Strategic Investment Advisory Group

A new perspective for credit investors

Credit has evolved into a complex and multi-layered market, yet asset allocators have limited exposure to its breadth. We argue that investors may want to reconsider their approach to credit — and how they categorize its components — and deploy skilled active management across the full credit spectrum.

Key takeaways

1. Traditional approaches to asset allocation emphasize fixed income's role as a risk diversifier relative to equities and therefore favor exposure to only the highest quality sectors of the bond market. Such strategies include limited exposure to investment grade corporate bonds but often overlook lower rated sectors despite their attractive risk-adjusted returns.

2. Corporate bond markets have been migrating toward a center of gravity that spans the investment grade and high yield ratings categories, making the traditional distinction between these two categories less useful as a basis for allocating capital. Active allocations that incorporate the broader credit markets can provide a compelling mix of yield and manager alpha.

3. The growth of private credit allows investors to supply capital to riskier borrowers and target higher levels of total return. The ability of weaker credits to obtain financing will likely lead to stressed and distressed situations arising at a more consistent pace – particularly in a higher rate environment. That is both a source of risk and an opportunity.

4. Consistent with these observations, investors may find it useful to maintain permanent strategic allocations to three distinct components of the credit markets, each serving a specific purpose:
   - **Ultra-high quality:** Sectors that exhibit modest yield enhancement and low levels of credit risk are useful to investors as better yielding sources of duration and risk diversification – often within active core strategies.
   - **Broad credit:** Reflecting the market's shifting center of gravity – spanning the lower tiers of investment grade and the upper reaches of high yield – these sectors can provide income and compelling risk-adjusted returns, with limited volatility.
   - **Speculative credit:** These sectors seek high potential returns through a combination of greater credit risk, leverage or illiquidity – often within private fund structures that are categorized as alternative assets.

Credit as an asset class

The breadth of the modern credit markets is not fully reflected in asset allocations

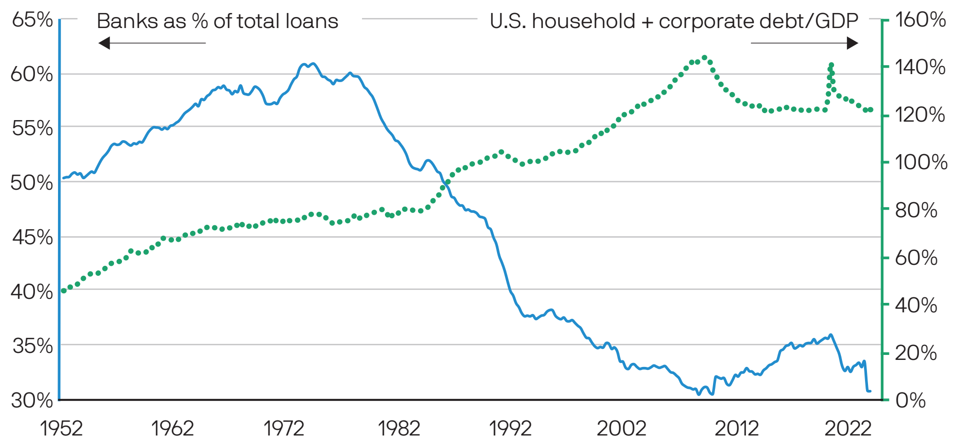
The extension of credit – lending capital in return for interest and with the expectation of full repayment at maturity – is among the most fundamental elements of finance. This basic economic activity has been around for centuries. But in modern financial markets, credit has grown and evolved into a complex, multi-layered universe spanning public and private markets that serves both high quality and low quality borrowers.

Credit markets have expanded across time by shifting traditional bank balance sheet lending to the financial markets and by extending access to lower rated and more leveraged borrowers (**Exhibit 1**). These processes are complementary: The market's expansion has allowed for more diversified portfolios with less concentrated risk from individual borrowers. The ability to diversify gives investors comfort in maintaining exposure to a wider spectrum of credit quality.

Today, this spectrum extends from extremely liquid, high quality investment

Despite a rise in private sector debt, the percentage of loans from banks has declined

EXHIBIT 1: BANK SHARE OF LOANS VS. HOUSEHOLD/CORPORATE SECTOR DEBT/GDP

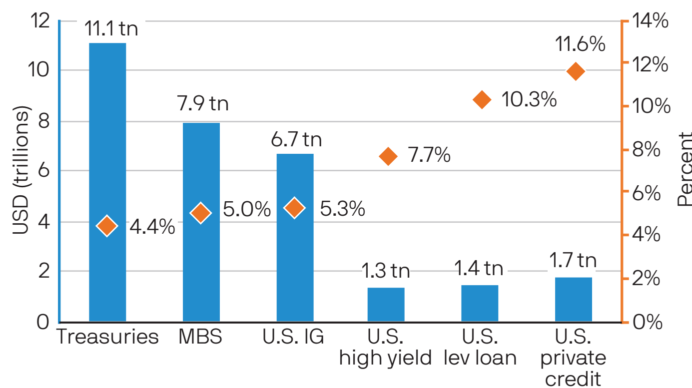


Source: Federal Reserve, J.P. Morgan Asset Management; data as of March 7, 2024.

grade (IG) debt through the lower reaches of investment grade and into the less liquid and riskier high yield (HY) and loan markets, then to illiquid private direct lending transactions and finally to more speculative distressed credit (**Exhibit 2**). The benefits of this market breadth are very real: Borrowers at every level of credit quality can access financing, and investors can target specific levels of risk and return that meet their particular objectives.

U.S. fixed income and credit market subsectors extend from highly liquid to illiquid, high quality to more speculative and distressed

EXHIBIT 2: AMOUNT OUTSTANDING (USD TN) LHS AND YIELD-TO-WORST RHS



Source: Bloomberg, Barclays, Proskauer Rose and J.P. Morgan Asset Management. Amount outstanding data are as of February 29, 2024. Treasuries amount outstanding includes notes and bonds. Yield-to-worst data is as of March 26, 2045, except for US Private Credit which is as of February 29, 2024.

Credit allocations are often incomplete

Why have asset allocators maintained only limited exposure to the full spectrum of the credit market? In part, this appears to be the result of a strategic asset allocation process that can undervalue key benefits – such as income, high risk-adjusted returns and potential manager alpha – that are common features of many credit sectors. It also reflects how asset allocations have been playing catchup to the evolution of the credit markets across time.

- Core bond strategies are the most common form of fixed income and have the longest history but in practice contain only a small amount of true credit exposure. Investment grade corporate bonds are typically combined with Treasuries and agency mortgage-backed securities (MBS) to align with an "aggregate" core fixed income benchmark.
- Dedicated investment grade credit strategies are somewhat less common than traditional core, except among certain categories of institutional investors, such as pension funds or insurance companies that need high quality assets to match specific liabilities.
- High yield bond and syndicated loan/collateralized loan obligation (CLO) markets have grown across time by serving a broadly diversified mix of public and private borrowers. However, many investors retain a meaningful degree of risk aversion when it comes to sub-investment grade debt – despite the presence of active managers who can help manage credit risk.
- Private credit, which is currently growing rapidly at the expense of both traditional bank balance sheet lending and the syndicated loan market, is usually classified as an alternative investment – although it has obvious similarities to other credit sectors. Within alternative allocations, private credit must compete for limited capital with other strategies that offer higher absolute returns.

The net result is that most asset allocations are only selectively exposed to the broad credit market. This outcome is suboptimal insofar as more diversified allocations can improve portfolio diversification at the margin and provide a meaningful source of potential alpha.

