Private Markets

Future of finance

Private Debt: a primer

Unpacking the growth drivers

BlackRock

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Executive summary

As we recently outlined in collaboration with our colleagues in the *BlackRock Investment Institute,* (please see *Mega forces - Future of Finance*), tectonic shifts are underway in the U.S. financial sector, which are changing the markets for deposits and credit. **A key beneficiary of this structural shift, in our view, is the private debt market.**

The term private debt refers to lending (largely to corporations and small businesses) done outside of the traditional channels of bank lending and the public (syndicated) debt markets. The broad term of "private debt" encapsulates a wide range of strategies such as direct lending – which is the largest by assets under management (AUM) – as well as distressed, opportunistic, mezzanine and venture (among others).

At $1.6 trillion in AUM globally, private debt (excluding real estate) has already cemented its status as a sizable and scalable asset class for a wide range of long-term investors (Exhibit 1). That said, it still represents a modest 12% of the broader alternative asset universe, which totaled $13 trillion as of March 2023, per Preqin (Exhibit 2).

We see scope for the global private debt market to reach $3.5 trillion in AUM by year-end 2028 (again, Exhibit 1). The drivers of this growth expectation are multi-faceted and include:

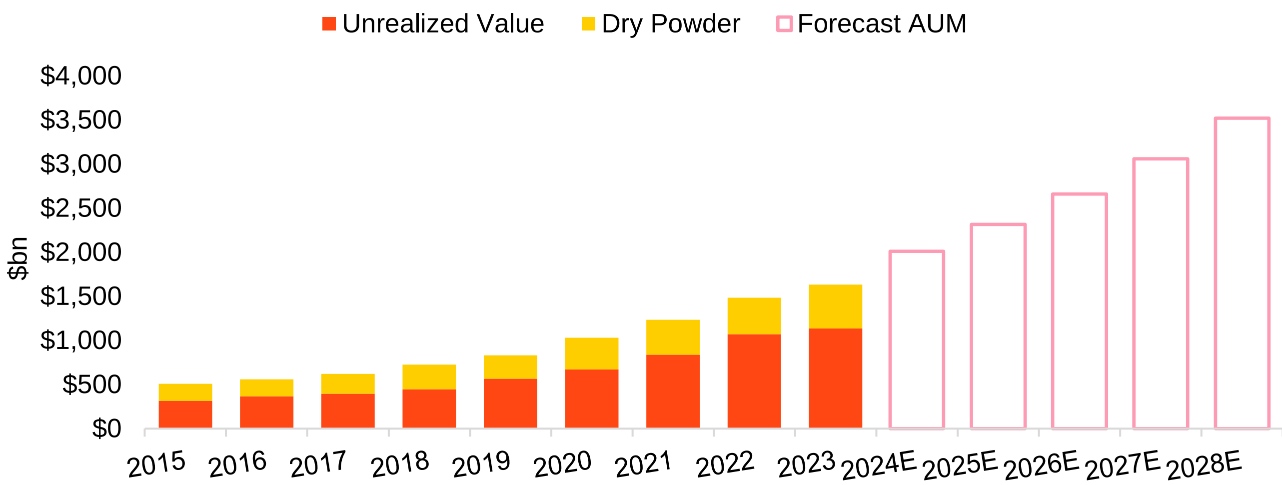
(1) **borrower preferences** for customized funding solutions, certainty of execution, and the flexibility inherent in a long-term borrower/lender relationship

(2) **investor desires** for diversification in the context of a whole portfolio allocation, with opportunities to introduce structural protections (depending on the strategy)

(3) **structural shifts in the public markets**, which are now serving larger borrowers, leaving public debt market deal sizes prohibitively large for most middle market companies, and

(4) **a continued contraction in bank credit availability**, which we expect should allow for a further expansion of private debt's "addressable market" of borrowers

Exhibit 1: We expect global private debt AUM to reach $3.5 trillion by year-end 2028
Private debt global assets under management (unrealized value and dry powder), and AUM forecasts



Source: BlackRock, Preqin. Historical (actual) data from Preqin, as of each calendar year-end, through March 31, 2023. 2024E to 2028E are BlackRock estimates.

Sizing the global private debt markets

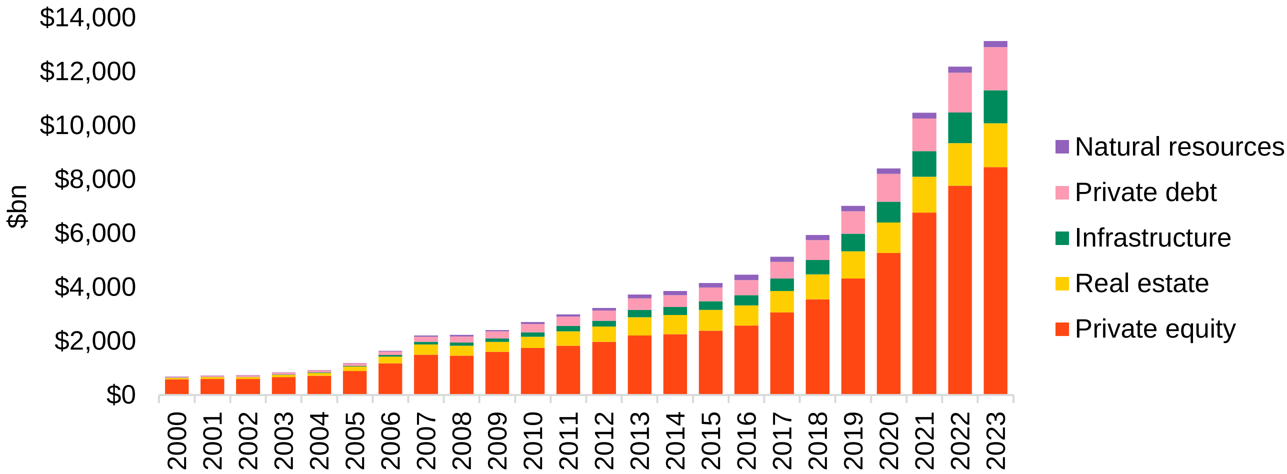
Private debt continues to cement its status as a sizable and scalable asset class for a wide range of long-term investors. The asset class – which totaled more than $1.6 trillion globally, as of March 2023 (according to data from Preqin) – represents roughly 12% of the $13 trillion alternative investment universe (Exhibit 2).

Using widely accepted measures from third party data providers such as Preqin, global private debt AUM has more than doubled in size vs. 2018 and more than tripled in size vs. 2014 (again, Exhibit 1). Notably, private debt AUM of $1.6 trillion is inclusive of $440 billion of dry powder (as of October 2023), which represents capital available for deployment (Exhibit 3).

We forecast the global private debt market will reach $3.5 trillion in AUM by year-end 2028 (again Exhibit 1). This implies a roughly 15% compound annual growth rate (CAGR) over the next five years (assuming $1.75 trillion is reached by year-end 2023). Considering the average annual growth rate from 2020-2022 was 21%, we view this as quite achievable – especially considering the ongoing contraction in bank lending (which we also detailed in our 4Q2023 global credit outlook).

Exhibit 2: Private debt represents 12% of the $13 trillion alternatives universe

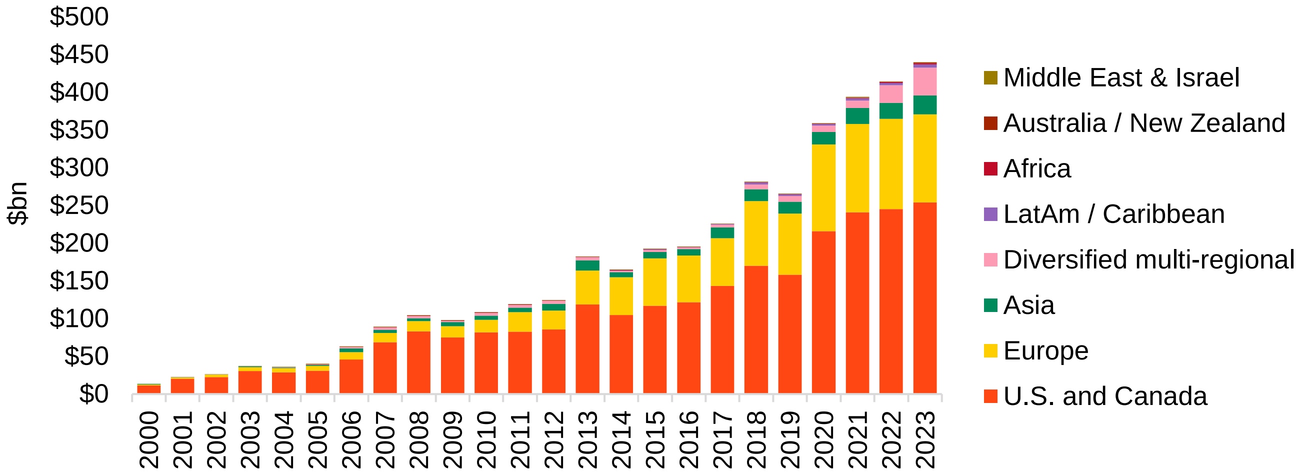
Assets under management (unrealized value and dry powder) across alternative asset classes



Source: BlackRock, Preqin. As of each calendar year-end. 2023 is as of March 2023 (most recent available). To avoid double counting of available capital and unrealized value, fund of funds and secondaries are excluded.

Exhibit 3: North America represents 58% of global private debt dry powder

Total private debt dry powder, by region



Source: BlackRock, Preqin. As of each calendar year-end. 2023 is as of October 2023. Total AUM (which includes unrealized value of investments and dry powder available for deployment) per Preqin is available on an approximate six-month lag for private market assets. Dry powder figures (in isolation) are not subject to the same lag in terms of data availability.

Private debt encompasses a wide range of strategies

While the $1.6 trillion global private debt asset class contains a wide variety of lending strategies (Exhibit 4), the largest is direct lending, which represents roughly 46% of global AUM, according to Preqin. North America direct lending represents 26% of global private debt AUM.

Direct lending refers to financing that is directly negotiated between a lender (often an alternative asset manager) and a borrower (usually a small-to-mid-sized company). Such loans are typically floating rate and secured by some portion of the borrower's assets. The key difference, however, between direct lending and a leveraged loan issued through the traditional public (syndicated) channel is that direct loans are not sold to multiple investors after they are issued. Rather, they are often held by the lenders until maturity, which can range anywhere from a few years to several years.

