And over the longer term, 55% of investors expect to increase their allocation, and 36% expect to maintain their allocation (Exhibit 11). Notably, the percentage of investors intending to increase their allocation (55%) is higher than the average of the four preceding years (November 2019 – November 2022, 50%). Only 8% of investors surveyed expect to decrease their allocation, a percentage that is broadly consistent with the four years preceding.

Exhibit 10: Only 9% of investors plan to reduce private debt allocations in the near term Investors in a November 2023 Preqin survey were asked: 'How much capital will you commit in the next 12 months?'



Source: BlackRock, Pregin. Pregin Investor Surveys collected November 2019 - November 2023.

Exhibit 11: Solid investor appetite to allocate to private debt over the longer term Investors in a November 2023 Preqin survey were asked: 'How will you allocate to private debt over the longer term?'

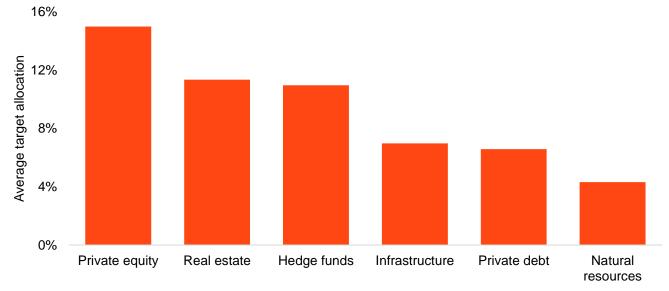


Source: BlackRock, Preqin. Preqin Investor Surveys collected November 2019 - November 2023.
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More tactically, Preqin estimates the average target private debt allocation for survey respondents was 6.6% of total assets in November 2023, up from 6.4% in June 2023. This development shows progress toward growing allocations to private debt. That said, when compared to an average target allocation of 15.0% of total assets in private equity (Exhibit 12), we believe there is further scope for private debt's average allocation to grow.

Exhibit 12: Room for the average target allocation to private debt to increase

Preqin November 2023 investor survey respondents' average target allocation, as percentage of total assets

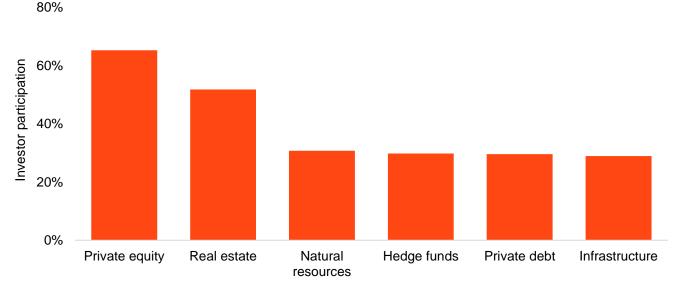


Source: BlackRock, Pregin. As of Pregin's November 2023 investor survey. Venture capital is included in private equity.

Room for increased investor participation, in our view

As of November 2023, an estimated 30% of investors surveyed by Preqin were allocating to private debt, up 2 percentage points from June 2023. Here too, despite recent progress, we believe there is ample room for continued growth, especially considering Preqin's estimate that 65% of investors had an allocation to private equity as of November 2023 (Exhibit 13).

Exhibit 13: We see scope for investor participation in the private debt market to growPercentage of Preqin November 2023 investor survey respondents allocating to each alternative asset class



Source: BlackRock, Preqin. As of Preqin's November 2023 investor survey. Venture capital is included in private equity. FOR QUALIFIED, PROFESSIONAL, INSTITUTIONAL AND WHOLESALE INVESTORS/ PROFESSIONAL CLIENTS ONLY | NOT FOR PUBLIC DISTRIBUTION

Interest rates and inflation remain top of mind for investors

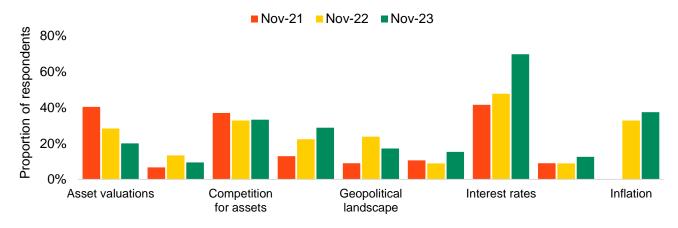
As has been the case in recent years, the top two concerns cited by private debt investors are interest rates and inflation, which were noted by 70% and 37% of respondents, respectively, according to Pregin's survey (Exhibit 14).

These two risks are intertwined, as interest rate increases are the Fed's primary tool to combat high inflation. And both can negatively impact a portfolio company's bottom line, in the form of higher borrowing costs, as well as increased expenses for wages, raw materials, and other input costs. That said, the message from the past few quarters of data has been encouraging from a fundamental perspective.

