Collateral Thinking

Private Debt: Opportunities and challenges in a new rates regime

02 October 2023

Leveraged Loan Strategy
United States

BofA Data Analytics

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Top of the stack

Private Debt faces notable challenges in a higher for longer rates environment. Capital costs for nonbanks have jumped, fundraising and deal flow has slowed. Unlike the syndicated loan market where LTM coupons have doubled, middle market fundamentals are yet to fully reflect a 5% rate backdrop, and face sharp coverage ratio declines next year. While syndicated loans have successfully pushed maturities, Private Debt portfolios have a third of their deals due in the next 2.5 years. At particular risk are unitranches, BDC portfolios, and older vintage funds with highly levered deals. We expect Private Debt defaults to reach 5%, overtaking the syndicated loan market next year if rates stay high.

That said, Private Debt platforms possess unparalleled opportunities as well. Post-2021 vintages are expected to outperform public credit given that they entered the market when deals had attractive valuations and lower leverage. Banks scaling back in the aftermath of the regional bank turmoil has only widened nonbanks' advantage and is helping them gain market share. Although the "denominator effect" impacted capital inflows earlier in the year, it was a temporary blip in an otherwise structural migration of real money allocations towards private assets. And investors are now choosing Private Debt over Private Equity to gain exposure. Private platforms are also advantaged by their unique ability to provide a wide range of solutions across capital structures and type of borrowers, and are fast proliferating outside their traditional direct lending spaces – into consumer loans and venture capital.

In this report we discuss the challenges and opportunities for Private Debt in a new rates regime.

Market Technicals

In the three weeks ending Sep 22nd, demand for loans totaled $12.8bn, a decrease from the $15.6bn demand seen in the prior three weeks. The decrease in demand was mainly driven by a $2bn decline in CLO issuance along with a $1.2bn decline in coupon payments. Meanwhile, retail flows increased by $413mn.

Rating Actions

In the past month, we saw rating actions across 27 issuers. 15 issuers were downgraded by 19 notches and 12 issuers upgraded by 15 notches. Tech and Retail contributed 22% and 19% of downgrades, while Food Producers and Real Estate contributed 21% and 16% to upgrades respectively. Overall, we see a net downgrade of $4.2bn.

Return Performance

Loans in the LCD index returned 0.97% in three weeks ending Sep 22nd, up from the -0.95% cumulative return seen in the prior three weeks. Across asset classes, YTD loan returns are at 10.3%, HY YTD returns are at 6.1% and IG YTD returns are at 0.8%.

Primary Activity

YTD global and US issuance totals $191bn and $173bn, with a total of 334 and 266 loans launched respectively in the primary market thus far. They trail YTD 2022 issuance by 13% and 9% respectively.

Exhibit 1: Loan performance

YTD Loan return is at 10.2%

Index	Px	1wk Δ	2wk Δ	YTD Rt
All Loan	95.7 pts	-0.2	-0.1	10.2%
BBs	99.1 pts	-0.2	-0.2	7.3%
Bs	97.1 pts	-0.3	-0.2	11.4%
CCCs	80.5 pts	-1.0	-0.6	15.1%

Source: S&P LCD

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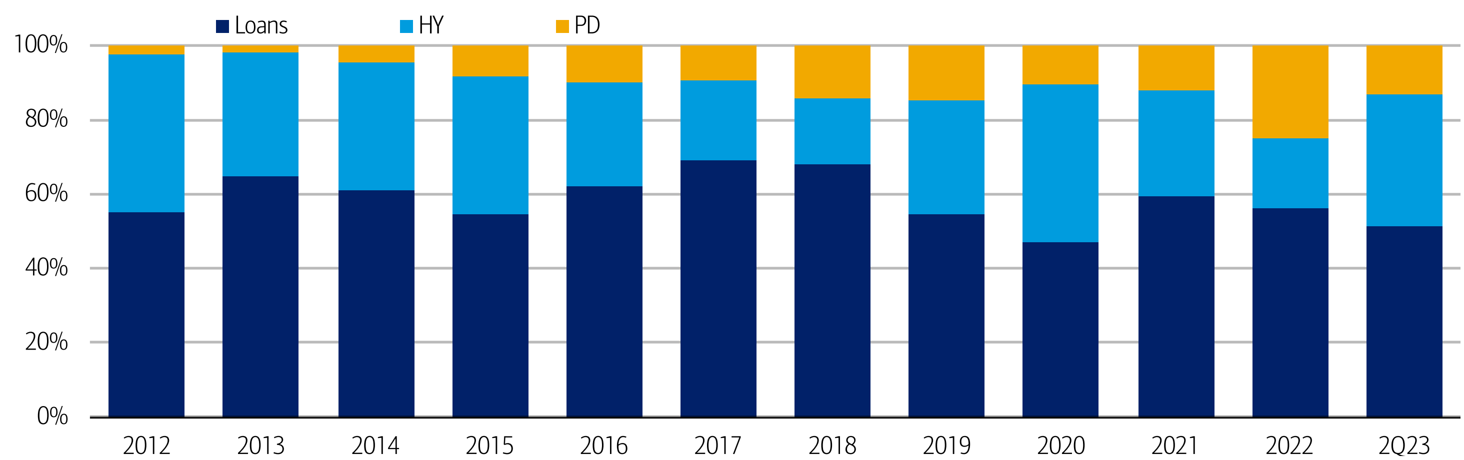
PD: Private Debt
MM: Middle Market
BSL: Broadly Syndicated Loans
PE: Private Equity

Top of the stack

In July 2022, when syndicated loan spreads were at their post war peak of 650bps, we candidly asked the question: Will Private Debt come to the rescue? Our reason: the selloff in syndicated loans made them more attractive vs middle market loans, giving Private Debt funds an opportunity to deploy large sums of capital at previously unattainable yields in the broadly syndicated market. Fast forward to today and they have indeed. Private Debt funds facilitated 23% of all capital raised by leveraged corporates in 2022, 2x that of the year prior (Exhibit 2). In the process, Private Debt has functioned as a shock absorber within credit, providing a timely lifeline to some issuers, a floor to prices, and a ceiling to credit losses.

This burst of Private Debt (PD) activity in broadly syndicated loan (BSL) market was driven by three factors: frozen debt capital markets gripped by recession fears, slow correction in middle market (MM) valuations, and growing PD dry powder. However, the story has changed on all three fronts now, and we expect PD to source a bulk of their investments from the middle market going forward, leaving 2022 as an anomaly.

Exhibit 2: Distribution of LevFin debt raised across main channels
Private debt, doubled its share of leveraged finance dollars in 2022, but now has normalized to its averaged 10% levels



Source: BofA Global Research, LCD, ICE, Refinitiv

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First, increasing likelihood of a soft landing have helped reopen capital markets and loosen credit conditions. The decline in BSL supply YTD is mostly driven by issuers unwilling to borrow at prevailing rates. BSL maturity walls have been pushed back from their Dec levels, implying there is capital available for those willing to pay for it.

Second, MM valuations have now corrected and reached our fair value target. Combined with a sizeable retracement tighter in BSL spreads, MM premium has jumped, eroding the desirability of BSL deals for PD platforms.

Third, while PD dry powder remains high ($250bn), deployment is being dictated by opportunity. Managers have scaled back investments given less attractive valuations and questions around balance sheet issues today. As such, PD financings are running at -45% YoY and PD share of LevFin funding has normalized to its average 10%+ levels.

As Private Debt platforms resume their middle market focus, they need to adapt to a new rates backdrop which has increased their cost of capital, slowed down fundraising, put pressure on portfolio company cashflows and maturities, and threatens levered structures such as unitranches and BDCs. However, these platforms also have unparallel opportunities in the form of banks scaling back lending, real money increasingly allocating to private debt, lower regulatory costs vs banks, and their unique ability to provide a wide range of solutions across capital structures and type of borrowers.

Below we discuss challenges and opportunities for Private Debt in this new rates regime.