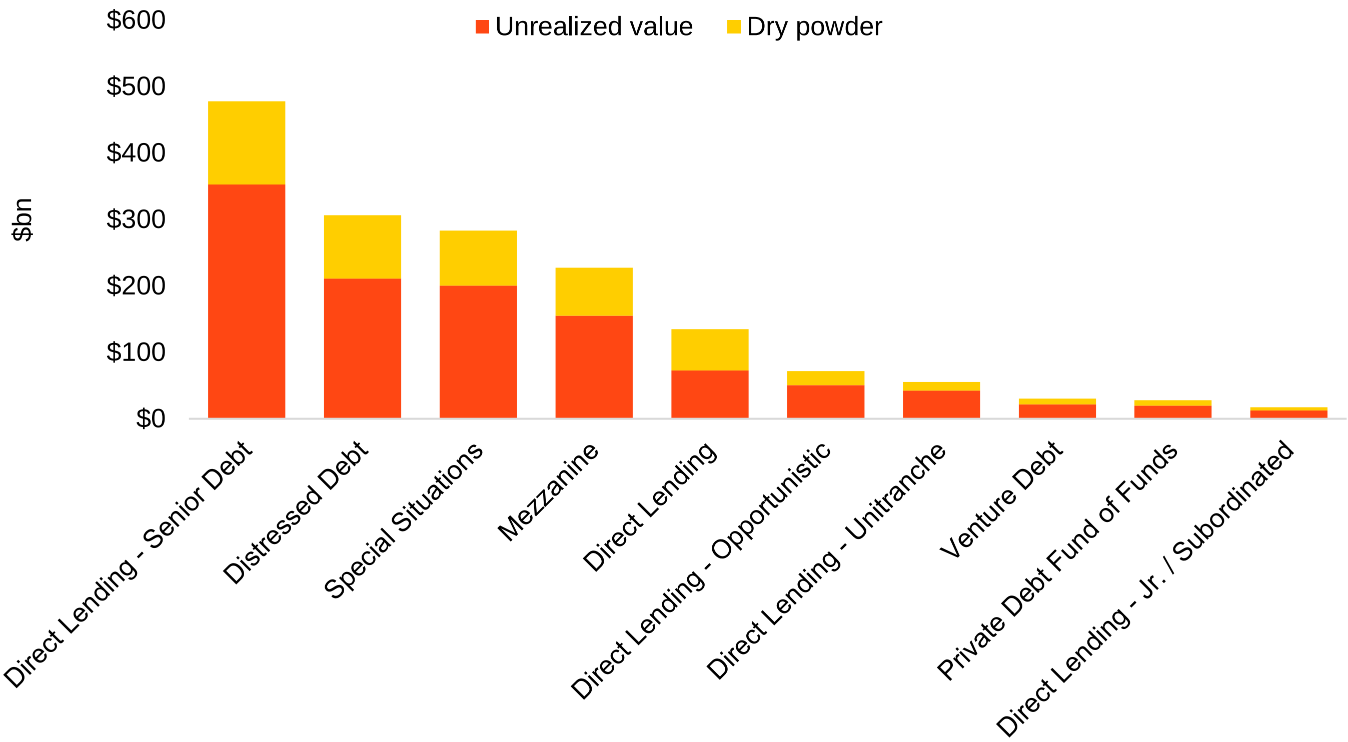
The Cliffwater Direct Lending Index (CDLI) is an asset-weighted index of approximately 13,000 directly originated middle market loans totaling $284 billion as of June 30, 2023. Launched in 2015, the CDLI was reconstructed back to 2004 using quarterly SEC filings required of business development companies, whose primary asset holdings are U.S. middle market corporate loans.

A Cliffwater analysis indicates that while most direct lending loans are structured with a maturity of five to seven years, they are often paid back early. Catalysts for early loan repayment would include a private equity backed sponsor selling a business (allowing to the loan to be repaid or refinanced).

Over a long-term historical period (from June 2006 to June 2023), the average effective loan life of the CDLI was 3.1 years. That said, the average effective loan life has increased over the past several quarters, reaching 5.3 years as of June 2023. This is reflective of a lower level of principal repayments amidst declining M&A volumes, according to Cliffwater.

In contrast to bonds and loans in the public market, private debt loans are not actively traded. As a result, such structures are best suited for investors that are willing and able to take on illiquid assets, and do not have significant, unpredictable needs for near-term liquidity.

Exhibit 4: The term 'private debt' encompasses a wide range of investing strategies
Total private debt assets under management, by strategy



Source: BlackRock, Preqin. 2023 is as of March 2023 (most recent available). Excludes Real Estate and Infrastructure lending.

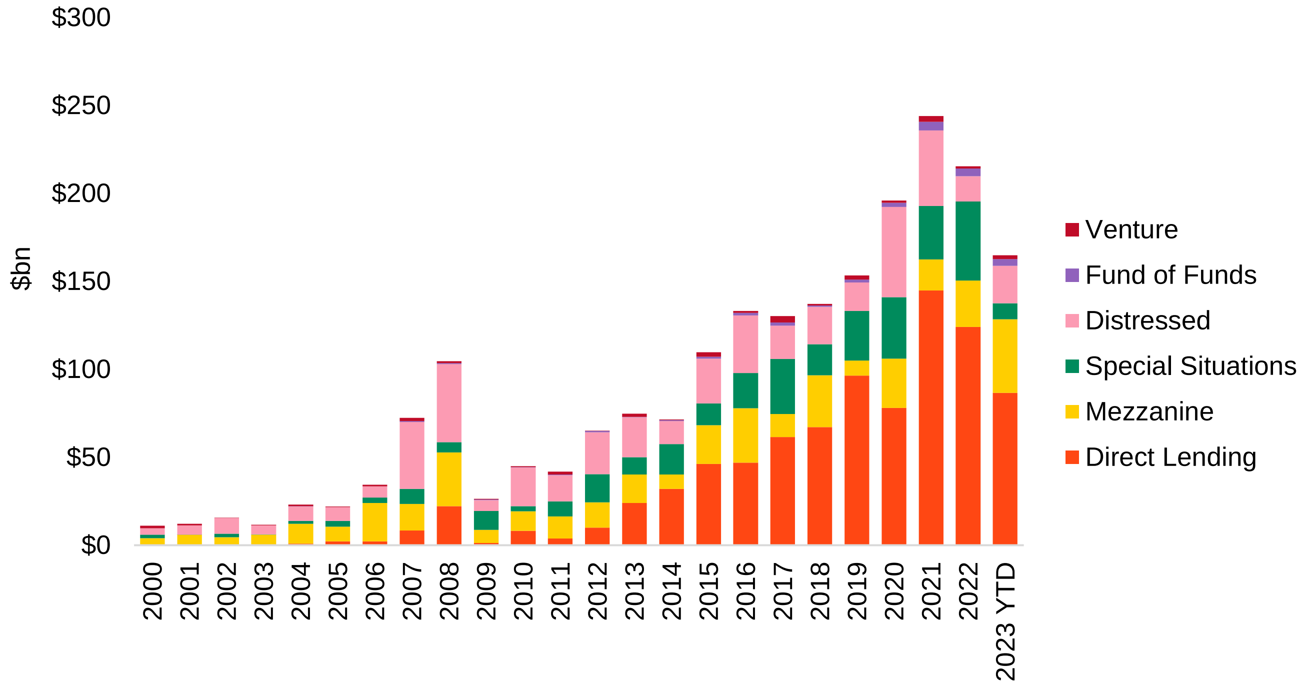
While direct lending is the largest private debt strategy, the "mix shift" of private debt fundraising can vary from year to year, as illustrated in Exhibit 5. The macro economic backdrop plays a role in this trend, in our view, as economic downturns can present opportunities for deployment in strategies such as distressed lending.

Below are some of the widely referenced strategies within private debt (excluding real estate and infrastructure lending). The definitions below use a mix of the classification criteria disclosed by third party data providers Preqin, Pitchbook LCD and Lincoln International.

- **Direct lending:** Non-bank lending, directly to small and medium enterprises. Debt can be senior (i.e., repaid first in a restructuring) or subordinated (i.e., repaid after senior holders), depending on the fund's strategy. The size of the borrowers can vary significantly, from lower middle market (annual EBITDA of less than $10 million) to upper middle market (annual EBITDA of more than $100 million).
- **Distressed:** Purchasing debt of companies (usually at a significant discount, in the secondary market) that are in bankruptcy, or likely to enter bankruptcy. Debt tends to be senior, given the high likelihood of liquidation. These strategies will also typically identify a "fulcrum" security, which is the most subordinated part of the capital structure likely to be paid back in a restructuring.
- **Mezzanine:** Subordinated debt, but still senior to equity positions. Can be a mix of debt and equity financing. Debt has conversion rights to equity (embedded equity option).
- **Special Situations:** Category can span other lending types such as distressed and mezzanine. Funding in response to a specific event, such as a merger or spin-off, often with the intent of gaining control of a company in financial distress.
- **Venture:** Loans to start-up / early-stage companies with venture capital backing, to fund growth. A way to avoid equity ownership dilution.
- **Fund of Funds:** A fund that invests in multiple (or several) third-party debt funds.
- **Opportunistic:** A strategy that seeks a diverse set of investments.
- **Unitranche:** Combines senior and subordinated debt into one tranche (instrument), to simplify debt structures.

Exhibit 5: The "mix shift" of private debt fundraising can vary from year to year

Private debt fundraising, by strategy. Aggregate capital raised ($bn).



Source: BlackRock, Preqin. As of October 30, 2023.

An expanding addressable market

The addressable market in private debt has expanded significantly over the past decade. In the earliest days of the asset class, private debt was used primarily for very small financing deals, or for companies without meaningfully positive (or even negative) EBITDA. But this asset class is no longer reserved for niche pockets of the market.

In recent years (and as the asset class has grown in size), direct lenders have funded larger deals, leading to more competition with the traditional (syndicated) leveraged finance markets. This can be seen in the fundraising trends highlighted in Exhibit 6.

Notably, while private debt (as a separately tracked asset class by data providers such as Preqin and others) experienced significant growth in the post-financial crisis era (early 2010, onwards), the practice of directly negotiated funding to small and medium sized businesses existed well before the onset of the global financial crisis in 2007-2008.

Unpacking the growth drivers

The drivers of private debt's growth have been multi-faceted over the past several years, including:

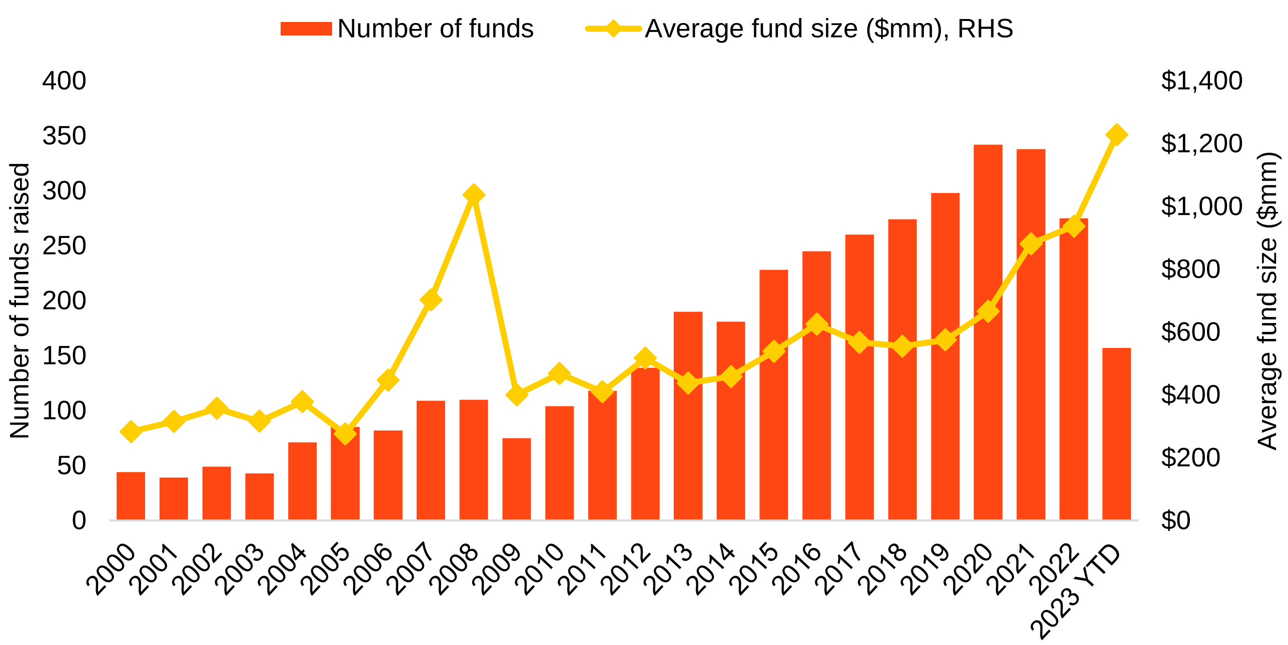
(1) **borrower preferences** for customized funding solutions, certainty of execution, and the flexibility inherent in a long-term borrower/lender relationship (i.e., the "demand" for private debt)

(2) **investor desires** for diversification in the context of a whole portfolio allocation, with opportunities to introduce structural protections, depending on the strategy (i.e., the "supply" of capital used in private debt lending)

(3) **structural shifts in the public markets**, which are now serving larger borrowers, leaving public debt market deal sizes prohibitively large for most middle market companies, and

(4) **a continued contraction in bank credit availability**, which we expect should allow for a further expansion of private debt's "addressable market" of borrowers

Exhibit 6: Private debt fundraising: new entrants, and larger fund sizes
Global private debt fundraising. Captures the "final close date" for each fund, or the number of funds that have reached a final close in each calendar year.



