BlackRock

Credit Currents Quarterly:

Insights across public and private credit

July 16, 2026

Dominique Bly
Macro Credit Research Strategist

Jack Sweeney
Macro Credit Research Strategist

Topics in this piece:
Macro
Liquid credit
Private credit

Estimated read time: 35 minutes

Progress, with pressure points:

I. Macro *(pages 2-7)*

- The macro backdrop remains supportive enough, with growth expectations still positive as some macro headwinds have eased.
- That said, still-elevated inflation continues to limit the scope for additional policy easing, keeping base rates and borrowing costs for issuers elevated.

II. Liquid credit *(pages 8-18)*

- Leveraged finance continues to outperform investment grade, with income doing most of the work. Spreads remain historically tight, yet history suggests this can still be a strong backdrop for forward total returns.
- Primary markets remain open although activity is diverging by region, with issuance in U.S. markets more resilient YoY.
- Credit performance also remains broadly supportive. HY defaults stand at 4.0%, in the 23rd percentile since 2010, while loan defaults are declining.
- Beneath that resilience, however, two idiosyncratic pressure points are emerging. Software borrowers remain in focus while the growing scale of AI-related issuance is beginning to test the depth of investor demand.

III. Private credit *(pages 19-28)*

- The story in direct lending remains broadly positive. Income continues to meaningfully outpace realized losses, which remain well below long-term averages.
- USD direct lending yields remain above those of syndicated markets, and reported total returns compare favorably with leveraged loans and HY bonds.
- But beneath the surface, the market is becoming more differentiated. Fundraising trends have diverged across vehicles, with BDCs experiencing modest outflows while closed-end fundraising has picked up. Growth has also varied across market segments, with the upper middle market expanding faster than the lower middle market. Meanwhile, credit stress has been concentrated by vintage, with 2021–2022 vintages accounting for roughly three-quarters of recent foreclosure activity.
- As dispersion increases across vehicles, borrowers, sectors, and vintages, manager underwriting and portfolio construction are likely to play an increasingly important role in determining outcomes.

Macro

A better backdrop, but not an easier one

Progress, with pressure points

The past three months have brought greater clarity to the macroeconomic backdrop facing credit markets. Growth expectations remain positive, AI-related investment continues to support U.S. activity, financial conditions have eased, and trade policy uncertainty has moderated. At the same time, inflation remains elevated, the scope for further policy easing is constrained, and borrowing costs remain well above the levels that prevailed for much of the post-GFC period. In our view, the macro foundation has improved, but it is not an easy one.

Across credit markets, the common thread is resilience in aggregate, with greater differentiation beneath the surface. Income continues to provide an important cushion, but refinancing pressure, sector-specific disruption and uneven recoveries are creating wider dispersion across regions, ratings, borrowers, managers and vintages. Rather than broad-based deterioration, we see a backdrop that increasingly rewards selectivity, underwriting discipline and thoughtful portfolio construction.

Growth expectations remain positive, but uneven

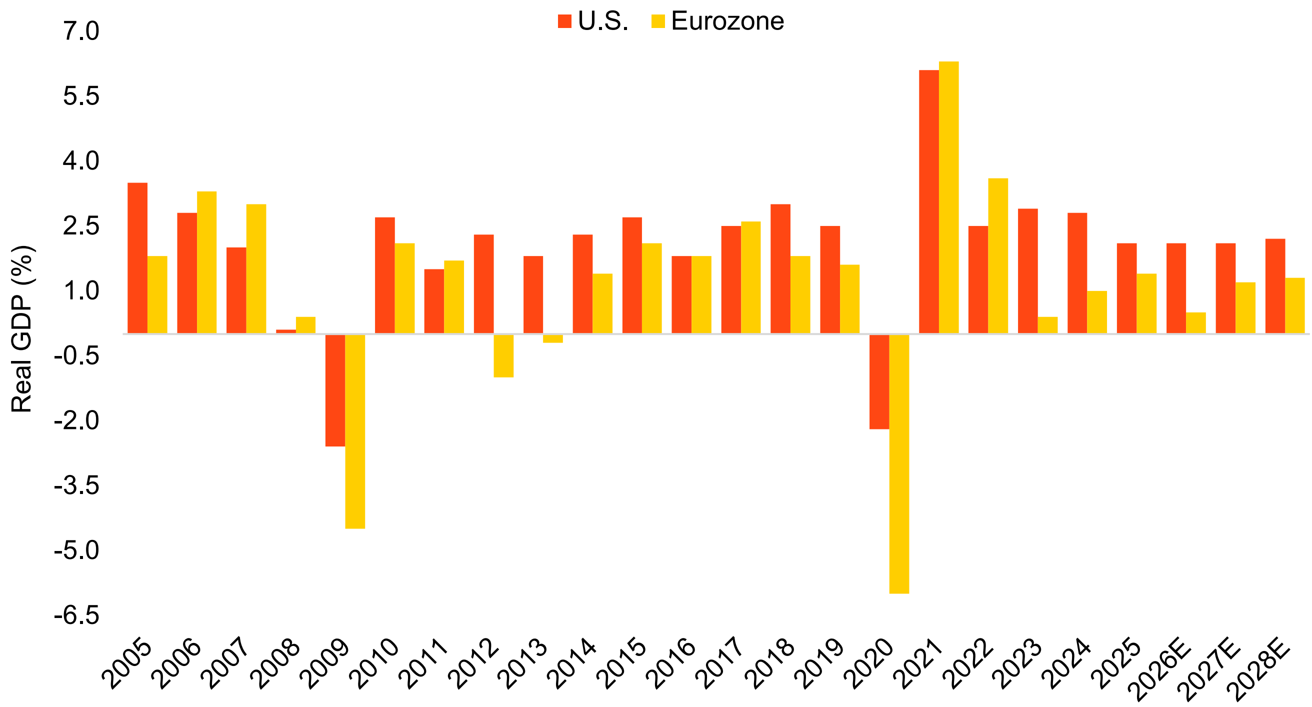
Across the U.S. and euro area, real GDP expectations continue to point to positive growth through 2026–2028 (Exhibit 1). That said, there is considerable dispersion between regions.

U.S. growth continues to look relatively resilient, supported by domestic demand, easier financial conditions and ongoing AI-related investment. Trade policy uncertainty has also moderated from earlier peaks, providing businesses with somewhat better visibility into the operating environment, which should support ongoing business investment and capex.

The euro area faces a more fragile mix. Growth expectations remain positive, but momentum is softer and the region remains more exposed to external shocks, including energy prices and related geopolitical developments. Financial conditions have also eased more slowly than in the U.S.

Looking ahead, we expect that any progress toward resolving geopolitical tensions and easing their broader economic impacts could provide additional support to the macro backdrop across regions.

Exhibit 1: Growth expectations have diverged somewhat between regions
Actual real GDP (annual, year-over-year) for the U.S. and Eurozone from 2005 to 2025, and Bloomberg composite forecasts for full-year 2026 – 2028



Source: Bloomberg, BlackRock. As of July 13, 2026. 2026 - 2028 estimates use the Bloomberg Composite of forecasters. There is no guarantee any forecasts may come to pass.

AI tailwinds strengthen, as some macro headwinds ease

The macro backdrop is increasingly shaped by a combination of strengthening tailwinds and moderating headwinds. AI-related capital expenditure ("CapEx") has become a meaningful source of U.S. growth, while easier financial conditions and reduced trade policy uncertainty have been supportive.

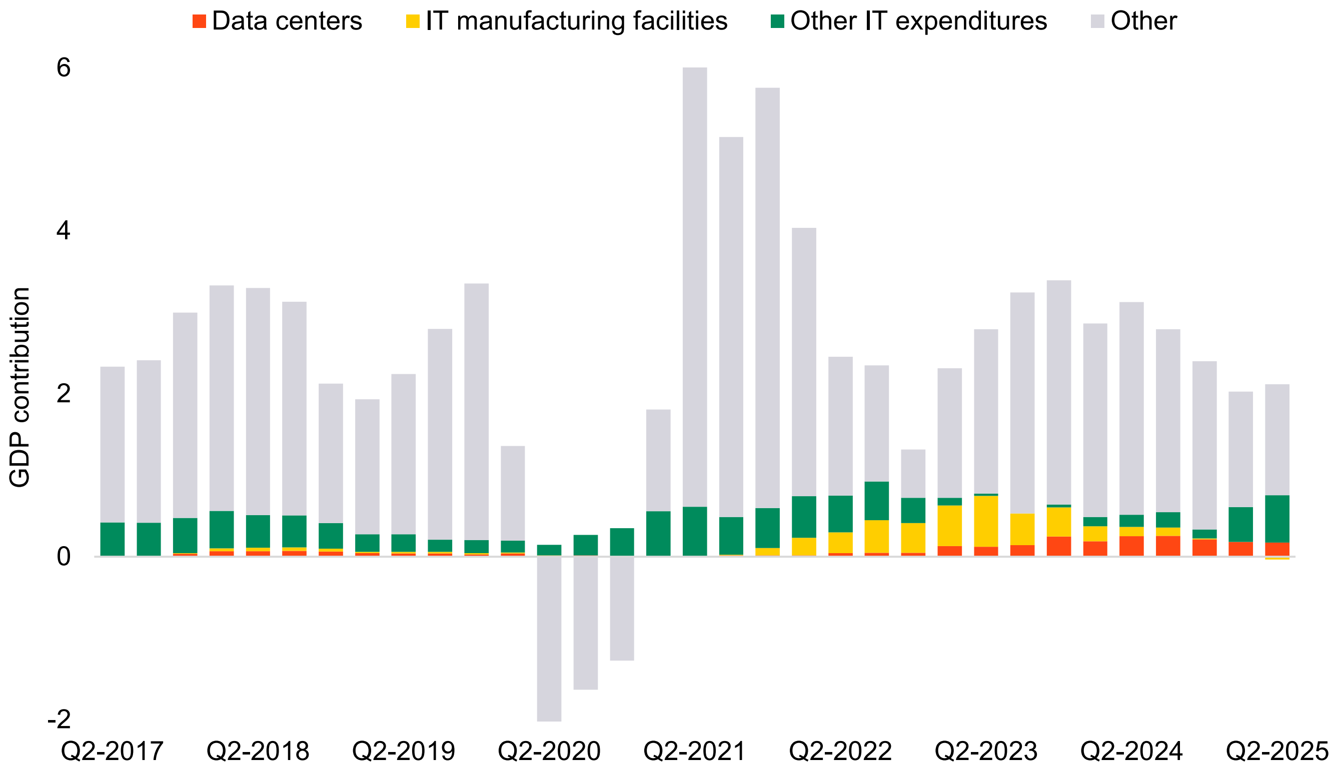
As we noted previously, the AI investment cycle is already large enough to matter for the U.S. economy. Indeed, a January report from the Bank for International Settlements ("BIS") estimated that expenditures on data centers and IT manufacturing facilities, including equipment and construction, represented roughly 1% of U.S. GDP by mid-2025. The BIS also estimates that broader IT investment, including spending by businesses on equipment and software to facilitate AI use, has accounted for nearly half of recent U.S. GDP growth (Exhibit 2). Even so, the AI investment cycle is expected to be in its early stages, with McKinsey estimating that global data center demand for AI-related workloads could grow 3.5x between 2025 and 2030.

Our colleagues in the *BlackRock Investment Institute (BII)* explore this idea further in their Midyear Outlook, considering whether AI innovation could lift U.S. trend growth above its long-run 2% rate by enhancing productivity and accelerating the pace of innovation. That said, they emphasize that realizing AI's productivity potential will first require sustained investment in 'scarce' inputs and enabling infrastructure. BII expects that the investment needed will maintain upward pressure on rates, at least for the time being.

Elsewhere, several headwinds have eased. Financial conditions have become less restrictive in both the U.S. and euro area, with the improvement more pronounced in the U.S. despite an uneven and, at times, volatile path. Trade policy uncertainty has also declined in recent months, which should support business investment and CapEx decisions, particularly among issuers exposed to global supply chains or tariff-sensitive input costs. Together, these developments point to a more supportive macro backdrop for credit, though the benefits are likely to vary across sectors and issuers.

Exhibit 2: AI-related spend has supported GDP growth in the U.S.

Contribution of AI-related investments, including data centers, IT manufacturing facilities, and other IT expenditures, to U.S. GDP growth



Sources: Bank of International Settlements, Bureau of Economic Analysis, US Census Bureau, International Energy Agency, BlackRock. Calculations by Bank of International Settlements. As of Q2-2025. Q2-2020 (-7.54) and Q2-2021 (12.39%) values are truncated on chart. Other IT expenditures include business investment in both hardware and software.

Focus turns to inflation

And while some macro headwinds have eased, inflation has moved back into focus as a key constraint on further policy easing in both the U.S. and euro area. For credit markets, this matters because base rates continue to shape both all-in yield levels for investors *and* financing costs for borrowers.

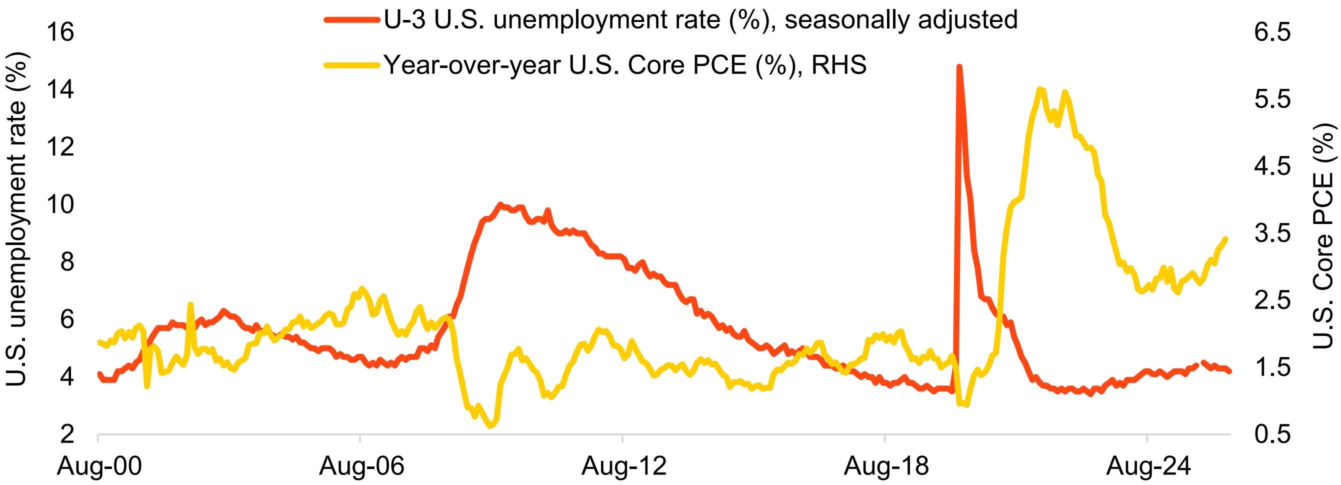
In the U.S., the Federal Reserve's (Fed's) dual mandate remains in tension. The labor market has remained broadly stable, while core PCE has reaccelerated, complicating the case for additional easing (Exhibit 3). At the June 2026 press conference, the first under Chair Kevin Warsh, he reinforced the Fed's commitment to restoring price stability. In our view, a resilient labor market gives the Fed less urgency to look through renewed inflation pressure, particularly with inflation still above its 2% target.

In the euro area, growth momentum appears more fragile, but inflation has also moved higher in recent months, even as the latest print showed some moderation (Exhibit 4). Given the European Central Bank's (ECB's) primary focus on price stability, the inflation path remains central to the direction of policy rates.

Should inflation pressures prove persistent across regions, the cost of capital is likely to remain higher for longer. That backdrop supports the income opportunity in credit but also keeps pressure on more levered borrowers, reinforcing the importance of balance sheet resilience and issuer selection.

Exhibit 3: Tension is building in the Fed's dual mandate

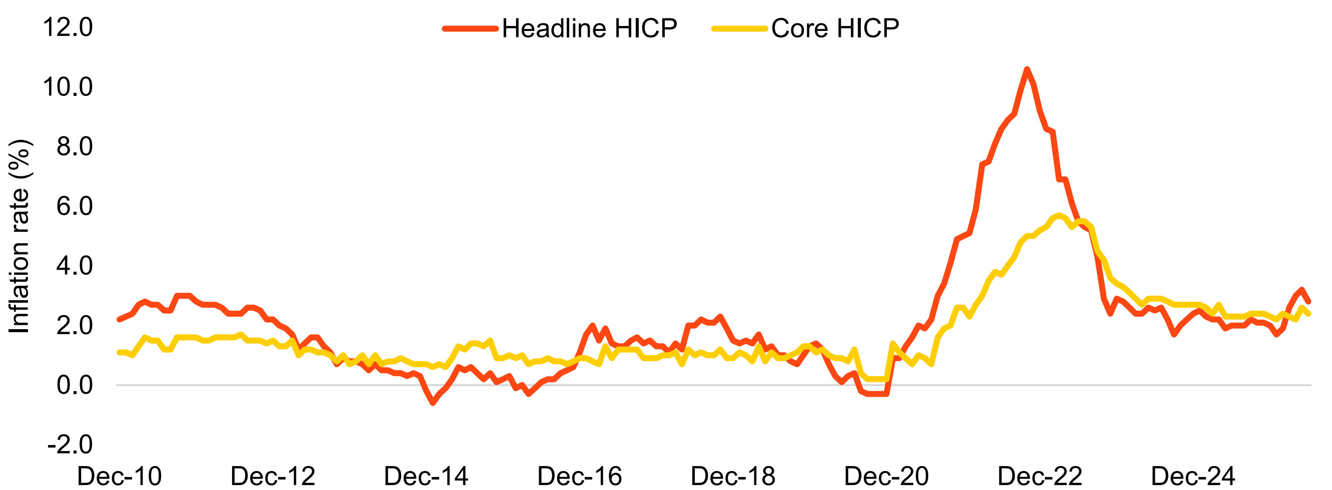
U-3 U.S. unemployment rate (%) seasonally adjusted, and year-over-year U.S. Core PCE inflation (%) seasonally adjusted, RHS



Source: Bureau of Labor Statistics, Bureau of Economic Analysis, BlackRock. Captures unemployment data as of June 30, 2026 and inflation data as of May 31, 2026 (most recent).

Exhibit 4: Inflation risks are also top of mind for the euro area

Year-over-year headline and core inflation: Euro area HICP and core HICP



Source: Bloomberg, Eurostat, BlackRock. Euro Area Core Harmonised Index of Consumer Prices (HICP) inflation as of June 30, 2026. Core HICP excludes energy, food, alcohol and tobacco.