Opportunities

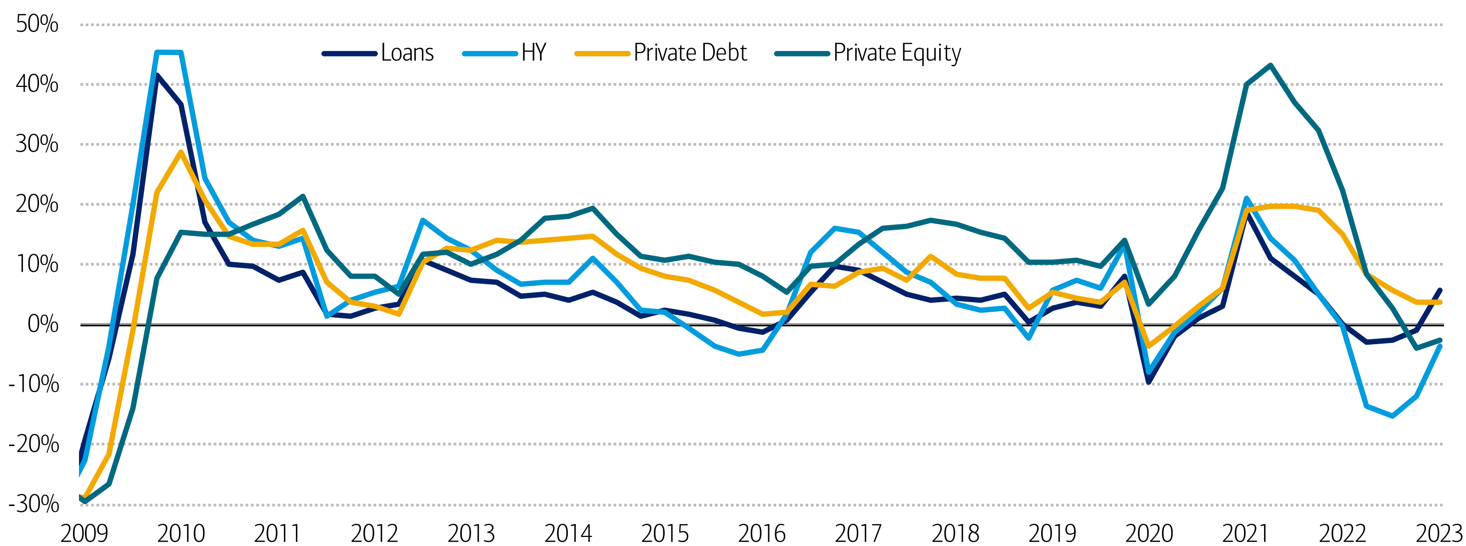
Attractive performance across LevFin

Private Debt has outperformed across leveraged credit post COVID. Exhibit 3 shows how private capital (PD and PE) has set itself apart from other asset classes amid the post-recession recovery. PD and PE reached LTM returns of 20% and 40% respectively, in mid-2021 after troughing at -4% and +3% during pandemic depths. HY bonds and Loans on the other hand retreated more (-10% levels) and bounced back less.

Recently, the PE sheen has faded and the asset class has dipped into negative returns in 2023 (-3%) for the first time since GFC. PD returns have also dimmed but to a lesser extent, running at +4% LTM. HY bonds have retraced meaningfully from their lows but still trail the other asset classes. Interestingly, the loan asset class has overtaken all else this year, across public and private capital, the first such instance since we started keeping track of private market returns post GFC.

Exhibit 3: Rolling 1yr returns across LevFin asset classes

Private Debt has outperformed across leveraged credit post COVID. Loans have overtaken the other asset classes this year



Source: BofA Global Research, LCD, ICE, Preqin

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The last decade was a golden one for equity, both public and private, where leverage was scaled up amid near zero rates to boost equity returns. We now expect a reversal of fortunes. In a high rates environment, there will be a gradual value transfer from equity to debt investors as increasing coupons cut into excess returns at the bottom of the capital structure in the absence of real earnings growth. This value transfer will be particularly pervasive amongst below-IG issuers where coupons have risen disproportionally higher and balance sheet cash is waning.

As such, debt returns are poised to compress against equities over the next few years, in our view. Private Debt with its widening appeal to borrowers and investors alike is well-positioned to take advantage. But the transition will not be without obstacles. Just like within the BSL market, the lowest rung, most levered, middle market issuers also face an existential threat due to falling pro-forma coverage ratios. This will cause increasing default rates amongst older PD vintages diluting returns over the next year (discussed in more detail in "Challenges"). However, once the layer of unsustainable capital structures has been addressed, we think PD total returns will remain attractive, and expect vintages 2022 and newer, to outperform public credit.

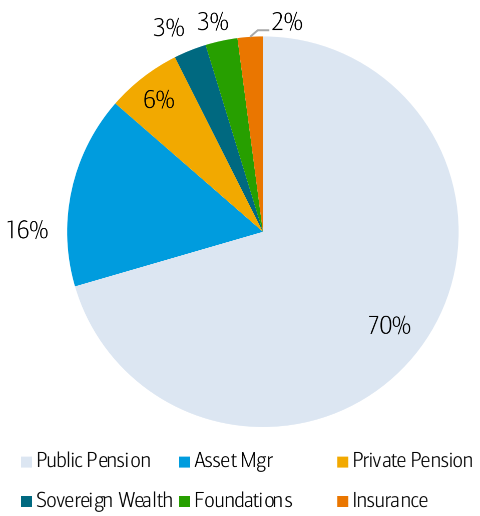
Real money investors allocating to privates

The proliferation of real money capital into alternative investments has been instrumental to the success of private markets. Pushed out of their natural habitat (treasuries, IG bonds) in a world of yield repression over the last decade, real money investors are increasingly assigning permanent allocations to private markets. Public pension funds are responsible for 70% of traceable capital within PD platforms, sovereign wealth, private pensions and insurance adding another 11% (Exhibit 4). Asset managers on the other hand are responsible for 16% of PD capital.

Exhibit 5 shows annual asset allocations within a group of 50 largest investors in alternative assets with an aggregate AUM of $3.8tn amongst them. PD allocations amongst most investor types has grown YoY. Though asset managers have the largest percentage of their portfolios in Private Debt given the high expected returns, it's the public pensions that feed the beast. Public pensions have allocated 6% of their current multi-trillion AUM to PD, an increase of 1% from a year ago. Similarly, Sovereign Wealth Funds and asset managers have also increased exposure to PD by a few percentage points over the course of the year.

Exhibit 4: Private Debt AUM contribution by investor

The "whale" of private debt capital is public pension fund money



Source: BofA Global Research, Preqin

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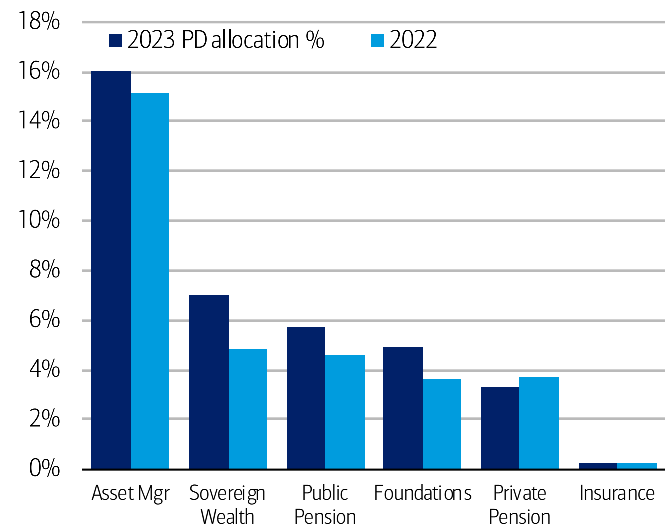
Exhibit 5: Change of PD allocations by investor type

PD allocations amongst most investor types has grown YoY



Source: BofA Global Research, Preqin

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The allocation increase was initially due to the denominator effect that most private investors faced through 2022. As the market pulled back, public investments witnessed a faster decline given their higher liquidity vs privates. As a result, investor books optically reflected higher allocations to privates where valuations were slower to correct. This has also had an impact on 1H'23 fundraising, discussed in the "Challenges" section.

The denominator effect has largely been mitigated given the recent jump in middle market premiums, implying that these allocation changes reflect real growth. As an example, consider that the total AUM of these 50 investors has largely remained flat YoY, but allocations have disproportionately favored PD (+20%), and PE (+10%), both of which grew in absolute dollar value from 2022 to 2023. The median fund has allocated 8% more to PD and 3% more to PE YoY, underscoring the gradual shift of investor favor from PE to PD.

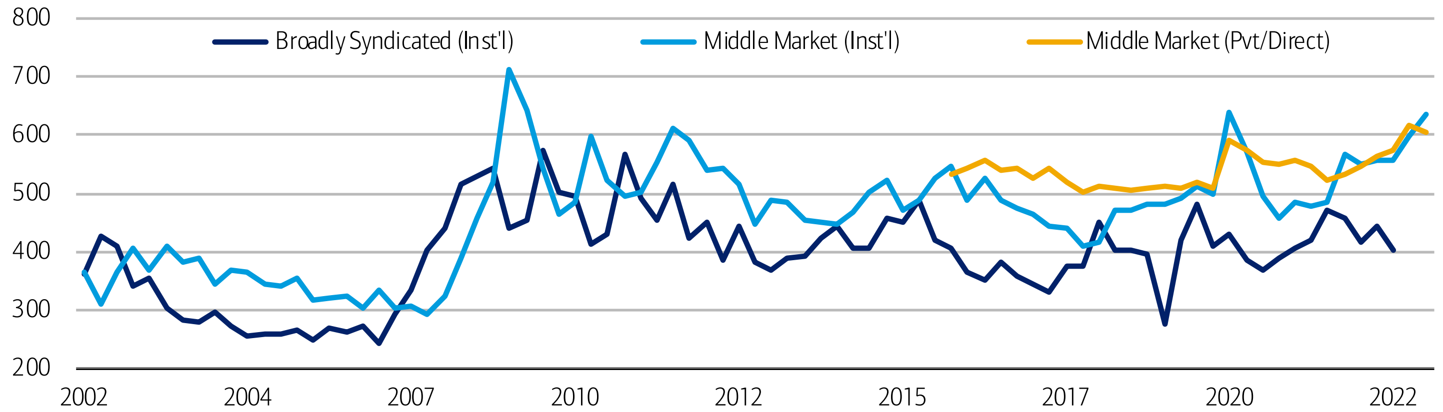
Going forward, we expect private capital to remain sticky. As per industry surveys [1], most real money investors plan to maintain if not increase their allocations to alternatives next year. With the rise in global cash yields, some of that attraction has faded, but the relative outperformance of private debt across corporates is likely to keep the spigot of capital inflows into the asset class open.