Active management is well suited to credit markets

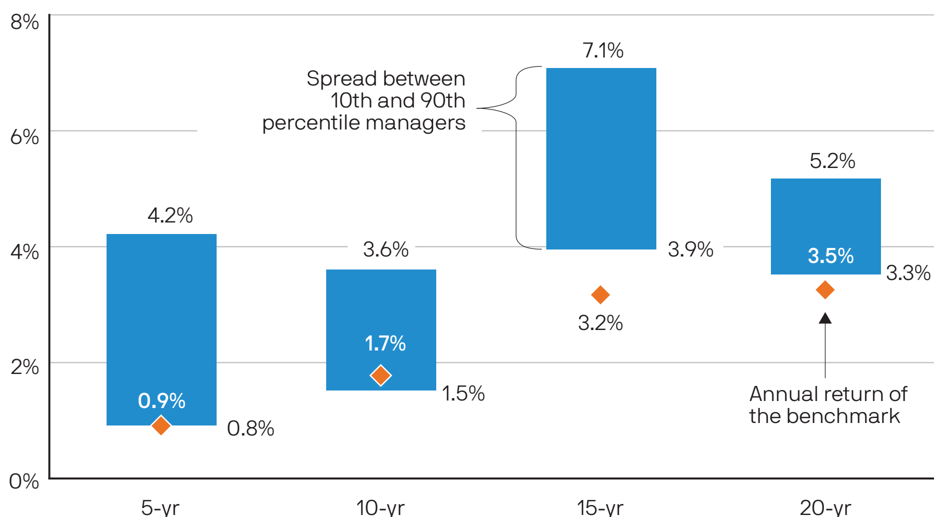
Active management has more advantages over passive management in credit markets

Credit market beta is problematic. The traditional segmentation of credit markets by letter rating or security type is an imperfect reflection of actual risk and return characteristics, making passive strategies based on these criteria inefficient allocators of capital. Equally problematic is allocating across issuers by market value, or par value, of debt outstanding: It seems self-evident that maximizing exposure to firms with the greatest amount of debt outstanding is suboptimal.

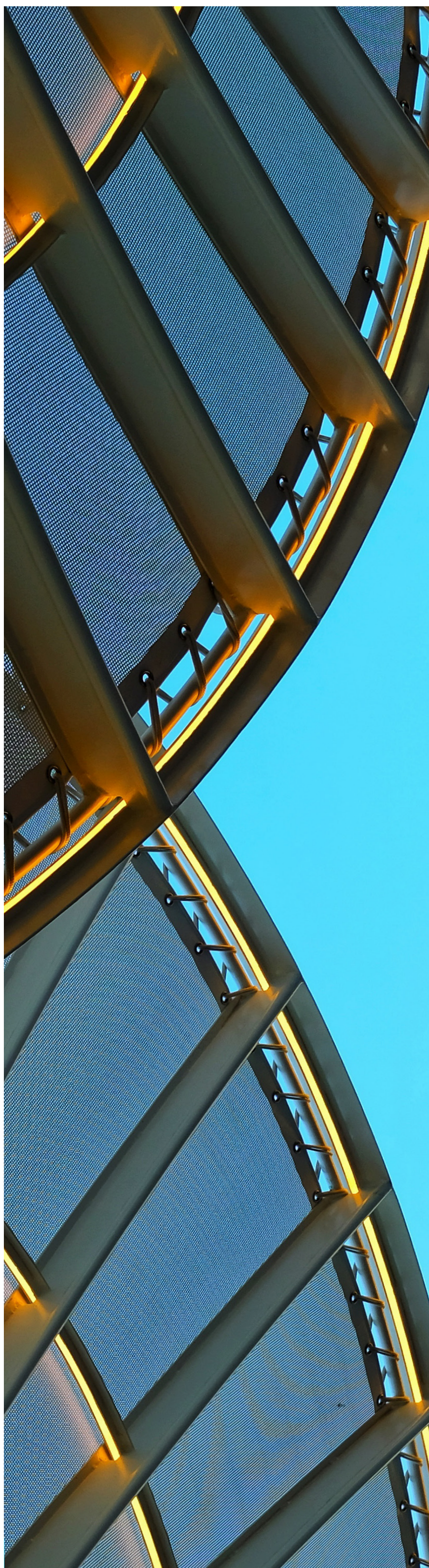
Active managers in public markets can avoid these inefficiencies by substituting fundamental credit analysis for reliance on public ratings and by identifying relative value opportunities across individual securities (**Exhibit 3**). Further, active managers with broad mandates that span multiple sectors of the market can add a layer of value by actively tilting portfolios toward sectors that offer more attractive investment potential. In private markets, where ratings rarely apply and liquidity to trade is in short supply, skill in underwriting individual transactions at the time of the investment is essential.

Active credit managers have broadly outperformed passive across time

EXHIBIT 3: MULTI-SECTOR BOND MANAGER RETURNS RELATIVE TO BENCHMARK



Source: Morningstar, J.P. Morgan Asset Management. Average annual portfolio return dispersion between the 10th and 90th percentile over the five, 10-, 15- and 20-year periods for the Morningstar Multisector Bond Category. Returns are updated monthly and reflect data through February 29, 2024. This information is for illustrative purposes only, does not reflect actual investment results, is not a guarantee of future results and is not a recommendation. Multi-sector bond: Bloomberg US Aggregate Total Return Index.



A new allocation framework for credit sectors

Instead of simply including credit within a broad fixed income allocation, we propose an alternative approach that classifies credit sectors according to their individual attributes

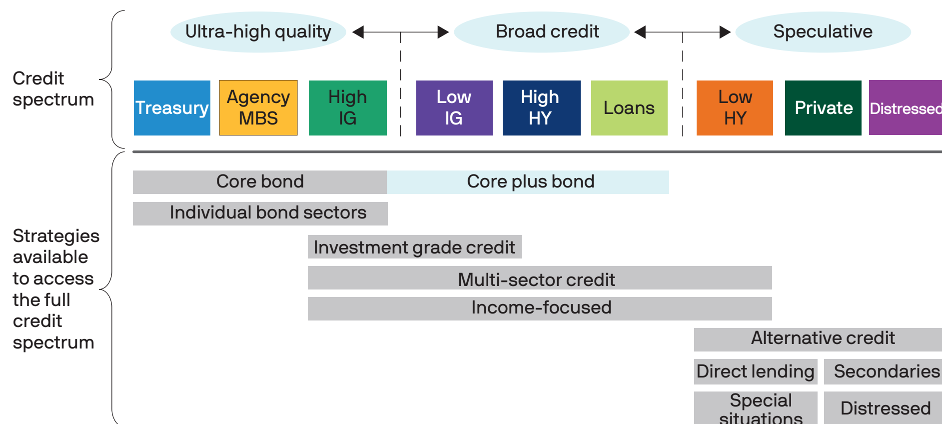
A thoughtful approach to building a diversified credit allocation should consider how individual sectors can serve the strategic allocation's broader objectives, such as income generation and high risk-adjusted returns, for which credit is well suited.

Exhibit 4 illustrates a proposed segmentation of the market into three categories, each with a distinct objective: ultra-high quality, in which duration risk is dominant, for diversification; broad credit, in which higher credit spreads and active credit selection both play a meaningful role in generating higher returns and income; and speculative credit, which seeks to balance much higher potential returns with illiquidity and the risk of capital loss. It should be straightforward for allocators to assign a permanent allocation to each and to then identify specific strategies and managers within them.

By design, the proposed categories align with commonly available fixed income strategies. Traditional core strategies, or their individual subsectors, represent the ultra-high quality segment. Dedicated investment grade and high yield strategies, and/or income-focused and multi-sector credit strategies, are available to cover the broad credit segment. Finally, the speculative credit segment is accessed by private alternative credit funds operating in the direct lending, CLO or distressed subsectors.

A new framework reclassifies the market into three categories, each with a distinct objective

EXHIBIT 4: LEGACY AND PROPOSED CATEGORIZATION OF CREDIT SECTORS



Source: J.P. Morgan Asset Management. MBS: mortgage-backed securities; IG: investment grade; HY: high yield. For illustrative purposes only.