Base rates remain an anchor, and a constraint

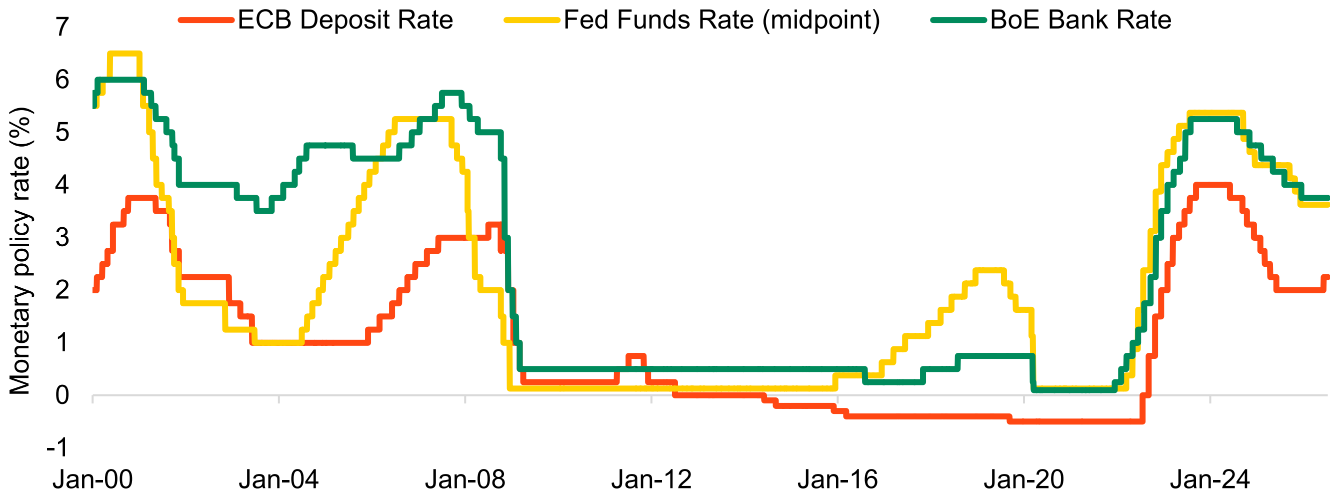
The more constrained policy backdrop keeps base rates at the center of the credit outlook. Indeed, policy rates across the U.S., euro area and UK remain well above the near-zero levels that characterized much of the post-GFC era, even as the backdrop diverges somewhat across regions (Exhibit 5). The Fed and Bank of England (BoE) held policy rates steady at recent meetings, while the ECB raised all three key policy rates by 25 basis points in June, talking the deposit facility rate to 2.25%. Market pricing also points to the potential for additional policy tightening ahead, with one additional policy rate hike priced by year-end 2026 for the Fed, BoE, and ECB, per Bloomberg data as of July 14.

In the U.S., Treasury yields have moved higher this year, including at the 2-year, 10-year and 30-year maturities (Exhibit 6).

For investors, elevated base rates have helped preserve attractive all-in yields, making income an important anchor for credit returns, even as spreads remain tight. For issuers, however, the same backdrop keeps debt-service and refinancing costs elevated and makes outcomes more dependent on balance-sheet strength, market access and sector positioning.

Exhibit 5: Policy rates warrant watching

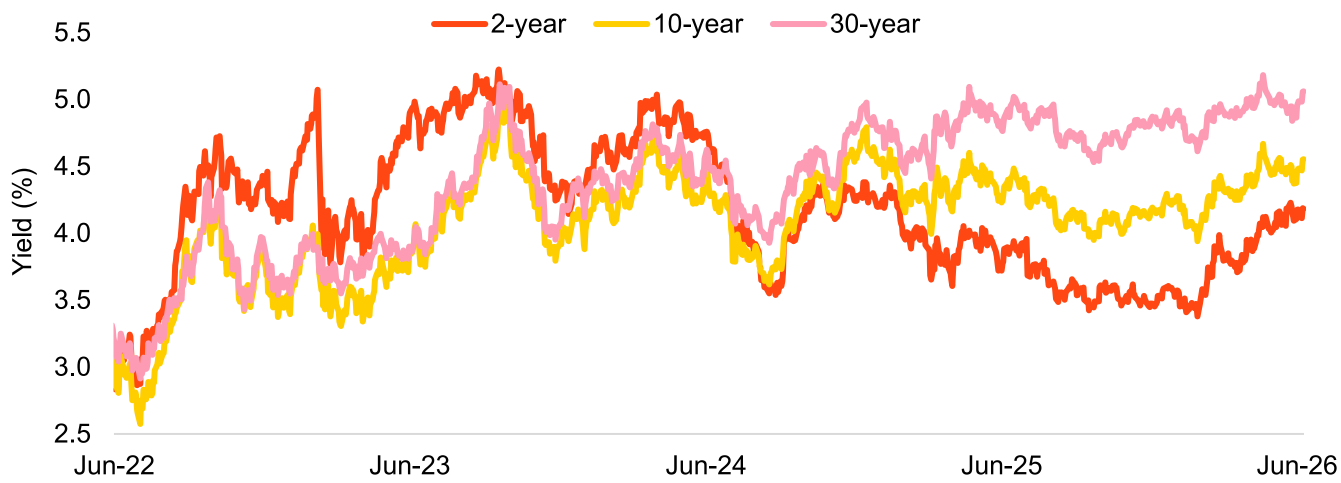
Monetary policy rates for the European Central Bank, Federal Reserve, and Bank of England



Source: BlackRock, European Central Bank, Federal Reserve, Bank of England, Bloomberg. As of July 13, 2026.

Exhibit 6: A higher cost of capital across the curve

Yield-to-worst of the 2-year, 10-year and 30-year U.S. Treasuries (on-the-run securities, mid levels)



Source: Bloomberg, BlackRock. As of July 13, 2026.

Consumers hold steady, with some pressure beneath the surface

Consumers provide another lens on the higher-rate backdrop. While consumer spending remains an important source of U.S. growth, elevated rates can keep borrowing costs high, especially for households that are 'net borrowers.' Further, data from the U.S. Bureau of Economic Analysis (BEA) suggests that real disposable personal income growth has fallen below its 2010–2019 average of 2.5%. Even so, consumers remain broadly stable, though increasingly selective and focused on value, a theme echoed by Goldman Sachs Research commentary ahead of 2Q earnings and in early 2Q earnings calls.

That said, under the surface, consumer outcomes are bifurcated. Higher-income consumers continue to drive spending, with the top 40% of earners accounting for 61% of total consumption according to the 2024 Consumer Expenditure Survey. This helps explain why headline consumption has remained resilient even as lower-income households face greater strain.

Consumer credit data reinforce this divide. Aggregate delinquent balances remained broadly stable in 1Q2026, but severely derogatory balances increased, suggesting stress is intensifying among already-stretched borrowers rather than spreading broadly (Exhibit 7). Credit card, consumer finance and auto delinquencies have continued to rise, while mortgage and HELOC performance remain relatively strong (Exhibit 8). Overall, the consumer remains resilient, supported by a still-functioning labor market, but conditions beneath the surface are increasingly uneven.

Exhibit 7: Total delinquent levels held steady in the first quarter
Delinquent balance as a share of total U.S. consumer debt

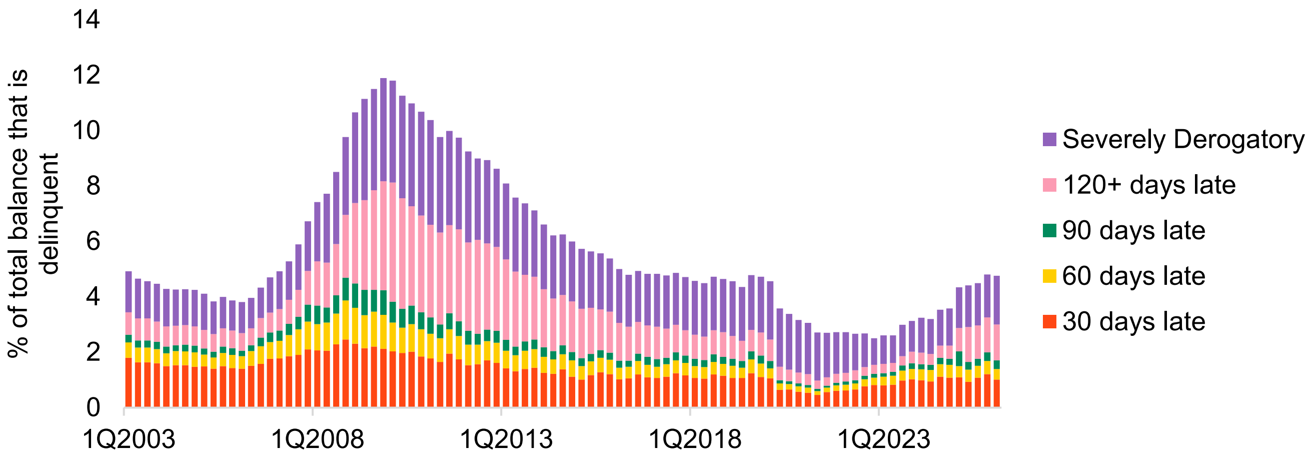
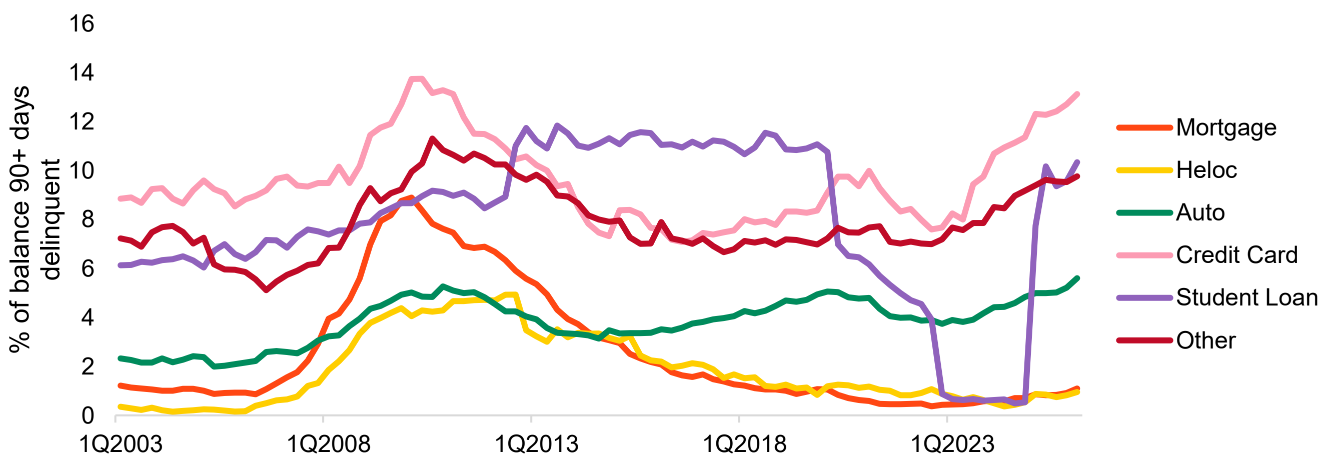


Exhibit 8: There is notable dispersion in delinquencies between consumer credit types
Percent of balance 90+ days delinquent, by loan type



For both charts: Source: New York Fed Consumer Credit Panel/Equifax, BlackRock. As of 1Q2026 (most recent available). The Other category includes Consumer Finance (sales financing, personal loans) and Retail (clothing, grocery, department stores, home furnishings, gas etc.) loans.

Liquid credit

Income stays front and center, but dispersion drives outcomes

A mostly rising tide for credit markets

Corporate credit markets have generally performed well amid the higher yield backdrop, but 2026 has not been a story of a rising tide lifting all boats. High starting yields have largely buoyed returns and interest in credit products. Spreads have been historically rangebound in 2026, with the Bloomberg IG and HY indices trading in a range of 22bp and 85bp, which rank as the 4th and 3rd most rangebound years since 2001, respectively. Excluding March, those ranges fall to 14bp and 54bp, which would rank as the 2nd most and most rangebound years, respectively.

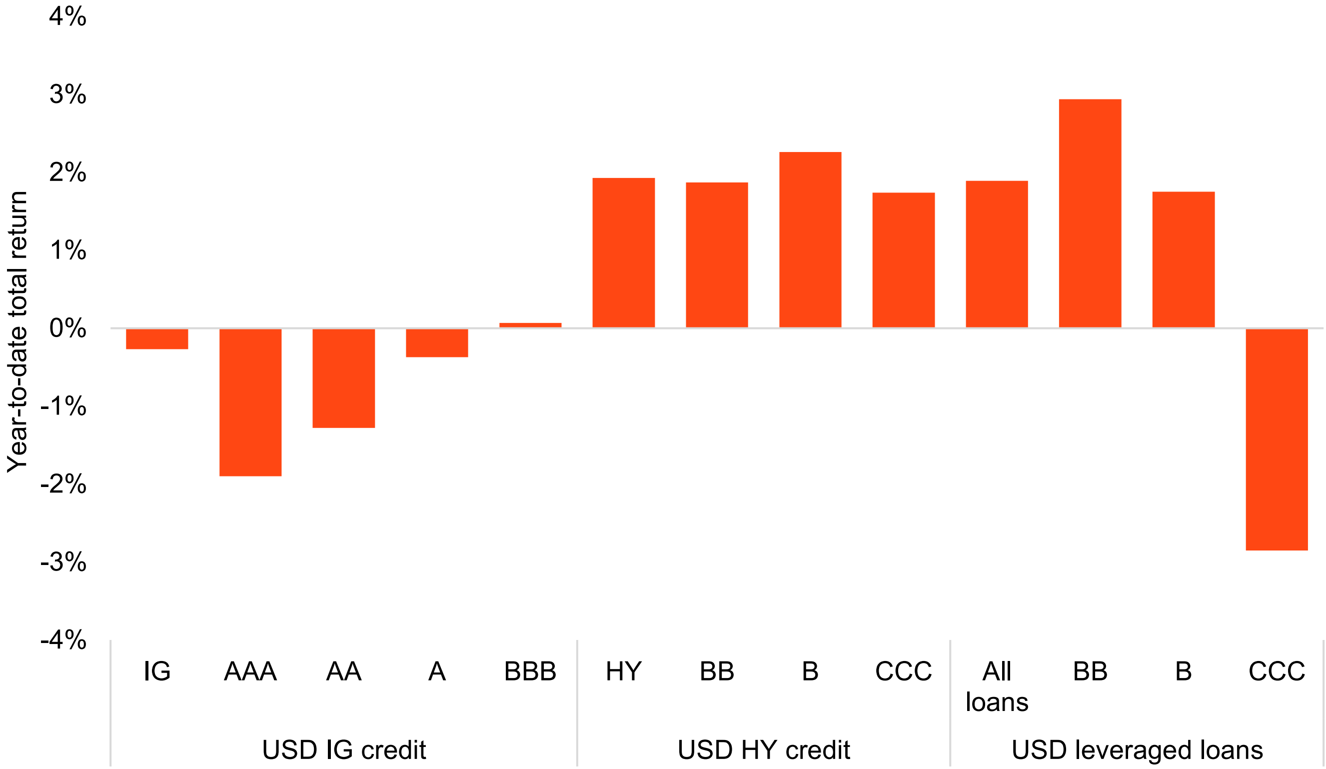
Given the increased attention on yields within the credit landscape, higher-yielding ends of the rating spectrum have largely outperformed, with leveraged finance markets solidly outperforming investment grade in both USD and European markets (Exhibit 9, Exhibit 11 – next page). In USD markets, the Bloomberg High Yield (HY) Index and the LSTA Leveraged Loan Index have returned 1.93% and 1.89%, respectively, compared with -0.27% for the Bloomberg Investment Grade (IG) Index. The recent weakness in USD IG stems from the YTD sell off in rates, as excess returns, which are returns of the index above the returns of a duration-matched Treasury over the same period, are positive (+0.51% YTD). The rate sell off has had a more muted effect on HY, as wider starting spreads have created a stronger carry backdrop and bolstered excess returns in the space (+1.71% YTD).

The exception to this, however, has been CCC-rated leveraged loans, which have returned -2.85% YTD. Several factors have likely contributed to the weakness, including limited natural demand from CLOs given restrictions on lower-rated holdings, greater exposure to the software sector, and idiosyncratic borrower stress.

At the other end of the quality spectrum, AA-rated investment-grade bonds have also lagged, reflecting heavy AI-related issuance in a segment that historically experiences more limited supply.

Exhibit 9: YTD total returns in USD credit markets highlight the importance of selectivity

Year-to-date total returns (%) for various USD corporate credit indices

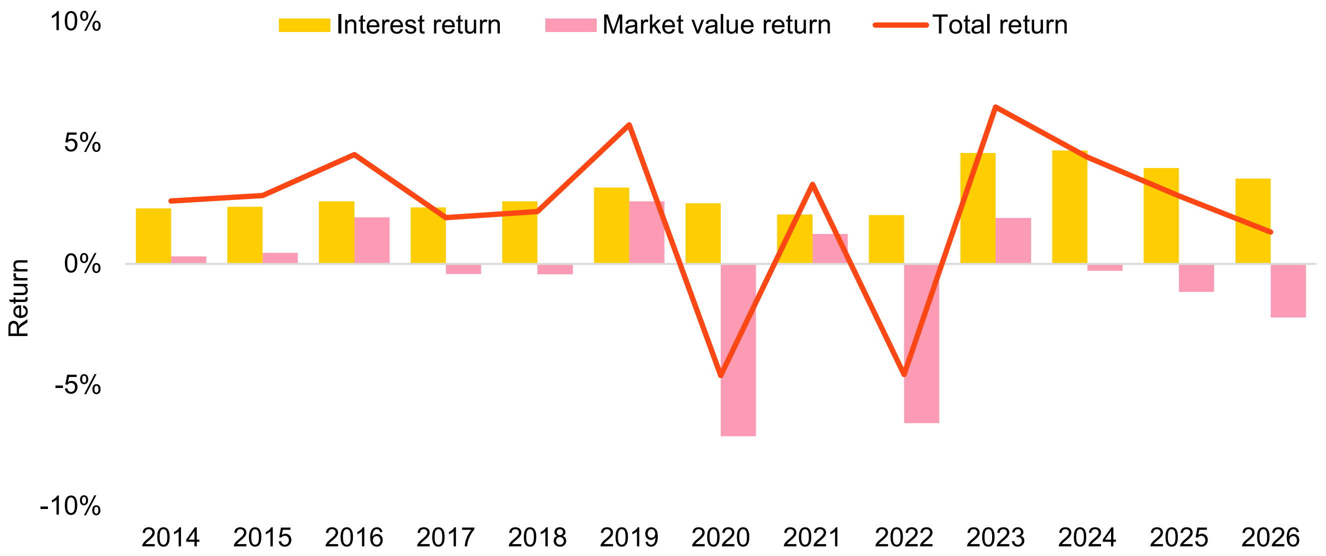


Source: Bloomberg, Pitchbook LCD, BlackRock. As of July 13, 2026. The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index.

Income has remained the primary source of leveraged loan returns. As demonstrated by Exhibit 10, interest income accounted for all of the asset class's total return in 2024, 2025 and YTD 2026, offsetting negative price performance. The market value drag in 2026 is the largest since 2022, when the Federal Reserve began tightening monetary policy and the S&P 500 declined 19.4%. With the policy easing cycle currently paused in the U.S., elevated income continues to support the relative appeal of loans.