[1] Goldman Sachs Asset Mgmt July '23 survey, Adam Street's global investor survey and Becker Friedman Institute's survey of private debt funds.

Banks scaling back credit

Private Debt stands to be a primary beneficiary of the regional bank turmoil (first discussed in our March report LevFin revolvers: in the eye of the bank storm). With regional banks scaling back lending, middle market corporate spreads were expected to rise, leaving PD platforms to fill the funding vacuum left behind by banks. They would do so selectively, and at more enticing yields, benefitting their bottom lines.

Exhibit 6: MM vs BSL new issue spreads
MM valuations have been playing catch up YTD even as BSL spreads have compressed



Source: BofA Global Research, Refinitiv

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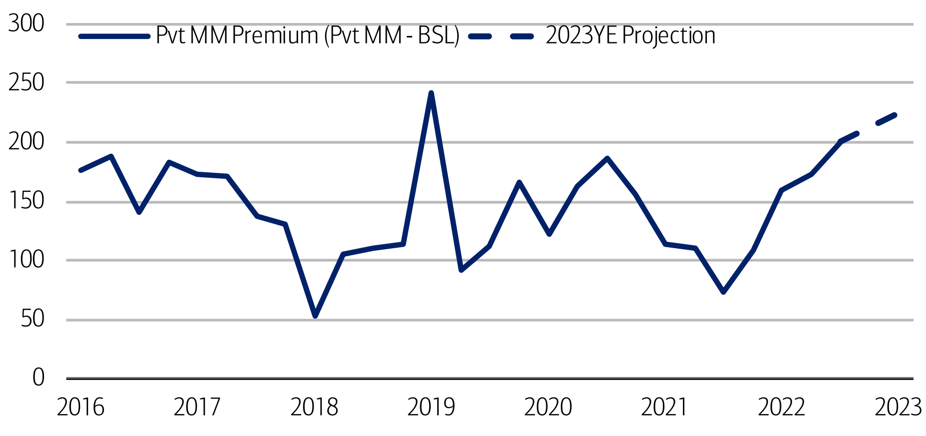
As expected, new issue MM spreads which were already in correction through 2022, have jumped further in Q1'23 in the aftermath of the banking turmoil. Both types of MM loans have been impacted – institutional (syndicated) and private (direct lending), with spreads reaching >600bps (Exhibit 6). MM valuations have been playing catch up YTD even as BSL spreads have compressed, sending MM spread premium to 200bps (Exhibit 7), close to our year-end target.

Exhibit 7: Middle market spread premium over broadly syndicated loans
MM spread premium is at 200bps, near our target



Source: BofA Global Research, LCD, Refinitiv

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Though cost of capital has increased across the entire financial industry, we think the regional bank impact will be more profound as their regulatory costs ratchet up commensurate to where bulge bracket levels are. As such, regionals are more likely to exit from riskier lending and other noncore functions to free-up capital. In addition, small MM corps have a higher beta to GDP and lesser number of funding channels, leaving them more exposed to macroeconomic changes than their large corporate counterparts.

MM premium has risen materially and is now 50bps higher than our previous target (Loans in 2023: A tale of two halves). However, as the impact of bank credit tightening reverberates through the economy, we think there is room for MM spreads to widen another 25bps, reaching 225bps over BSL and providing plenty of lucrative options for Private Debt funds.

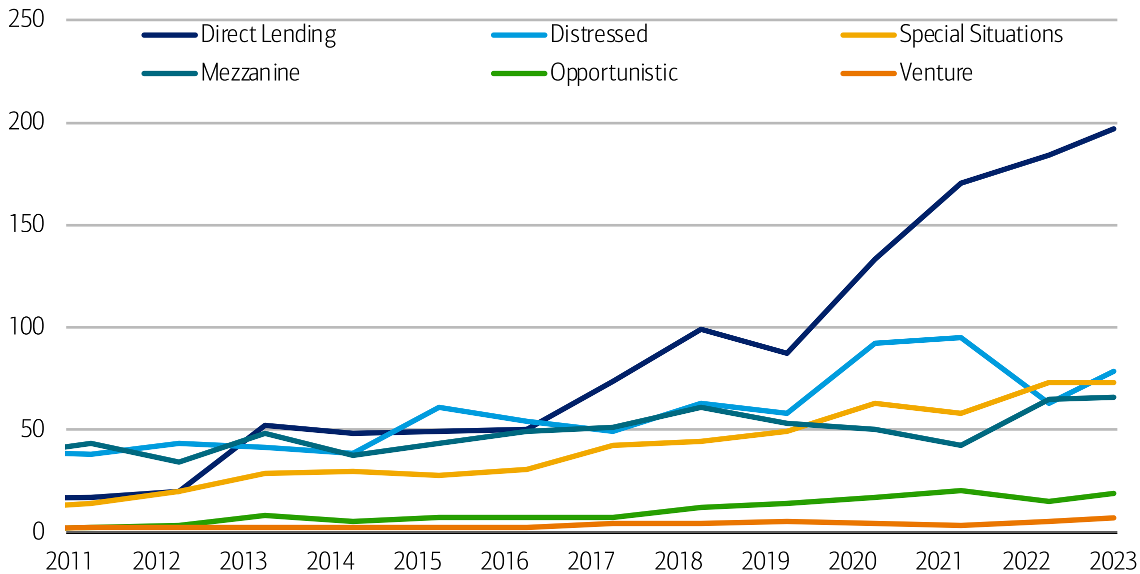
Wide range of funding solutions

There are some aspects of nonbank lenders that will continue to provide them a leg up vs traditional bank lending. Because these platforms are unregulated, have lower cost of capital, and have considerably smaller number of counterparties, deals are easier to negotiate, construct and implement. PD platforms are more able and willing to provide a wider range of solutions to businesses in terms of financing type, attachment point, speed and frequency of funding. PD platforms are also able to provide rescue financing albeit at higher yields to levered issuers who may not be able to find capital elsewhere.

They are now fast proliferating outside their traditional lending space. In that sense, the universe of borrowers benefitting from private lending is enlarging, and PD's encroachment into traditional capital markets space is increasing. Though direct lending represents the majority of PD dry powder ($200bn), it does not represent the entirety, and other types of funding solutions are also gaining ground (Exhibit 8). Special situations, distressed and mezzanine funds are the next largest with ~$75bn in dry powder each. Of these, the former has seen the most rapid growth given its innate flexibility to participate in a broad variety of deals. In the aftermath of the regional bank turmoil, PD is already providing meaningful capital outlays for CRE and construction loans coming out of bank books, and is now making inroads into consumer loans through opportunistic funds and tech startups through venture funds.

Exhibit 8: Dry powder by types of PD strategies

Direct lending represents the majority of PD dry powder while other types of funding solutions are also gaining ground



Source: BofA Global Research, Preqin

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Challenges

Rising default pressures (coverage, maturities)

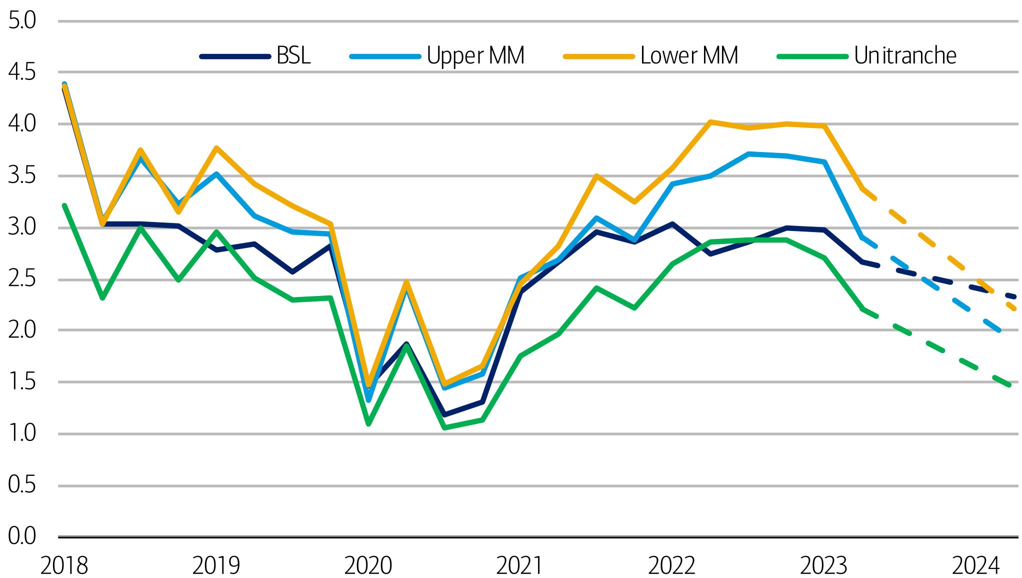
Private Debt has been one of the fastest growing asset classes of this decade with a CAGR of 12% since 2010. Growing investor demand in a low-rate environment has been helpful to the rise of the asset class, but it has also unleashed animal spirits, facilitating less than ideal deals. 2021 represented the pinnacle of market froth in this regard and was littered with deals containing high leverage and EBITDA adjustments. Coming into 2023 we were already concerned about credit issues arising in private debt portfolios in the backdrop of rising rates and debt service pressures. Since then, rates have climbed another 100bps putting further pressure on middle market balance sheets.