Source: BlackRock, Preqin. As of October 2023.

Growth driver #1: Borrower preferences

Borrowers' desire for customized funding solutions has resulted in significant demand for private debt. Companies value the ease and simplicity of the transactions, as well as the certainty of execution (as deals are not reliant upon syndication to a wide range of investors).

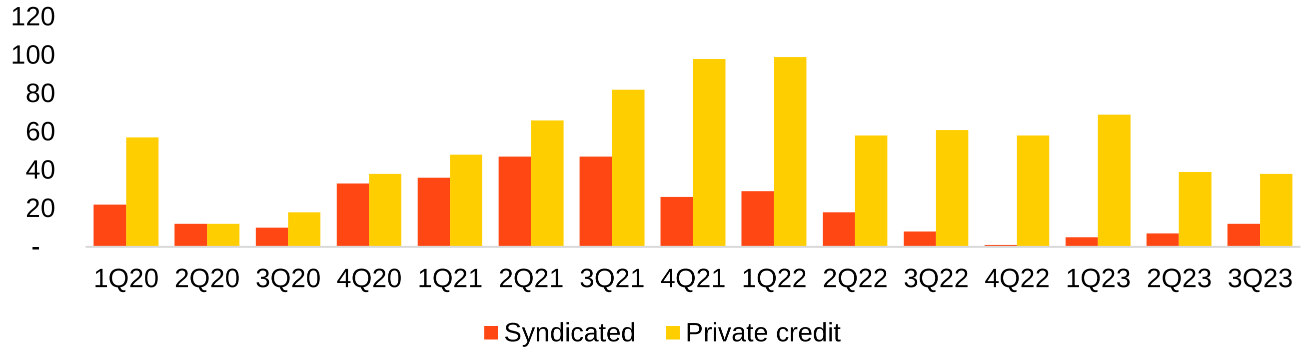
Due to the direct negotiating and underwriting process, lengthy investor roadshows and rating agency reviews are largely unnecessary for borrowers when they choose the route of direct lending. Another advantage, from a borrower's perspective, is the ability to keep proprietary and confidential information out of the public domain. More recently, there have been several examples of firms refinancing debt (currently outstanding in the public debt markets) with private funding solutions. We view this as reflective of private debt's appeal to a wide range of borrowers (even those with demonstrated access to the public markets).

Data from Pitchbook LCD do indeed show an ongoing, increased participation of private debt in the broader financing markets, for both leveraged buy-out (LBO) and non-LBO transactions (Exhibits 7 and 8). In fact, various public news reports (Pitchbook LCD, Bloomberg) have indicated that some borrowers are preferring to run "dual track" processes, simultaneously assessing investor interest in both the public and private debt markets, to determine where they can achieve the best execution.

Anecdotally, there have also been several examples (this year alone) of direct lending deals to refinance broadly syndicated term loans. As of September 30, 2023, Pitchbook LCD tracked at least six such transactions, totaling nearly $12 billion in aggregate. The largest of these deals was $5.3 billion. As the private debt market continues to grow in size, its capability to compete directly with the public debt financing markets will likely expand. We view this as a natural evolution of the asset class, as it matures.

Exhibit 7: The private credit market has dominated LBO financing, by deal count

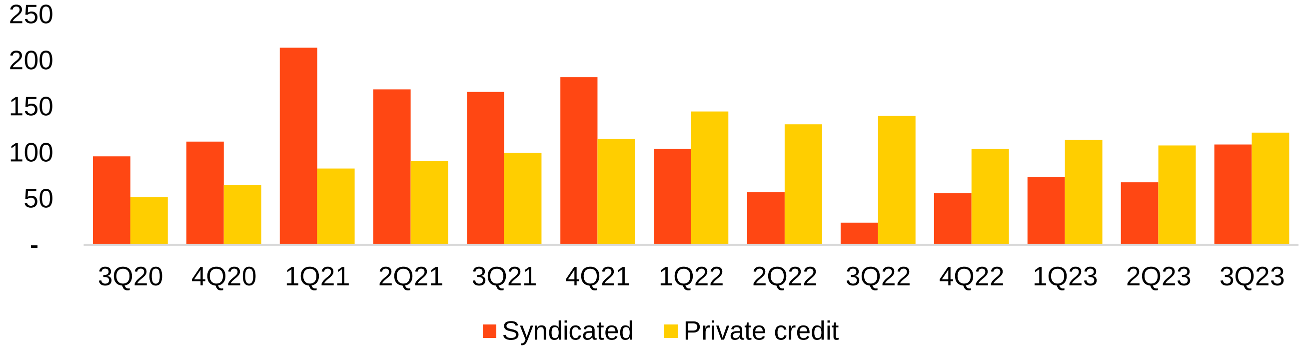
Count of LBOs financed in broadly syndicated loan vs. private credit markets



Source: BlackRock, Pitchbook LCD. As of September 30, 2023. Private credit count is based on transactions covered by LCD News.

Exhibit 8: Private credit can now absorb some of the "non-LBO" funding needs, as well

Count of non-LBOs financed in broadly syndicated loan vs. private credit markets



Source: BlackRock, Pitchbook LCD. As of September 30, 2023. Private credit count is based on transactions covered by LCD News.

Growth driver #2: Investor desires

The ownership of private debt is largely comprised of buy-and-hold investors, such as pension funds, endowments, foundations and insurance companies, among others (Exhibit 9). Many of these investors engage in asset-liability matching, whereby long-term liabilities to be paid in the future (such as life insurance payments and pension payouts) are matched against income-generating assets with a similar maturity profile.

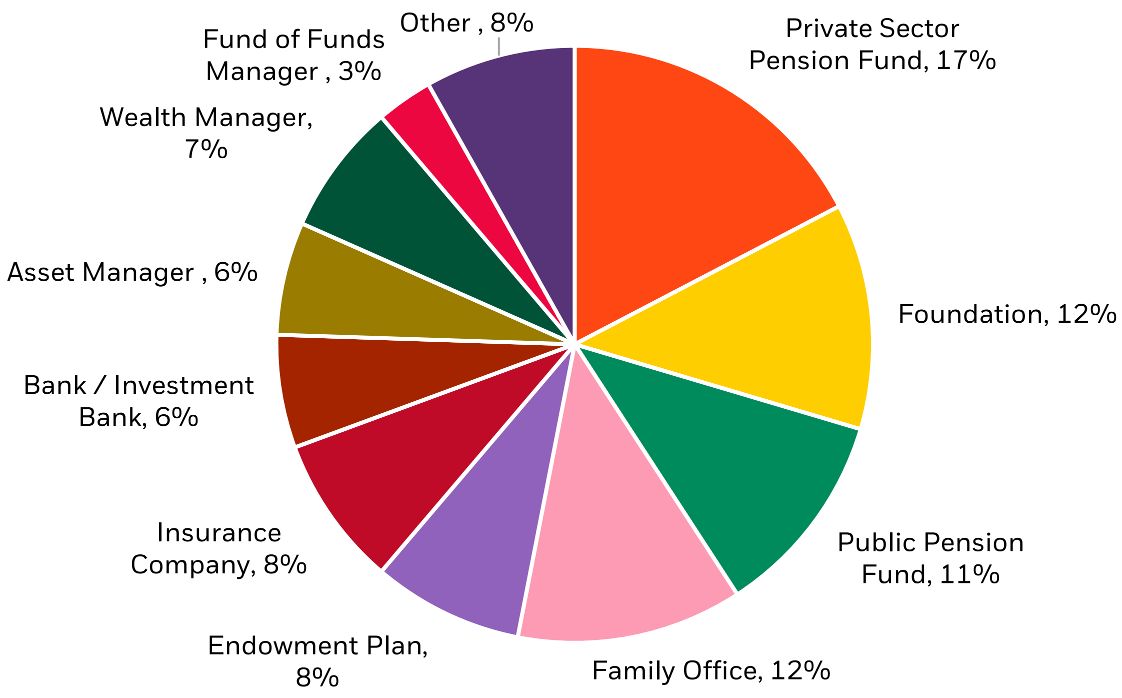
One byproduct of a buy-and-hold investor base is the ability to remain patient during periods of market volatility. This can minimize technical downside pressure on the private debt asset class relative to what is sometimes observed in the public markets during similar times of stress. In our view, and with the caveat that fund specific nuances are important to consider, this generally leaves the asset class less vulnerable to the types of asset-liability "mismatches" that were evident among some U.S. regional banks in March 2023, as the liquidity of direct lending fund structures is typically well matched to the duration of the investments (i.e., both are long-term).

Room for increased investor participation

Underpinning our AUM growth forecast is our expectation for an ongoing increase in investor allocations to private debt. This view is supported by a recent investor survey conducted by third party alternative asset data provider Preqin. The survey was conducted in June 2023 and captured responses from a wide range of global institutional and retail investors.