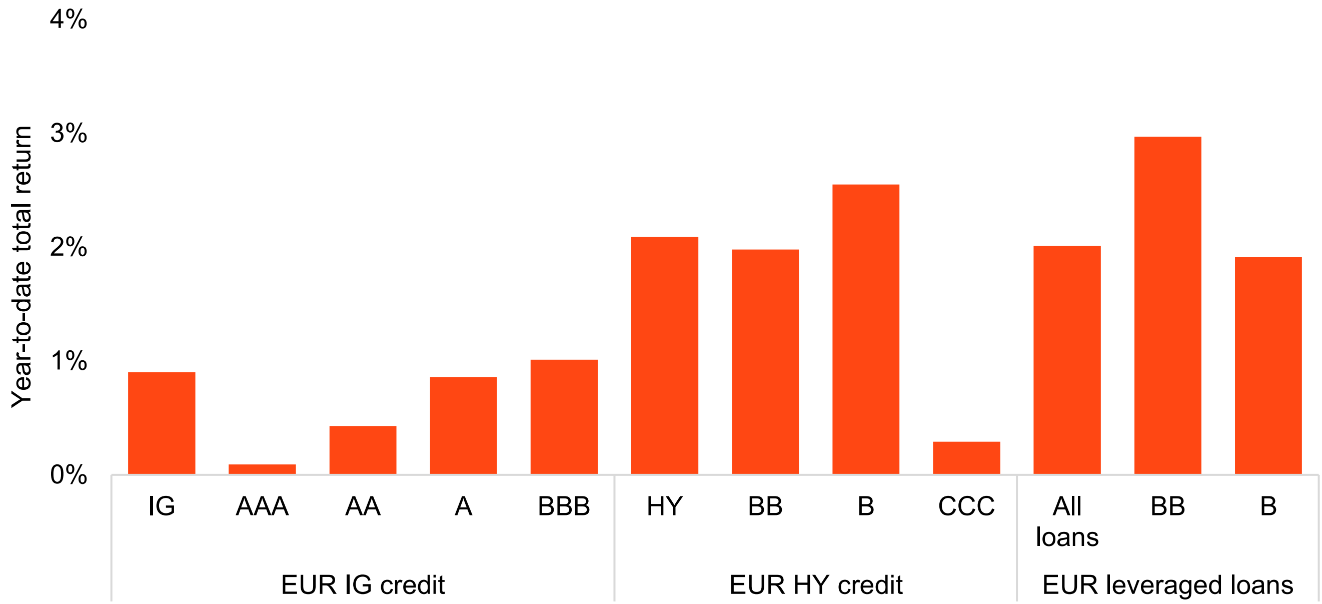
European credit has followed a broadly similar pattern, with selective exposure to lower-rated bonds generally rewarded (Exhibit 11). Within corporate bonds, YTD returns increase progressively as you move from AAA down to single-B rated credit. CCC-rated bonds are the exception, producing modestly positive returns but trailing single-B bonds by more than 2pp. The pattern differs in European loans, where BB-rated borrowers have outperformed single-Bs by 1.06pp despite the asset class generating returns broadly comparable with high-yield bonds.

Exhibit 10: Interest income has driven the majority of total return YTD for the USD LL market
USD leveraged loan interest, market value, and total returns (January - June, by year)



Sources: PitchBook LCD, Morningstar LSTA US LL Index, BlackRock. Data through June 30, 2026.

Exhibit 11: EUR credit YTD total returns have favored a *selectively* down in quality stance
Year-to-date total returns (%) for various EUR corporate credit indices



Source: Bloomberg, Pitchbook LCD, BlackRock. As of July 13, 2026. 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.

Spread vs. yield tension remains in focus

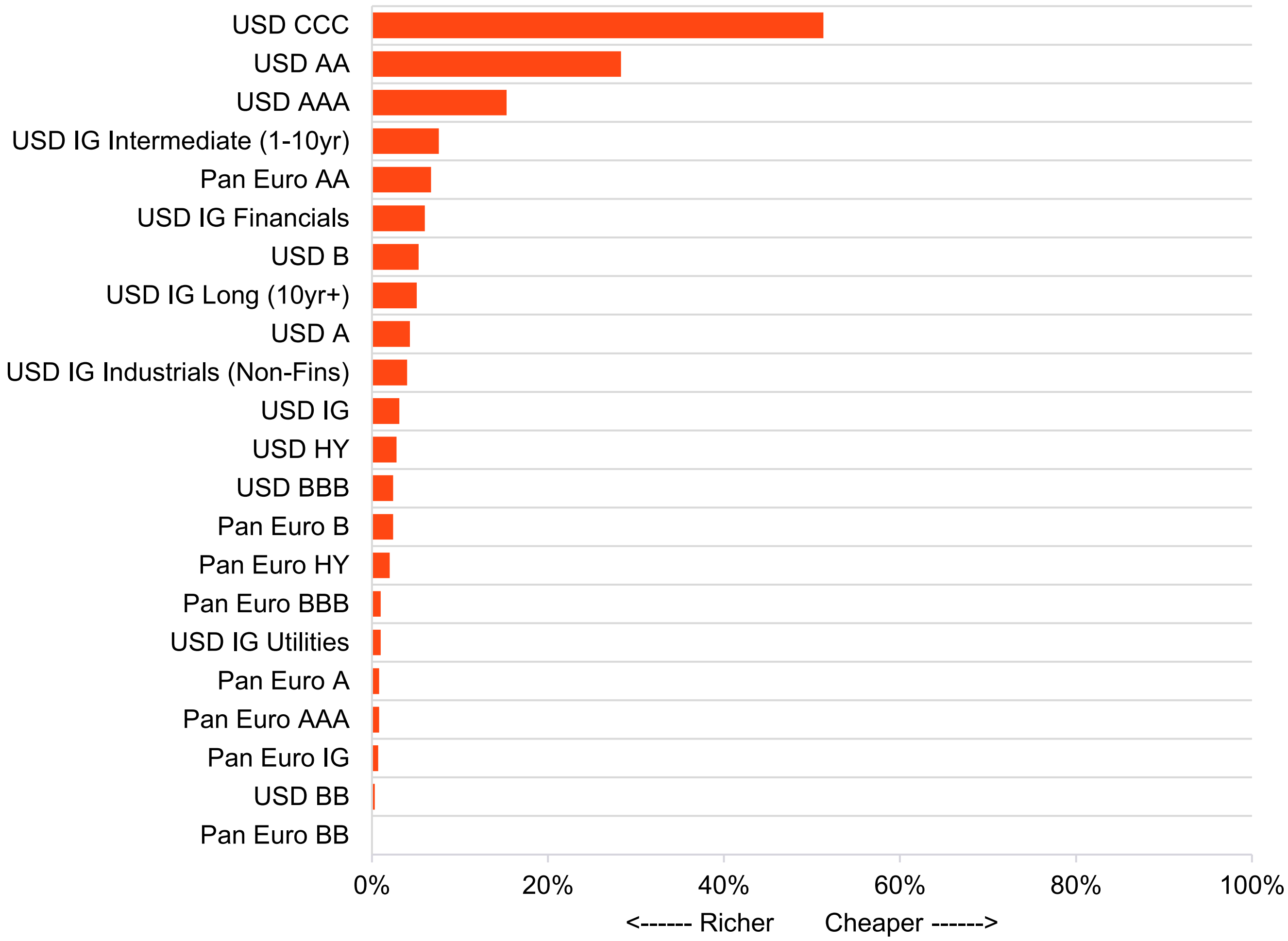
Yields, yields, and yields keep credit an attractive asset class. At the index level, corporate bond option-adjusted spreads (OAS) trade within the tightest 30th percentile since 2010 for every rating cohort outside of USD CCCs (Exhibit 12). Elsewhere, only the highest quality USD bonds appear to offer meaningful historical relative value, but this cohort has been tied to the AI/hyperscaler trade that has changed its landscape.

That said, no section of the market trades tighter than its 50th percentile since 2010 in terms of index-level corporate bond yields (Exhibit 13). In many ways, the outright spread has become a secondary concern, as the historically attractive yields outweigh rich spread valuations.

Currently, in USD IG, spreads account for 14% of all-in yields, just off the lowest level since 2000. For HY, that metric stands at 37%, ranking in the 2nd percentile since 2010 and the 9th percentile since 2000.

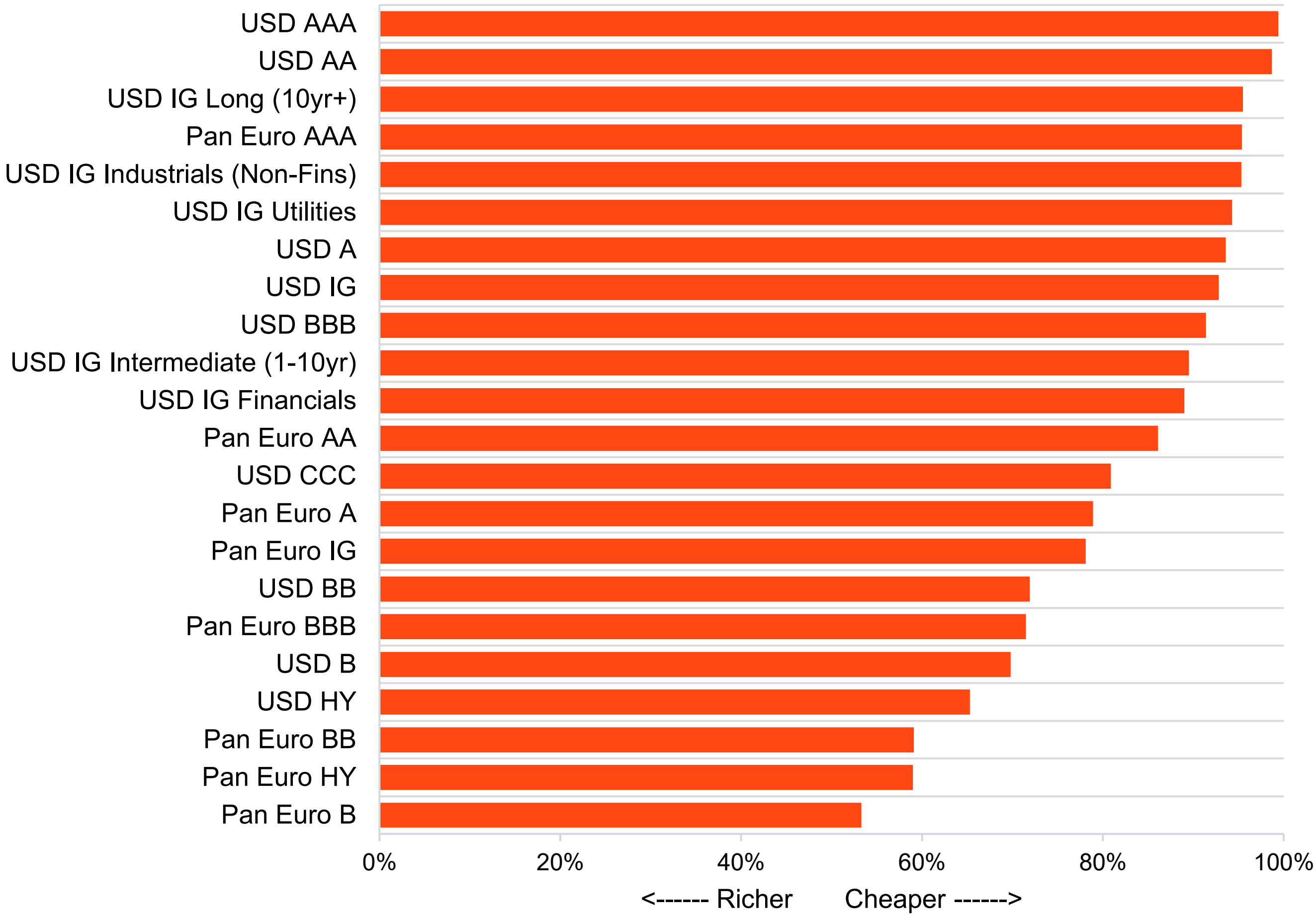
Despite such rich spread valuations, this has historically not been a poor indicator of total returns. Since 2010, when spreads account for less than 15% of all-in yields, median forward returns have been positive: 1.02% over the forward three months, 3.57% over the forward six months, and 7.61% over the forward twelve months. The same is true for high yield when spreads account for less than 40% of all-in yields: 1.64% over the forward three months, 4.38% over the forward six months, and 8.30% over the forward twelve months.

Exhibit 12: Spreads remain tight across most segments...
Percentile rank of daily index-level corporate bond option-adjusted spreads, since January 1, 2010



Source: BlackRock, Bloomberg. As of July 13, 2026. 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 13: ...though all in yields remain largely attractive by historical standards
Percentile rank of daily index-level corporate bond yield-to-worst levels, since January 1, 2010



Source: BlackRock, Bloomberg. As of July 13, 2026. 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.

[Content continues on next page]

Primary markets are (largely) open

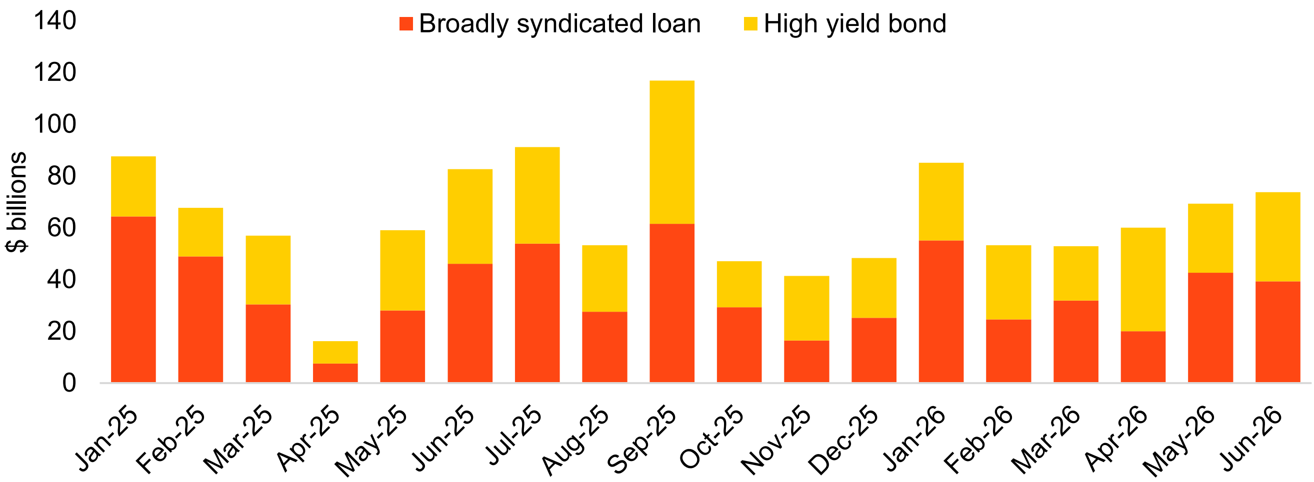
USD primary markets have remained resilient YTD. HY bond issuance reached $181 billion through June 30, up 25% from the same period last year, while syndicated loan new-issuance volumes, excluding repricings and extensions, totaled $214 billion, modestly below the prior year pace (Exhibit 14). In our view, these suggest that both financing channels remain generally accessible although year-over-year momentum has been somewhat stronger in HY.

The picture has been more subdued in Europe. Combined new-issue volume across HY bonds and syndicated loans declined 9% YoY, with periods of geopolitical and macroeconomic uncertainty likely contributing to a more cautious issuance environment (Exhibit 15). The weakness, however, has been concentrated in loans, with syndicated loan volume falling 30% to less than €40 billion, the slowest start to a year since 2023. By contrast, high-yield issuance rose 19% to €48 billion, marking the strongest start since 2021.

Taken together, the data point to open but increasingly differentiated primary markets. Financing conditions have remained relatively supportive in the US while European issuance has shifted more decisively toward HY bonds as syndicated loan activity has slowed.

Exhibit 14: USD issuance has been considerably resilient YTD

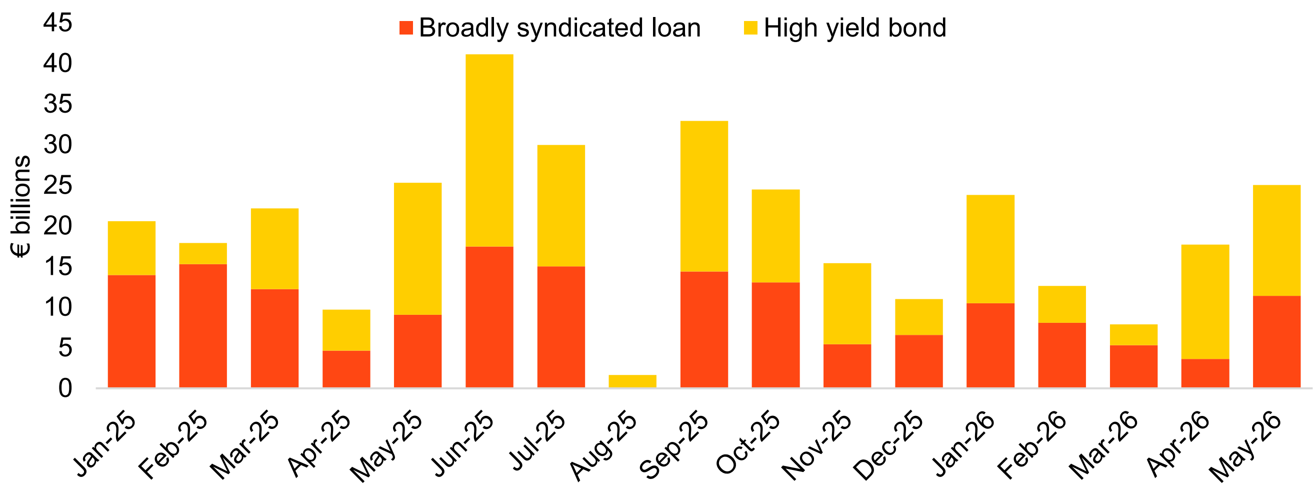
Monthly new-issue volume for USD institutional broadly syndicated loans and high yield bonds, in $ billions



Source: Pitchbook LCD, BlackRock. As of June 30, 2026. Note: excludes repricing and extension volume.

Exhibit 15: YTD issuance in the EUR market has slowed vs. last year

Monthly new-issue volume for EUR broadly syndicated loans and high yield bonds, in € billions



Source: Pitchbook LCD, BlackRock. As of May 31, 2026. Note: HY volume excludes PIK instruments & short-term bonds; reflects corporate bonds only. In case of a global issue, the portion allocated to European HY investors is counted (if unknown, the entire global issue is counted).

Strategic transactions have driven M&A volumes

M&A activity provides another indication that financing conditions are improving. Strategic activity has been particularly strong in 2026, supported in part by a number of very large transactions. For context, the five largest strategic deals in each of the first two quarters accounted for more than 30% of quarterly strategic deal value.

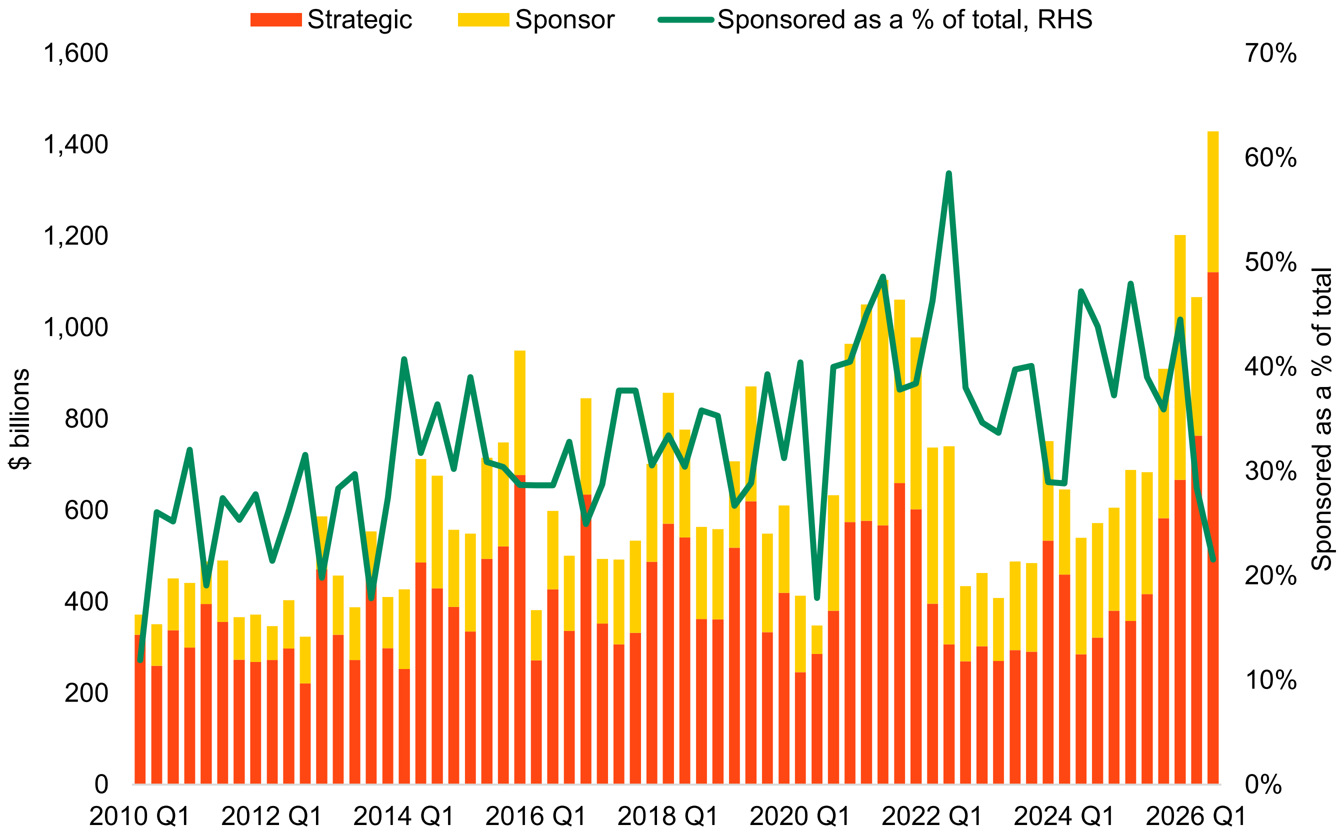
Against this backdrop, strategic transactions accounted for 76% of announced U.S. and European M&A deal value among deals valued at $100 million or more in the 1H2026 (Exhibit 16). Several factors may be supporting this activity, in our view. Strategic acquirers are generally less sensitive to financing costs than financial sponsors because transactions are often driven by longer-term corporate objectives rather than target return thresholds. A more supportive US policy backdrop, onshoring initiatives and technology-driven investment are also likely supporting strategic activity.