Declining coverage ratios

The first order derivative of higher rates is lower coverage ratios. We are seeing this play out in both public and private markets. Exhibit 9 shows our estimate of where coverage ratios currently are across the loan universe, along with where we expect them to be if rates stay at current levels for another year.

Exhibit 9: Time series of coverage ratios for loan issuers along with NTM forecasts

Coverage ratios for LevFin issuers has declined across the board despite positive earnings growth this year



Source: BofA Global Research, LCD, Refinitiv, Bloomberg

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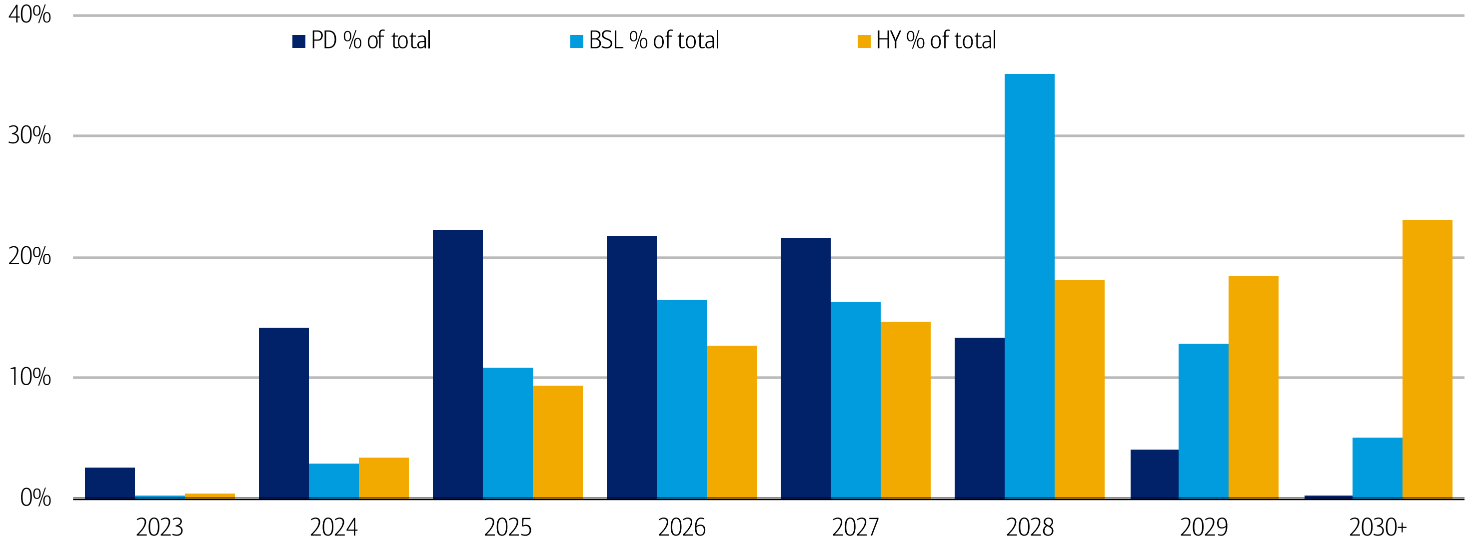
Coverage ratios for LevFin issuers has declined across the board despite positive earnings growth this year. Upper MM is at 2.9x while Lower MM is at a better 3.4x, representing sharp declines from 3.5x-4x levels seen earlier in the year. Comparatively, BSL market has dropped to 2.7x levels, lower than most parts of the middle market. This is because while BSL LTM coupons largely reflect the higher rate environment, MM valuations were slow to correct, optically carrying higher coverage ratios in 2022.

The full impact of the new rates regime will likely proliferate through middle markets over the next 2-3 quarters. As such, the prospective decline in coverage ratios to fully price in current rate levels, is going to be higher in MM vs BSL companies. All told, we expect MM issuers to end up between 2x-2.5x, while BSL market finishes at the top end of that range. Unitranche loans however, due to their higher leverage are in the spotlight – coverage levels here are already at 2.2x, and could decline further to 1.5x. We discuss them more below.

Maturity walls building up

Complicating this further is the maturity wall within private debt portfolios which is relatively more aggressive than the BSL and HY bond space. Exhibit 10 shows the percentage of deals due by year in each asset class based on >1000 loans/bonds outstanding in each market. While syndicated HY bonds and loans have successfully pushed back maturities to ‘25/’26, PD still has >10% of its deals due next year and another 20% in 2025. This means some potential problematic situations within PD remain unaddressed and are likely to surface near-term. We expect workout conversations to increase, and along with that, restructurings and write-downs.

Exhibit 10: Maturity walls across various LevFin asset classes
Private Debt maturity profile is relatively more aggressive than the syndicated loans and HY bonds



Source: BofA Global Research, ICE, DLD

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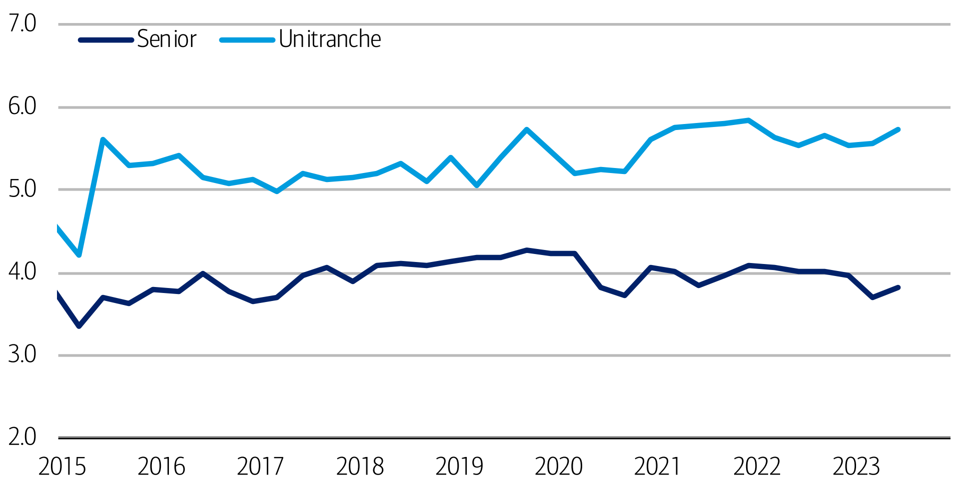
Unitranches and BDCs are weak links

Generally, default cycles are led by "excesses" built up in a sector or two. However, there are no such glaring sector outliers today. The "bubble" today is leverage, which transcends sector and business-model boundaries. Instead, the vulnerabilities lie in the higher levered, lower rated portions of the market which are susceptible to decreasing coverage ratios and earnings.

The rates impact is most concerning for unitranches. These structures have grown in popularity and represent 37% of all MM deals originated over the last three years. By design these structures provide higher "blended" spread but at the cost of having higher leverage and lower cushion to absorb credit losses (Exhibit 11). Coverage in this segment could fall to 1.5x with rates at 5%, which in the public market is a pre-determinant of downgrade to CCC. Without earnings growth, many of these issuers could become zombies – at best receiving just enough cashflow to service their senior loans, or at worst restructuring the debt and generating losses for lenders.

Exhibit 11: Senior vs Unitranche loan leverage
Unitranches offer blended spreads at the cost of higher leverage



Source: BofA Global Research, Refinitiv

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BDC coverage has also declined rapidly. Our analysis of 20 of the largest BDCs revealed current portfolio coverage ratios are just under 2x, while leverage ratios are between 5x-6x. This could very well be the first shoe to fall within private markets, push come to shove. These entities also have higher leverage at the fund level, making their investors more prone to losses.

