BofA SECURITIES

Collateral Thinking

Year Ahead 2024: Goldilocks and the Three Bears

Our key macro assumptions

2023 presented goldilocks conditions for credit investors. Corporates' increasing input costs were mitigated by high cash balances and pricing power. Deteriorating LevFin fundamentals were offset by strong technicals. Loan investors benefitted from 2x coupons without crippling issuer liquidity, leading to loan outperformance across credit. In 2024, this credit goldilocks will be challenged by three bears: Rates (increasing costs), Earnings (decreasing coverage), and Issuance (softening technicals). We expect market volatility on gyrating consensus views. Our base case is a soft-landing with rate cuts.

A new rates regime for corporates

Higher for longer rate backdrop will encourage value transfer from equity to debt. Dispersion across corporates will increase-Loans have taken the first impact, HY will follow, and IG will remain insulated due to strong fundamentals. Expect LevFin coverage ratios to decline, reaching 2.3x in loans, 2.1x in private debt, and 4x in HY bonds. Loan maturity walls are elevated, and HY walls are at record levels, which will drive increased issuance and restructurings. We expect LevFin defaults to finish in the 3-5% range.

US Loans

Corp fundamentals are likely to decline despite rate cuts, impacting lower quality issuers disproportionately. We expect 3.5% defaults, 10% downgrades, and index CCCs to reach 12%. Spreads to leak 40bps wider to 600bps, though high carry should help loans deliver 7% returns. BBs are expected to outperform, while CCCs could see high losses. Expect increased supply, while demand from CLOs and coupons recedes, softening technicals.

EU Loans

Amid high macroeconomic uncertainty, we expect EU loans to widen 60bps, but default rates to remain lower vs US at 2.5%, and loan index to generate 5% returns. Supply to increase marginally. Unlike the US, we think peak net downgrades in EU are yet to come – we project downgrades to hit 12% and CCCs to reach 8%.

Private Debt

Middle market issuers face sharp coverage declines and substantial maturities; peak defaults could reach 5%. Newer PD vintages will outperform public credit amid high MM premiums and banks scaling back post turmoil. MM CLO creation is poised to increase.

Relative Value

IG offers the best RV in credit given rate cuts. While tempting to favor HY over loans, note that HY has 2.5% lesser carry than loans, to offset which 5yr needs to rally 80bps. On top, HY credit losses are unlikely to be lower vs loans in a soft-landing. We estimate '24 returns at ~6% in HY, and ~8% in IG. We like quality yield: IG>LevFin BB>CCC, US>EU, BSL>MM, value>growth, secured>unsecured, and debt>equity.

Risks

Geopolitical fragility, US election, policy mistake, oil spike, "something breaking".

20 November 2023

Leveraged Loan Strategy
United States

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Exhibit 1: 2024 US spread, return, issuance

Expect spread widening but positive returns led by BBs

3yr Discount Margin	600bps
Price Target	94.5pt
Total return	7.2%
BB return	8.5%
B return	7.6%
CCC return	-2.9%
Repayments	$250bn
New money issuance	$240bn

Source: BofA Global Research

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Exhibit 2: 2024 US Defaults and migration

Downgrade and default pressures to increase

Default rate	3.5%
Recovery	55%
Downgrades (% of index)	10%
CCCs (% of index)	12%

Source: BofA Global Research

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Exhibit 3: 2024 EU forecasts

Expect spread widening, EU to underperform US

3yr Discount Margin	620bps
Default rate	2.5%
Total return	5.1%
Downgrades (% of index)	12%
CCCs (% of index)	8%
New money issuance	€30-€35bn

Source: BofA Global Research

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See glossary of abbreviations and terms on page 52

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Can credit goldilocks extend into '24?

2023 presented goldilocks conditions for credit investors with delicate balances established at multiple economic levels. Rapid rate increases altered the inflation trajectory without creating insurmountable damage, shifting consensus from hard to soft-landing. Amongst corporates, increasing cost of capital was mitigated by strong balance sheets and pricing power. Within LevFin, deteriorating fundamentals were balanced by strong technicals. In particular, loan investors benefitted from doubling of coupons, without the incremental outlays crippling issuer liquidity and increasing credit losses. As a result, loans have outperformed across credit with total returns of 11% in line with our expectations, while HY and IG are at 7% and 1% resp.