By contrast, sponsor activity remains more exposed to borrowing costs, asset valuations, and thus, monetary policy. Ongoing pressure in software, historically an important area of private equity investment, has likely also acted as an ongoing headwind to sponsor activity, for those with sizable exposure to the sector.

Even so, sponsor volume has continued to recover. Although sponsored deal value remained well below strategic M&A in the 1H2026, it reached its highest first-half level since 2022. As such, the data point to continued improvement in sponsor-led transaction activity, but with some scope for further progress.

Exhibit 16: Strategic M&A has driven the majority of YTD M&A volume

Announced sponsor and strategic M&A deals in North America and Europe and sponsored volume as a share of the total (RHS). Captures deals valued at $100 million or more, at announcement. Excludes canceled and withdrawn deals.



Source: Dealogic, BlackRock. As of June 30, 2026.

Defaults remain contained, but warrant watching

Default trends reinforce the broader picture of aggregate resilience alongside concentrated pockets of stress. Recent data from Moody's demonstrates that leveraged loan defaults continue to decline, while HY bond defaults have continued to climb, though from lower level (Exhibit 17). These different paths, in our view, reflect the different pace at which higher borrowing costs reached borrowers in each market.

In HY, the issuer-weighted default rate has risen toward recent highs as borrowers gradually refinance at higher coupons. Even so, the current rate of 4.0% ranks in only the 23rd percentile since 2010, suggesting that deterioration remains concentrated rather than broad-based.

The leveraged loan market appears further along in the default cycle. Because floating-rate borrowers absorbed higher base rates almost immediately following the Fed's hiking cycle in 2022 and 2023, stress emerged earlier, with defaults hitting a local high of 7.7% in November 2024. Since then, the default rate has declined to its lowest level since September 2023.

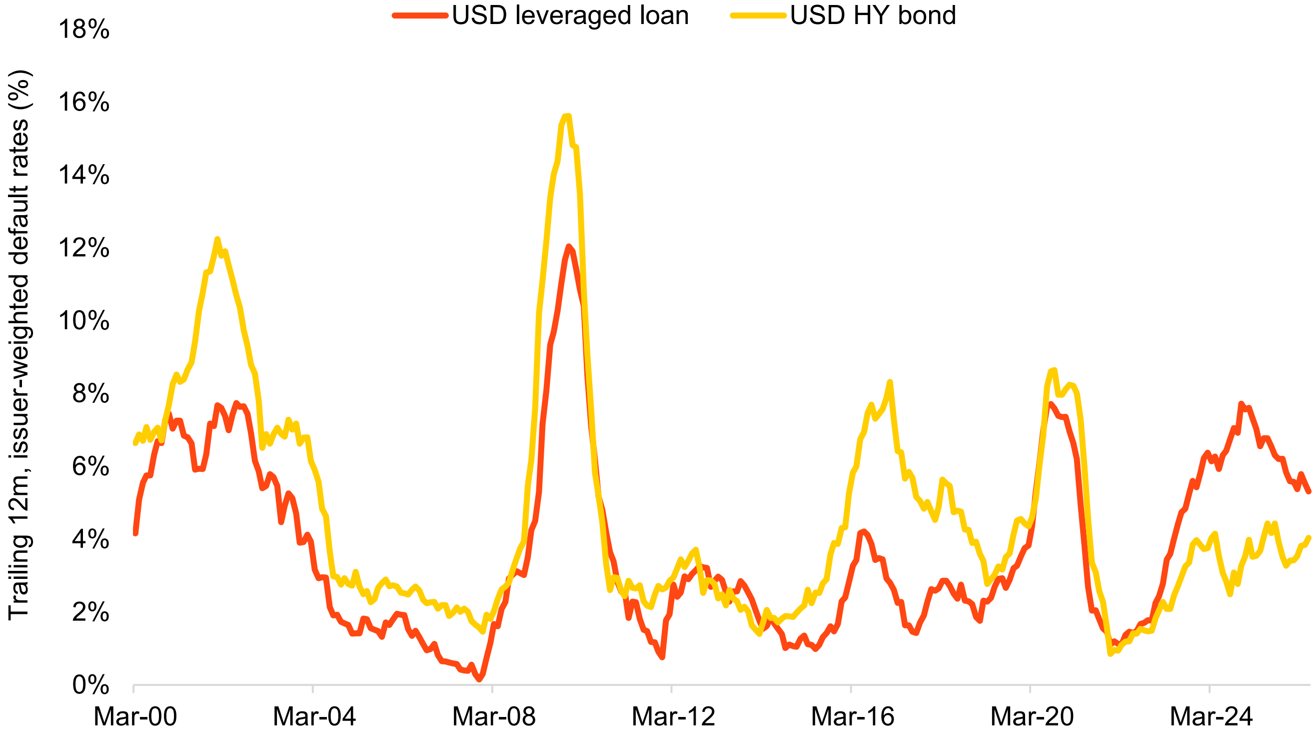
Over time, loan and HY default rates have increasingly converged, with the gap between them narrowing to its tightest since February 2023 in May.

That said, the underlying risks remain distinct, in our view. HY borrowers may face continued pressure as more debt refinances at higher coupons while the loan market could experience renewed stress from software borrowers as maturities approach.

The larger test will come as the 2028 maturity wall draws closer. Barclays estimates that 8% of the Leveraged Loan Index matures within two years and 23% within three years, the highest shares in more than a decade. HY faces a similar challenge, with approximately 24% of the Bloomberg High Yield Index maturing within three years, the highest share on record. Looking ahead, we expect that continued access to refinancing will be a key factor informing default activity.

Exhibit 17: USD LL and HY bond default rates continue to converge

Trailing 12-month, issuer-weighted default rates for the universe of USD HY bonds and USD leveraged loans tracked by Moody's



Source: Moody's, BlackRock. As of May 31, 2026.

Software continues to create issues, but impacts remain contained at present

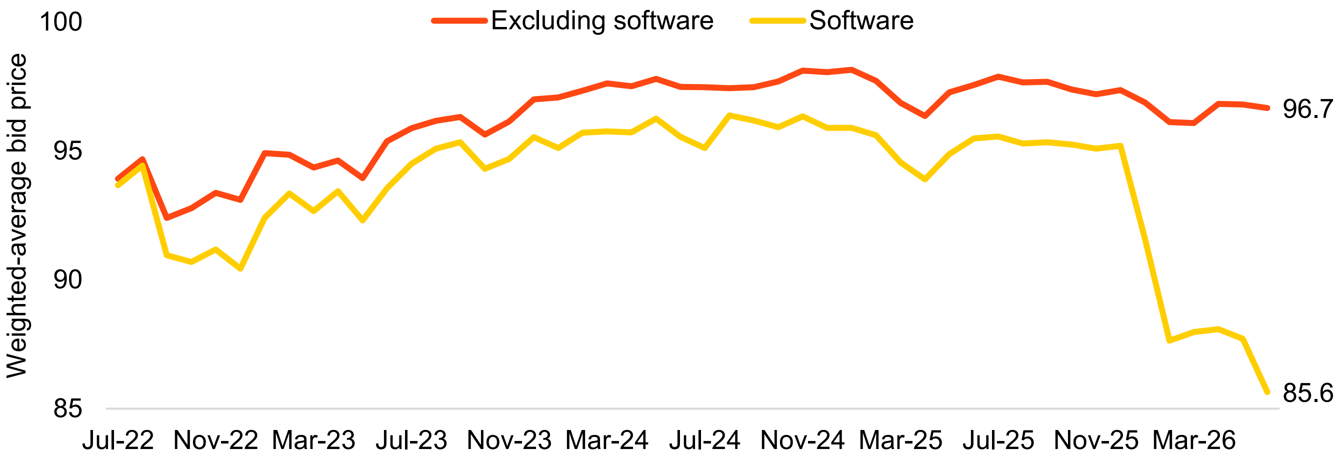
Software remains a key focus across leveraged finance given its scale in both the broadly syndicated loan and private credit markets (discussed here). Indeed, as of June 30, 2026, it represented 12.35% of the USD Leveraged Loan Index in par terms.

In the USD leveraged loan market, pricing increasingly reflects investor concern. The gap between the weighted-average bid prices of software and non-software loans widened to 11.1 points as of June 30, with software loans trading at 85.6, down 10.1% YTD (Exhibit 18).

The aggregate decline, however, masks considerable dispersion within the sector. As of June 30, the interquartile price range among software loans was nearly 19 points, with the 25th percentile trading near 77.2 and the 75th near 96.0. This wide range highlights the importance of assessing software borrowers individually, as credit outcomes can vary materially.

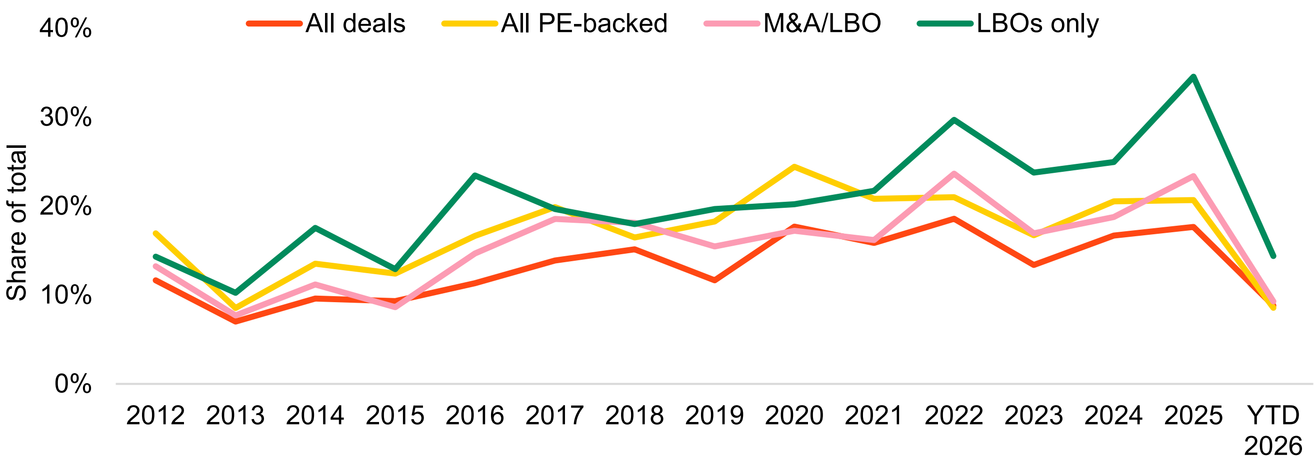
Financing access will become increasingly important as software borrowers approach a sizable maturity wall. Goldman Sachs Research estimates that $98 billion of USD software loans, representing roughly 29% of the sector, mature through 2028. By comparison, only 22% of non-software loans mature over the same period, suggesting refinancing needs are more concentrated within software. At the same time, software's share of broadly syndicated loan issuance has fallen sharply this year (Exhibit 19), underscoring the importance of continued market access. Ultimately, the outlook will depend on whether stronger borrowers can refinance on attractive terms and weaker capital structures can be reset.

Exhibit 18: Software loans have underperformed the broader index
Weighted-average bid price of performing loans in the LSTA USD Leveraged Loan Index



Sources: PitchBook LCD, Morningstar LSTA US Leveraged Loan Index, BlackRock. Data through June 30, 2026.

Exhibit 19: Access to financing will be key for software borrowers
Software share of total new-issue activity in the broadly syndicated loan market



Source: PitchBook LCD, BlackRock. Data through June 30, 2026.

AI issuance is changing the shape of financing markets

AI-related issuance has become an increasingly important feature of primary markets in 2026. Hyperscalers have emerged as some of the largest issuers, and data center-related bond issuance has become a meaningful source of primary activity in both IG and HY. As shown in Exhibit 20, IG AI data center bonds outstanding have climbed to $53.4 billion as of June, nearly doubling since January, while HY data center bonds have risen from $8.6 billion to $36.4 billion over the same period.

Investor demand has so far accommodated the strong pace of issuance, but the volume of supply is beginning to test the depth of the market. Hyperscalers appear mindful of this dynamic, as reflected in an increasingly diversified currency mix (Exhibit 21, next page). The digestion question has become more visible in recent deals, some of which have priced with wider new-issue concessions than recent historical norms and have traded softer in the days and weeks following pricing.

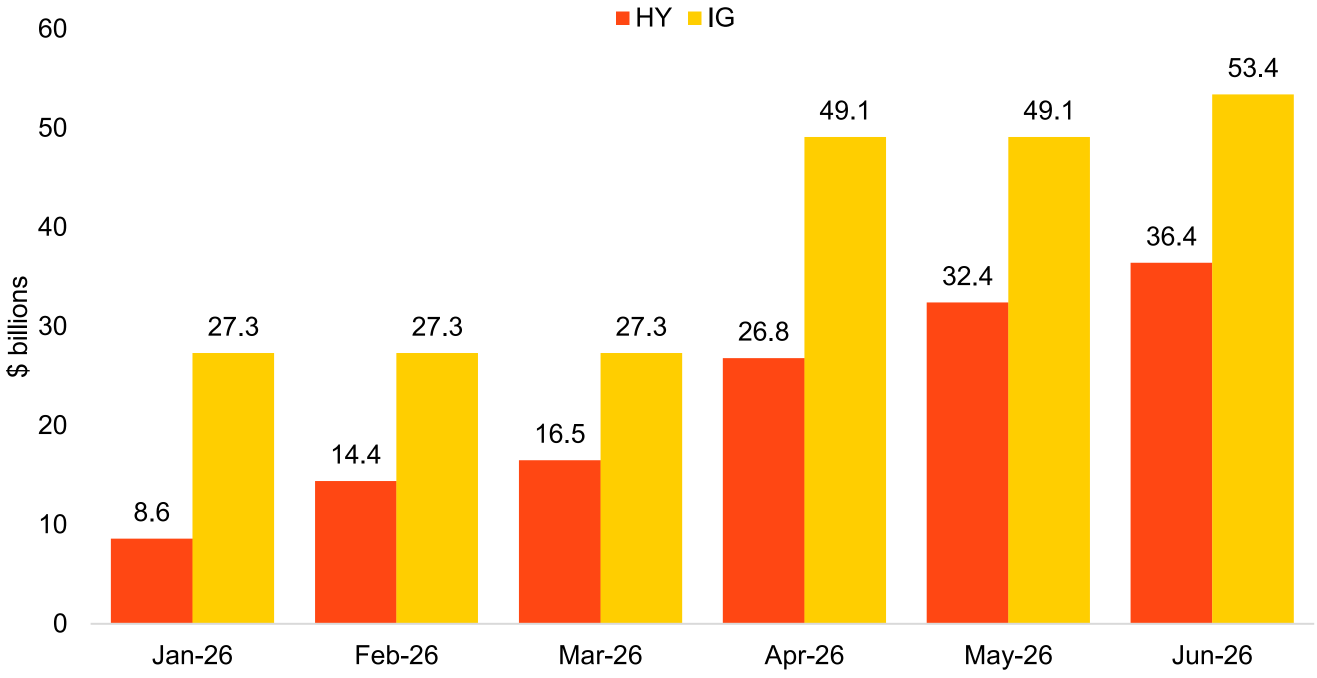
That diversification is also evident within the USD HY market, where project- and asset-based structures have become a more prominent source of financing. As shown in Exhibit 22 (next page), these transactions accounted for approximately 15% of year-to-date issuance, compared with an annual average of less than 1% since 2010, with much of the increase tied to AI-related data centers and digital infrastructure.

With capital expenditure needs likely to remain elevated, we see scope for issuers to increasingly complement traditional bond financing with private capital. In particular, we see scope for private credit to play a larger role alongside publicly issued debt in financing the AI buildout.

These developments have implications for both pricing and portfolio construction. Wider concessions from high-quality AI-related issuers could gradually influence pricing elsewhere in the credit market and place modest upward pressure on spreads. Further, we expect that concentration limits, position sizing and diversification will become increasingly important considerations for investors.