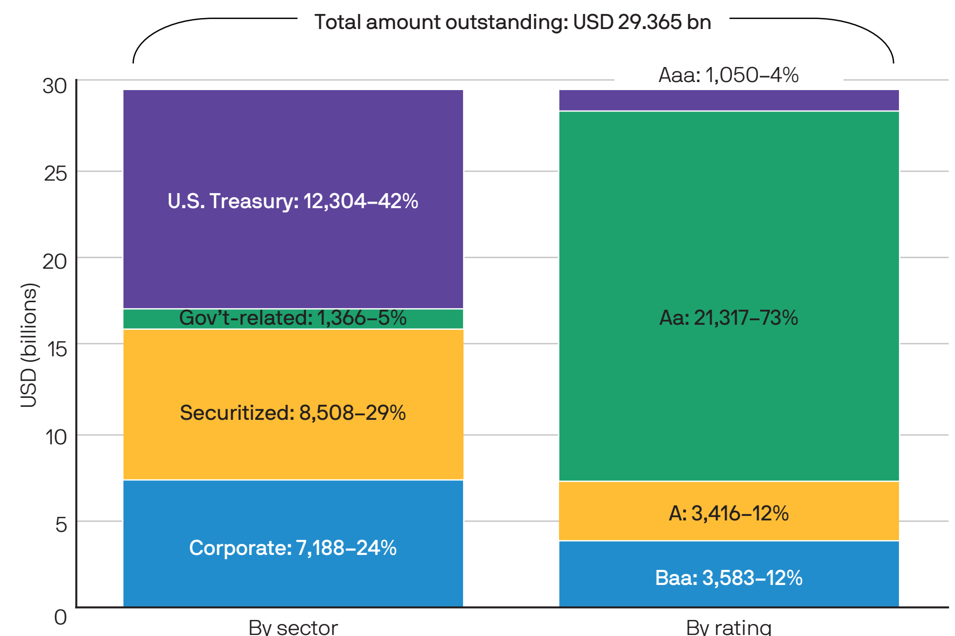
Traditional fixed income allocations are structurally underweight credit

The widespread use of high quality core fixed income tends to crowd out higher returning but riskier portions of the credit market

Core strategies serve investors very well as a source of diversification within the total asset allocation, but their widespread use has the unintended effect of crowding out strategies that offer more credit exposure – and the higher yields and income that come with them. **Exhibit 5** illustrates that the high quality sectors that comprise a core fixed income strategy benchmarked to the Bloomberg Aggregate index deliver only a modest amount of actual credit exposure.

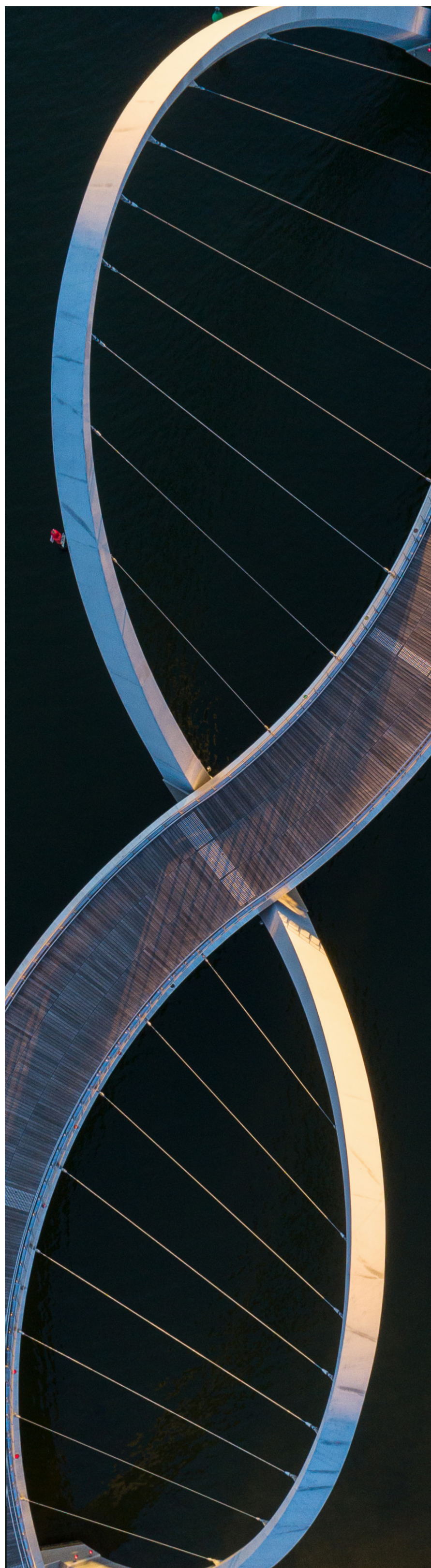
Exposure to mainly core strategies limits investors' potential to capture the higher yields and income associated with extended credit sectors

EXHIBIT 5: COMPOSITION OF THE BLOOMBERG AGGREGATE INDEX BY RATING AND SECTOR



Source: Bloomberg, J.P. Morgan Asset Management. Data as of February 29, 2024.

Active management is helpful in optimizing exposure to individual credits within this high quality universe, but it will typically go only so far. To capture the benefits of income and alpha generation more fully, a more comprehensive approach is needed.



The public credit markets have shifted to lower ratings

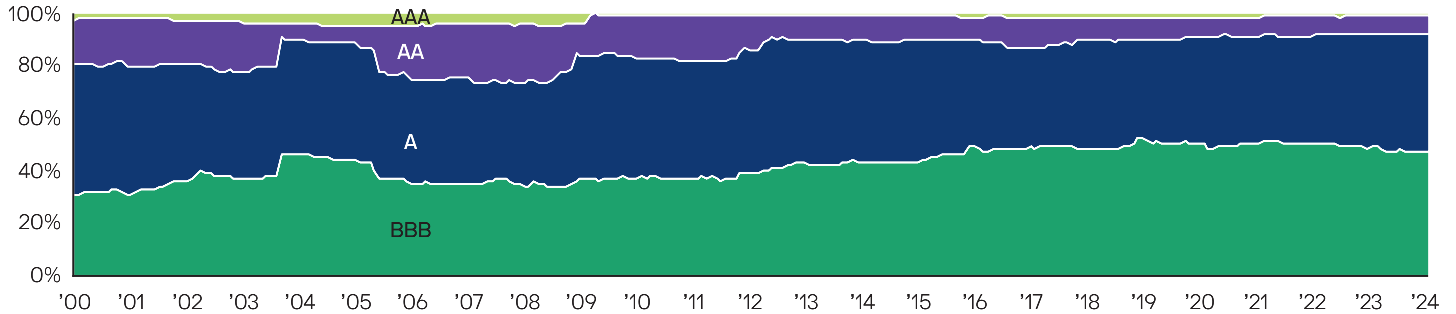
The bright-line distinction between investment grade and high yield leads to inefficient capital allocation

Investors place great significance on the distinction between investment grade and high yield credit, even though these sectors are separated by nothing more than a single rating "notch" determined by the rating agencies. This demarcation, or break point, in the public markets might have made sense in years past, when high yield debt and syndicated loans were relatively new market niches with much lower liquidity and the potential for high default risk. Dividing the market in this manner today, however, makes less sense, as these market sectors have grown and evolved across multiple credit cycles. It has become commonplace for firms to transit the IG/HY divide as either "fallen angels" or "rising stars."

Borrowers' willingness to operate with greater leverage and correspondingly lower ratings is visible in the distribution of corporate ratings across both investment grade and high yield markets. IG debt has tilted steadily toward the lower tiers of A and BBB, while high yield has tilted toward the higher quality BB and B range – suggesting that issuers and investors recognize limits to the amount of leverage that is considered sustainable. Within this range, however, firms seem comfortable operating, and the credit markets seem willing to fund them (**Exhibits 6A** and **6B**). Why should investors continue to behave as if the line between BBB and BB represents a critical limit on prudent risk-taking?