As for earnings, American middle market is proving resilient for now. Q2 earnings and revenue growth was near 4% levels: lower than Q1's 10% levels, but still positive. However, factoring in inflation, real revenues remain flat, and earnings expansion has come mainly as a result of reducing costs. Additionally, recurring revenue loans – a recent market addition – have not withstood a default cycle yet, and will be put to the test.

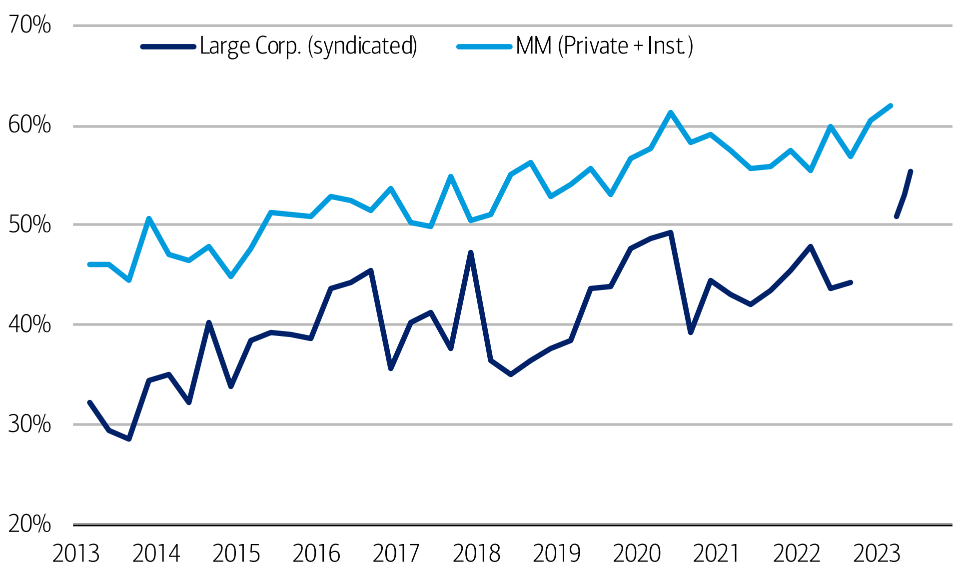
Mitigating factors

There also exist mitigating factors that will suppress losses for private credit investors.

First, sponsors have shown their inclination to inject liquidity and delever deals, as a means to win over creditors in new deal executions and refis. This is driven by their high amounts of dry powder, shrinking set of opportunities that meet return hurdles, as well as need to replace subordinate debt fast vanishing from leveraged issuer capital structures. As such, average equity contribution in LBO deals has been on a structural climb since the GFC, currently sitting at 60% for MM LBOs, meaningfully reducing deal LTVs (Exhibit 12). Comparatively, equity contributions in BSL are lower, at 50%.

Exhibit 12: LBO equity contribution

Average equity contribution in LBO deals has been on a structural climb since GFC



Source: BofA Global Research, Refinitiv

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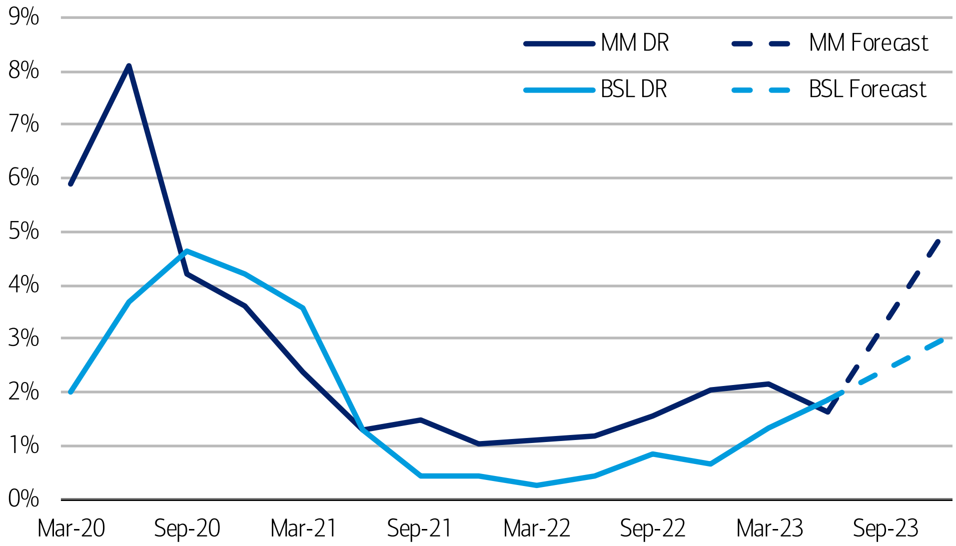
Second, there is higher stakeholder ability and willingness to resolve issuer payment problems within close-knit private markets. This is especially true for good business models stuck within the confines of bad balance sheets. Such companies will likely be able to address their coverage and maturity problems by creating blended debt and equity solutions (lenders charge fixed fee to extend maturity in exchange for sponsor equity), or converting loans to PIKs and converts.

On balance, we expect credit losses within PD to increase over the course of the year. We estimate that default rates could reach 5% at their highs driven by increasing credit losses in older vintages (Exhibit 13). This is an environment where BSL defaults reach 3%. From here, if we see an economic soft-landing scenario, default rates could subside to 4%. However, if a hard landing scenario becomes inevitable, defaults amongst middle market firms could surge to 7%, on our estimates.

Exhibit 13: Middle Market vs broadly syndicated loan default rates
Middle market defaults could overtake BSL early next year in a higher for longer rate environment



Source: BofA Global Research, LCD, Proskauer

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Slowdown in fundraising and deployment

PD fundraising, which had been on a one-way trajectory until now, has slowed down, with a 26% decrease in aggregate capital raised YTD '23 vs YTD '22 (Exhibit 14). Fund count decreased by 34%, indicating larger funds were raised. Key drivers for the decline were the denominator effect which prevented real money investors from allocating additional funds to PD, and higher macroeconomic uncertainty earlier in the year.

Exhibit 14: YoY change in PD fundraising
PD fundraising has slowed down this year with a 26% decrease in capital raised vs 2022

Date	No. of funds	Aggregate capital raised in $bns
1H'23	42	55
1H'22	64	75
YoY Change	-22	-20
YoY Change%	-34%	-26%

Source: BofA Global Research, Preqin

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PD capital deployment also slowed down by a commensurate amount in 1H'23 (Exhibit 15) on the back of slower fundraising and PE exits/deal flow. Overall financing flowing to leveraged issuers decreased 24% YoY on the back of a large decline across floating rate channels. PD financing fell 45% vs 2022 while syndicated loan financing fell 39%. Interestingly, HY financings increased 43% as issuers rotated out of floating rate into fixed rate instruments. Note that these are based on new money estimates coming through each funding channel.

Exhibit 15: YoY change in PD capital deployment
PD financing slowed down in 1H'23 with a 45% decrease vs 2022

	Total New Money Financing (USD bn)			
Period	PD	Loans	HY	Total
1H'23	26	103	71	201
1H'22	48	168	50	266
YoY Change	-22	-65	21	-65
YoY Change%	-45%	-39%	43%	-24%

Source: BofA Global Research, LCD, ICE, Refinitiv

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Given that today we have more clarity around economic trajectory, and most of the denominator effect has been reversed, we are expecting these headwinds to partially subside going forward. We think fundraising and deployment is poised to pick up along with middle market PE deal flow into year end. Additionally, the newer vintages with their "crown jewel" deals are likely to provide a performance boost for the asset class over the medium term, keeping the activity intact. We have already noted how real money allocations have increased recently, which will likely drive more capital inflows in 2H'23 and 2024.

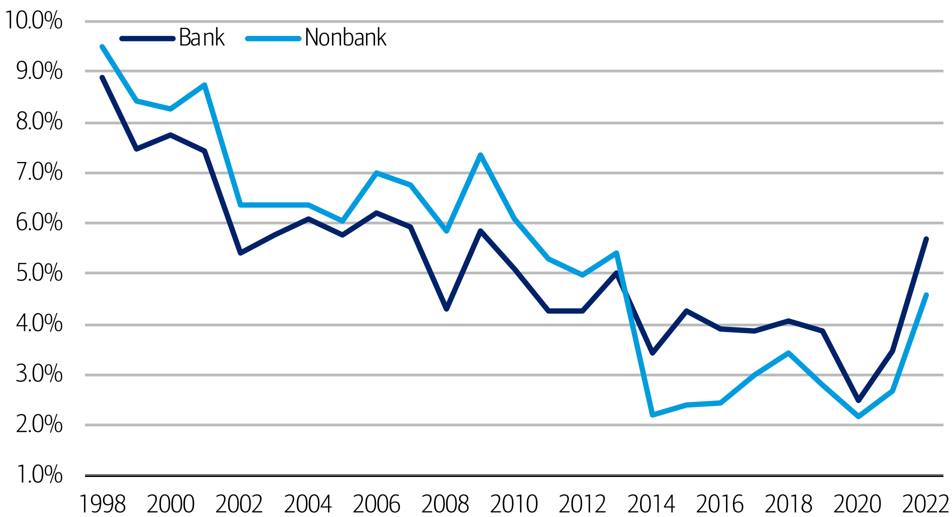
Increasing cost of capital

In the aftermath of the GFC, a number of regulatory reforms were enacted to stabilize banks and financial markets. The advent of risk-weighted capital requirements for banks drove up their financing costs, altering their investment profitability. Nonbank platforms by nature have been sitting outside regulatory purview and enjoyed a lower cost of capital vs banks over the last decade. This is what facilitated the migration of leveraged financing from banks to nonbanks in the first place.