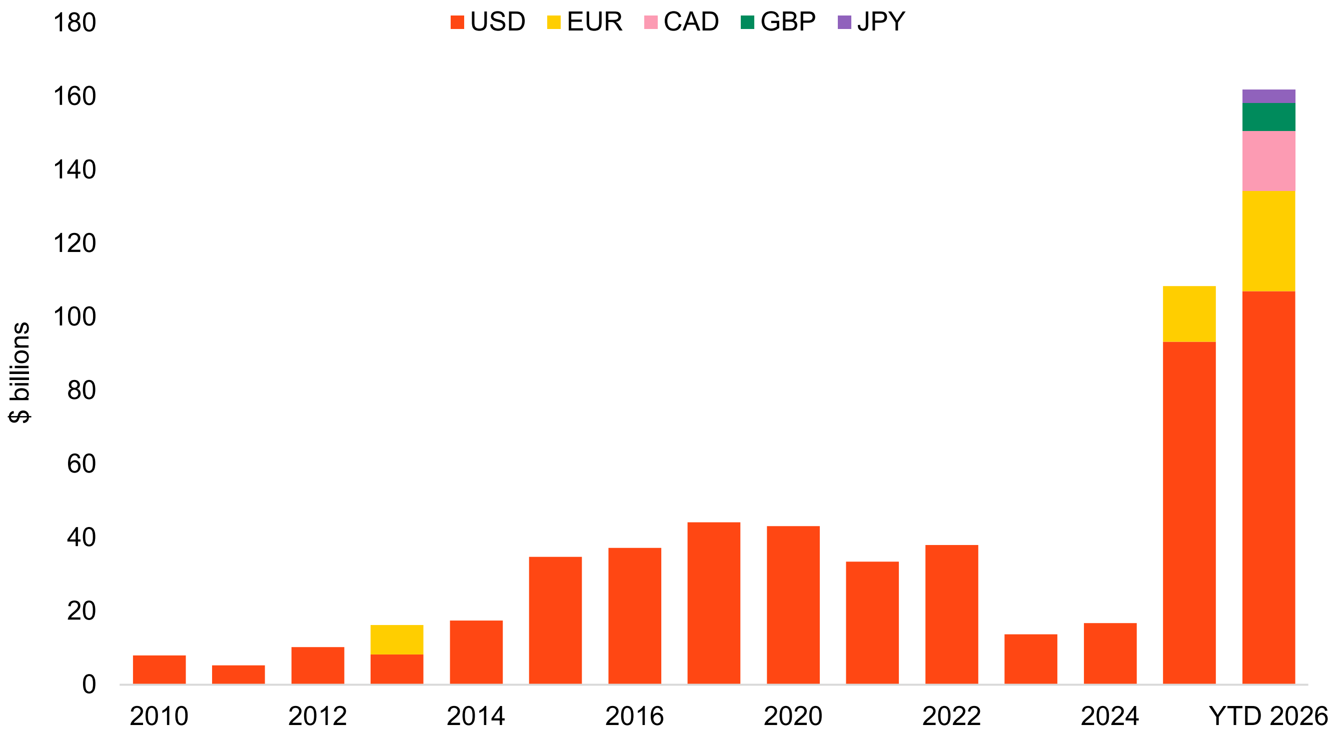
Exhibit 20: Data center financing has grown YTD

IG / HY AI data center bonds outstanding by month, in $ billions



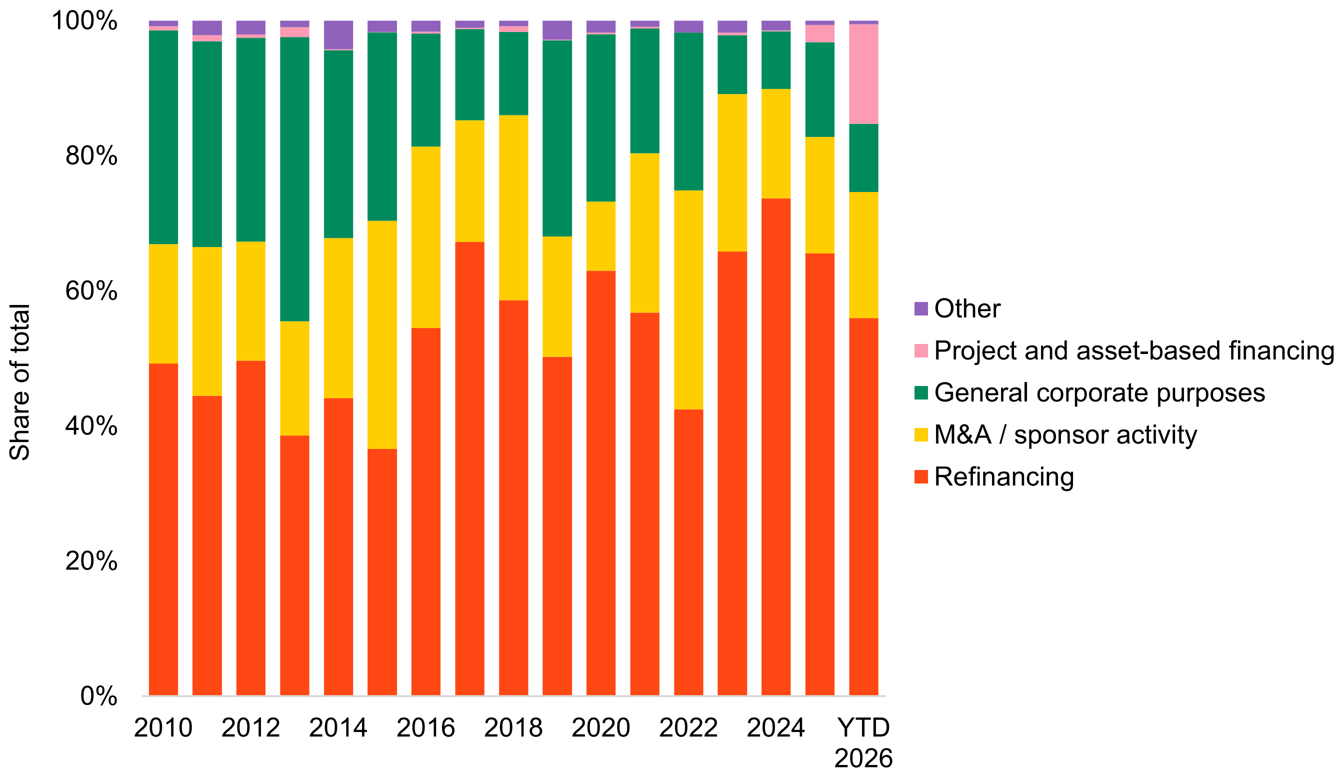
Source: Bloomberg, Barclays Research, BlackRock. June as of June 25, 2026. Excludes issuance by neocloud CoreWeave, which has $9.8 billion of regular-way HY bonds outstanding.

Exhibit 21: Hyperscaler issuance has grown considerably
IG hyperscaler debt issuance across currencies, in $ billions, based on USD equivalent



Source: Dealogic, BlackRock. YTD 2026 as of July 6, 2026. Includes Alphabet, Amazon, Microsoft, Meta, and Oracle.

Exhibit 22: Project and asset-based financing has risen alongside AI-related activity
Share of USD HY gross issuance, annual and YTD 2026, by use of proceeds



Source: Dealogic, BlackRock. YTD 2026 as of July 6, 2026.

Private credit

Resilient in aggregate, but increasing differentiation

Private credit's maturing opportunity: resilient, but far from uniform

Over recent years, private credit has grown from a niche asset class, to a sizable, scalable, standalone one. As it has evolved, it has become more diverse, including across strategies, investor types, access points, and borrowers, ultimately expanding the opportunity and making outcomes less uniform.

Recent developments underscore that shift. Elevated redemption requests in parts of the semi-liquid market and pressure among select borrowers and sectors suggest a market where dispersion is becoming more visible. In our view, such dispersion is likely to remain a defining feature of the asset class and may matter more as the asset class continues to mature.

Importantly, we do not believe that these signals point to broad-based disruption. Indeed, aggregate performance remains resilient, supported by still strong fundamental and performance data. In our view, the key takeaway is that private credit remains well supported, but the market is becoming more segmented, making manager selection, underwriting discipline, and portfolio construction increasingly important.

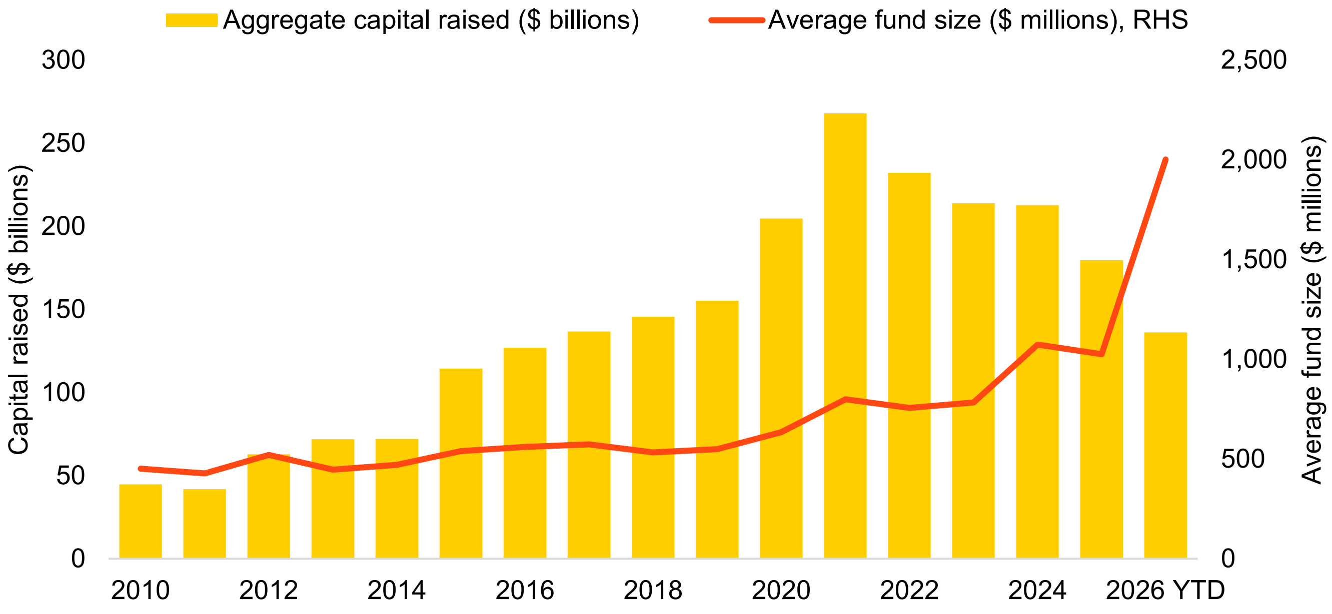
A broader, and more segmented, investor base

As private credit has grown, both its investor base and the ways investors access the asset class have expanded. Recent flows illustrate how that growth is producing increasingly different dynamics across vehicles and investor channels.

Redemption requests in parts of the semi-liquid market have drawn attention. In 1Q2026, the Cliffwater Direct Lending Index, which covers more than 22,000 loan segments and approximately $560 billion in assets, recorded modest net outflows for the business development company (or BDC) universe. While this suggests some pressure among investors with periodic liquidity needs, it does not point to a broad retreat from the asset class.

By contrast, closed-end fundraising presents a different picture. Preqin data show that aggregate private credit fundraising had reached 76% of the full-year 2025 total as of June 26, 2026, suggesting that institutional demand remains resilient (Exhibit 23). The divergence highlights the different considerations shaping each investor cohort, including liquidity needs and allocation horizons. At the same time, closed-end private credit funds continues to scale, with the average fund size continuing to rise, extending the longer-term shift toward larger pools of capital and more established platforms.

Exhibit 23: Closed-end fundraising has been resilient YTD, though has favored larger funds
Annual private credit fundraising, by aggregate capital raised, in $ billions, and average fund size, in $ millions, RHS



Source: Preqin, BlackRock. YTD 2026 as of June 25, 2026. Captures closed end funds.

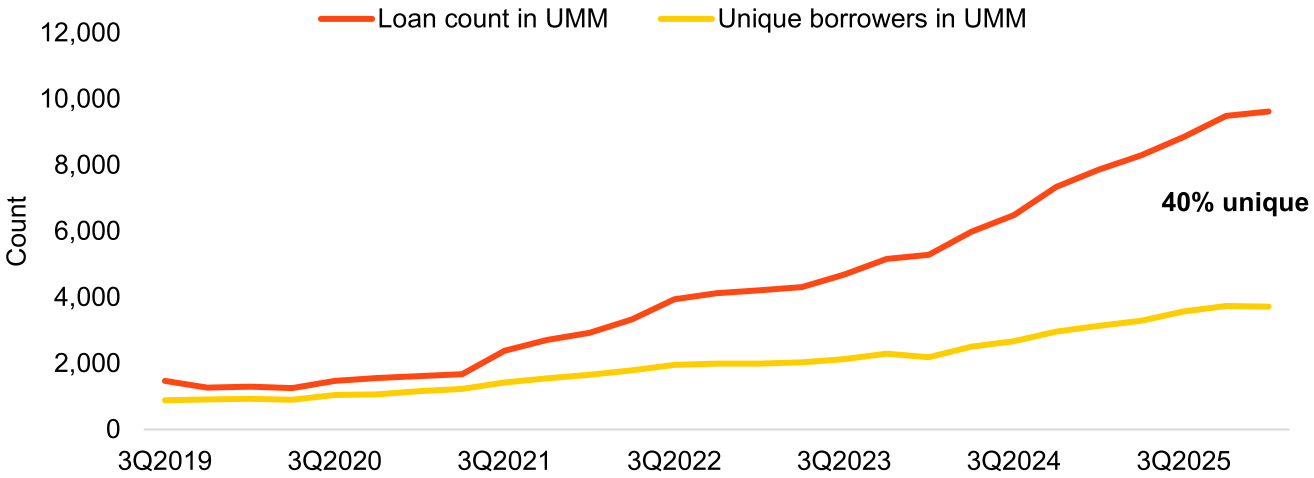
Differences between UMM and LMM demonstrate dispersion within private credit

As private credit has scaled, lenders have increasingly been able to serve larger borrowers, expanding the upper middle market (UMM) borrower cohort, broadly defined as companies with more than $100 million of EBITDA. Indeed, the loan count in this cohort has grown more than 6 times, from nearly 1,300 in 1Q2020 to more than 9,600 in 1Q2026 (Exhibit 24). By comparison, the lower middle market (LMM) loan count grew more modestly, from roughly 1,300 to just over 3,000 over the same period (Exhibit 25). This expansion reflects several structural trends, including the growth of larger private credit platforms and their ability to underwrite increasingly sizeable transactions.

The growth of the UMM has also changed how private credit portfolios are constructed. Larger financings are more commonly completed through club transactions, with multiple lenders participating in a single deal. By contrast, LMM transactions tend to be smaller and are more often executed as sole-lender or tightly held club financings. This dynamic is why only 40% of borrowers are unique in the UMM, vs. 80% in the LMM. Further, UMM managers generally maintain more diversified borrower portfolios, averaging 202 portfolio companies compared with 104 for LMM managers.

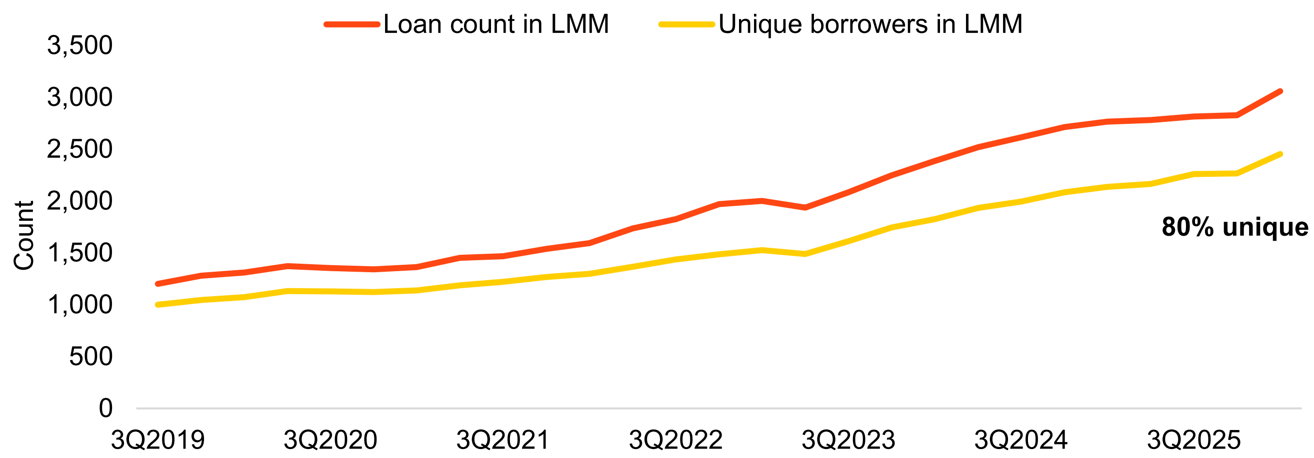
These differences underscore the dispersion even *within* private credit strategies. An allocation to UMM or LMM direct lending represents exposure not only to different borrower cohorts, but also to different portfolio construction. As the asset class continues to mature, these distinctions are likely to become increasingly important to allocation decisions.

Exhibit 24: The UMM cohort has expanded considerably
Number of total loans and unique borrowers in upper middle market (UMM) portfolios



Source: Cliffwater Direct Lending Index, BlackRock. As of 1Q2026. UMM defined as borrowers with EBITDA $100 million or more.

Exhibit 25: The LMM borrower cohort tends to be more diversified across unique borrowers
Number of total loans and unique borrowers in lower middle market (LMM) portfolios



Source: Cliffwater Direct Lending Index, BlackRock. As of 1Q2026. LMM defined as borrowers with EBITDA below $40 million.

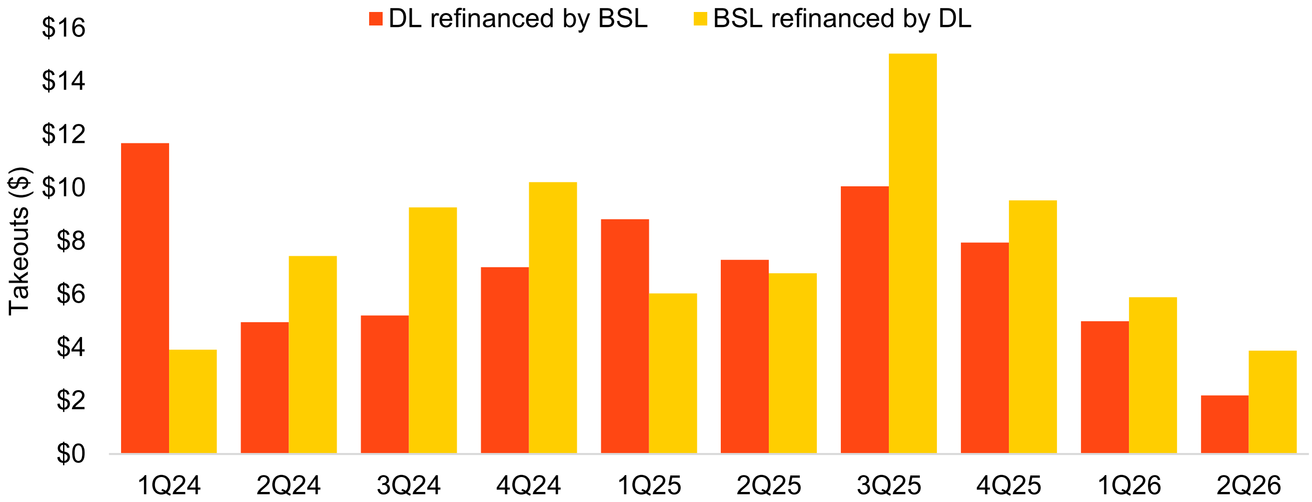
We expect movement between markets will continue to ebb and flow

As the UMM has expanded, so too has the overlap between direct lending and the broadly syndicated loan (BSL) market. Exhibits 26 and 27 show takeout activity across the USD and EUR markets. In both regions, activity has remained modest year to date, likely reflecting a combination of geopolitical uncertainty, an uneven M&A backdrop, heightened redemptions in some segments of private credit, and, more recently, *selectively* risk-on appetite in the syndicated markets.

In the U.S., YTD activity has modestly favored direct lending. By contrast, movement between the two markets has remained more limited in Europe, where takeout activity has been subdued since late 2025. Notably, no BSLs have been refinanced by direct lending since the third quarter of 2025.