In 2024, however, these "goldilocks" conditions will be challenged by three "bears":

Rates

High rates are a double-edged sword – generating excess income for investors, but also causing cracks to emerge at the bottom of the stack. LevFin liquidity profiles have been deteriorating, and defaults/downgrades have increased, as expected. Loans have been the first to get hit, with many CCC issuers today in need of intervention, unable to meet debt service. HY today is where loans were a year ago – at the precipice of a downgrade and default cycle – it has remained relatively sheltered from coupon increases thus far, but is vulnerable going forward as maturities draw near. Interest expense has also ticked up for IG issuers, which they have successfully absorbed given high coverage ratios.

Earnings

US economic strength has surprised this year. However, this upside has primarily benefitted large caps while small caps have underperformed: YTD '23 vs '22 aggregate earnings are flat for S&P vs -12% for Russell. Dispersion remains high – between large and small caps, and between IG and HY/Loans. IG issuers have positive earnings growth, higher cash/debt ratio vs LevFin issuers, and stable leverage. LevFin issuers are expected to generate no real revenue growth and slip into an earnings recession. Going forward even nominal revenues could decline if consumer rolls over and companies can't push through price increases. Coverage ratios are projected to decline to 2.3x in loans, and 4x in HY, with many CCC issuers <1x, triggering restructuring concerns.

Issuance

LevFin maturity walls are still a concern. Proportion of US loan index coming due over the next 2,3 years is higher today vs a year ago. For US HY, the same maturity metrics are at all-time records. Issuers, especially in HY, have attempted to outlast what they hoped was a temporary rates spike. However, as reality sets in, we think they will need to hit the primary. This is likely to trigger a) increased issuance, more so in HY bonds than loans, softening today's strong LevFin technicals b) credit losses in instruments that are unable to refinance in public or private markets.

These challenges threaten to tarnish conditions for LevFin credit in 2024, impacting the survival of the lowest rated issuers, while IG credit could enjoy a good year. Expect LevFin defaults to be in 3-5% range, and IG to finish with 8% returns, while loans and HY finish at 7% and 6% respectively. Technicals, though supportive, will be comparatively softer next year, ultimately letting fundamentals prevail in 2H. With this in mind we like "quality yield" in 2024: IG>LevFin, BB>CCC, US>EU, large cap>small cap, BSL>MM, value>growth, secured>unsecured, and debt>equity.

We'd be remiss if we don't highlight a bull case – one of "immaculate disinflation" – where growth stays high yet inflation recedes. In this case, Goldilocks will prevail against the bears, supporting a risk rally within credit, but this is not our base case.

Our key macro assumptions

Economy and inflation

Last year at this time we were gripped by inflation fears and had embarked on a tightening cycle with little historical precedent. There was uncertainty around inflation, hikes and damage to growth. One year later, we have achieved a lot economically. Inflation has been adequately responsive to policy rates. A fair portion was attributable to supply-side challenges which auto resolved post COVID. And now the demand-driven portion is also being addressed, with hopes that it will recede without bringing economies to their knees.

Some geographies have been more successful than others in this process. In the US, soft-landing has become the base case given underlying economic strength, but those hopes are quickly fading away in EU where policy today is arguably overly restrictive compared to economic strength. We discuss this in greater detail in the EU section.

As the rates shock has made its way through the economy, sectors have responded at varying lags. First was the housing market where existing home sales have come under pressure, sinking to the lowest level since 2010. Goods were next and are now borderline deflating. As wages increased human capital sensitive areas of the economy such as Healthcare felt the squeeze. The one exception: services where inflation remains high at ~5.5% due to OER stuck near YTD highs. However even here areas like airline fares and medical services are in active deflation. Tech and Financials have succumbed this year. Labor market has responded as well: with unemployment rising from 3.5% YE'22 to 3.9%, nonfarm payrolls cooling to a 150k clip, wage growth slowing to 0.2% MoM, and personal savings rate declining to 3.4%.

All told, headline inflation has decreased from 5.5% at YE'22 to 3.4% in Q3, and core inflation has decreased from 4.7% to 3.9%. But because lights have gone out on one sector at a time, we have avoided a cathartic purge, and kept the economic momentum going. A rolling blackout (see our report, The rolling blackout) is the least disruptive way for the economy to align to a new rates regime, and a non-recessionary environment has made this possible.