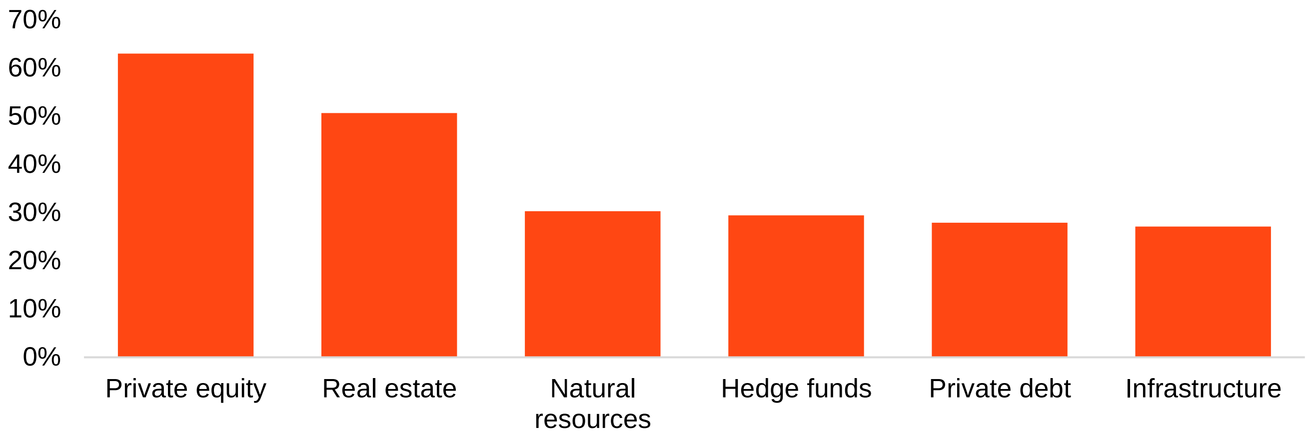
Of the Preqin survey respondents, an estimated 28% had an allocation to private debt as of June 2023. This suggests room for continued growth, especially considering Preqin's estimate that 63% of investors had an allocation to private equity (Exhibit 10) as of that same timeframe. For those investors allocating to the respective alternative asset classes, Preqin estimates the average target private debt allocation was 6.4% of total assets. This compares to an average target allocation of 14.8% of total assets in private equity (Exhibit 11).

Exhibit 9: The private debt ownership base: largely long-term, and "buy-and-hold" focused
Ownership of global private debt assets under management, by investor type



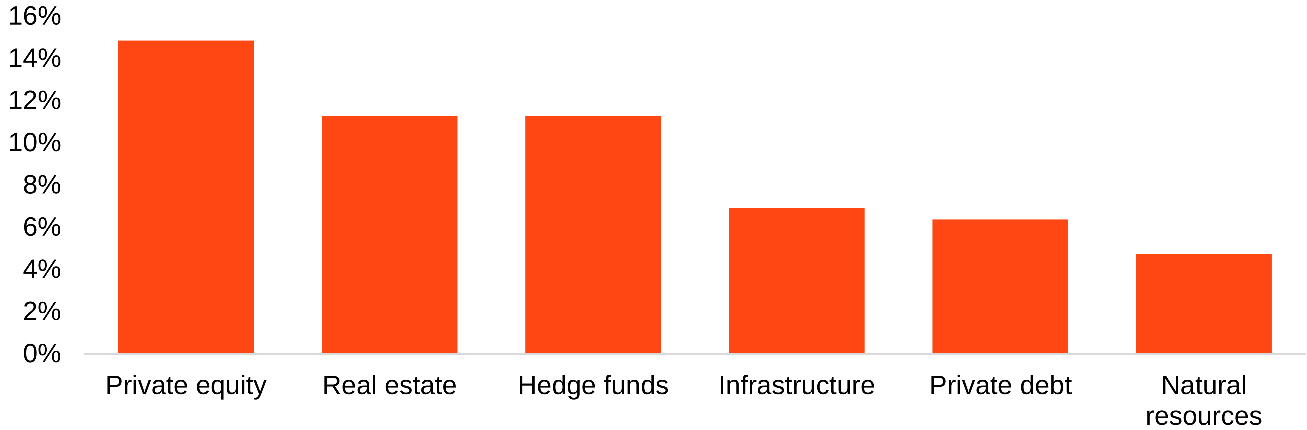
Source: BlackRock, Preqin, Goldman Sachs Global Investment Research. As of June 2022. The "Other" category includes Corporate Investor, Government Agency, Investment Company, Investment Trust, Sovereign Wealth Fund, and Superannuation Scheme.

Exhibit 10: We see ample scope for investor participation in the private debt market to grow
Percentage of Preqin investor survey respondents allocating to each alternative asset class



Source: BlackRock, Preqin June 2023 Investor Survey. Venture capital is included in private equity.

Exhibit 11: We also see room for the average target allocation to private debt to increase
Preqin investor survey respondents' average target allocation, as a percentage of total assets



Source: BlackRock, Preqin June 2023 Investor Survey. Venture capital is included in private equity.

Investor signaling shows a variety of reasons to allocate to private debt

45% of Preqin's June 2023 survey respondents planned to commit more capital to private debt in the next twelve months, and 45% expected to invest the same amount. Only 10% expected to commit less capital to private debt over the next year (Exhibit 12).

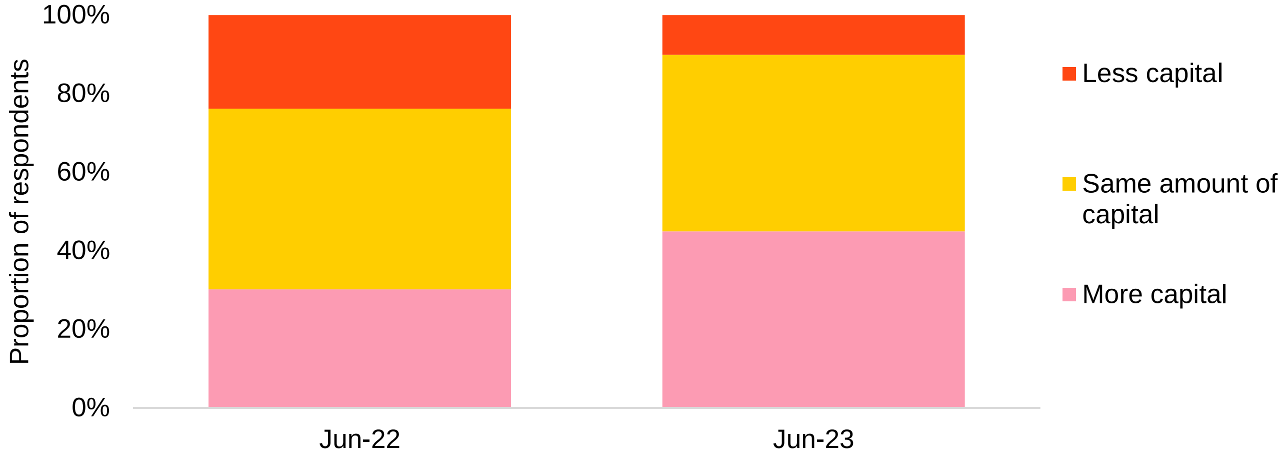
Similarly, 51% of respondents planned to increase their allocation to private debt over the long-term, while 43% planned to maintain it. Only 6% of investors surveyed planned to decrease their long-term private debt allocations (Exhibit 13).

A range of reasons for allocating to private debt were cited by these investors, including a desire for a reliable income stream (cited by 61% of respondents), diversification (49%), high risk-adjusted returns (44%), reduced portfolio volatility (33%), and low correlation to other asset classes (27%). As shown in Exhibit 14, the biggest risk to the private debt asset class (per the Preqin investor survey) remains the high interest rate environment. This focus on the higher cost of capital backdrop underscores the importance of credit selection and manager underwriting/restructuring expertise , in our view.

Notably, the Preqin survey signaled investor interest across a range of strategies – most notably direct lending and distressed. The "mix-shift" of the long-term growth in private debt AUM – within strategies – will depend heavily, in our view, on the macroeconomic backdrop. A sharp growth downturn, while not our base case in the U.S. in the near-term, would likely increase the investing opportunity for strategies such as distressed lending.

Exhibit 12: 45% of Preqin survey respondents plan to commit more capital to private debt in the next 12 months

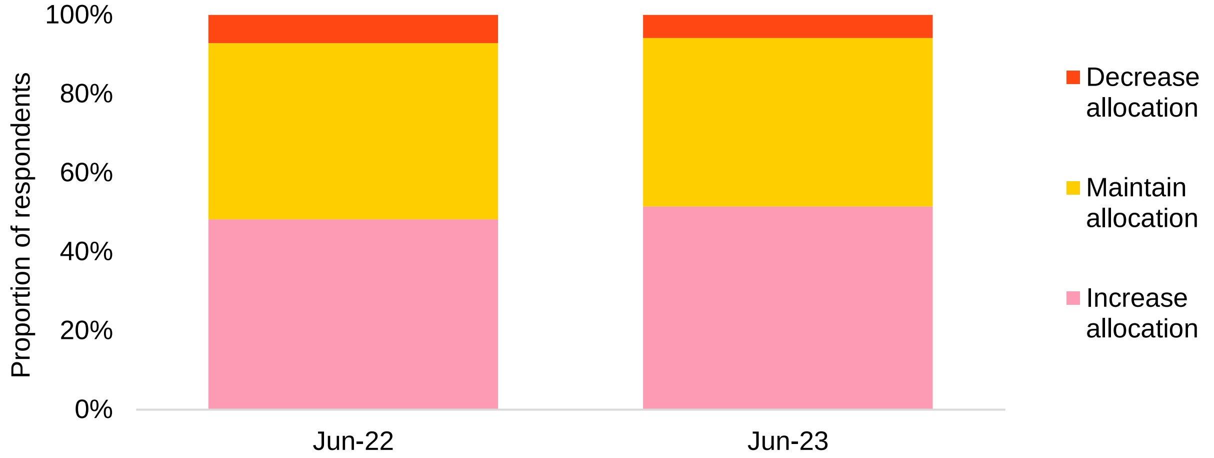
Preqin investor survey responses to: “How much capital will you commit to private debt in the next 12 months?”



Source: BlackRock, Preqin June 2023 Investor Survey (and June 2022 Survey, for comparison).

Exhibit 13: 51% of survey respondents plan to increase their private debt allocations, over the long term

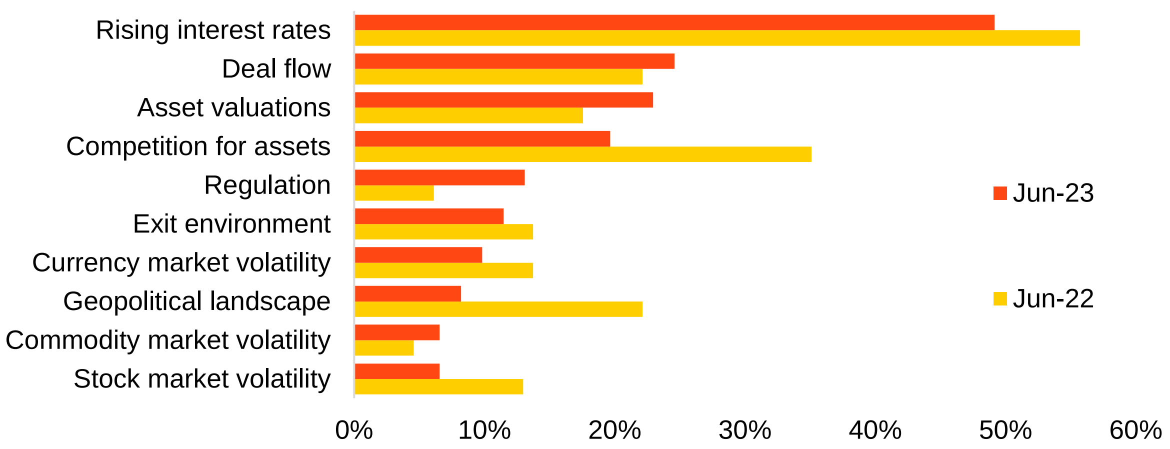
Preqin investor survey responses to: “How will you allocate to private debt over the longer term?”