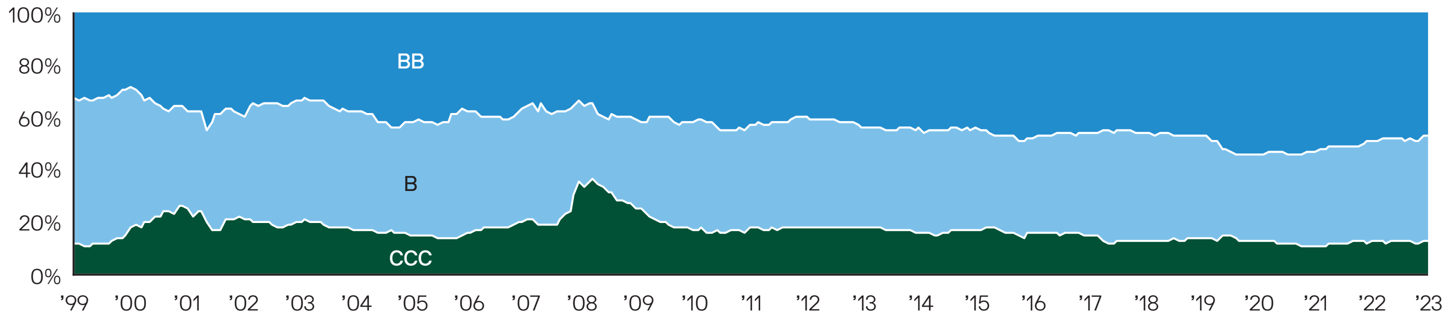
The distribution of investment grade and high yield credit ratings is converging

EXHIBIT 6A: BREAKDOWN OF IG CORPORATE RATINGS



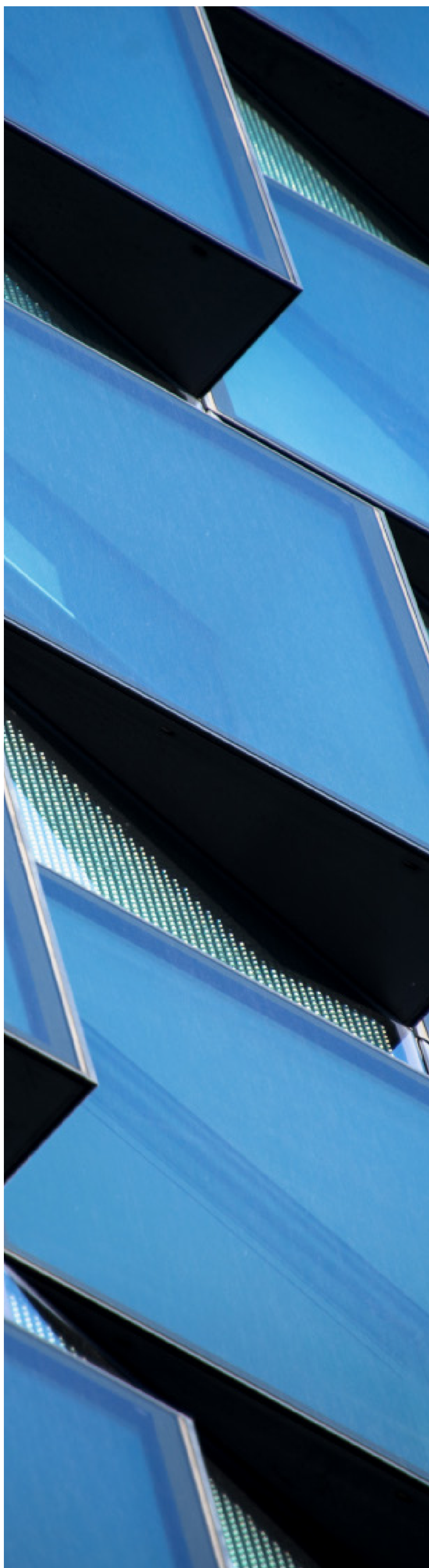
Source: Bloomberg US Aggregate Corporate Index, J.P. Morgan Asset Management; data as of February 29, 2024.

EXHIBIT 6B: BREAKDOWN OF HY CORPORATE RATINGS



Source: ICE BofA US High Yield Constrained Index, J.P. Morgan Asset Management; data as of February 29, 2024.

The amount of publicly traded BBB and BB rated corporate debt immediately adjacent to the IG–HY line has grown to roughly USD 3.5 trillion – more than half of the total market. Yet core strategies will have only limited exposure here, and dedicated high yield strategies have a small footprint in many allocations. Fixing this underweight will require a larger structural allocation to broad credit, either through dedicated IG/HY allocations or through broader multi-sector strategies that can allocate opportunistically.



Broad credit appears resilient through market and economic volatility

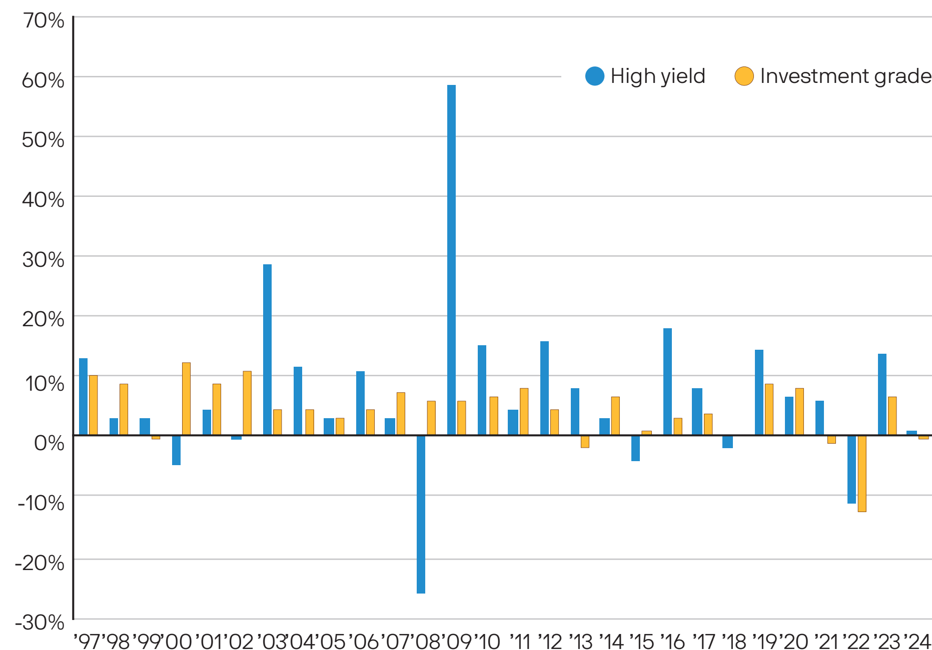
Higher yielding credit markets appear to have become more stable during periods of elevated risk

As any bond investor knows, in fixed income the upside is limited and the potential downside can be significant. HY credit investors must be particularly careful to judge whether the yield received is adequate compensation to offset the losses that could result from downgrades and defaults (net of recoveries) across time. Careful analysis of fundamentals can improve the chances of avoiding deteriorating credits, but credit cycles are unpredictable in both their magnitude and their timing, and in the past they have overwhelmed careful security selection.

The relative stability of HY spreads during bouts of economic and market volatility in the period following the global financial crisis (GFC) suggests improving resiliency of the underlying credit risk (**Exhibit 7**).