Good news is that the US economy remains resilient. Bad news is this likely cannot happen for an extended period of time without bringing inflation back on the table. A myriad of potential economic outcomes exist for 2024/2025, and market gyrations just over the last month are a testament to how quickly consensus can shift due to data flow.

Stable growth scenarios: In the event, uptick in growth is accompanied by higher inflation, this would form a no-landing or reacceleration scenario. However, this likely instigates the Fed back into action, and pushes us towards a hard-landing in '25. If, however, inflation doesn't rise, this bolsters the case for "immaculate disinflation", ie the most desirable Goldilocks scenario.

Falling growth scenarios: If both growth and inflation moderate, this would form the classic soft-landing scenario, which is the market consensus and our base case. Should growth succumb more than desirable levels while chasing inflation downward, this would form the hard-landing scenario. There is, theoretically, a third scenario here – one of stagflation where inflation remains sticky despite falling growth. However, we view this as the least likely and therefore do not discuss further in the report.

Our base case for '24 is that the Fed orchestrates a soft-landing by keeping financial conditions tight enough to decelerate the economy gradually. Our economists expect US growth to slow down but remain positive. GDP growth is projected at 1.4% in '24, vs 2.4% in '23. Labor market is expected to remain resilient with unemployment rising to 4.4% from 3.9% today. Headline PCE is forecast to decline from 3.0% YE'23, to 2.6% YE'24. Core inflation is also projected to decline from 3.5% to 2.8%. Our upside case is the Goldilocks scenario, and downside case is a hard-landing, whether reached outright or via economic reacceleration.

If we believe the upside case, then the neutral rate of interest (R*) has increased due to COVID era stimulus and AI led productivity growth, amongst other factors. In this case the economy can remain strong, and financial conditions ultimately ease, despite a higher rates backdrop, because of falling inflation. The downside risk, however, is that R* hasn't increased, so high growth ultimately translates into inflationary pressures, pushing the Fed back into triage territory, and exposing us to a potential '25 recession. In the near term, these two scenarios are difficult to tell apart because they hinge on the trajectory of inflation – a lagging variable. As such any strong growth prints will only lead to weight being taken out of the center of the distribution and into both tail-ends.

> We expect the Fed to orchestrate a soft-landing by keeping financial conditions tight enough to decelerate the economy gradually. A rolling blackout is the least disruptive way for the economy to align to a new rates regime, and non-recessionary conditions have made this possible.

Policy and rates

The Fed is more optimistic than us. They have penciled in declines in headline and core PCE to 2.5% and 2.6% respectively, while affording limited "payback" in wages, employment or GDP. The only way to reconcile this "immaculate disinflation" is if they have reassessed the neutral rate of interest, R*, to be higher. In this case rates could remain higher without leading to incremental financial tightening. We saw this play out in October, when rates jumped on good data, driven by real rates rather than breakevens, indicating inflation expectations are contained even as economic growth remains strong.

However, the rates move was also accompanied by a risk off in equities despite strong earnings expectations at +9% YoY in 2024 (see our report, Don't be so negative on Corporate America). Duration neutral loans also lost 2-4 points. This underscores investors' worry that inflation may return on a lagged basis, which then increases the probability of a hard-landing in '25, even as economic growth remains strong in '24.

While the debate around 2025 has opened up, we have a few known variables. Inflation has retreated and economic impact seems to be contained. The Fed could very well be at the end of its hiking cycle. Markets are pricing the first full cut in June. In fact, all economic scenarios with the exception of reacceleration offer some form of monetary policy easing. We are aligned with this narrative and expect Fed to deliver cuts in '24, but acknowledge the possibility of a downside surprise.

The Fed has repeatedly told us that they need to see consistent and broad-based decline in core and wage inflation to consider rate cuts. Repeated Fed posturing gives us further conviction that they are truly data dependent, and that they will err on the side of overtightening regardless of what financial markets want. This could well turn out to be a policy mistake, but one that they will need to make to save themselves from making an even bigger one in the long run. Even with the current promising dataflow, we think the Fed will be inclined towards cutting the least possible amount in order to maximize the probability of inflation returning to their 2% target. As such we believe that the rates regime has changed and we could be in a "higher for longer" environment.

> We expect rate cuts in '24 but believe the Fed will err towards overtightening to win the inflation fight. As such we are in a higher for longer rates environment.