However, in the new rates regime, costs for nonbanks have also gone up dramatically. The regional bank turmoil threatened to disrupt their capital call lines, upending their leverage channels. While the shock turned out to be transitory, and most funding channels have since recovered, they are available at notably higher costs. Our estimates suggest nonbanks now pay close to 300bps on their bank funding, 2x of what was available a year ago. The total cost of capital has shot up (Exhibit 16), thereby eroding their marginal return advantage.

Exhibit 16: Bank vs Nonbank cost of capital

The total cost of capital for nonbanks has gone up dramatically, but remains lower than banks



Source: BofA Global Research, NYU Stern

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This has created opportunities for some other sources of capital such as insurance companies to fill the funding gap, and the private secondary market has erupted. Growth of NAV loans which are higher cost loans private equity platforms borrow against the value of their entire portfolios to generate liquidity, is another sign of this funding crunch reverberating through the nonbank ecosystem.

Another source of concern is the ongoing activism to bring nonbanks under regulatory purview. Case in point SEC's Private Fund rules that were put in place in Aug '23 to increase transparency within the industry, and which are likely to significantly change industry practices and increase regulatory burden. The DoJ also remains focused on private platforms and has successfully brought charges against individuals employed by these platforms to ensure compliance. Regulatory authorities' efforts to extend their governance from retail to institutional funds, albeit for the sake of financial stability, is a notable shift in stance, and means that nonbanks are no longer operating in isolation and will continue to garner regulatory scrutiny.

Going forward, this means returns for PD investors could get squeezed even further as returns diminish, and value gets transferred from equity to debt at the fund and portfolio level. Newer vintages may be able to absorb these high debt costs given the higher quality and spreads of their portfolios. Existing funds however could underperform on the back of higher credit losses, debt service and regulatory costs.

Summary

- Private Debt faces notable challenges in a new rates regime. Cost of capital for nonbanks has doubled, fundraising and deal flow has slowed. Unlike the syndicated loan market where LTM coupons reflect a new rates regime, middle market loans are yet to fully reflect a 5% rate environment and face sharper coverage ratio declines over the next 12 months.

- Syndicated loan market has cycled through a lot of its expensive debt problems by tapping HY bond and Private Debt markets to refinance, helping maturity walls to clear out until '26. Comparatively, PD still has >10% of its deals due next year and another 20% in 2025. Potential problematic situations within PD remain unaddressed and are likely to surface near-term.

- At particular risk are unitranches, BDCs, older vintage funds with highly levered deals, and recurring revenue loans. We expect default rates within Private Debt to rise to 5%, overtaking the syndicated loan market early next year.

- However, Private Debt platforms possess unparallel opportunities as well. Vintages 2022 and newer are expected to outperform public credit given they entered a market characterized by deals with higher valuations and lower leverage.

- Banks scaling back in the aftermath of the regional bank turmoil has widened private debt platforms' ability to gain lending market share and disintermediate traditional banking. Though cost of capital has increased for everyone, nonbanks' cost still remains 200bps lower than that of banks.

- Pension funds, the whales of Private debt, are increasing their allocations to the asset class. Although the "denominator effect" impacted capital inflows earlier in the year, it was a temporary blip in an otherwise structural migration of real money allocations towards private assets. And investors are choosing Private Debt over Private Equity to gain exposure.

- Private platforms are more able and willing to provide a wider range of solutions to businesses and individuals in terms of financing type, attachment point, speed and frequency of funding. Special situations, mezzanine and distressed funds each have $75bn of dry powder. Now managers are fast proliferating CRE, consumer loans and venture cap funding spaces as well.

Market Technicals

In the three weeks ending Sep 22nd, demand for loans totaled $12.8bn, decreasing from the $15.6bn of demand seen in the prior three weeks ending Sep 1st. The decrease in demand was mainly driven by a $2bn decline in CLO creation and a $1.2bn decline in coupon payments. Meanwhile, retail flows increased by $413mn. YTD net demand has outweighed supply by $142bn versus the $87bn of net demand seen this time last year. Note that this table does not account for demand channels such as SMAs and alternate asset vehicles.

Exhibit 17: Weekly Technicals ($mns)
Demand net of supply is at $142bn

	YTD as of 9/22/2023	9/22/23	9/15/23	9/8/23	9/1/23
Retail flows (a)	-10,893	622	452	377	631
CLO creation (b)	72,773	2,057	1,232	1,759	2,999
Coupons (c)	87,410	2,144	2,161	1,980	2,687
Demand (a+b+c)	149,290	4,822	3,845	4,116	6,318
Issuance Ex-repricings (d)	174,162	6,976	13,570	12,151	0
Repayments (e)	166,510	5,726	455	3,809	4,443
Supply (d-e)	7,652	1,250	13,115	8,342	-4,443
Demand net of Supply	141,638	3,572	-9,270	-4,226	10,761

Source: BofA Global Research, LCD

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Rating Actions

In the past month, we have seen rating actions across 27 distinct issuers. A total of 15 issuers were downgraded by 19 notches ($15bn total notional) and 12 issuers upgraded by 15 notches ($10.8bn total notional). Of the downgrades, Staples Inc had two loans downgraded by one notch each, totaling $2.2bn, the most by notional. Of the upgrades, Formula One had one loan upgraded by one notch, totaling $1.7bn, the most by notional.

In terms of sectors, Technology and Retail each contributed 22% and 19% of total downgrades in the past month by notional respectively. Of the upgrades, by notional amount, 21% was in Food Producers followed by 16% in Real Estate. Eleven distinct sectors experienced upgrades while eight distinct sectors experienced downgrades. Overall, we see net downgrade activity of $4.2bn.

Exhibit 18: Recent downgrades and upgrades
There was net downgrade activity of $4.2bn

Issuer	Ticker	Margin	Notional	Maturity	Sector	Rating Action	Current Rating	Previous Rating	Notches
Carestream Dental LLC	CARDEN	325	259	9/1/2024	Healthcare	Downgrade	CCC	B-	-2
Carestream Dental LLC	CARDEN	450	230	9/1/2024	Healthcare	Downgrade	CCC	B-	-2
Catalent Pharma Solutions	CTLT	200	1,418	2/22/2028	Healthcare	Downgrade	BB	BB+	-1
ClientLogic	SITEL	375	1,376	8/28/2028	Technology	Downgrade	BB-	BB	-1
ConvergeOne LLC	CVON	500	1,067	1/4/2026	Technology	Downgrade	CCC+	B-	-1
Empire Today LLC	EMPTDY	500	584	4/3/2028	Real Estate	Downgrade	CCC+	B-	-1
Entertainment Partners	EPPURC	350	839	11/6/2028	Technology	Downgrade	B	B+	-1
Forest City Enterprises	FCE	350	600	12/8/2025	Real Estate	Downgrade	B-	B	-1
Momentive	MOMPER	450	848	3/29/2028	Capital Goods	Downgrade	B	B+	-1
MRC Global	MRC	300	294	9/20/2024	Energy	Downgrade	B-	B	-1
NAPA Management Services Corporation	NAPAMA	525	602	2/23/2029	Healthcare	Downgrade	B-	B	-1
SI Group	SIGRP	475	1,325	10/15/2025	Chemicals	Downgrade	CCC	CCC+	-1
Staples Inc	SPLS	500	1,915	4/16/2026	Retail	Downgrade	B-	B	-1
Staples Inc	SPLS	450	287	9/12/2024	Retail	Downgrade	B-	B	-1
Styron	TSE	250	735	5/3/2028	Chemicals	Downgrade	B-	B	-1
United Site Services Inc	UNSTSV	425	1,970	12/15/2028	Autos	Downgrade	CCC	CCC+	-1
WellPet	WOOHOL	375	733	12/21/2027	Retail	Downgrade	CCC+	B-	-1
AppLovin Corporation	APP	310	1,481	10/25/2028	Media	Upgrade	BB	BB-	1
Array Technologies	ARRY	325	290	10/14/2027	Utilities	Upgrade	BB-	B+	1

Exhibit 18: Recent downgrades and upgrades
There was net downgrade activity of $4.2bn