Source: BlackRock, Preqin June 2023 Investor Survey (and June 2022 Survey, for comparison).

Exhibit 14: Interest rates remain one of the largest risks to private debt, per investors

Preqin investor survey responses to: “What are key challenges for private debt return generation in the next 12 months?”. Percentage of survey respondents selecting each factor as a key challenge.



Source: BlackRock, Preqin June 2023 Investor Survey (and June 2022 Survey, for comparison).

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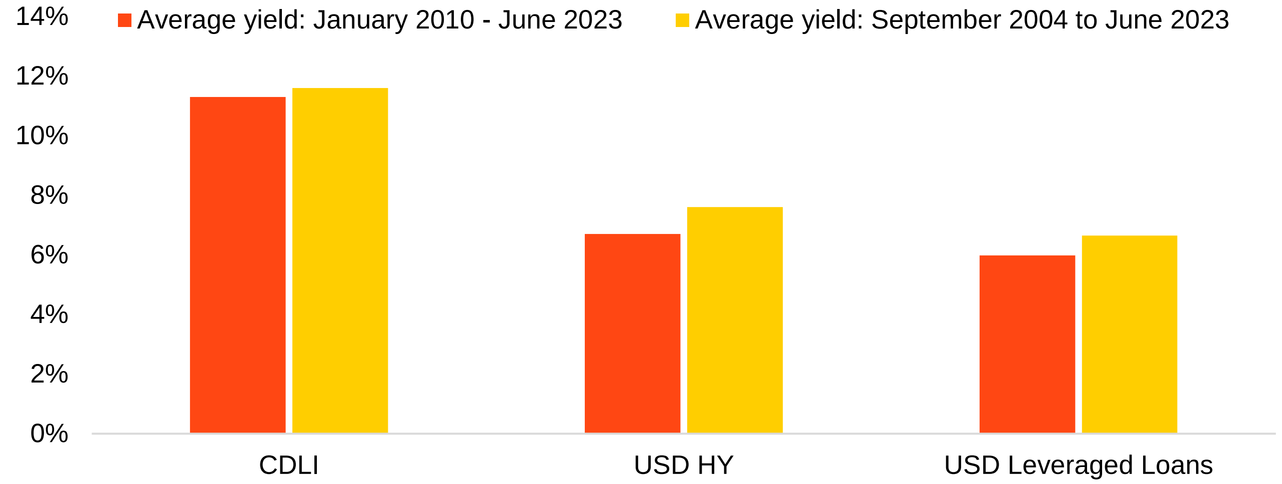
Private debt performance: yields, returns and losses

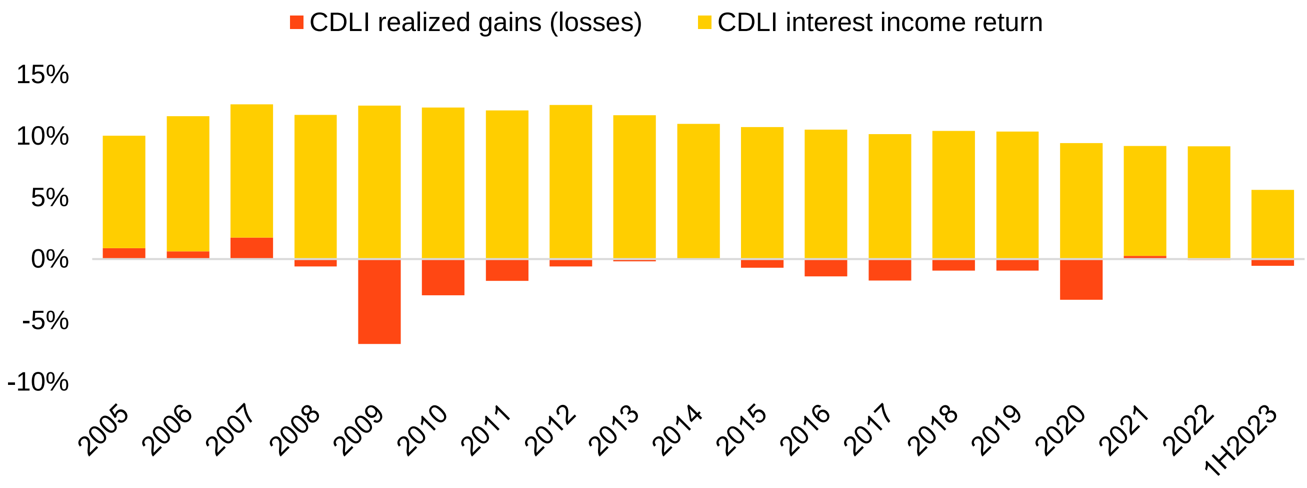
Exhibits 15 through 17 illustrate the performance trends of direct lending (the largest strategy within private debt), using the CDLI (which measures unlevered returns, gross of fees). As shown in Exhibit 15, private debt has historically offered a notable "yield pick-up" versus public markets. This incremental yield reflects the additional cost paid by the borrower, in exchange for the certainty and ease of execution provided by the lender.

Exhibit 15: U.S. direct lending has historically offered a yield "pick-up" vs. public markets
Average yields for the Cliffwater Direct Lending Index (CDLI), Morningstar/LSTA USD Leveraged Loan Index, and the Bloomberg USD HY Corporate Index



Source: BlackRock, Morningstar/LSTA, Pitchbook LCD, Bloomberg. As of June 30, 2023 (most recent available for CDLI). Yields used: CDLI: 3-year takeout yield; Loans: yield-to-maturity; HY: yield-to-worst. **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 16: Realized losses for the CDLI remained modest for 1H2023, at 55bp
Cliffwater Direct Lending Index (CDLI) realized gains (losses) and interest income return, by annual period and 1H2023 (not annualized)



Source: BlackRock, Cliffwater. As of June 30, 2023. 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. 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. **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.

As Exhibit 16 illustrates, realized losses have typically been modest in the context of the interest income generated by the asset class. After an extremely low period of realized loss rates in 2021 and 2022, the loss trend of the CDLI has showed some normalization but remains contained. 2Q2023 data for the CDLI (most recent available) highlighted realized loss rates (from payment defaults or restructurings) that, while higher vs. 2021-2022, remained moderate and broadly consistent with 1Q2023. For 1H2023, the CDLI realized loss totaled 0.55%, compared to an interest income return of 5.63%.

Exhibit 17 highlights the total return performance of the CDLI against two widely-tracked indices in the public credit market: The Bloomberg USD HY Corporate Index, and the Morningstar/LSTA USD Leveraged Loan Index. Of the 18 annual periods (2005 – 2022) since the CDLI's inception, the CDLI has outperformed these HY bond and leveraged loan indices (on a total return basis) in 13 of these years.

One key variable related to total performance (between the asset classes) is duration exposure. As a fixed rate asset class, the USD HY bond market has exposure to duration (i.e., price sensitivity to a change in interest rates). This stands in contrast to the CDLI and leveraged loan markets, which are floating rate asset classes.

As such, the CDLI and leveraged loan indices would be expected to perform better in a rising rate environment. Conversely, a sharp rally in interest rates (from current levels) would benefit the total return performance of the USD HY market. That said, because we view the bar for Fed rate cuts as remaining high well into 2024, this is not our base case.

Exhibit 17: Direct lending has a favorable return track record

Calendar year total return comparisons (2005 - 2022), 1Q2023, and 2Q2023. Green = largest total return in the period. Red = smallest total return in the period.

	Cliffwater Direct Lending Index (CDLI)	Bloomberg USD HY Corp Bond Index	Morningstar LSTA USD Leveraged Loan Index
2005	10.1%	2.7%	5.1%
2006	13.7%	11.9%	6.8%
2007	10.2%	1.9%	2.0%
2008	-6.5%	-26.2%	-29.1%
2009	13.2%	58.2%	51.6%
2010	15.8%	15.1%	10.1%
2011	9.8%	5.0%	1.5%
2012	14.0%	15.8%	9.7%
2013	12.7%	7.5%	5.3%
2014	9.6%	2.5%	1.6%
2015	5.5%	-4.5%	-0.7%
2016	11.2%	17.1%	10.2%
2017	8.6%	7.5%	4.1%
2018	8.1%	-2.1%	0.4%
2019	9.0%	14.2%	8.6%
2020	5.5%	7.1%	3.1%
2021	12.8%	5.3%	5.2%
2022	6.3%	-11.2%	-0.8%
1Q2023	2.7%	3.6%	3.3%
2Q2023	2.8%	1.8%	3.2%

Source: BlackRock, Cliffwater, Bloomberg, Pitchbook LCD, Morningstar/LSTA. As of 2Q2023 (most recent available for the CDLI). The CDLI measures the unlevered, gross of fees performance of U.S. middle market corporate loans, as represented by the underlying assets of Business Development Companies ("BDCs"), including both exchange traded and non-traded BDCs, subject to certain eligibility requirements. **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.

Loss rates have also compared favorably with the public markets, as shown in Exhibit 18. (Note: when comparing public vs. private debt, we view loss rates as more informative than default rates, driven by the increased prevalence of covenants in private debt structures. For example, tripping a covenant provides lenders the time and legal position to address issues in advance of a payment default).

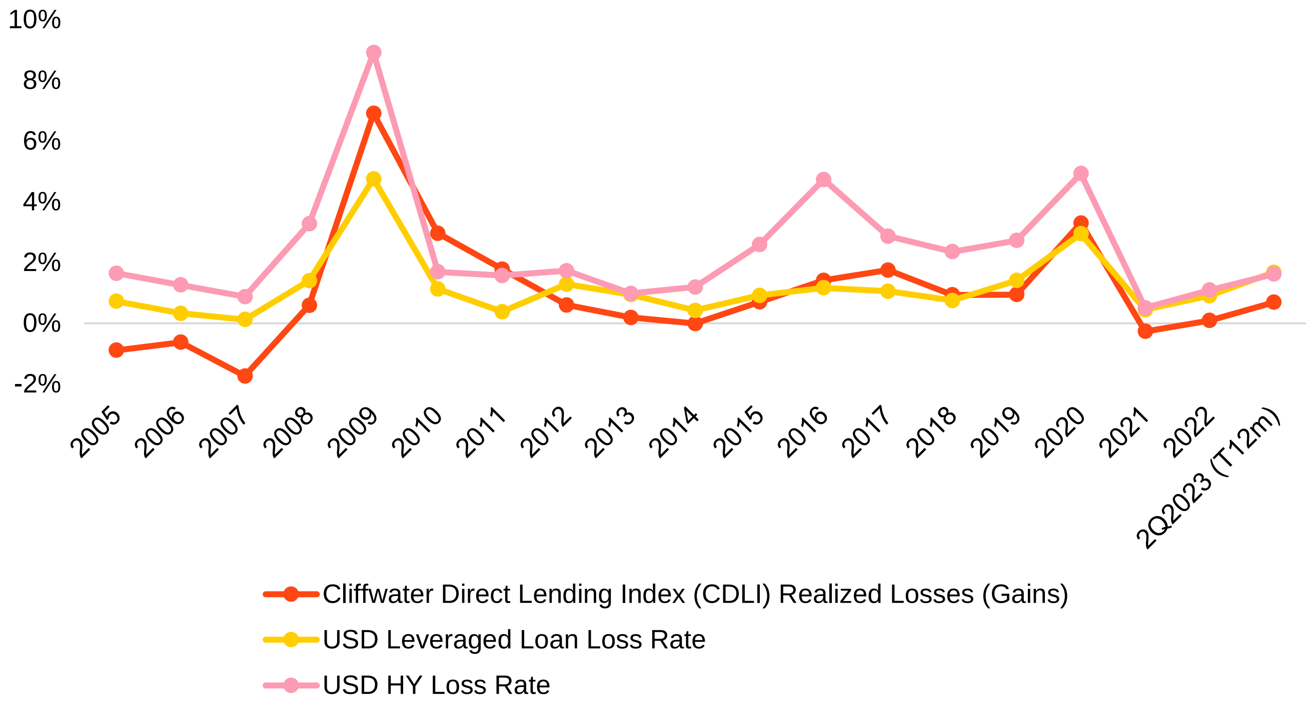
In periods of financial market stress such as the global financial crisis of 2007-2008, the energy sector disruption of 2014-2015, and the COVID-19 pandemic in early 2020, net realized losses for the CDLI were either similar to or lower than our estimates of loss-given-default in the U.S. HY bond and leveraged loan markets (again, Exhibit 18). We attribute this relative resilience of direct lending to a few factors, namely: (1) the extensive due diligence and underwriting process in the investment selection process, (2) structural protections, as the loans are senior secured in the capital structure, as well as covenants (3) ongoing monitoring to help mitigate downside risk, and (4) having a strategic partner which can work collaboratively with the company to provide needed support, if required.