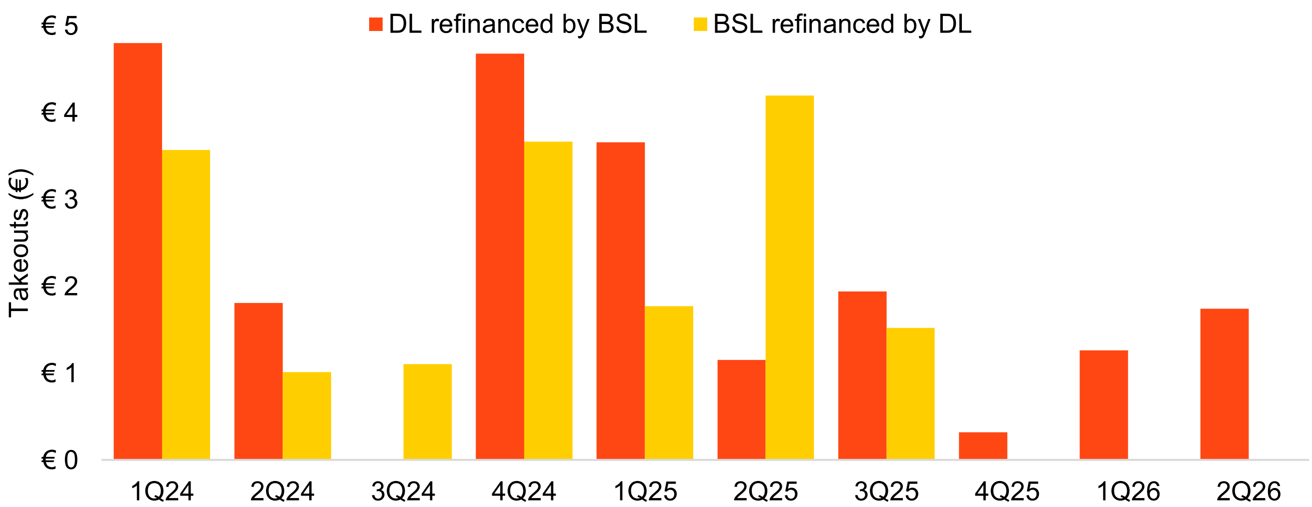
Over the longer term, we expect capital to continue moving between the direct lending and BSL markets as relative financing conditions evolve. Risk appetite in the syndicated market will likely remain an important determinant of that activity, particularly within the upper middle market where the two financing channels compete most directly. As a result, developments in the syndicated market are likely to continue influencing both activity and pricing in direct lending.

Exhibit 26: Recent takeout activity has been notably lower, in the USD markets…
US broadly syndicated loans and direct lending takeouts, in $ billions



Source: Pitchbook LCD, BlackRock. Historical data is subject to revisions as LCD collects additional information. As of June 30, 2026.

Exhibit 27:…and in the EUR markets
Europe broadly syndicated loans and direct lending takeouts, in € billions



Source: Pitchbook LCD, BlackRock. Historical data is subject to revisions as LCD collects additional information. As of June 30, 2026.

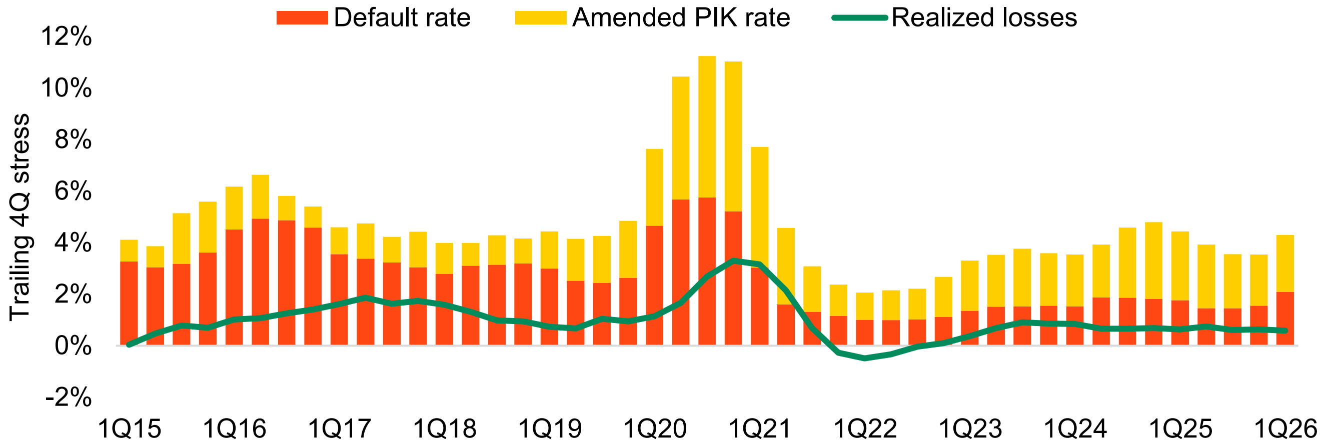
Dispersion also visible through signals of stress

Along this theme, we continue to see aggregate fundamental strength, with dispersion under the surface. Borrower fundamentals continue to point to resilience, with the majority of private credit borrowers continuing to grow and interest coverage improved from lows in 2023 and 2024. That said, dispersion is evident across characteristics such as loan vintage, or borrower size and sector, for example.

Data such as the stress rate give insight into pockets of weakness within the private credit market that warrant watching, in our view. Exhibit 28 shows Cliffwater's 'stress rate,' which combines the TTM default rate and amended payment-in-kind (PIK) rate. Defaults are defined as new loan value transitioning to non-accrual status. Amended PIK, often referred to as 'bad PIK,' captures loans where interest shifts from cash to PIK after origination and the loan is marked below 96, both of which typically signal borrower pressure. While the current stress rate of 3.5% remains below its average since 4Q2014 of 4.7%, its composition has shifted in recent years, with amended PIK accounting for a larger share. This suggests that amended PIK has become a more common tool for lenders to manage borrower stress.

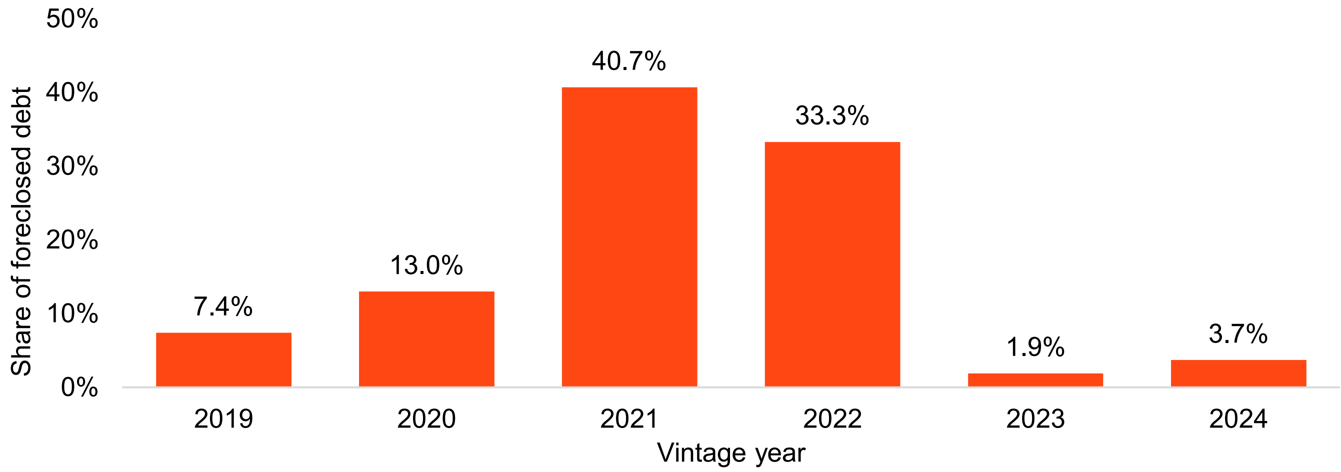
Further, debt foreclosure data from Lincoln International demonstrates where stress is concentrated, by loan vintage year. Notably, 2021 and 2022 vintage loans have represented the largest share of foreclosure activity (Exhibit 29). In many cases, such loans were underwritten in a near-zero rate regime, with elevated enterprise values, then soon thereafter they were subject to higher borrowing rates.

Exhibit 28: Cliffwater's stress rate warrants watching, but realized losses remain low
Stress rate (including TTM default rate and amended PIK rate), and realized losses (gains) for the Cliffwater Direct Lending Index



Source: Cliffwater Direct Lending Index, BlackRock. As of 1Q2026 (most recent available). Cliffwater notes that the 'stress rate' may overstate stress, because loans that transition to PIK may later default and be counted twice in trailing metrics.

Exhibit 29: 2021 and 2022 vintage loans have the highest debt foreclosure rate
Share of debt foreclosed in 2025 and 1Q2026, by origination vintage



Source: Lincoln Lens - Private Market Intelligence, BlackRock. As of 1Q2026.

Fair value marks point to manageable, but uneven, credit pressure

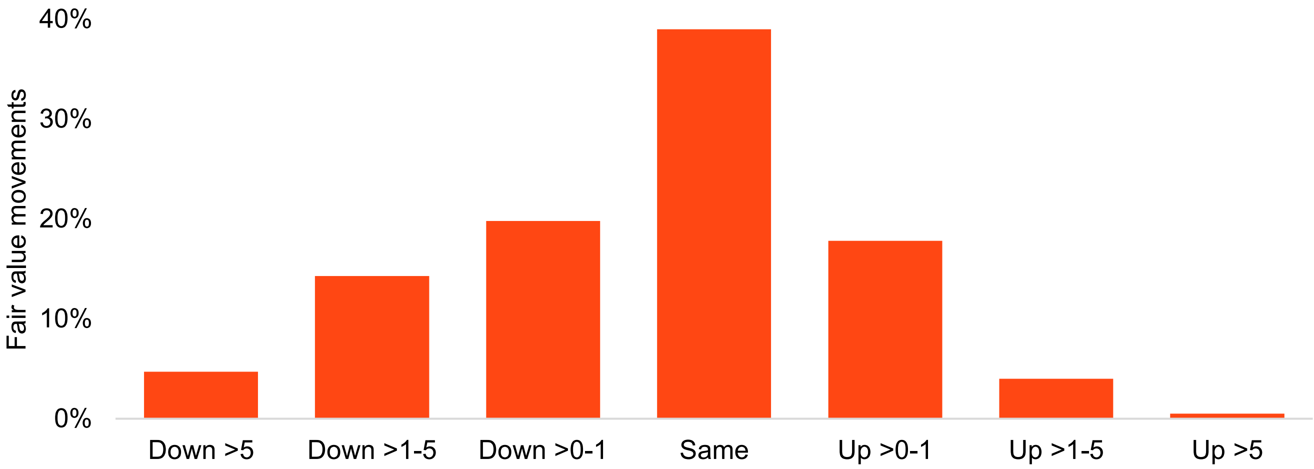
Fair value marks provide another lens on aggregate private credit borrower health. Declines in fair value are reflected as unrealized losses, which may ultimately reverse as borrowers recover or become realized losses if credit conditions deteriorate. As such, changes in fair value can provide an early indication of emerging borrower stress.

Data from KBRA DLD suggest some pressure, but not broad deterioration. In 1Q2026, more than 76% of loan marks were either unchanged or moved by one point or less, highlighting the relative stability of private credit valuations (Exhibit 30). Because private credit loans are generally not marked to market, valuations also tend to be less sensitive to short-term shifts in market sentiment than public credit.

Even so, the direction of marks remains informative. In 1Q2026, fair value changes skewed modestly negative, with 39% of loans marked down, compared with 39% unchanged and 22% marked up. That pattern is consistent with CDLI data showing a modest increase in unrealized losses (Exhibit 31), reflecting a combination of borrower-specific developments, software-related pressure and wider public market spreads, according to Cliffwater. While unrealized losses do not necessarily translate into realized credit losses, they can provide an early indication of where borrower pressure is beginning to build.

Exhibit 30: Sponsored fair value movements skewed somewhat negative during the quarter

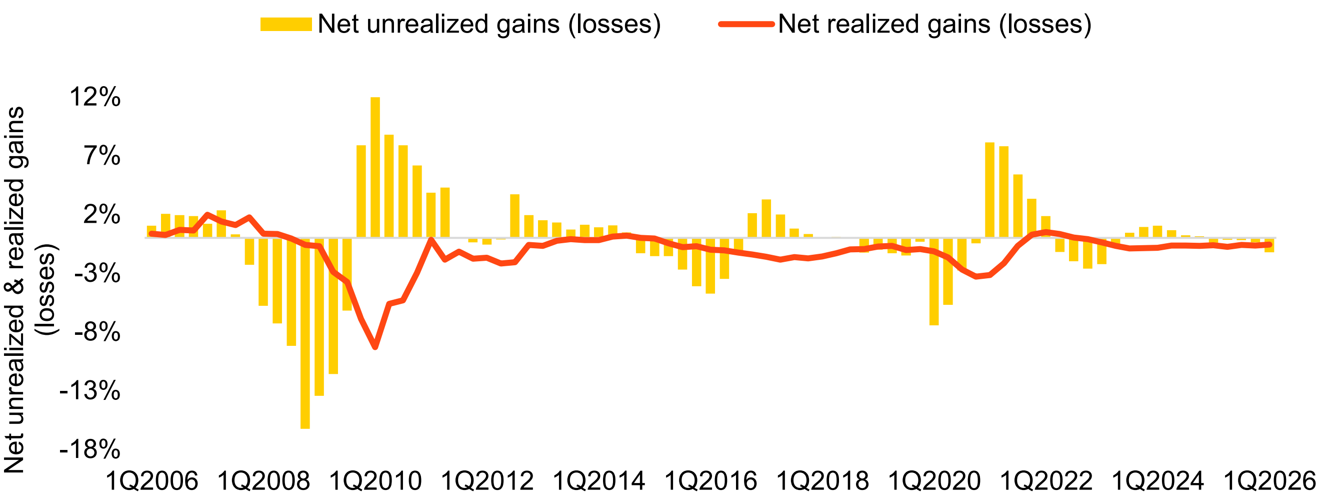
1Q2026 fair value movements for sponsored index, by loan count



Source: KBRA DLD Default Research, BlackRock. As of 1Q2026. Captures over 2,300 sponsored borrowers (more than 85% of the index).

Exhibit 31: Unrealized marks increased modestly in 1Q2026

Trailing 4 quarter net unrealized and realized gains (losses)



Source: Cliffwater Direct Lending Index, BlackRock. As of 1Q2026. Performance data represents past performance, which does not guarantee future results.

Dispersion between, and within, sectors

Borrower pressure remains uneven across sectors, with software continuing to stand out. The sector remains a key focus for private credit investors given its meaningful portfolio representation and continued uncertainty surrounding AI-related disruption, valuations and future refinancing needs.

Technology, which includes software, represents roughly 23% of the Cliffwater Direct Lending Index by fair value, while PitchBook LCD data show that software accounts for 18% of BDC loan holdings by count. Given that exposure, borrower-level differentiation within the sector has become increasingly important.

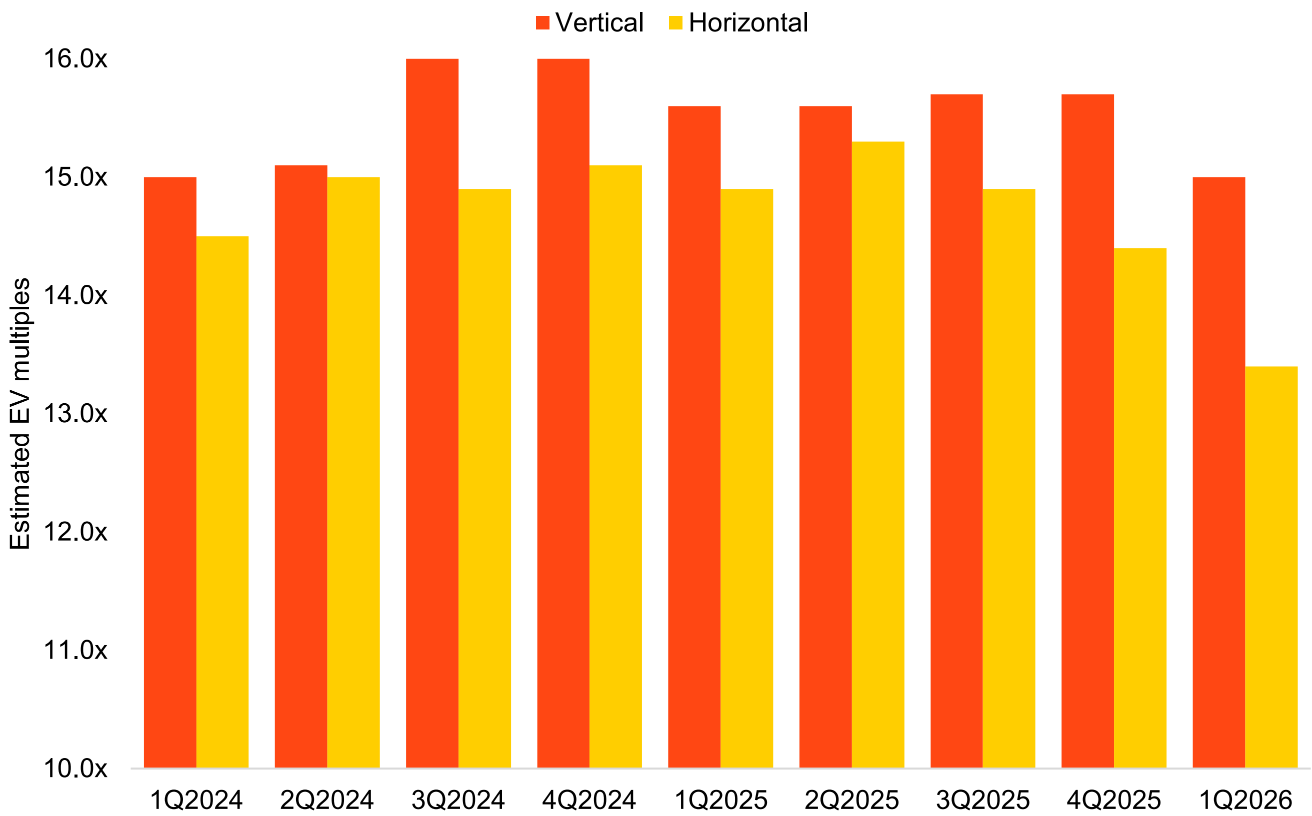
As a result, differentiating between software borrowers has become increasingly important.

Exhibit 32 highlights one dimension of that differentiation using estimated enterprise valuation multiples for software borrowers in the Lincoln International Proprietary Private Markets Index. While multiples have declined across both vertical and horizontal software businesses, the decline has been more pronounced among horizontal software companies.

As a result, the valuation gap between the two has widened meaningfully, moving from near parity in 2Q2024 to roughly a 1.6x difference by 1Q2026. Vertically focused software borrowers have generally commanded higher valuations, generally reflecting their more specialized use cases and more embedded customer relationships, which may leave them better positioned as investors assess AI-related risks.

Exhibit 32: The valuation gap between vertical and horizontal software businesses has widened

Estimated enterprise valuation multiples across vertically integrated and horizontally focused businesses



Source: Lincoln Lens - Private Market Intelligence, BlackRock. As of 1Q2026. Industry classifications as well as vertically and horizontally integrated software business distinctions based on Lincoln International estimates. Multiples above reflect Lincoln estimates as of the given valuation period.