Broad credit sectors have delivered positive returns across time

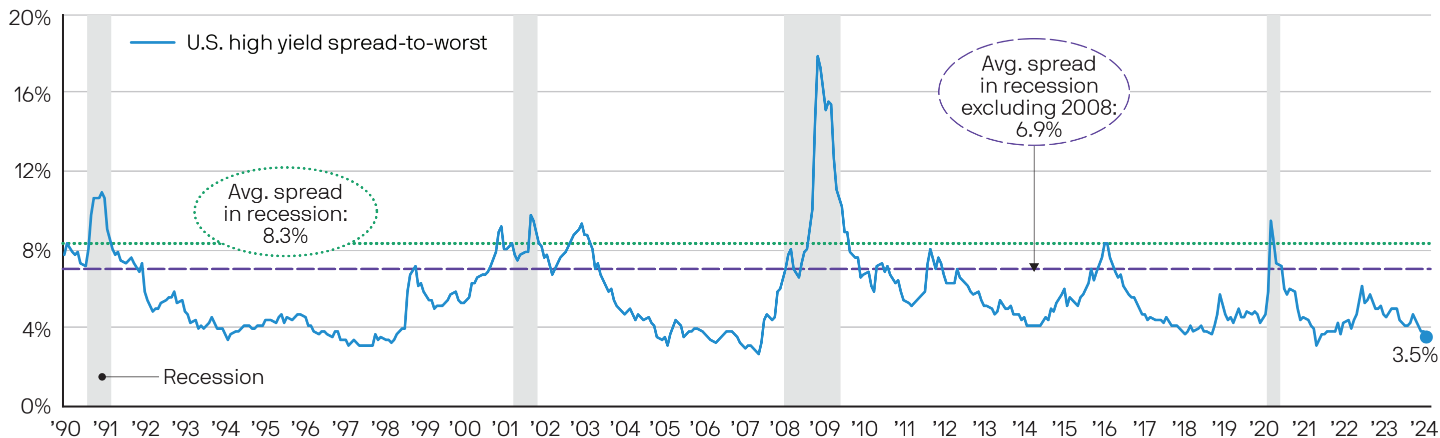
EXHIBIT 7: ANNUAL TOTAL RETURNS ON INVESTMENT GRADE AND HIGH YIELD FIXED INCOME



Source: Bloomberg, J.P. Morgan Asset Management; data as of February 29, 2024.

High yield spreads have remained relatively stable despite recent market volatility

EXHIBIT 8: U.S. HIGH YIELD SPREADS (1990–2024)



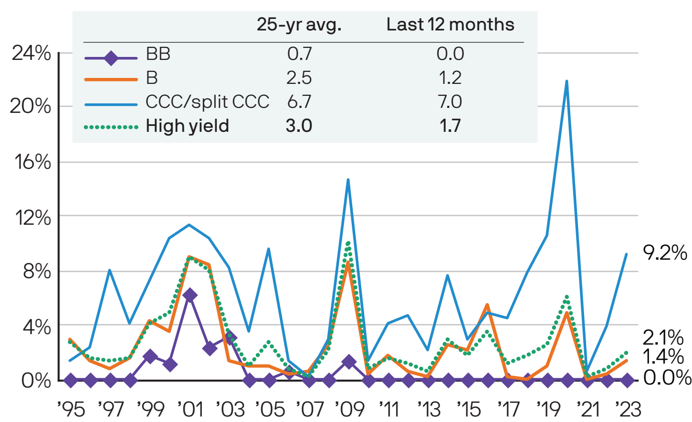
Source: J.P. Morgan Global Economic Research, J.P. Morgan Asset Management; data as of February 29, 2024. Long-run average based on monthly historical data beginning January 1990. Spread-to-worst indicated are the difference between the yield-to-worst of a bond and the yield-to-worst of a U.S. Treasury security with a similar duration. High yield is represented by the J.P. Morgan Domestic High Yield Index.

Unlike past episodes, when recessions led to materially higher credit spreads and subsequent spikes in defaults, recent volatility has been muted (**Exhibit 8**). This resiliency supports the case for establishing a more permanent allocation to broad credit that extends beyond investment grade and into high yield.

The lower quality portion of the HY market (CCC rated debt) remains highly speculative, with much wider spreads but also weaker fundamentals, greater sensitivity to financing environments, higher default probability and lower recoveries. An economic reversal or the continuation of high rates could lead to higher default rates, which would be felt most strongly across the weakest credits (**Exhibits 9A** and **9B**). A more resilient approach may be to seek targeted exposure to select CCC credits within an active high yield strategy that is biased to higher quality.

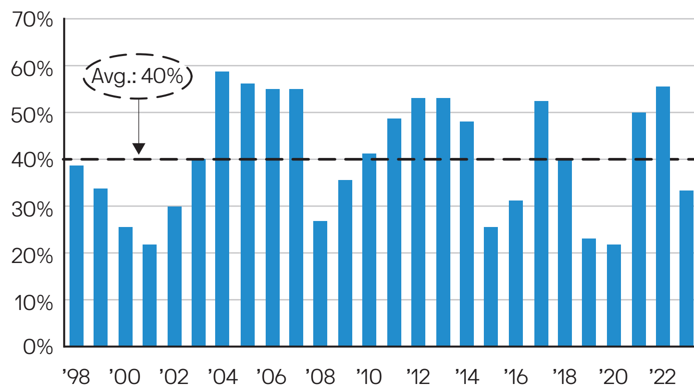
High yield default rates are starting to rise, while recoveries remain at or near long-term averages

EXHIBIT 9A: U.S. HIGH YIELD DEFAULT RATES BY CREDIT RATING (%)



Source: J.P. Morgan Research, J.P. Morgan Asset Management; data as of March 26, 2024. Last 12-month default rates are as of the most recent month for which data are available. Default rates shown do not include distressed exchanges and are grouped by rating 12 months prior to default. Bond ratings include split ratings.

EXHIBIT 9B: HIGH YIELD RECOVERY RATES



Source: Moody's Investors Service; S&P/IHS Markit; PitchBook, J.P. Morgan Asset Management; data as of February 29, 2024.

Syndicated loans and private credit: A step beyond high yield

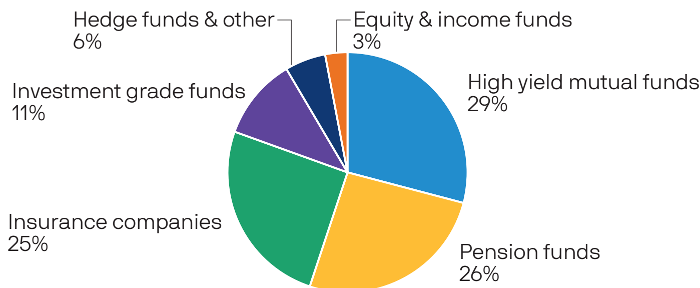
The syndicated loan market has been the dominant source of financing for private equity for some time but is now facing direct competition from private credit funds

While the high yield bond market provides financing directly to corporate borrowers, the syndicated loan market has evolved to service the private equity community's need for acquisition financing. A number of its features have limited investors' direct exposure to syndicated loans.

While major banks arrange and underwrite the loans, they are generally syndicated and sold quickly to end users – predominantly collateralized loan obligations (CLOs). CLO managers pool many loans together to improve diversification and in turn offer investors a range of senior and junior tranches at different levels of credit risk and return. The more highly rated segments of the capital structure have proven to be desirable to insurance companies, while the riskier segments have been a target market for hedge funds (**Exhibits 10A** and **10B**).

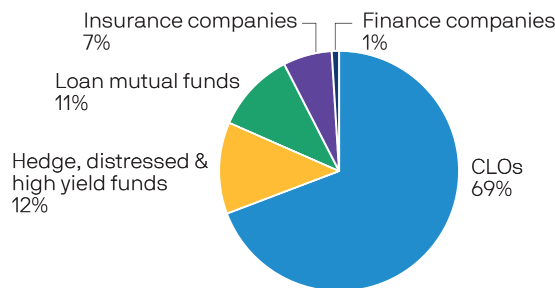
The ownership of high yield bonds vs. syndicated loans is significantly different

EXHIBIT 10A: OWNERSHIP OF HIGH YIELD MARKET



Source: Estimates from J.P. Morgan Securities 2023 High Yield Annual.