Relatively benign loss trends were also visible in another private debt index in 2Q2023 – the Lincoln International Senior Debt Index (LSDI), which tracks 4,500 U.S. portfolio companies across 150 sponsors and lenders. In 2Q2023, the LSDI reported a record high yield (of 11.7%) and a decline in covenant defaults vs. 1Q2023 (from 4.5% in 1Q2023 to 4.2% in 2Q2023; Exhibit 19). The LSDI also identified 425 loan amendments executed in 1H2023 (involving roughly 15% of the universe of companies that it tracks). In its 2Q2023 report, Lincoln International flagged higher interest expense as a reason for these firms to proactively seek amendments.

In our view, this dynamic is reflective of one key attribute of direct lending: the long-term relationship between a borrower and lender. This can often result in a more efficient process for negotiating amendments vs. what would otherwise occur in the syndicated public market, where a wide array of lenders would need to agree on a potential change.

Exhibit 18: Direct lending loss rates have compared favorably vs. public markets in recent years

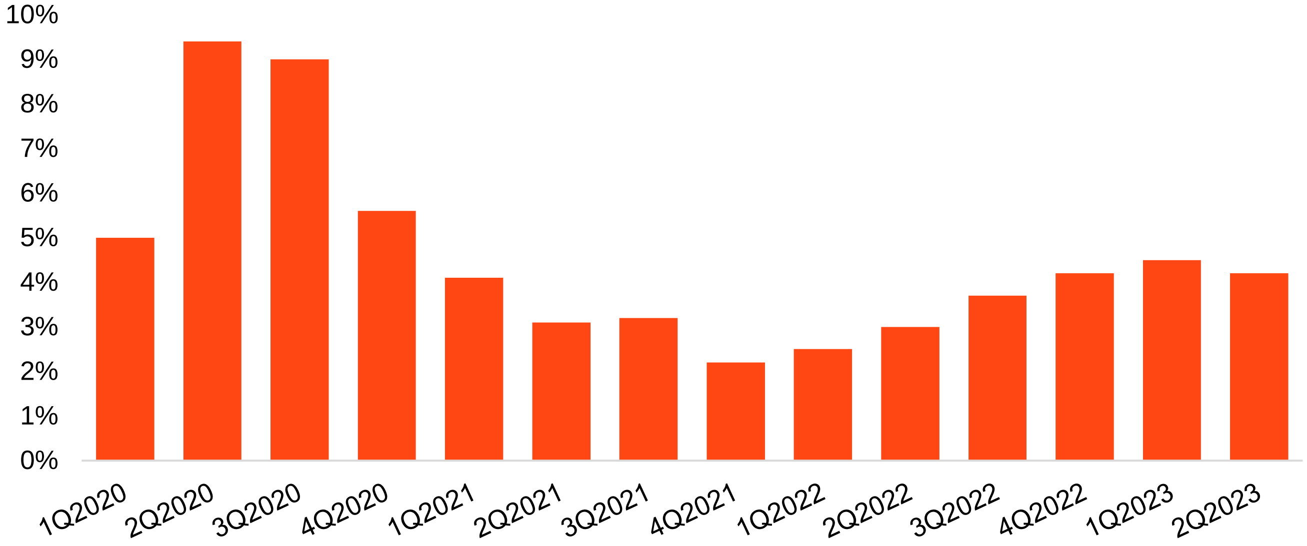
Historical loss rates (%)



Source: BlackRock, Moody's, Cliffwater. For the CDLI, we show annual and trailing 12-month realized loss rate data for 2Q2023 (most recent available for the 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 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 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.

Exhibit 19: Private debt's long-term relationship between borrower and lender may help keep defaults contained, in our view

Covenant default rate (size-weighted) for the 4,500+ portfolio companies tracked by the Lincoln International Senior Debt Index



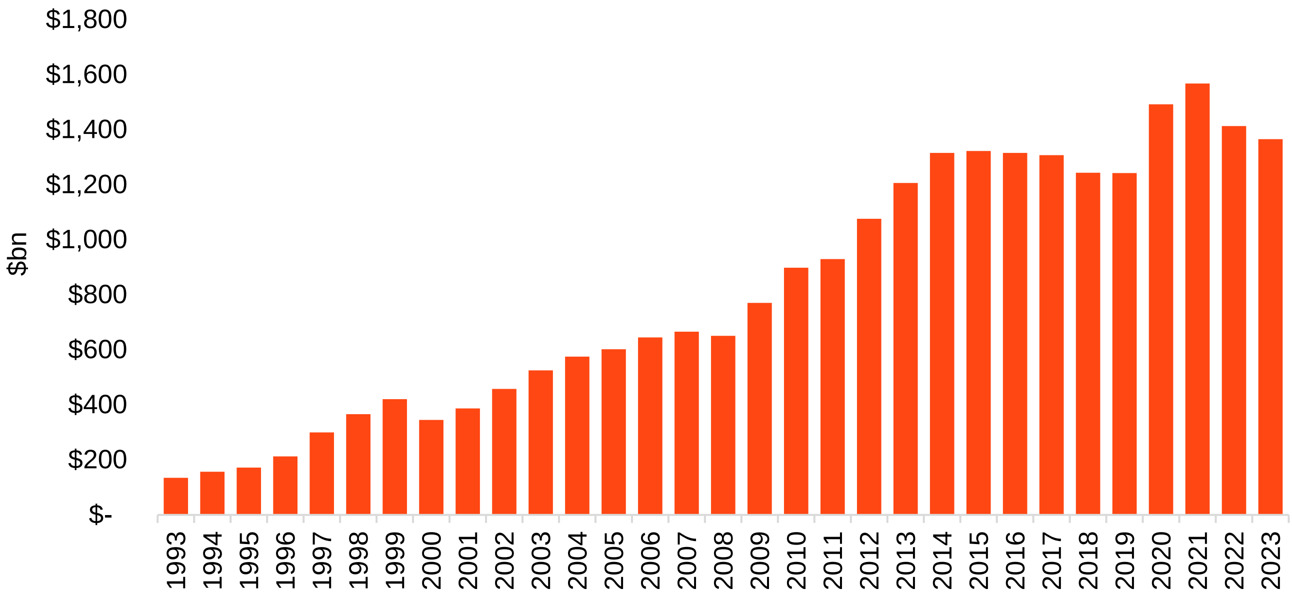
Source: BlackRock, Lincoln Valuations & Opinions Group (VOG)Proprietary Private Market Database. Note: A default is defined as a covenant default and not a monetary default. The analysis was performed based on a size-weighted approach, which considered the total net debt balance for each of the portfolio companies that had a defaulting security in the respective quarter. Captures data through 2Q2023 (most recent available).

Growth driver #3: Structural shifts in public markets

Structural shifts in the public debt markets have also played a role in the growth of the private debt market, specifically as it relates to the demand for the asset class (from borrowers).

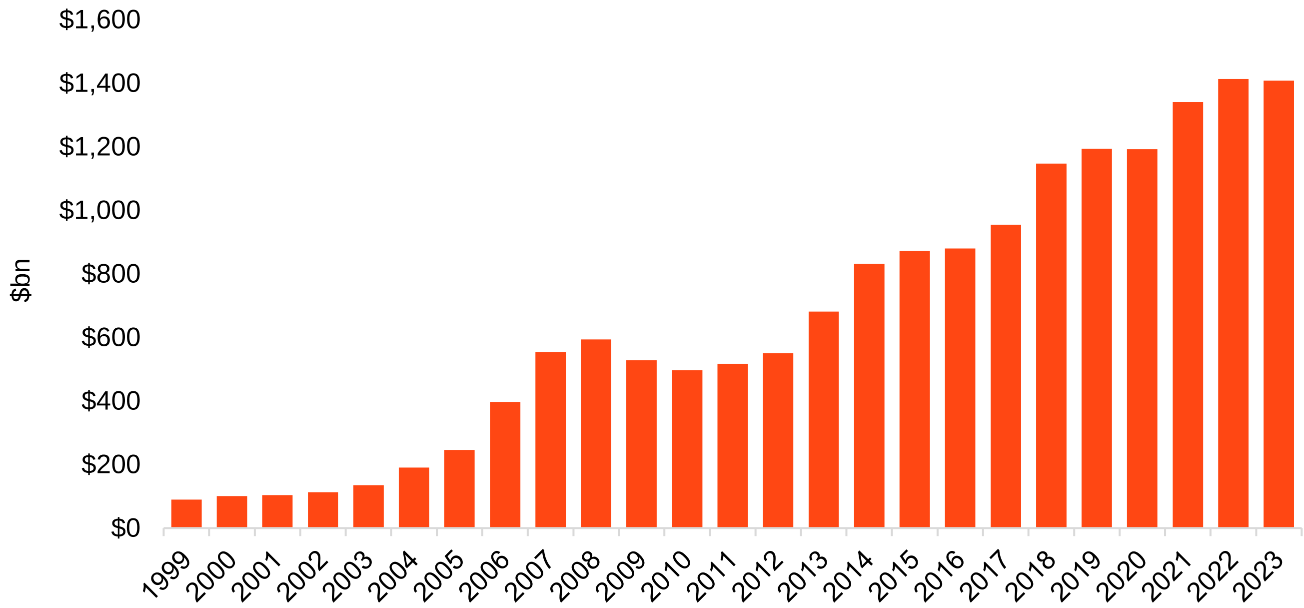
For example, the public (i.e., syndicated) USD HY bond and leveraged loan markets have grown significantly since the financial crisis, as shown in Exhibits 20 and 21. This growth has resulted in higher "barriers to entry" in public funding markets for small and medium sized firms, as the public funding channel serves larger borrowers. These higher "barriers to entry" are illustrated in the average deal sizes for new issues in the HY and leveraged loan markets, shown in Exhibits 22 and 23.