Focusing in on the maturity wall

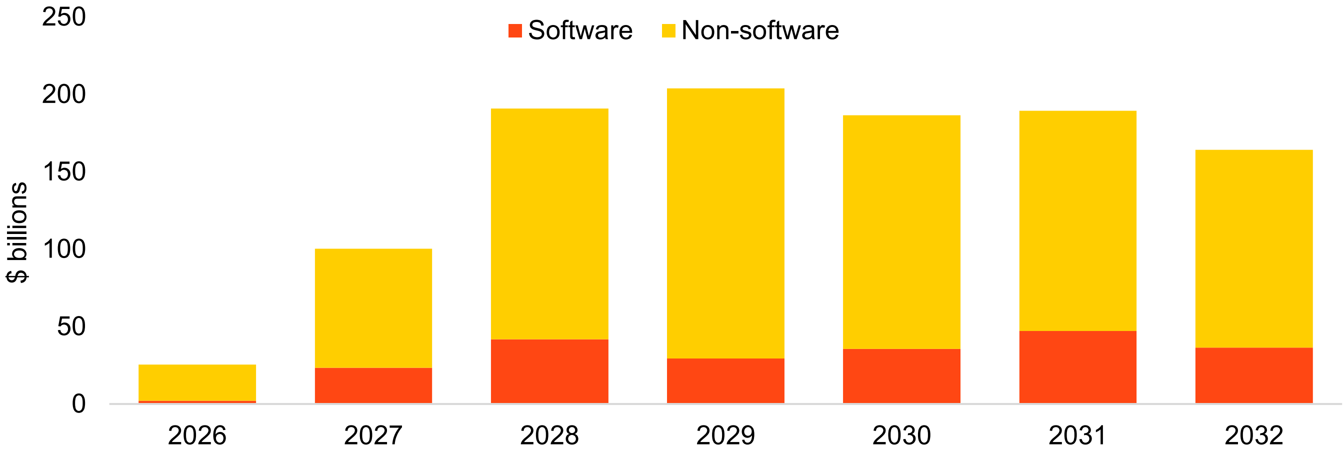
At the same time, uncertainty around AI disruption has increased focus on software refinancing needs. The sector's near-term maturities are most notable in 2028, making access to capital an important factor to watch (Exhibit 33). Importantly, however, unlike the BSL market dynamic we discussed earlier, the software maturity wall does not appear outsized relative to broader private credit maturities.

Further, near-term price discovery will be an important signal of how the market addresses these refinancing needs, particularly as we move into 2027. Lender refinancing decisions will likely depend on a variety of factors including entry valuations, loan pricing, capital structure, and each manager's existing portfolio exposure.

Exhibit 34 demonstrates how LTVs for software private credit loans have repriced in recent months. Most notably, those with high LTVs have seen the most fair value deterioration. As price discovery progresses, lenders would need to be properly compensated for the risks related to refinancing such businesses.

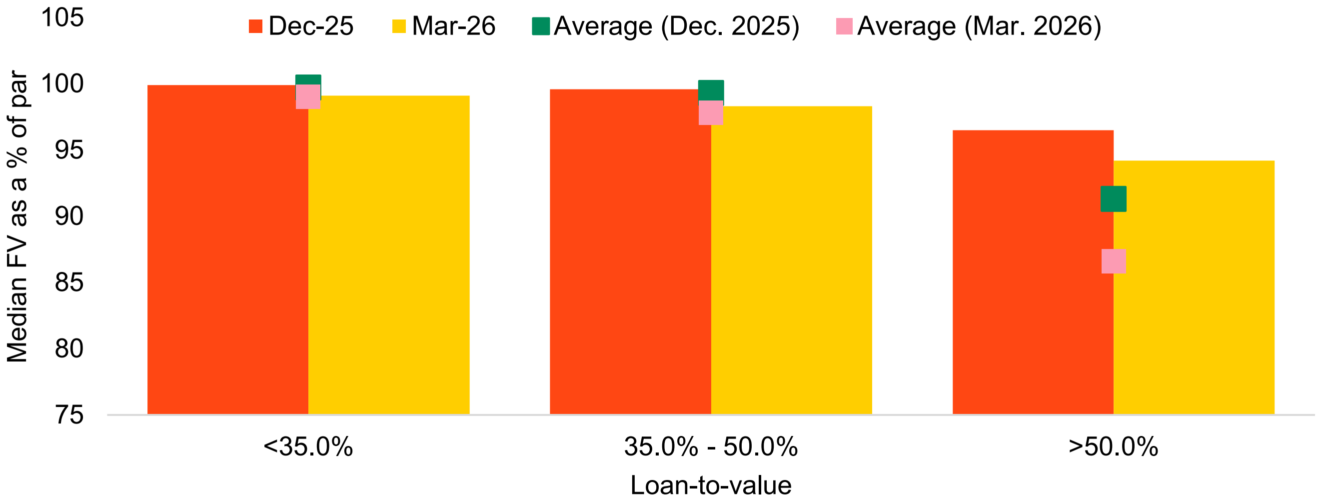
Looking ahead, we expect that more flexible capital, including capital focused on 'higher-octane' strategies, such as opportunistic, distressed, mezzanine, and special situations, may play a larger role where refinancing needs intersect with weaker valuations or more complex capital structures.

Exhibit 33: Software maturities are notable, but not outsized relative to non-software
Size-weighted maturity wall, in $ billions, for software and non-software private credit borrowers, reflected with outstanding principal



Source: Lincoln Lens - Private Market Intelligence, BlackRock. Analysis as of 2Q2026. Outstanding principal balances reflect total outstanding debt as of 1Q2026. Weighted based on total principal outstanding.

Exhibit 34: Higher-LTV software loans saw the sharpest valuation declines in 1Q2026
Lincoln median and average estimated fair value for software loans, quarter-over-quarter, by LTV



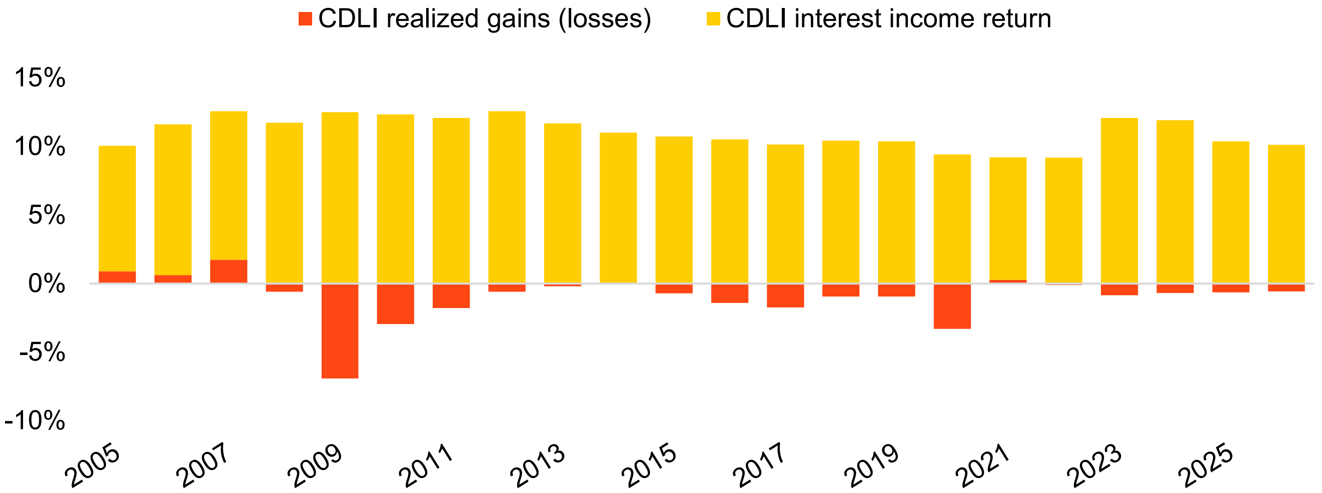
Source: Lincoln Lens - Private Market Intelligence, BlackRock. As of 1Q2026. Data reflects only First Lien / Unitranche loans valued by Lincoln.

Credit outcomes are normalizing, but income still provides a meaningful cushion

Private credit performance continues to be anchored by income generation. As shown in Exhibit 35, interest income in the CDLI remains well above realized losses. Although income has declined from recent peaks, elevated base rates continue to provide meaningful support. KBRA DLD data show that base rates accounted for roughly 40% of private credit unitranche yields as of May 2026, compared with 13% in January 2022, before the Federal Reserve began raising the policy rate (Exhibit 36).

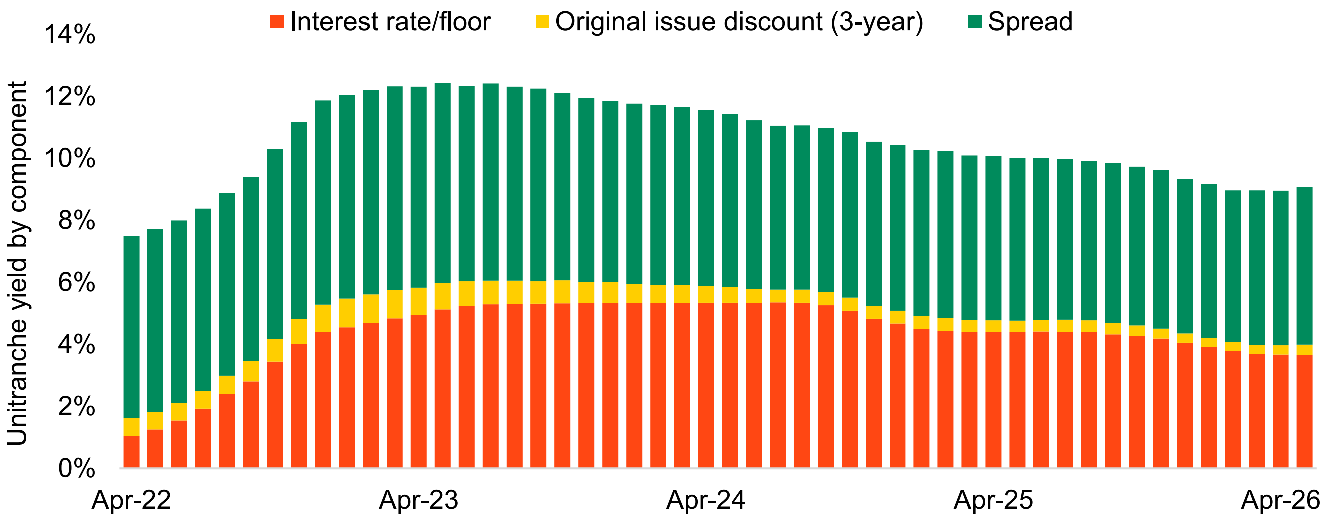
Credit losses have also remained contained. Trailing 12-month (TTM) realized losses in the CDLI were 58 basis points as of 1Q2026, below the longer-term average of approximately 1%. TTM unrealized losses rose modestly to 1.22% over the same period, but, as we've discussed previously, these marks do not necessarily translate directly into realized losses. In our view, the increase is more consistent with a normalization in credit costs than with broad-based deterioration.

Exhibit 35: Interest income for the CDLI remains attractive relative to realized losses
Trailing 12-month income return and realized gains (losses) for the Cliffwater Direct Lending Index



Source: Cliffwater Direct Lending Index, BlackRock. As of March 31, 2026. Realized gains can be driven by equity stubs, warrants, and gains on exited investments. These were more common in 2005-2007, when second lien and mezzanine loans were a greater portion of the CDLI. The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index. We exclude unrealized gains and losses in this chart. Long-term unrealized gains (losses) are approximately zero, as they either convert to net realized losses upon a credit default, or are reversed when principal is fully repaid.

Exhibit 36: Base rates continue to support private credit yields
3-month rolling average private credit unitranche yields, by component



Source: KBRA DLD, BlackRock. As of May 31, 2026. Considers first lien term loans and assumes 3 year yield-to-maturity.

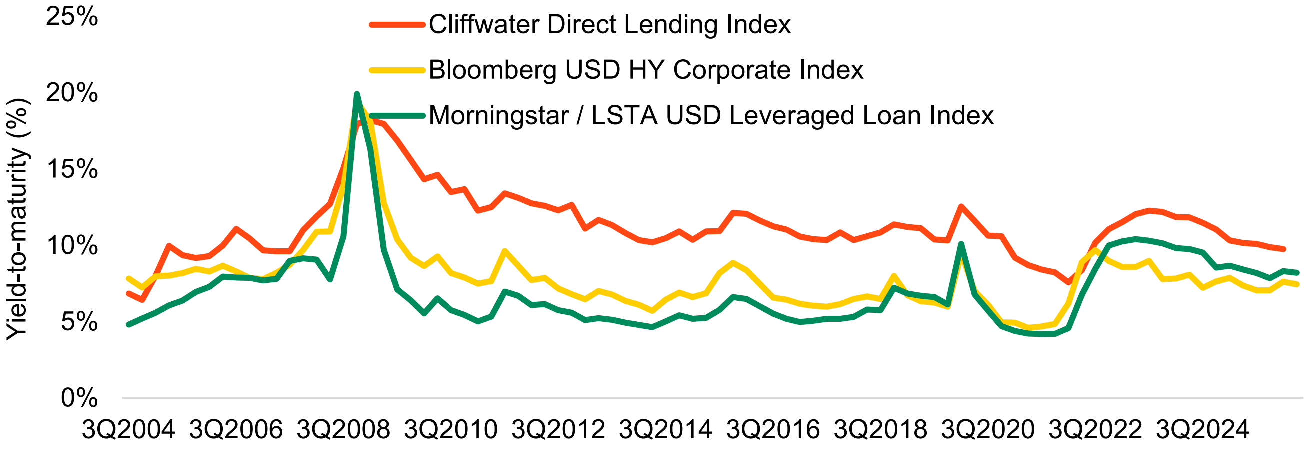
Comparing private credit with syndicated markets

Further, investors increasingly evaluate private credit alongside the leveraged loan and HY corporate bond markets. Exhibit 37 compares index-level yields across the three asset classes. Historically, the Cliffwater Direct Lending Index has offered a yield premium over the syndicated markets, partly compensating investors for the lower liquidity associated with private assets (i.e., the illiquidity premium).

This yield premium has also been accompanied by stronger reported total returns over recent history, as shown in Exhibit 38. Private credit's resilience in 1Q2026 was supported in part by still-modest trailing 12-month realized losses of 58 basis points.

That said, comparisons with public markets require nuance. Private credit is generally less liquid, valuations are updated less frequently, and performance can often vary meaningfully across managers and strategies.

Exhibit 37: U.S. direct lending has historically offered a yield 'pick-up' vs. public markets
Average index yield-to-maturity levels



Source: Cliffwater LLC, Bloomberg, Morningstar / LSTA, Pitchbook LCD, BlackRock. Direct lending as of 1Q2026 (most recent available). Leveraged loans and HY bonds as of 2Q2026. 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 38: Private credit has historically generated strong total returns
Total return comparisons for calendar years 2005 – 2025, and 1Q2026

	Cliffwater Direct Lending Index	Morningstar / LSTA USD Leveraged Loan Index	Bloomberg USD HY Corporate Bond Index
2005	10.1%	5.1%	2.7%
2006	13.7%	6.8%	11.8%
2007	10.2%	2.0%	1.9%
2008	-6.5%	-29.1%	-26.2%
2009	13.2%	51.6%	58.2%
2010	15.8%	10.1%	15.1%
2011	9.8%	1.5%	5.0%
2012	14.0%	9.7%	15.8%
2013	12.7%	5.3%	7.4%
2014	9.6%	1.6%	2.5%
2015	5.5%	-0.7%	-4.5%
2016	11.2%	10.2%	17.1%
2017	8.6%	4.1%	7.5%
2018	8.1%	0.4%	-2.1%
2019	9.0%	8.6%	14.3%
2020	5.5%	3.1%	7.1%
2021	12.8%	5.2%	5.3%
2022	6.3%	-0.8%	-11.2%
2023	12.1%	13.3%	13.4%
2024	11.3%	9.0%	8.2%
2025	9.3%	8.6%	5.9%
1Q2026	1.1%	-0.6%	-0.5%

Source: Cliffwater LLC, Bloomberg, Morningstar / LSTA, Pitchbook LCD, BlackRock. As of 1Q2026 (most recent available for the CDLI). The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Index performance returns do not reflect any management fees, transaction costs, or expenses. Indices are unmanaged, and one cannot invest directly in an index.

Unless otherwise stated, all reference to $ are in USD.

Risk Warnings:

Capital at risk. The value of investments and the income from them can fall as well as rise and are not guaranteed. You may not get back the amount originally invested.

Past performance is not a reliable indicator of current or future results and should not be the sole factor of consideration when selecting a product or strategy.

Changes in the rates of exchange between currencies may cause the value of investments to diminish or increase. Fluctuation may be particularly marked in the case of a higher volatility fund and the value of an investment may fall suddenly and substantially. Levels and basis of taxation may change from time to time.

Cliffwater Direct Lending Index (CDLI) is an index that assists investors to better understand private credit as an asset class. The CDLI seeks to measure 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 unlisted BDCs, subject to certain eligibility criteria. The CDLI is an asset-weighted index that is calculated on a quarterly basis using financial statements and other information contained in the U.S. Securities and Exchange Commission ("SEC") filings of all eligible BDCs. Eligibility is set as all assets held by BDCs that (1) are regulated by the SEC as a BDC under the Investment Company Act of 1940; (2) have a substantial majority (approximately 75%) of reported total assets represented by direct loans made to corporate borrowers, as categorized by each BDC and subject to Cliffwater's discretion, and (3) file SEC form 10-Q (or 10-K, as applicable) within 75 (or 90) calendar days following the current Valuation Date. If a BDC meets the eligibility criteria, but has not filed its report on Form 10-K or 10-Q with the SEC at the time the index is reconstituted, asset information from its report will be included in the index at the time of the next reconstitution. This information is derived from sources that are considered reliable, but BlackRock does not guarantee the veracity, currency, completeness or accuracy of this information.

Important Information:

In the U.S., this material is for institutional use only – not for public distribution.

In Canada, this material is intended for permitted clients as defined under Canadian securities law, is for educational purposes only, does not constitute investment advice and should not be construed as a solicitation or offering of units of any fund or other security in any jurisdiction.

In **China,** this material may not be distributed to individuals resident in the People's Republic of China ("PRC", for such purposes, not applicable to Hong Kong, Macau and Taiwan) or entities registered in the PRC unless such parties have received all the required PRC government approvals to participate in any investment or receive any investment advisory or investment management services.

In **Hong Kong**, this material is issued by BlackRock Asset Management North Asia Limited and has not been reviewed by the Securities and Futures Commission of Hong Kong. This material is for distribution to "Professional Investors" (as defined in the Securities and Futures Ordinance (Cap.571 of the laws of Hong Kong) and any rules made under that ordinance.) and should not be relied upon by any other persons or redistributed to retail clients in Hong Kong.

In **Japan**, this is issued by BlackRock Japan. Co., Ltd. (Financial Instruments Business Operator: The Kanto Regional Financial Bureau. License No375, Association Memberships: Japan Investment Advisers Association, The Investment Trusts Association, Japan, Japan Securities Dealers Association, Type II Financial Instruments Firms Association) for Institutional Investors only. All strategies or products BLK Japan offer through the discretionary investment contracts or through investment trust funds do not guarantee the principal amount invested. The risks and costs of each strategy or product we offer cannot be indicated here because the financial instruments in which they are invested vary each strategy or product. Therefore, before deciding to receive our strategies or products, please refer to the document provided prior to the execution of agreement, prospectus, terms and conditions of investment trust and the explanatory document, etc. that will be delivered to you in accordance with each offering model and confirm the contents thereof.

In **South Korea**, this information is issued by BlackRock Investment (Korea) Limited. This material is for distribution to the Qualified Professional Investors (as defined in the Financial Investment Services and Capital Market Act and its sub-regulations) and for information or educational purposes only and does not constitute investment advice or an offer or solicitation to purchase or sells in any securities or any investment strategies.

In Singapore, this is issued by BlackRock (Singapore) Limited (Co. registration no. 200010143N) for use only with **accredited/institutional** investors as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. This advertisement or publication has not been reviewed by the Monetary Authority of Singapore.