EXHIBIT 10B: OWNERSHIP OF SYNDICATED LOAN MARKET

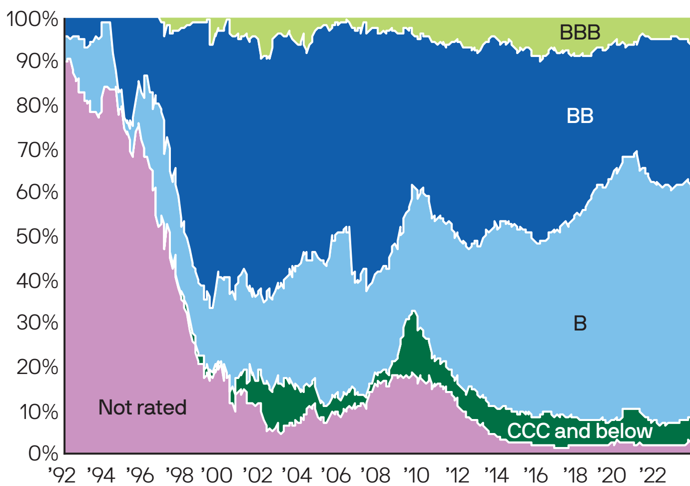


Source: PitchBook LCD Quarterly Leveraged Lending Review 3Q 2023.

The underlying loans themselves exhibit generally lower average credit ratings than high yield credit (**Exhibit 11**). Single B issuers represent 53% of the market, while higher quality BB/BBB issuers represent 38% and CCCs approximately 5%. Despite these lower ratings, default risk is reduced somewhat by more lenient terms and conditions on loans; because senior loans are typically secured by a first-ranking lien on collateral, post-default recoveries on senior loans are often higher.

Syndicated loans appear lower in quality but can be attractive on a risk-adjusted basis

EXHIBIT 11: BREAKDOWN OF SYNDICATED LOAN RATINGS OVER TIME



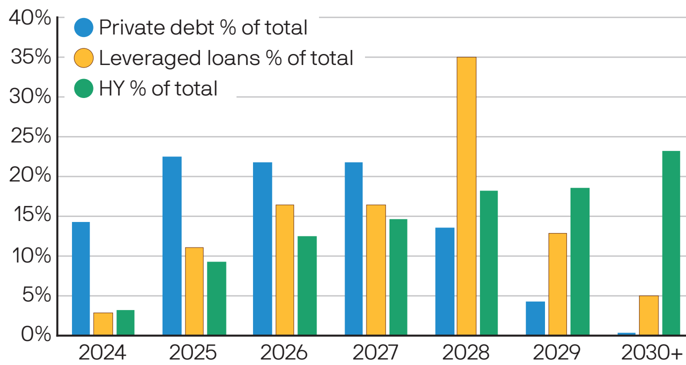
Source: Credit Suisse Leveraged Loan Index; data as of February 29, 2024. Monthly data download.

One key feature that differentiates the syndicated loan market from the HY bond market is floating interest rates. During the long period of low rates that ended in 2022, all-in borrowing costs were low for both floating and fixed rate borrowers. This tended to encourage higher leverage – particularly among private equity sponsors and their portfolio companies.

The sharp move higher in short-term interest rates has reversed this position. Borrowing costs have surged for floating rate borrowers, relative to borrowers that locked in low fixed rates. Fixed rate borrowers are more exposed to the cost of refinancing, but it appears that high yield markets could be reasonably well insulated from this effect over the next few years (**Exhibit 12**).

Refinancing schedules vary widely across riskier credit sectors

EXHIBIT 12: MATURITY WALL ACROSS LEVERAGED FINANCE, 2024–29 (%)

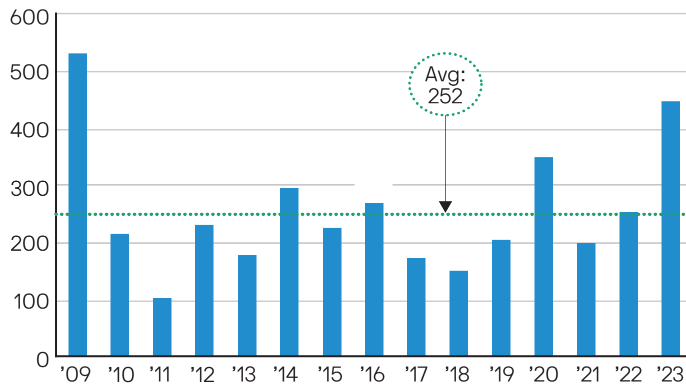


Source: BofA Global Research: Collateral Thinking; data as of October 2, 2023.

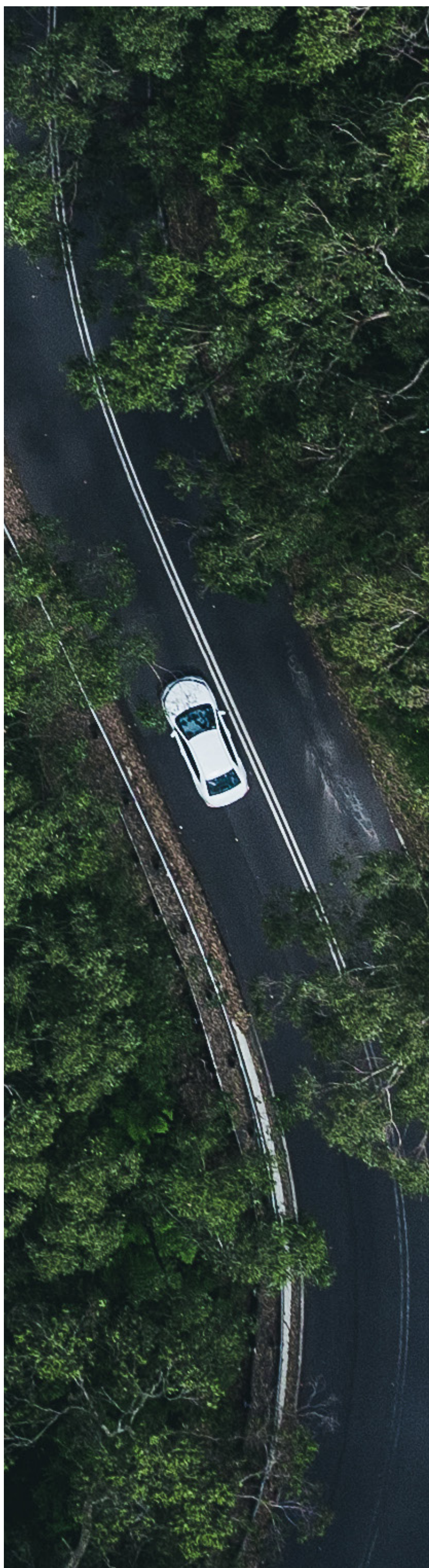
One potential signal of rising credit risk is the use of "amend-and-extend" activity, in which creditors are offering longer maturities to stressed borrowers to postpone outright default (**Exhibit 13**). Although such activity has increased, it must be noted that not all such transactions are worrisome: Some of these deals are simply a form of refinancing within the BB and B sectors, which can indicate healthy capital markets.

Loan amendment activity has risen recently to a post-GFC high

EXHIBIT 13: U.S. LEVERAGED LOAN AMENDMENTS AND EXTENSIONS (2009–24)



Source: Pitchbook LCD, J.P. Morgan Asset Management; data as of February 29, 2024.



Private credit: Picking up where the public markets leave off

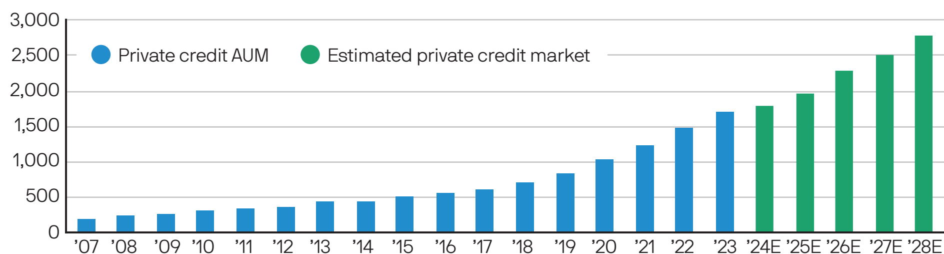
The rapid growth of private credit presents an opportunity for investors to gain exposure to categories of borrowers that they had previously missed out on — but private credit's relatively short history warrants caution regarding the degree of risk embedded in these loans

Private credit has grown rapidly in recent years as banks have pulled back from the traditionally originated and syndicated loans that were a key source of financing for many small and mid-size enterprises (**Exhibits 14A** and **14B**). Private credit funds have stepped in to fill the gap, offering borrowers a more streamlined and flexible underwriting process in return for a higher cost of funds.