Exhibit 20: The Bloomberg USD HY index has $1.36 trillion of debt outstanding
Par amount outstanding ($bn) of the Bloomberg USD HY Corporate Index



Source: BlackRock, Bloomberg. As of October 29, 2023. Excludes HY debt that is not index eligible.

Exhibit 21: The Morningstar/LSTA USD Leveraged Loan Index is now $1.4 trillion in size
Par amount outstanding ($bn) of the Morningstar/LSTA USD Leveraged Loan Index

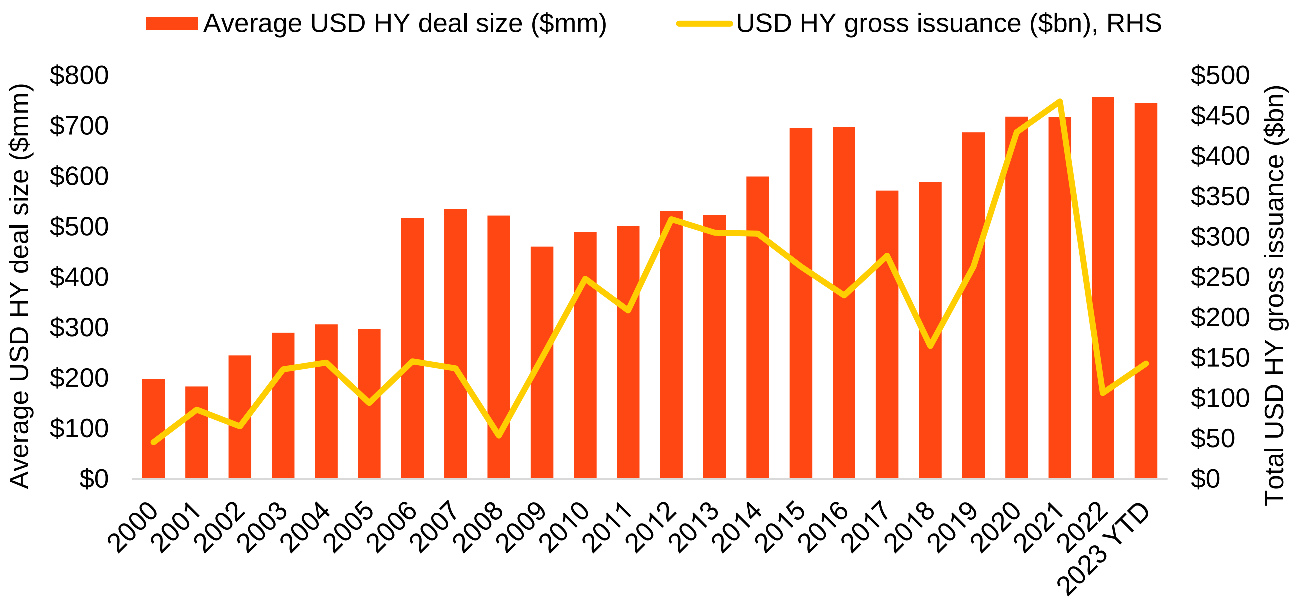


Source: BlackRock, Pitchbook LCD, Morningstar/LSTA. As of September 30, 2023 (most recent available). Excludes loans that are not index eligible.

As shown in Exhibit 22, the average new deal size in the USD HY corporate bond market has been in excess of $700 million over the past three years and has been on an upward trajectory for much of the past decade. In the USD leveraged loan market, the average new deal size (new institutional money) is slightly lower, but still substantial, averaging $470 million since 2020 (Exhibit 23). Here too, the trend has generally been higher for the past decade.

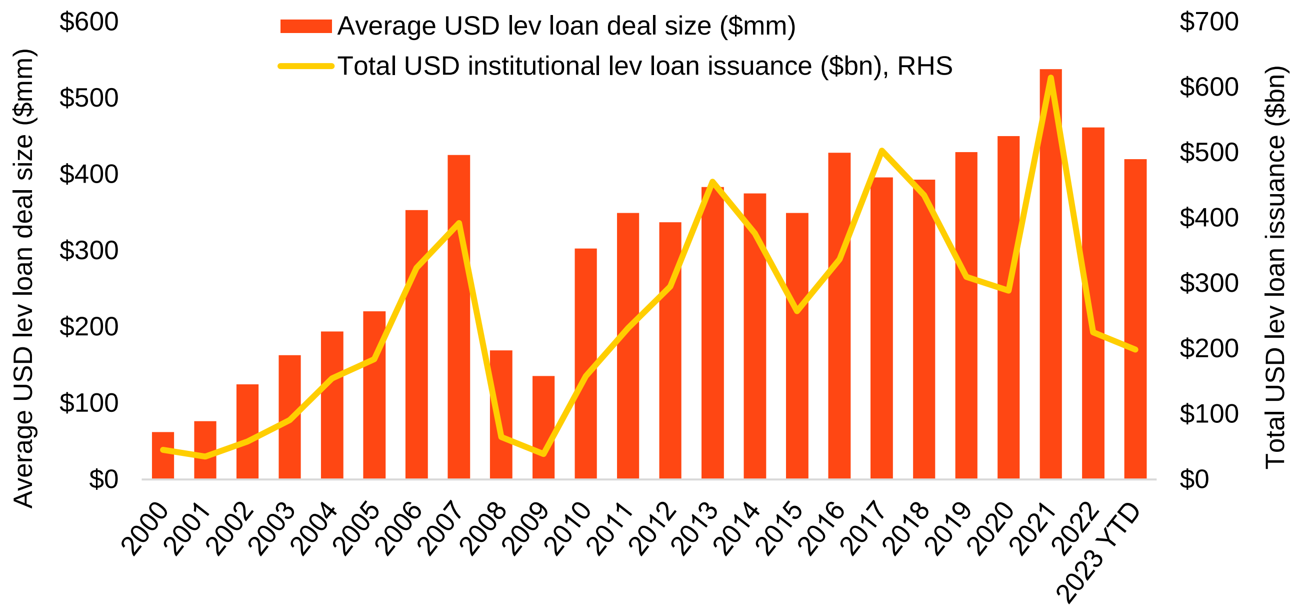
For a middle market firm seeking funding from the public markets, these "average" sizes are prohibitively large and unrealistic. And issuing "too little" debt in the public debt markets can render a capital structure illiquid and poorly held among investors – an unfavorable outcome in the event the firm would like to refinance in the future, and likely a suboptimal outcome for investors.

Exhibit 22: The average USD HY deal size has been well above $700 million since 2020
Average USD HY deal size ($mm) and total USD HY gross issuance ($bn)



Source: BlackRock, Dealogic. As of October 29, 2023.

Exhibit 23: The average USD leveraged loan deal size has been $470 million since 2020
Average USD leveraged loan deal size ($mm) and total USD institutional leveraged loan issuance ($bn)



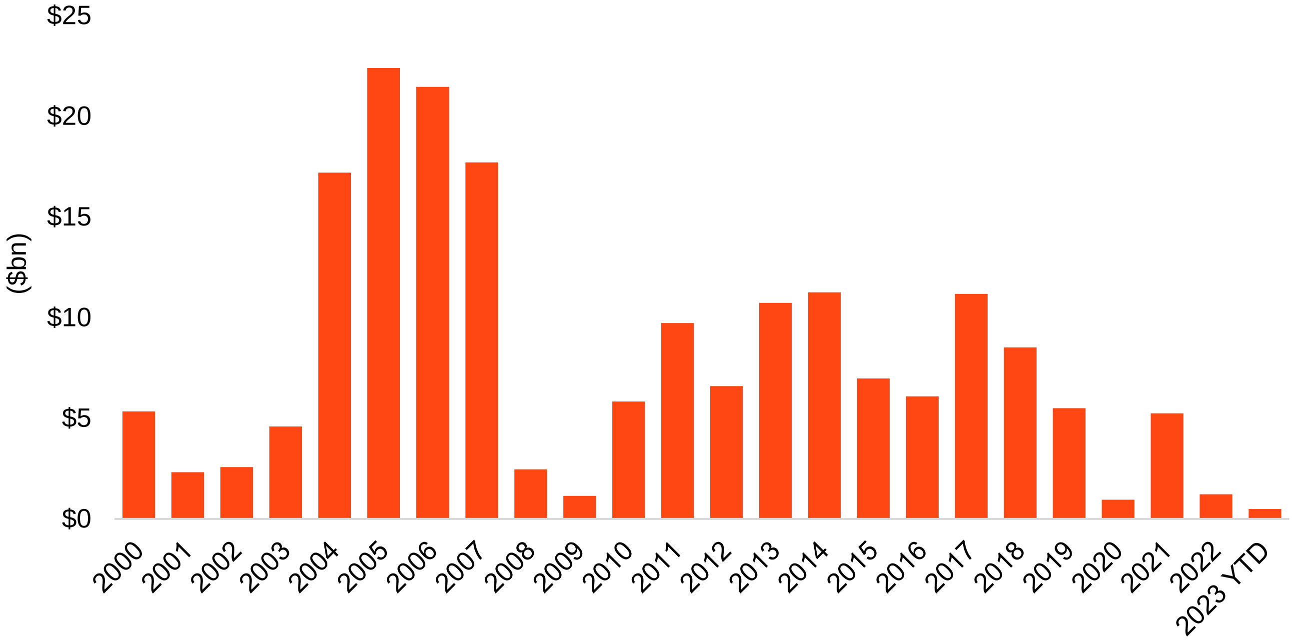
Source: BlackRock, Pitchbook LCD. As of October 29, 2023.

Beyond the growth in the average deal size of syndicated HY bond and leveraged loan markets, the trend of the public debt markets serving larger borrowers is also visible when isolating middle market leveraged loan issuance in the syndicated channel. As shown in Exhibit 24, issuance of middle market leveraged loans (defined by LCD as firms with less than $50 million in annual EBITDA) has stagnated over the past several years, while assets under management in private debt funds have grown substantially (again, Exhibit 1).

With the public debt markets serving larger and larger borrowers, we expect middle market firms will continue to be drawn to the private debt markets for tailored funding solutions. In our view, the private debt market will continue to capture an increasing share of the "financing pie," including funding that may have previously been earmarked for the syndicated debt markets (and the banking channel, as discussed in point #4). Given recent volatility in markets, we also continue to see an opportunity for private debt to enhance its pricing power vs. syndicated financing channels (in exchange for the certainty of execution that private debt provides).

Exhibit 24: Middle market leveraged loan issuance in the syndicated channel has stagnated in recent years, as private debt AUM has grown

USD syndicated middle market leveraged loan issuance ($bn)



Source: BlackRock, Pitchbook LCD. As of October 29, 2023.