For Southeast Asia: This document is issued by BlackRock and is intended for the exclusive use of any recipient who warrants, by receipt of this material, that such recipient is an institutional investors or professional/sophisticated/qualified/accredited/expert investor as such term may apply under the relevant legislations in Southeast Asia (**for such purposes, includes only Malaysia, the Philippines, Thailand, Brunei and Indonesia**). BlackRock does not hold any regulatory licenses or registrations in Southeast Asia countries listed above, and is therefore not licensed to conduct any regulated business activity under the relevant laws and regulations as they apply to any entity intending to carry on business in Southeast Asia, nor does BlackRock purport to carry on, any regulated activity in any country in Southeast Asia. BlackRock funds, and/or services shall not be offered or sold to any person in any jurisdiction in which such an offer, solicitation, purchase, or sale would be deemed unlawful under the securities laws or any other relevant laws of such jurisdiction(s).

This material is provided to the recipient on a strictly confidential basis and is intended for informational or educational purposes only. Nothing in this document, directly or indirectly, represents to you that BlackRock will provide, or is providing BlackRock products or services to the recipient, or is making available, inviting, or offering for subscription or purchase, or invitation to subscribe for or purchase, or sale, of any BlackRock fund, or interests therein. This material neither constitutes an offer to enter into an investment agreement with the recipient of this document, nor is it an invitation to respond to it by making an offer to enter into an investment agreement.

The distribution of the information contained herein may be restricted by law and any person who accesses it is required to comply with any such restrictions. By reading this information you confirm that you are aware of the laws in your own jurisdiction regarding the provision and sale of funds and related financial services or products, and you warrant and represent that you will not pass on or utilize the information contained herein in a manner that could constitute a breach of such laws by BlackRock, its affiliates or any other person.

For Other Countries in APAC: This material is provided for your informational purposes only and must not be distributed to any other persons or redistributed. This material is issued for Institutional Investors only (or professional/sophisticated/qualified investors as such term may apply in local jurisdictions) and does not constitute investment advice or an offer or solicitation to purchase or sell in any securities, BlackRock funds or any investment strategy nor shall any securities be offered or sold to any person in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities laws of such jurisdiction.

The information provided here is not intended to constitute financial, tax, legal or accounting advice. You should consult your own advisers on such matters. BlackRock does not guarantee the suitability or potential value of any particular investment. Investment involves risk including possible loss of principal. International investing involves risks, including risks related to foreign currency, limited liquidity, less government regulation, and the possibility of substantial volatility due to adverse political, economic or other developments. These risks are often heightened for investments in emerging/developing markets or smaller capital markets.

THIS MATERIAL IS HIGHLY CONFIDENTIAL AND IS NOT TO BE REPRODUCED OR DISTRIBUTED TO PERSONS OTHER THAN THE RECIPIENT.

In **Australia & New Zealand**, issued by BlackRock Investment Management (Australia) Limited ABN 13 006 165 975, AFSL 230 523 (BIMAL) for the exclusive use of the recipient, who warrants by receipt of this material that they are a wholesale client as defined under the Australian Corporations Act 2001 (Cth) and the New Zealand Financial Advisers Act 2008 respectively. BIMAL is not licensed by a New Zealand regulator to provide 'Financial Advice Service' 'Investment manager under an FMC offer' or 'Keeping, investing, administering, or managing money, securities, or investment portfolios on behalf of other persons'. BIMAL's registration on the New Zealand register of financial service providers does not mean that BIMAL is subject to active regulation or oversight by a New Zealand regulator. This material provides general advice only and does not take into account your individual objectives, financial situation, needs or circumstances. Before making any investment decision, you should therefore assess whether the material is appropriate for you and obtain financial advice tailored to you having regard to your individual objectives, financial situation, needs and circumstances. Refer to BIMAL's Financial Services Guide on its website for more information. This material is not a financial product recommendation or an offer or solicitation with respect to the purchase or sale of any financial product in any jurisdiction. This material is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. BIMAL is a part of the global BlackRock Group which comprises of financial product issuers and investment managers around the world. BIMAL is the issuer of financial products and acts as an investment manager in Australia. BIMAL does not offer financial products to persons in New Zealand who are retail investors (as that term is defined in the Financial Markets Conduct Act 2013 (FMCA)). This material does not constitute or relate to such an offer. To the extent that this material does constitute or relate to such an offer of financial products, the offer is only made to, and capable of acceptance by, persons in New Zealand who are wholesale investors (as that term is defined in the FMCA). BIMAL, its officers, employees and agents believe that the information in this material and the sources on which it is based (which may be sourced from third parties) are correct as at the date of publication. While every care has been taken in the preparation of this material, no warranty of accuracy or reliability is given and no responsibility for the information is accepted by BIMAL, its officers, employees or agents. Except where contrary to law, BIMAL excludes all liability for this information.

In **Central America**, these securities have not been registered before the Securities Superintendence of the Republic of Panama, nor did the offer, sale or their trading procedures. The registration exemption has made according to numeral 3 of Article 129 of the Consolidated Text containing of the Decree-Law No. 1 of July 8, 1999 (institutional investors). Consequently, the tax treatment set forth in Articles 334 to 336 of the Unified Text containing Decree-Law No. 1 of July 8, 1999, does not apply to them. These securities are not under the supervision of the Securities Superintendence of the Republic of Panama. The information contained herein does not describe any product that is supervised or regulated by the National Banking and Insurance Commission (CNBS) in Honduras. Therefore any investment described herein is done at the investor's own risk. This is an individual and private offer which is made in Costa Rica upon reliance on an exemption from registration before the General Superintendence of Securities ("SUGEVAL"), pursuant to articles 7 and 8 of the Regulations on the Public Offering of Securities ("Reglamento sobre Oferta Pública de Valores"). This information is confidential, and is not to be reproduced or distributed to third parties as this is NOT a public offering of securities in Costa Rica. The product being offered is not intended for the Costa Rican public or market and neither is registered or will be registered before the SUGEVAL, nor can be traded in the secondary market. If any recipient of this documentation receives this document in El Salvador, such recipient acknowledges that the same has been delivered upon his request and instructions, and on a private placement basis. For Guatemala Investors, This communication and any accompanying information (the "Materials") are intended solely for informational purposes and do not constitute (and should not be interpreted to constitute) the offering, selling, or conducting of business with respect to such securities, products or services in the jurisdiction of the addressee (this "Jurisdiction"), or the conducting of any brokerage, banking, or other similarly regulated activities ("Financial Activities") in the Jurisdiction. Neither BLACKROCK, nor the securities, products and services described herein, are registered (or intended to be registered) in the Jurisdiction. Furthermore, neither BLACKROCK, nor the securities, products, services, or activities described herein, are regulated, or supervised by any governmental or similar authority in the Jurisdiction. The Materials are private, confidential and are sent by BLACKROCK only for the exclusive use of the addressee. The Materials must not be publicly distributed and any use of the Materials by anyone other than the addressee is not authorized. The addressee is required to comply with all applicable laws in the Jurisdiction, including, without limitation, tax laws and exchange control regulations if any.

The information provided within this document is for education purposes only in **Bermuda**. This information is not intended for distribution to, or use by, any person or entity in any jurisdiction or country where such distribution would be unlawful under the securities laws of such jurisdiction or country.

In **Latin America**, for institutional investors and financial intermediaries only (not for public distribution). This material is for educational purposes only and does not constitute investment advice or an offer or solicitation to sell or a solicitation of an offer to buy any shares of any fund or security and it is your responsibility to inform yourself of, and to observe, all applicable laws and regulations of your relevant jurisdiction. If any funds are mentioned or inferred in this material, such funds may not been registered with the securities regulators of Argentina, Brazil, Chile, Colombia, Mexico, Panama, Peru, Uruguay or any other securities regulator in any Latin American country and thus, may not be publicly offered in any such countries. The securities regulators of any country within Latin America have not confirmed the accuracy of any information contained herein. No information discussed herein can be provided to the general public in Latin America. The contents of this are strictly confidential and must not be passed to any third party.

In **Colombia**, the promotion of each product discussed herein is carried out through the Representative Office of BlackRock Fund Advisors, authorized by the Colombian Financial Superintendence. The transmission of this information does not constitute a securities public offering in Colombia. The products discussed herein may not be promoted or marketed in Colombia or to Colombian residents unless such promotion and marketing is made in compliance with Decree 2555 of 2010 and other applicable rules and regulations related to the promotion of foreign financial and/or securities related products or services in Colombia. With the receipt of these materials, and unless the Client contacts BlackRock with additional requests for information, the Client agrees to have been provided the information for due advisory required by the marketing and promotion regulatory regime applicable in Colombia.

In **Chile**, The securities if any described in this document are foreign securities, therefore: i) their rights and obligations will be subject to the legal framework of the issuer's country of origin, and therefore, investors must inform themselves regarding the form and means through which they may exercise their rights; and that ii) the supervision of the Commission for the Financial Market (Comisión para el Mercado Financiero or "CMF") will be concentrated exclusively on compliance with the information obligations established in General Standard No. 352 of the CMF and that, therefore, the supervision of the security and its issuer will be mainly made by the foreign regulator; In the case of a fund not registered with the CMF is subject to General Rule No. 336 issued by the SVS (now the CMF). The subject matter of this sale may include securities not registered with the CMF; therefore, such securities are not subject to the supervision of the CMF. Since the securities are not registered in Chile, there is no obligation of the issuer to make publicly available information about the securities in Chile. The securities shall not be subject to public offering in Chile unless registered with the relevant registry of the CMF.

IN MEXICO, FOR INSTITUTIONAL AND QUALIFIED INVESTORS USE ONLY. INVESTING INVOLVES RISK, INCLUDING POSSIBLE LOSS OF PRINCIPAL. THIS MATERIAL IS PROVIDED FOR EDUCATIONAL AND INFORMATIONAL PURPOSES ONLY AND DOES NOT CONSTITUTE AN OFFER OR SOLICITATION TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SHARES OF ANY FUND OR SECURITY**.** This information does not consider the investment objectives, risk tolerance or the financial circumstances of any specific investor. This information does not replace the obligation of financial advisor to apply his/her best judgment in making investment decisions or investment recommendations. It is your responsibility to inform yourself of, and to observe, all applicable laws and regulations of Mexico. If any funds, securities or investment strategies are mentioned or inferred in this material, such funds, securities or strategies have not been registered with the Mexican National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores, the "CNBV") and thus, may not be publicly offered in Mexico. The CNBV has not confirmed the accuracy of any information contained herein. The provision of investment management and investment advisory services ("Investment Services") is a regulated activity in Mexico, subject to strict rules, and performed under the supervision of the CNBV. These materials are shared for information purposes only, do not constitute investment advice, and are being shared in the understanding that the addressee is an Institutional or Qualified investor as defined under Mexican Securities (Ley del Mercado de Valores). Each potential investor shall make its own investment decision based on their own analysis of the available information. Please note that by receiving these materials, it shall be construed as a representation by the receiver that it is an Institutional or Qualified investor as defined under Mexican law. BlackRock México Operadora, S.A. de C.V., Sociedad Operadora de Fondos de Inversión ("BlackRock México Operadora") is a Mexican subsidiary of BlackRock, Inc., authorized by the CNBV as a Mutual Fund Manager (Operadora de Fondos), and as such, authorized to manage Mexican mutual funds, ETFs and provide Investment Advisory Services. For more information on the Investment Services offered by BlackRock Mexico, please review our Investment Services Guide available in www.blackrock.com/mx. This material represents an assessment at a specific time and its information should not be relied upon by the you as research or investment advice regarding the funds, any security or investment strategy in particular. Reliance upon information in this material is at your sole discretion. BlackRock México is not authorized to receive deposits, carry out intermediation activities, or act as a broker dealer, or bank in Mexico. For more information on BlackRock México, please visit: www.blackRock.com/mx. BlackRock receives revenue in the form of advisory fees for our advisory services and management fees for our mutual funds, exchange traded funds and collective investment trusts. Any modification, change, distribution or inadequate use of information of this document is not responsibility of BlackRock or any of its affiliates. Pursuant to the Mexican Data Privacy Law (Ley Federal de Protección de Datos Personales en Posesión de Particulares), to register your personal data you must confirm that you have read and understood the Privacy Notice of BlackRock México Operadora. For the full disclosure, please visit www.blackRock.com/mx and accept that your personal information will be managed according with the terms and conditions set forth therein.

In **Peru**, this private offer does not constitute a public offer, and is not registered with the Securities Market Public Registry of the Peruvian Securities Market Commission, for use only with institutional investors as such term is defined by the Superintendencia de Banca, Seguros y AFP.

General Disclosure: This material is intended for information purposes only, and does not constitute investment advice, a recommendation or an offer or solicitation to purchase or sell any securities to any person in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities laws of such jurisdiction. Reference to specific company names, asset classes and financial markets are for illustrative purposes only and should not be construed as investment advice or investment recommendations. This material may contain estimates and forward-looking statements, which may include forecasts and do not represent a guarantee of future performance. This information is not intended to be complete or exhaustive. No representations or warranties, either express or implied, are made regarding the accuracy or completeness of the information contained herein. The opinions expressed are as of publication date and are subject to change without notice. Reliance upon information in this material is at the sole discretion of the reader. Investing involves risks.

This material is for distribution to Professional Clients (as defined by the Financial Conduct Authority or MiFID Rules) only and should not be relied upon by any other persons.

In the UK and Non-European Economic Area (EEA) countries: this is Issued by BlackRock Investment Management (UK) Limited, authorised and regulated by the Financial Conduct Authority. Registered office: 12 Throgmorton Avenue, London, EC2N 2DL. Tel: + 44 (0)20 7743 3000. Registered in England and Wales No. 02020394. For your protection telephone calls are usually recorded. Please refer to the Financial Conduct Authority website for a list of authorised activities conducted by BlackRock.

In the European Economic Area (EEA): This document is marketing material. This is Issued by BlackRock (Netherlands) B.V. and is authorised and regulated by the Netherlands Authority for the Financial Markets. Registered office Amstelplein 1, 1096 HA, Amsterdam, Tel: 020 – 549 5200, Tel: 31-20-549-5200. Trade Register No. 17068311 For your protection telephone calls are usually recorded.

In **Switzerland**: This document shall be exclusively made available to, and directed at, qualified investors as defined in Article 10 (3) of the CISA of 23 June 2006, as amended, at the exclusion of qualified investors with an opting-out pursuant to Art. 5 (1) of the Swiss Federal Act on Financial Services ("FinSA"). For information on art. 8 / 9 Financial Services Act (FinSA) and on your client segmentation under art. 4 FinSA, please see the following website: www.blackrock.com/finsa.

In Israel: BlackRock Investment Management (UK) Limited is not licenced under Israel's Regulation of Investment Advice, Investment Marketing and Portfolio Management Law, 5755-1995 (the "Advice Law"), nor does it carry insurance thereunder.

In the DIFC: This document is intended strictly for Professional Clients as defined under the Dubai Financial Services Authority ("DFSA") Conduct of Business (COB) Rules. Blackrock Advisors (UK) Limited -Dubai Branch is a DIFC Foreign Recognised Company registered with the DIFC Registrar of Companies (DIFC Registered Number 546), with its office at Unit L15 - 01A, ICD Brookfield Place, Dubai International Financial Centre, PO Box 506661, Dubai, UAE, and is regulated by the DFSA to engage in the regulated activities of 'Advising on Financial Products' and 'Arranging Deals in Investments' in or from the DIFC, both of which are limited to units in a collective investment fund (DFSA Reference Number F000738).

In **Saudi Arabia**, This document is intended for Institutional and Qualified Clients (as defined by the Capital Market Authority) only and should not be relied upon by any other persons. BlackRock Saudi Arabia, authorised and regulated by the Capital Market Authority (License Number 18- 192-30). Registered office: 7976 Salim Ibn Abi Bakr Shaikan St, 2223 West Umm Al Hamam District Riyadh, 12329 Riyadh, Kingdom of Saudi Arabia, Tel: +966 11 838 3600. CR No, 1010479419. For your protection telephone calls are usually recorded. Please refer to the Capital Market Authority website for a list of authorised activities conducted by BlackRock Saudi Arabia.

In Bahrain: The information contained in this document is intended strictly for sophisticated institutions

In the United Arab Emirates (UAE) (excluding the Dubai International Financial Centre (DIFC) and the Abu Dhabi Global Market (ADGM)): The information contained in this document is intended to Professional Investors.

Abu Dhabi Global Markets

This communication is sent strictly within the context of, and constitutes, an Exempt Communication under the Financial Services and Markets Regulations 2015 (as amended).

BlackRock Advisors (UK) Limited - ADGM Branch is a Branch of a Foreign Company registered with the Abu Dhabi Global Market Registration Authority (Registered number 21523), with its office at Floor 25, Al Sila Tower, Abu Dhabi Global Market Square, Al Maryah Island, Abu Dhabi, UAE, and is regulated by the ADGM Financial Services Regulatory Authority ("FSRA") to engage in the regulated activities of 'Arranging Deals in Investments'; 'Advising on Investments or Credit' 'Managing Assets'; and 'Managing in a Collective Investment Fund' (FRSA Reference 240099.

In the **State of Qatar and the Qatar Financial Centre (QFC):** This document is intended strictly for sophisticated institutions.

In **Kuwait:** This document is intended strictly for sophisticated institutions that are 'Professional Clients' as defined under the Kuwait Capital Markets Law and its Executive Bylaws.

The information contained in this document, does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for or an opinion or guidance on a financial product, service and/or strategy. Whilst great care has been taken to ensure that the information contained in this document is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of BlackRock Investment Management (UK). The information contained in this document is for information purposes only. It is not intended for and should not be distributed to, or relied upon by, members of the public.

The information contained in this document, may contain statements that are not purely historical in nature but are "forward-looking statements". These include, amongst other things, projections, forecasts or estimates of income. These forward-looking statements are based upon certain assumptions, some of which are described in other relevant documents or materials. If you do not understand the contents of this document, you should consult an authorised financial adviser. Any research in this document has been procured and may have been acted on by BlackRock for its own purpose. The results of such research are being made available only incidentally. The views expressed do not constitute investment or any other advice and are subject to change. They do not necessarily reflect the views of any company in the BlackRock Group or any part thereof and no assurances are made as to their accuracy. Any opinions, forecasts represent an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This information should not be relied upon by the reader as research, investment advice or a recommendation. This document is for information purposes only and does not constitute an offer or invitation to anyone to invest in any BlackRock funds and has not been prepared in connection with any such offer. If you are an intermediary or third-party distributor, you must only disseminate this material to other Professional Investors as permitted in the above-specified jurisdictions and in accordance with applicable laws and regulations. Certain information contained herein has been obtained from published sources and from third parties, including without limitation, market forecasts, internal and external surveys, market research, publicly available information and industry publications. In addition, certain information contained herein may have been obtained from companies in which investments have been made by entities affiliated with BlackRock. Although such information is believed to be reliable for the purposes used herein, neither the Fund nor BlackRock assumes any responsibility for the accuracy or completeness of such information. Reliance upon information in this material is at the sole discretion of the reader. Certain information contained herein represents or is based upon forward-looking statements or information. BlackRock and its affiliates believe that such statements and information are based upon reasonable estimates and assumptions. However, forward-looking statements are inherently uncertain, and factors may cause events or results to differ from those projected. Therefore, undue reliance should not be placed on such forward-looking statements and information.

In EMEA, this material is for distribution to Professional Clients (as defined by the Financial Conduct Authority or MiFID Rules) only and should not be relied upon by any other persons.

In the Kingdom of Bahrain, to Central Bank of Bahrain (CBB) Category 1 or Category 2 licensed investment firms, CBB licensed banks or those who would meet the description of an Expert Investor or Accredited Investors as defined in the CBB Rulebook. **In Albania, Azerbaijan, Botswana, Egypt, Georgia, Ghana, Jordan, Kazakhstan, Kenya, Lebanon, Mauritius, Morocco, Namibia, Nigeria, North Macedonia, Serbia, Uganda, Tanzania, Turkey, Zimbabwe, Zambia** this information contained in this document is intended strictly for Central Banks and Sovereign Investors only.