Markets

Markets are data dependent just like the Fed is, leading to gyrations in consensus and elevated volatility. As long as the economy remains resilient, there will exist a push-pull between reacceleration, recession and Goldilocks. The last 12 months have been littered with precedents of wild swings–consensus has gone from pricing in a soft-landing in 1H'22 to recession in 2H'22 to Goldilocks in summer '23, to recession in fall '23 and what now seems to be a soft-landing yet again, given the recent market rally.

The Oct risk selloff could simply be a story of overheated markets that were pricing in Goldilocks rather than a soft-landing. This aligns with our view that a pullback was a long overdue correction in LevFin rather than a canary in the coalmine. And unless we see signs that inflation is reaccelerating, we think the markets will continue to mean revert towards soft-landing as growth softens gradually.

We share the same sentiment for the recent November rally – it's a result of short-term factors (demand supply imbalance + year-end technicals) that are unlikely to trump the fundamental trajectory. So while we might see tailwinds into year-end taking HY and Loans 25-50bps tighter, we are inclined to fade it in favor of our longer-term outlook.

Markets are data dependent just like the Fed is, leading to consensus gyrations and elevated volatility. As long as the economy remains resilient, there will exist a push-pull between reacceleration, recession and Goldilocks.

A new rates regime for corporates

Higher for longer rates has notable consequences for credit.

- First, we expect to see value transfer from equity to credit across financing structures. A large portion of attractive equity returns post GFC were a result of ramping up leverage via cheap debt. Now an unwind is set to begin as precious cashflows are diverted towards servicing debt liabilities at the cost of equity performance. As such, going forward equity investments will offer less attractive premiums over debt, setting off a compression of returns, and prompting investors to favor debt over equity. We are seeing this across all investment markets with flows transitioning from equities to bonds, HY to IG, Private Equity to Private Debt, and CLO equity to CLO Mezz.

- Second, repercussions will be disparate across credit. Impact to IG issuers will be limited to a haircut on equity returns and is unlikely to snowball into a credit problem. C-suites will be incentivized to rein in discretionary spend, buybacks and other equity-friendly actions in favor of securing balance sheets, cash flows and operations. As such IG credit is expected to remain relatively insulated with good liquidity, stable leverage and ability to absorb rate impact. Impact on LevFin is more pronounced given the preponderance of high debt capital structures, many of which have/will become untenable in a new rates regime. Here, fundamentals will continue to decline as cash drains out of balance sheets amid high leverage and earnings contraction.

- Third, dispersion could play out on a grand scale. S&P 500 is projected to have solid earnings potential in '24, as it directly benefits from higher economic growth. Such will not be the case for small cap earnings which are already projected to dip into negative growth for the same reason that next year will be more challenging for LevFin issuers (see our note, Corrections happen). As such we could well be a situation where S&P/IG strength and LevFin weakness co-exist. This is important to note because broad equity market rallies should not be taken as a sign that fundamental woes for LevFin issuers have alleviated. The surest sign of this will be decreasing leverage and/or increasing real revenue growth amongst LevFin issuers.

- Fourth, arguably more important than the level of terminal rate is the duration for which it stays there. Impact on corporate fundamentals is going to be a result of the cumulative amount of debt costs over quarters. If there is a general belief that high rates are transitory, then sponsors and investors may be more amenable to pushing out maturities and injecting fresh capital to avoid corporate downgrades and defaults. Otherwise, we will see credit losses build up amongst lower quality issuers.

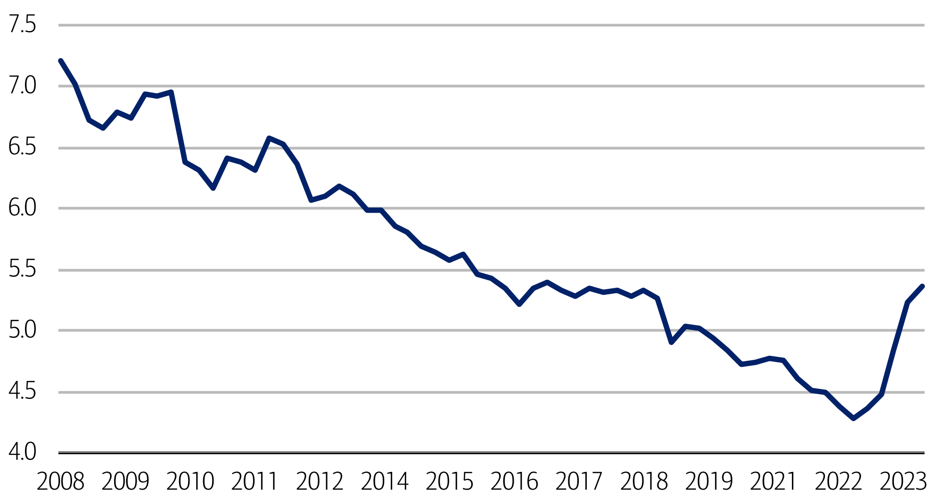
- Fifth, within LevFin, Loan issuers will sustain fundamental impact first given their floating rate nature. However, fixed rate HY bonds will eventually face refinancing risk when they need to access the primary, which in the context of a record buildup in their maturity walls is likely to be 2H '24 at the latest. Below we discuss how the rates impact could flow through credit.