Within this population of borrowers are two relatively distinct populations: firms owned by private equity funds (sponsored) and independent, small and mid-market firms (nonsponsored). Most sponsored loans in the benchmark index exhibit higher leverage (6x debt to EBITDA at issuance in 2022 and 5.9x in 2021). Nonsponsored loans, in contrast, tend to be higher in quality: Leverage is lower at roughly 4.4x debt to EBITDA.

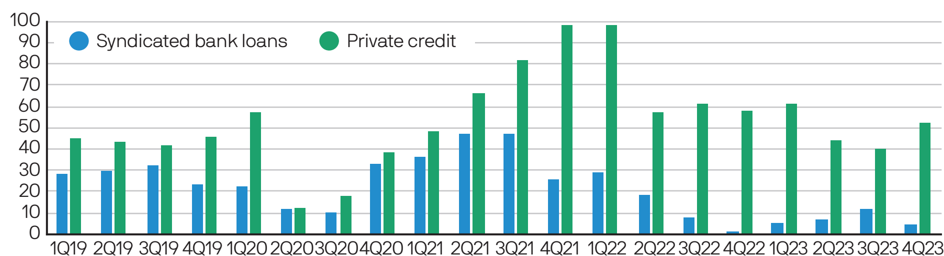
Private credit markets have grown dramatically in recent years, with direct lenders stepping in as banks have retreated

EXHIBIT 14A: GROWTH IN PRIVATE CREDIT ASSETS UNDER MANAGEMENT (USD, BN)



Source: Morningstar, PitchBook LCD, J.P. Morgan Asset Management; data as of January 29, 2024.

EXHIBIT 14B: QUARTERLY ISSUANCE, BANK LOANS AND PRIVATE DEBT (USD, BN)



Source: Morningstar, PitchBook LCD, J.P. Morgan Asset Management; data as of February 29, 2024.

The standard vehicle for private credit strategies is a closed-end fund that draws down capital during a finite investment period and then distributes returns in later years. This model has some advantages over traditional banking: Rather than funding loans with a bank's short-term deposits, which could be withdrawn, private credit funds lock up investors' capital over the fund's lifetime. No run on the bank would force a sale of the underlying assets. However, the illiquidity of the closed-end fund structure presents a risk to investors. Those that need their capital returned rapidly must use the nascent private credit secondary market, where fund stakes trade at a significant discount to par (**Exhibit 15**).

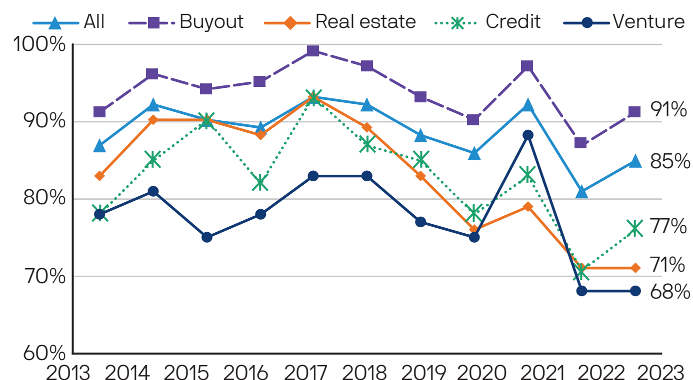
Since many private loans are unrated, the private credit market's overall quality is a subject of much debate. The strong performance of the asset class in recent years – and especially during the pandemic – would suggest that the underlying loans are indeed of high quality. If so, then private credit investors are receiving high levels of compensation for little more than liquidity risk – a tempting trade-off considering that most institutions have ample liquidity elsewhere.

However, these loans may have benefited from a fortunate confluence of historical factors that produced strong returns with low risk for a period of time that is now past. Specifically, the extended era of low interest rates made borrowing costs more affordable, while the banks' exit from many lending activities offered private credit funds access to a wider range of higher quality borrowers that would previously have found financing elsewhere.

Private credit fundamentals tell a mixed story. Net leverage has declined significantly; higher borrowing costs may be limiting the use of debt. The simultaneous decline in interest coverage ratios – even as leverage has fallen – is a further sign that elevated borrowing costs are having an impact (**Exhibits 16A** and **16B**).

Secondary markets for private investment funds trade at a significant discount

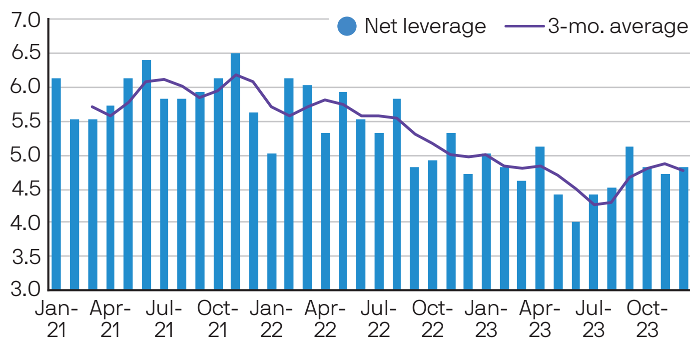
EXHIBIT 15: NOMINAL PRIVATE CAPITAL SECONDARY TRANSACTION PRICING, 2013–23



Source: Greenhill, Jefferies, J.P. Morgan Asset Management; data as of February 29, 2024.

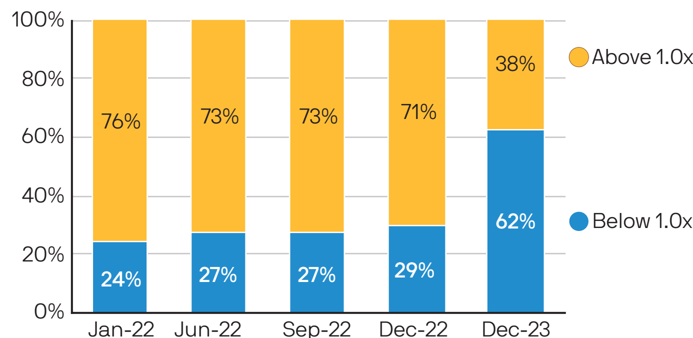
Overall leverage in direct lending transactions has declined, with interest coverage ratios deteriorating in a high rate environment

EXHIBIT 16A: NET DEBT-TO-EBITDA FOR NEW DIRECT LOAN DEALS



Source: J.P. Morgan Asset Management; data as of March 31, 2024. EBITDA: Earnings before interest, taxes, depreciation and amortization. This shows issuer net leverage, or the ratio of net debt to EBITDA, for new private credit deals. It spent 2021 in the 5.5x–6.5x range and trended toward 4x as of mid-2023.