Exhibit 15 and 16 use data from Lincoln International to illustrate that despite the persistently high cost of capital, ongoing fundamentals for private debt borrowers are holding in relatively well (i.e., not deteriorating). For example, average (last twelve months) EBITDA growth for the companies in Lincoln's Database was 4.8% as of 4Q2023. This has helped keep interest coverage (Exhibit 15) and fixed charge coverage (Exhibit 16) ratios in a narrow range on a pro-forma basis, despite no relief (yet) in the form of interest rate cuts.

Exhibit 14: Interest rates are the biggest challenge to private debt investors surveyed by Preqin

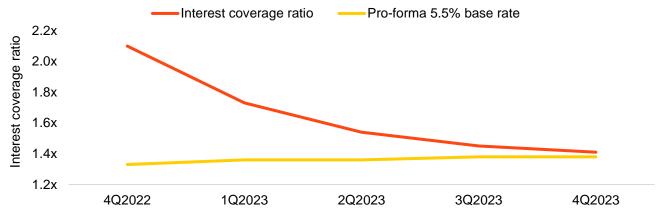
Investors in a November 2023 Preqin survey were asked: 'What are key challenges for return generation in the next 12 months?'



Source: BlackRock, Preqin. Preqin Investor Surveys collected November 2019 - November 2023. Inflation added to survey beginning in 2022. Lowest two categories (stock market volatility and commodity market volatility), and years 2019-2020 not included in the above chart.

Exhibit 15: Interest coverage remains in a narrow range, on pro-forma basis

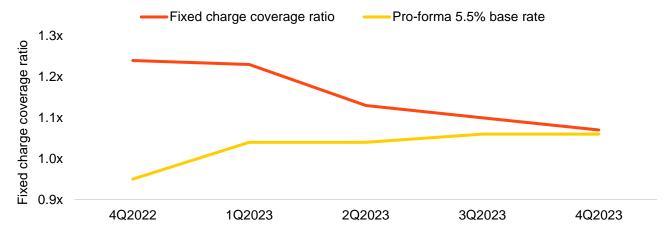
Size-weighted actual and pro-forma (using a 5.5% base rate) interest coverage ratio for the portfolio companies in the Lincoln International Proprietary Private Market Database



Source: BlackRock, Lincoln International Valuations and Opinions Group Proprietary Private Market Database. Captures data through 4Q2023. Interest Coverage Ratio = LTM EBITDA / Interest Expense. LTM = last twelve months. FOR QUALIFIED, PROFESSIONAL, INSTITUTIONAL AND WHOLESALE INVESTORS/ PROFESSIONAL CLIENTS ONLY | NOT FOR PUBLIC DISTRIBUTION

Exhibit 16: Pro-forma fixed charge coverage ratios have improved slightly vs. year-end 2022

Size-weighted actual and pro-forma (using a 5.5% base rate) fixed charge coverage ratio for the portfolio companies in the Lincoln International Proprietary Private Market Database



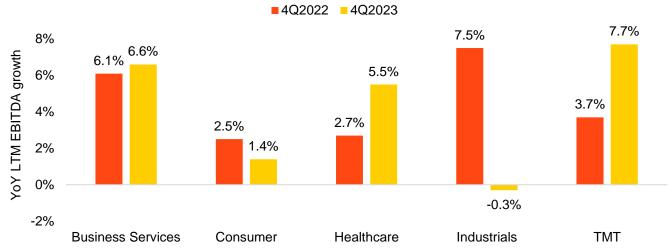
Source: BlackRock, Lincoln International Valuations and Opinions Group Proprietary Private Market Database. Captures data through 4Q2023. Fixed Charge Coverage Ratio = (LTM EBITDA - Taxes - CapEx) / (Interest Expense + (1% * Total Debt)).

Inflation was the second most frequently cited challenge in Preqin's survey. While we expect ongoing improvement in inflation data, as Chair Powell recently noted in multiple public speeches, the path to normalization may be "bumpy" and may take time. Some businesses are better positioned to accommodate inflationary pressures than others. For example, certain sectors in the Lincoln International Proprietary Private Market Database were able to improve year-over-year (YoY) LTM EBITDA growth in 4Q2023, relative to 4Q2022, while other sectors saw moderation or outright declines (Exhibit 17). In our view, this <u>dispersion</u> underscores the importance of credit selection and diversification across a range of factors – including portfolio, strategy, and vintage.

For the private debt universe (and the liquid credit market, for that matter), this underscores the importance of a company's ability to generate capital efficient growth – as opposed to growth at any cost, which was more prevalent in a period of ultra-low interest rates. Preqin highlights that the third and fourth largest concerns (competition for assets and deal flow) would be positively supported by easing interest rates, as a decline in rates would likely increase deal activity.

Exhibit 17: YoY LTM EBITDA growth rates varied across sectors in 4Q2023

YoY LTM EBITDA growth by industry, for companies in the Lincoln International Proprietary Private Market Database



Source: BlackRock, Lincoln International Valuations & Opinions Group Proprietary Private Market Database. As of December 31, 2023.

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