Journey Personal Care	JOUPER	425	637	5/1/2028	Retail	Upgrade	B-	CCC+	1
Formula One	FONFP	325	1,700	1/15/2030	Real Estate	Upgrade	BB+	BB	1
Garrett Motion	GTX	325	702	4/30/2028	Autos	Upgrade	BB-	B+	1
Garrett Motion	GTX	450	500	4/30/2028	Autos	Upgrade	BB-	B+	1
Grab Holdings Inc	GRABTA	450	507	1/29/2026	Technology	Upgrade	B	B-	1
JMC Steel Group	ZEKIND	200	859	1/24/2027	Metals	Upgrade	BBB-	BB+	1
Latam Airlines	LTMCI	950	1,095	10/12/2027	Travel	Upgrade	BB-	B+	1
MedPlast Inc	MEDPLA	375	476	7/2/2025	Healthcare	Upgrade	B-	CCC+	1
US Foodservice Inc	USFOOD	200	1,184	9/13/2026	Food Producers	Upgrade	BBB-	BB+	1
Hard Rock Northern Indiana	SPEGAR	425	353	12/11/2028	Gaming	Upgrade	BB-	B	2
Shearer's Foods Inc	SHEARE	350	1,046	9/23/2027	Food Producers	Upgrade	B+	B-	2

Source: BofA Global Research, LCD

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Return Performance

Loans in the LCD index returned 0.97% in the three weeks ending Sep 22nd, up from 0.95% cumulative return seen in the prior three weeks ending Sep 1st. 2nd lien loans were the best performer during the three-week window, returning 193bps, and CCC loans (161bps) outperformed both BBs (61bps) and Bs (110bps). Across asset classes, YTD loan returns are at 10.3%, HY YTD returns are at 6.1% and IG YTD returns are at 0.8%.

Exhibit 19: Total Returns (price plus coupon return) bps
Loans returned 0.10% in the week ending Sep 22nd

	9/22/2023	9/15/2023	9/8/2023	9/1/2023
All Loans	10	53	34	40
BB	6	35	20	26
B	9	59	42	50
CCC	24	102	35	36
2nd Lien	49	74	70	64
LL100	7	54	32	44

Source: BofA Global Research, LCD

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Primary Activity

YTD global and US issuance totals $191bn and $173bn, with a total of 334 and 266 loans launched respectively in the primary market thus far. In comparison, YTD '22 brought in $220bn global issuance across 317 loans, and $189bn US issuance across 252 loans. In total, YTD 2023 Global and US issuance trail YTD 2022 issuance by 13% and 9% respectively. In terms of the composition of the types of deals financed in the past 30 days, 36% by notional amount was for refinancing, followed by 35% for LBO and 15% for Acquisition.

Exhibit 20: Recent new loan issues
The largest recent new issue came from WorldPay Inc's $5.7bn deal

Launch Dt	Issuer	New Inst. Money	Moody's	S&P	ABL	Cov Lite	Proceeds	Sector	Country
9/21/2023	Upfield BV	100	B1	B		YES	Refinancing	Food & Beverage	United Kingdom
9/21/2023	Watlow Electric Manufacturing	175	B2	B	No	YES	Refinancing	Manufacturing & Machinery	United States
9/20/2023	RealTruck Group Inc	180	B2	B-	No	YES	Acquisition	Automotive	United States
9/20/2023	Interstate Waste Services Inc	575	B2	B	No	YES	Dividend	Environmental	United States
9/19/2023	FleetPride Inc	276	B3	B-	No	YES	Refinancing	Automotive	United States
9/19/2023	Infra Group NV	600	NR	NR		YES	LBO	Building Materials	Belgium
9/19/2023	Simon & Schuster Inc	1,100	B2	B	No	NO	LBO	Printing & Publishing	United States
9/19/2023	Spring Education	850	B2	B-	No	YES	Refinancing	Computers & Electronics	United Kingdom
9/18/2023	Upfield BV	215	B1	B	No	YES	Refinancing	Food & Beverage	United Kingdom
9/18/2023	Virgin Media Finance	500	Ba3	BB-	No	YES	Refinancing	Cable	United Kingdom
9/18/2023	Priority Technology Holdings	40	B2	B-	No	YES	Refinancing	Computers & Electronics	United States
9/18/2023	Alphia Inc	640	NR	B	No	YES	LBO	Food & Beverage	United States

Exhibit 20: Recent new loan issues

The largest recent new issue came from WorldPay Inc's $5.7bn deal

Launch Dt	Issuer	New Inst. Money	Moody's	S&P	ABL	Cov Lite	Proceeds	Sector	Country
9/18/2023	CPM Corp	1,130	B2	B	No	YES	Dividend	Manufacturing & Machinery	United States
9/15/2023	Cegid Group SA	700	B2	B+		YES	Dividend	Computers & Electronics	France
9/14/2023	GIP II Blue Holdings	1,100	Ba3	BB-	No	YES	Acquisition	Oil & Gas	United States
9/14/2023	HireRight LLC	750	B2	B	No	YES	Refinancing	Computers & Electronics	United States
9/13/2023	BCP Renaissance Parent LLC	100	B2	B+	No	NO	Dividend	Services & Leasing	United States
9/13/2023	ProAmpac	70	B3	B-	No	YES	Refinancing	Forest Product	United States
9/13/2023	NCR Atleos LLC	1,050	B2	B+	No	NO	Acquisition	Computers & Electronics	United States
9/13/2023	WorldPay Inc	500	Ba3	BB		YES	LBO	Computers & Electronics	United Kingdom
9/13/2023	WorldPay Inc	5,200	Ba3	BB	No	YES	LBO	Computers & Electronics	United Kingdom
9/13/2023	ViaSat Inc	617	Ba3	BB	No	YES	Acquisition	Telecom Equipment	United States
9/12/2023	Pacific Dental Services	200	B1	B	No	YES	Refinancing	Services & Leasing	United States
9/12/2023	Bausch + Lomb Corp	500	B1	B-	No	YES	Acquisition	Healthcare	Canada
9/11/2023	Breezeline	775	B1	BB	No	YES	Refinancing	Cable	United States
9/11/2023	AOC/Aliancys	400	B1	B	No	YES	Dividend	Chemicals	United States
9/11/2023	Fogo de Chao	550	B3	B-	No	YES	LBO	Restaurants	United States
9/11/2023	Forward Air Corporation	925	NR	BB-	No	YES	Acquisition	Transportation	United States
9/11/2023	Nouryon Finance BV	2	B2	B+		YES	Refinancing	Chemicals	Netherlands
9/11/2023	Nouryon Finance BV	13	B2	B+	No	YES	Refinancing	Chemicals	Netherlands
9/11/2023	USI Holdings Corp	1,420	B1	B	No	YES	Repurchase equity	Insurance	United States
9/8/2023	Flynn Restaurant Group LP	200	B2	B	No	YES	Refinancing	Restaurants	United States
9/8/2023	Baldwin Risk Partners	170	B2	B-	No	YES	Refinancing	Insurance	United States
9/8/2023	Creative Artists Agency LLC	425	B2	B+	No	YES	LBO	Entertainment & Leisure	United States
9/7/2023	EnergySolutions Inc	640	B2	B	No	YES	Acquisition	Environmental	United States
9/7/2023	Iridium Communications	1,500	Ba3	BB	No	YES	Refinancing	Telecom	United States
9/7/2023	Syneos Health Inc	2,700	B1	B	No	YES	LBO	Services & Leasing	United States
9/7/2023	Restaurant Brands International	5,175	Ba2	BB+	No	YES	Refinancing	Restaurants	Canada
9/6/2023	TAMKO Building Products	821	B2	BB-	No	YES	Refinancing	Building Materials	United States
9/6/2023	WaterBridge	160	B2	B-	No	NO	Repurchase equity	Oil & Gas	United States

Source: BofA Global Research, LCD

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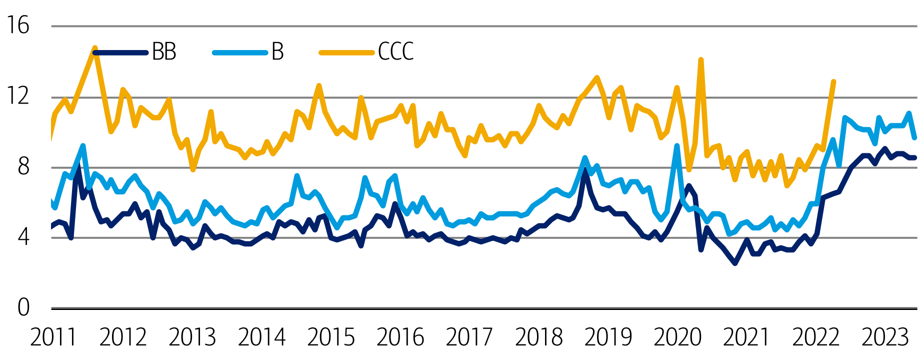
Exhibit 21: Average new issue yields by month

BB and B currently yield 8.71% and 9.85% respectively while there is not enough sample size for CCC