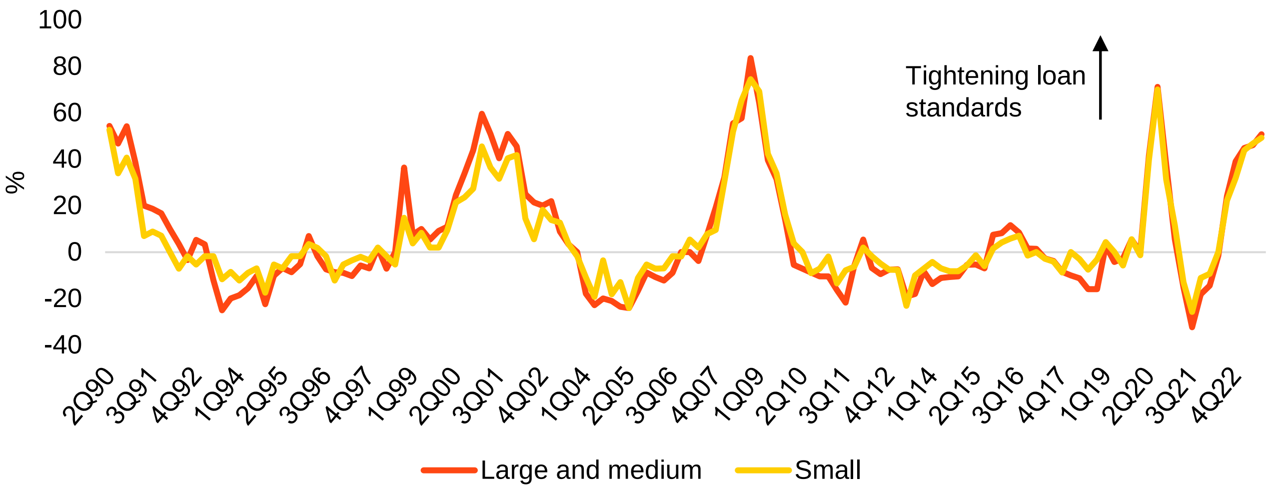
Growth driver #4: Tightening bank lending standards

As we discussed recently in "Mega forces - Future of Finance", we also see a structural opportunity for growth in private debt as a result in the ongoing tightening in bank lending. Lending standards – as visible in the Federal Reserve's Senior Loan Officer Opinion Survey (SLOOS) – have been tightening for the past few quarters and are approaching levels last seen in recessionary episodes such as 2001, 2008/2009 and early 2020 (Exhibit 25). The pricing of credit has also been increasing over that same timeframe (Exhibit 26).

Exhibit 27 highlights the range of factors that are likely to contribute to an ongoing tightening of bank lending standards in 2H2023, as outlined in the July 2023 Federal Reserve's Senior Loan Officer Opinion Survey. Most notable, in our view, are concerns about loan and collateral quality deterioration given the macroeconomic backdrop, the increased cost of deposits, and regulatory changes (which, as proposed, will raise capital and liquidity requirements). With banks approaching lending more selectively, we continue to see an opportunity for private debt to expand its addressable market of borrowers – either through writing new business or acquiring existing business from legacy bank lenders.

Exhibit 25: U.S. bank lending standards have been tightening in recent quarters

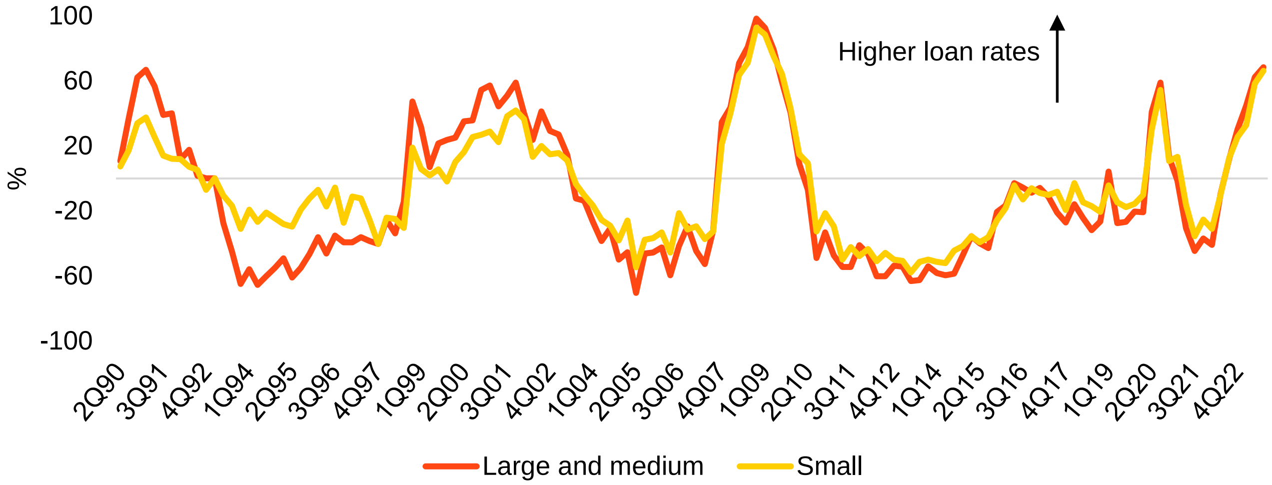
Net percentage of domestic respondents to the July 2023 Senior Loan Officer Opinion Survey (SLOOS) tightening standards for commercial & industrial (C&I) loans to large/medium and small firms



Source: BlackRock, Board of Governors of the Federal Reserve System. July 2023 SLOOS was released on July 31, 2023.

Exhibit 26: The pricing of credit has also increased over that timeframe

Net percentage of domestic respondents to the July 2023 Senior Loan Officer Opinion Survey (SLOOS) increasing spreads of loan rates (over banks' cost of funds) to large/medium and small firms

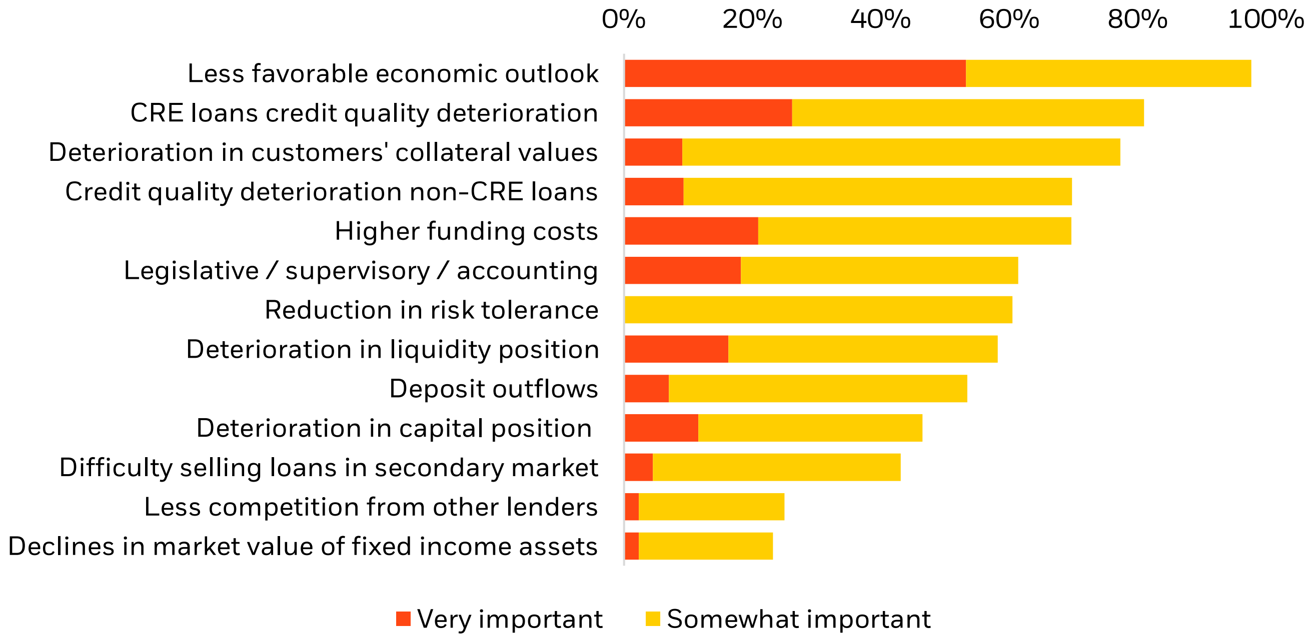


Source: BlackRock, Board of Governors of the Federal Reserve System. July 2023 SLOOS was released on July 31, 2023.

Notably, while the SLOOS has historically been an important barometer for macro credit conditions, the survey may not have the same relationship vis-à-vis economic pressures in the current cycle, in our view. Exhibit 28 highlights this trend, with USD HY and leveraged loan corporate default rates that remain well below the peaks (especially for USD HY bonds).

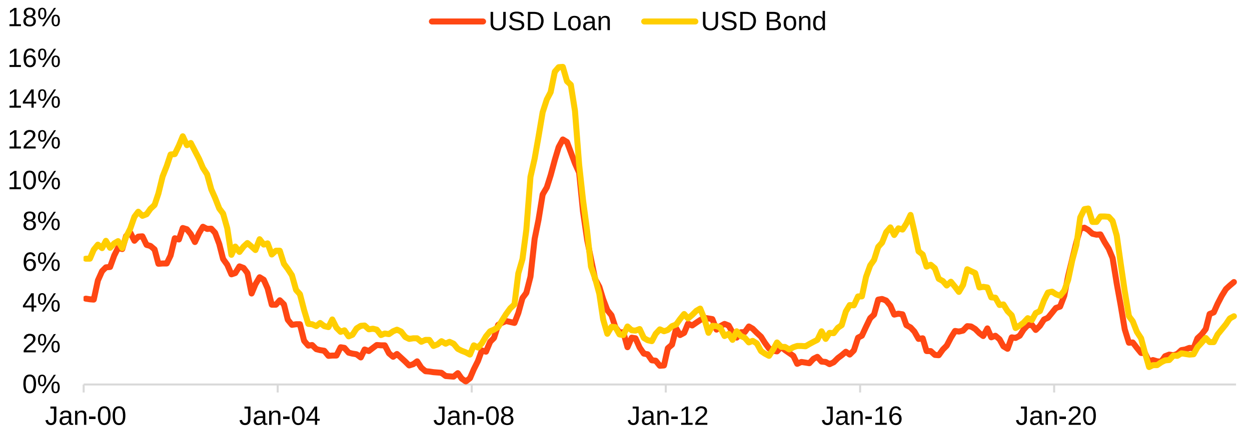
In our view, the relative resilience of corporate default rates – despite a sharp tightening in bank lending standards – is driven by structural changes in the financial system – specifically the growth of the private debt market over the past several years – which has allowed firms to diversify their funding sources and reduce their reliance on traditional bank lending. A continued contraction in bank credit availability, which we expect, should allow for a further expansion of private debt's "addressable market" of borrowers. We view this as a structural tailwind for the asset class.

Exhibit 27: Banks plan further lending standard tightening in 2H2023, citing many reasons
Possible reasons for tightening lending standards in 2H2023, cited by respondents in the Federal Reserve's July 2023 Senior Loan Officer Opinion Survey (SLOOS)



Source: BlackRock, Board of Governors of the Federal Reserve System. July 2023 SLOOS captures the period of June 15 - 30, 2023. Excludes the "Not important" value for each response.

Exhibit 28: 2023 default rates (so far) have been lower vs. what might be historically implied by the tightening in bank lending standards
Trailing 12-month, issuer-weighted default rates for the universe of USD HY bonds and USD leveraged loans tracked by Moody's



Source: BlackRock, Moody's. As of September 30, 2023 (most recent available).

The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Unless otherwise stated, all reference to $ are in USD.

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