EXHIBIT 16B: INTEREST RATE COVERAGE RATIOS

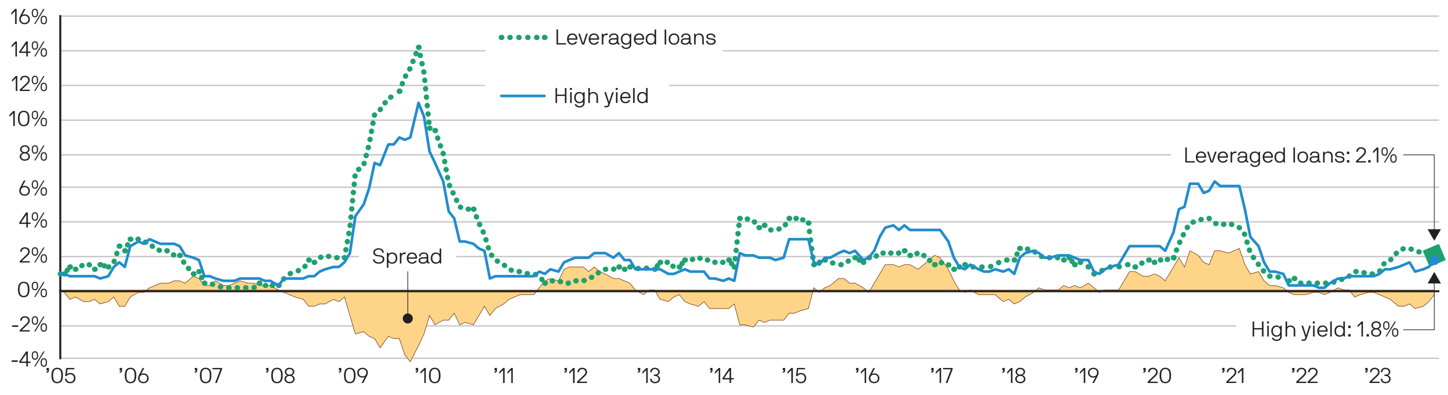


Source: Moody's Investors Service: Speculative-Grade Companies – North America, J.P. Morgan Asset Management; data as of July 27, 2023. Interest coverage: EBITDA less capex/interest. Study conducted by Moody's on 305 corporate issuers in the U.S. and Canada that were rated B3 as of April 2023.

Finally, the percentage of interest income being paid in kind (PIK) rather than in cash remains elevated compared with pre-pandemic levels. Outright default rates have risen only modestly since 1Q22 and remain below levels seen in 2008 and 2020, but the broader mosaic suggests that more stress is building (**Exhibits 17** and **18**).

High yield and leveraged loan defaults are broadly similar

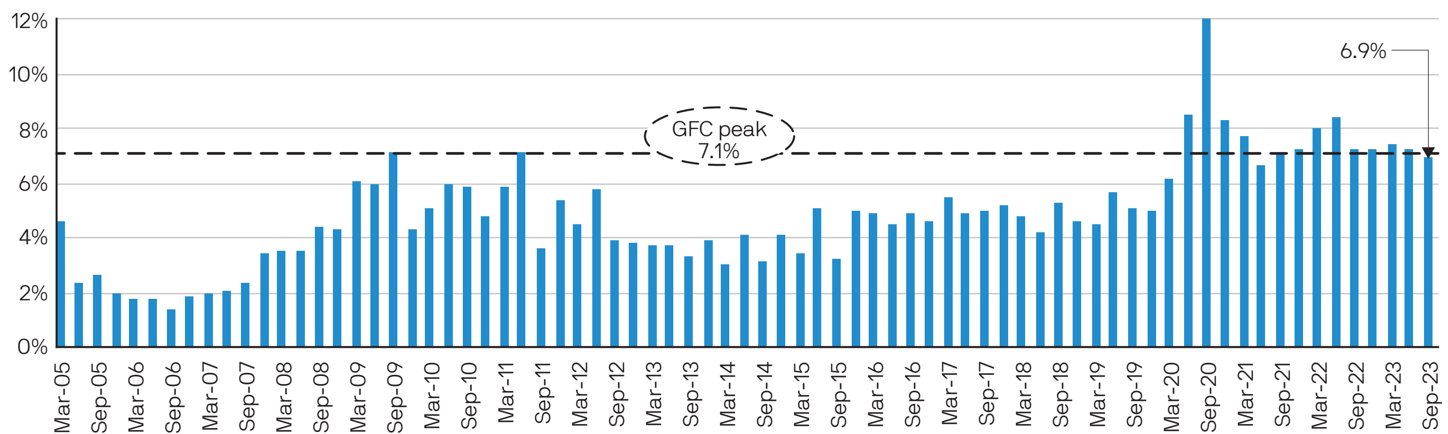
EXHIBIT 17: DEFAULT RATES FOR HIGH YIELD AND LEVERAGED LOAN MARKETS



Source: J.P. Morgan Research, J.P. Morgan Asset Management; data as of February 29, 2024.

Direct lenders are accepting a growing percentage of debt service via payment in kind (PIK)

EXHIBIT 18: PAYMENT IN KIND INCOME (% OF TOTAL INCOME)



Source: The Cliffwater Direct Lending Index; data as of September 30, 2023.

Distressed debt: When traditional lending is no longer available

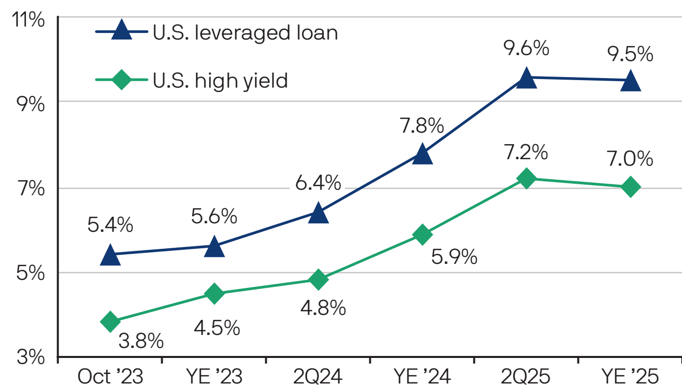
Whether a company seeks financing in the public or the private markets, there may come a time when traditional sources of credit are no longer available. The reason could be temporary market conditions, a short-term liquidity crunch or more fundamental matters of solvency. Such moments are the *raison d'être* of the distressed lending market – the end of the credit spectrum.

It's the end not only because many of the borrowers are precariously close to default but also because distressed lending often blurs the line between lending and equity ownership. It is common for distressed (or "special situations") funds to provide debt and equity simultaneously to more completely recapitalize the borrower's balance sheet. Or they may be following a "loan-to-own" strategy that presupposes a default and subsequent change of control. Befitting investments that offer elevated risk and a potential equity stake, target returns are far higher than in any other segment of the credit market (**Exhibit 19**).

The steady expansion of the credit markets to encompass more highly leveraged and lower quality borrowers will ultimately create a larger population of firms that could experience significant credit stress, either due to individual circumstances or as a result of broader credit conditions. This suggests a more permanent role for distressed and special situations investments in portfolios: What had previously been a cyclical opportunity that demanded flexibility and patience between credit cycles may instead become a more routine element of the credit markets. Whether or not that comes to pass, as the impact of higher interest rates ripples through public and private borrowers, we expect the next few years to offer an elevated opportunity.

Rising default expectations create opportunities for distressed investors

EXHIBIT 19: SPECULATIVE CREDIT DEFAULT RATE FORECAST



Source: Deutsche Bank Research 2024 Credit Strategy. Based on BofA private credit default rate 2024 forecast and Deutsche Bank 2024 HY and leveraged loan default rate forecast. Data as of November 29, 2023.

Conclusions: Investment implications

The legacy practice of segmenting the credit markets along strict rating lines, and of separating public from private markets based on fund vehicles, has made it more difficult to allocate capital efficiently.

A wise economist once said, “When the facts change, I change my mind.”[1] As investors observe the structural evolution of the credit markets, it seems reasonable that they may want to do likewise and change their approach to investing in this asset class. Practically, we think that investors may benefit from separating the credit markets into three buckets:

1. Ultra-high quality sectors focused on diversification. Dominated by interest rate risk, this segment may provide valuable downside protection. The primary role of credit exposure here is to provide modest yield enhancement without diluting the intended focus on duration risk.

2. Broader credit sectors for income and alpha generation, with some risk diversification from duration. Active credit selection in primary and secondary markets is a major driver of returns.

3. Illiquid and speculative sectors targeting high total returns but with increasing credit risk. The key value-add here is the ability to underwrite individual credits with a high degree of confidence, and at yields that compensate for the risk and illiquidity.

Higher interest rates have made all fixed income assets more attractive, but in doing so they have sown the seeds of future challenges. Credit investors must remain vigilant because higher yields for investors represent higher costs for borrowers, and these costs may eventually bring about elevated stress and default risk. This is not a reason to avoid the sector; it is a call to deploy skilled active management at every point along the credit spectrum.

[1] Allegedly, John Maynard Keynes.

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