Source: BofA Global Research, LCD

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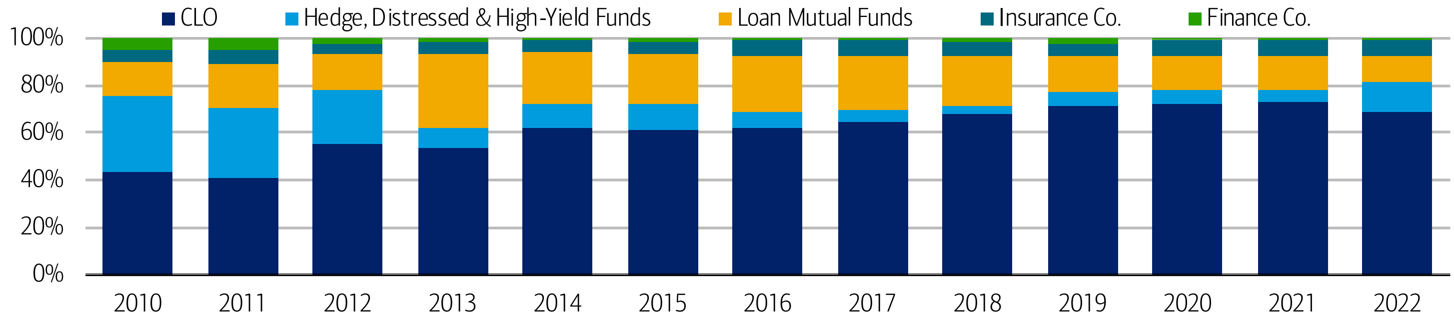
CLO Update

CLOs are the largest buyers of loans and today represent close to 70% of the primary demand within this asset class. Loan retail funds are the second largest buyers – their participation has shrunk since the peaks of 2013 but has been increasing recently, coinciding with the rate move. At the same time, hedge, distressed & high yield funds have played a lesser role in the primary market.

Exhibit 22: Distribution of investors across loan market
CLOs make up 69% of the primary institutional market



Source: BofA Global Research, LCD

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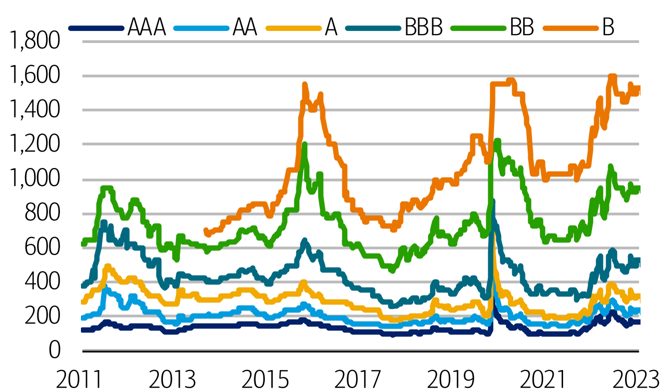
Exhibit 23 shows CLO spread levels by tranches. CLO arbitrage is a widely followed statistic in the loan market, and represents the theoretical spread that managers can capture by issuing CLOs. Exhibit 24 compares CLO asset (loan) spreads to the weighted average spreads of CLO liabilities. The difference between these two values is the theoretical arbitrage and represents the current attractiveness of creating new CLOs. A higher arbitrage number means a greater incentive for managers to bring new CLOs to the market, and thus provide incremental loan demand, and vice versa. Importantly, this arbitrage calculation puts more weight on the primary loan market.

Exhibit 23: US CLO 2.0/3.0 indicative spread level (bps)
Secondary CLO spreads have increased materially



Source: BofA Global Research

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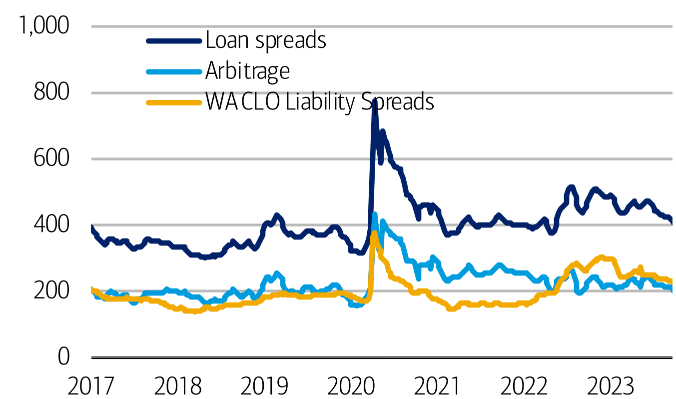
Exhibit 24: CLO Arbitrage (bps)
CLO arbitrage has been declining



Source: BofA Global Research, LCD
Arbitrage: Loan asset spread – WA CLO spread X Liability %
Loan spreads (running avg 4wks): 60% sec BB, 40% sec B
Until 3/4/22 Loan spreads (running avg 4wks): 50%new issue B+/B, 30% pri BB, 10% sec BB, 10% sec B

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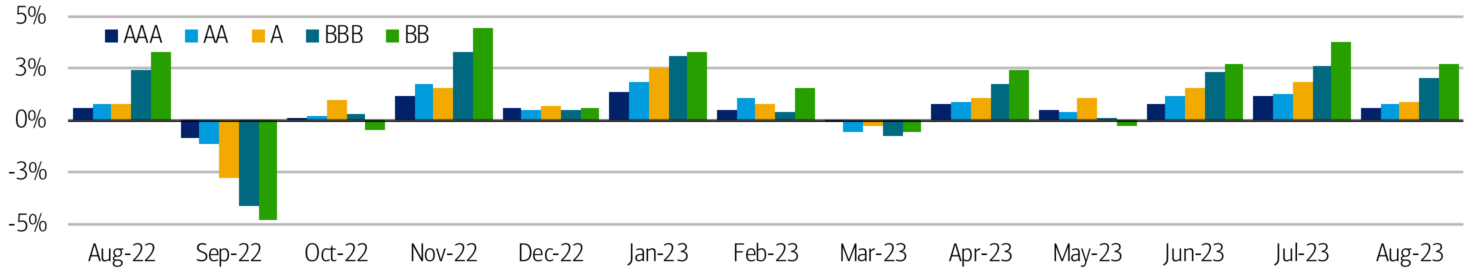
Exhibit 25 shows monthly CLO returns as defined by the Palmer Square CLO index (price plus coupon returns).

Exhibit 25: Monthly CLO 2.0 returns by rating
CLOs returned 0.9% in Aug



Source: BofA Global Research, PriceServe, Palmer Square CLO Indices, Bloomberg

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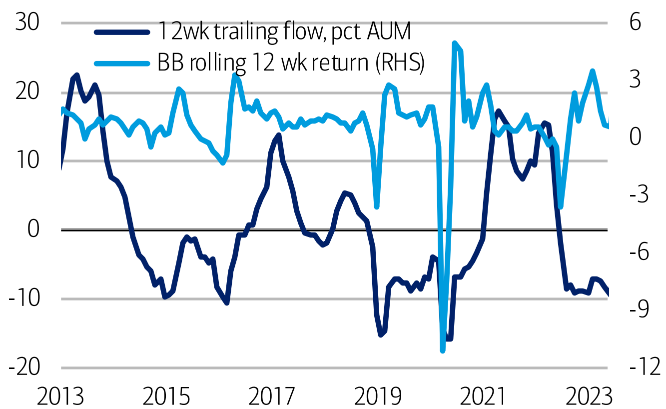
The following charts show demand trends within the loan market, correlated with returns within rating buckets. Exhibit 26 shows a measure of retail flows (12 week trailing retail flows as a percentage of outstanding AUM) vs. monthly BB Loan total returns, while Exhibit 27 depicts monthly CLO issuance vs. monthly B Loan total returns.

Exhibit 26: BB performance vs Loan retail flows
Currently BB rolling 12-week return is at 2.8% and 12 week trailing retail flow is 2% of outstanding AUM.



Source: LCD, EPFR Global

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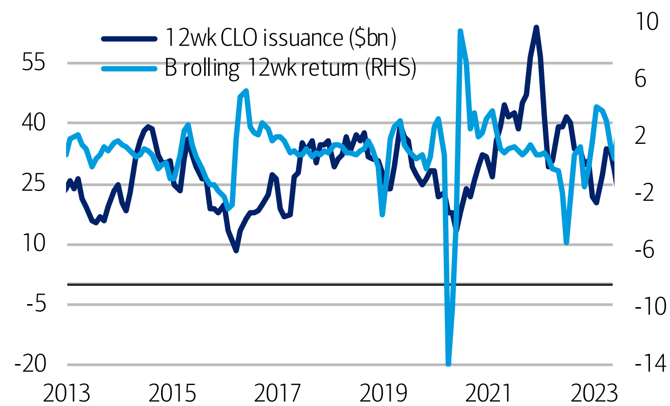
Exhibit 27: B performance vs CLO creation
For Bs, rolling 12 week return is at 4.4% while 12 week CLO issuance is $23.5bn



Source: LCD, EPFR Global

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