Impact on coverage ratios, defaults and yields

Loans have been the leading indicator of rates impact within credit. To get a sense of how higher for longer will unfold across LevFin, we just have to look at YTD loan performance.

In 2023, loan coupons have increased from 4.5% to 9%, coverage ratios have decreased more than a turn to <3x, 20% of the outstanding loan index has been hit with downgrades, and default rates have increased from 0.5% to 2.1%. At the same time revenues have stagnated and cash reserves have deteriorated. Exhibit 4 shows the steep ascent in effective LTM interest rates for loan issuers, reversing a decade long one-way trajectory. The jump up in interest costs thus far has been driven by the floating rate part of LevFin capital structures which is why gross interest rates for bond-loan issuers remain under the 9% coupons available in the loan market.

Exhibit 4: Effective interest rate for US bond-loan issuers
Effective interest rate for US bond-loan issuers has jumped to 5.4%, the highest since 2015



Source: BofA Global Research, LCD, Bloomberg

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If rates remain in the 4-5% context next year, fixed rate HY coupons that need to be refinanced will also jump to prevailing 9% levels. The HY bond market today is where the loan market was a year ago – at the precipice of interest rate increases, and potential refi/downgrade/default risk that comes associated with it. Over the longer run, aggregate LevFin interest costs could gradually double from today's levels, following the LTM trajectory of leveraged loans.

This will bleed into LevFin fundamentals. Coverage ratios are projected to decline by half a turn next year to 2.3x in leveraged loans, and 4x in HY bonds. Middle market loans (bought by Private Debt platforms) are projected to reach even lower coverage levels, from 3.1x to 2.1x, mainly due to highly levered unitranches. A subset of middle market – FinCo which contains BDCs, are the most vulnerable and could decline from 2x to 1.5x in a high-rate environment.

This fundamental deterioration is expected to lead defaults higher and keep downgrades elevated in 2024 which is reflected in our projections. We expect LevFin defaults (HY, Loans, Private Debt) to range between 3-5%. Middle Market loans are expected to be at the top end of this range given lower pro-forma coverage and aggressive maturities. HY and loan markets should finish at the lower end of the range. That said, default rates are unlikely to top this range due to shrinking debt markets and enough availability of capital to finance good companies across LevFin, which should keep a lid on aggregate credit losses.

IG coverage ratios have also deteriorated this year but remain at high levels (>10x). IG issuers have stable leverage and earnings growth, with cash as pct of total debt touching 17% vs 10% amongst loan issuers. The asset class could outshine fundamentally as management tries to shore up liquidity by cutting discretionary spend.

Exhibit 5 shows a snapshot of risk vs reward across the US corporate debt market: IG bonds, HY bonds, Bank (bilateral loans), Institutional (broadly syndicated loans), Middle Market (private debt) and FinCos (BDCs: subset of Middle Market)

Exhibit 5: Risk vs reward snapshot across corporate debt
Yields highest in middle market, but projected coverage lowest

	IG	HY	Bank Loan	Inst'l Loan	FinCos	Middle Market
Size ($bn)	8,629	1,345	2,936	1,718	611	1,046
Yield	6.1%	8.8%	7.4%	10.3%	12.5%	12.0%
LTM Par Default	0.0%	2.6%	0.7%	2.1%	2.4%	1.4%
Current Coverage	10.7	4.5		2.7	2.0	3.1
Projected Coverage	11.4	4.0		2.3	1.5	2.1

Source: BofA Global Research, LPC, Proskauer, LCD, FDIC, ICE

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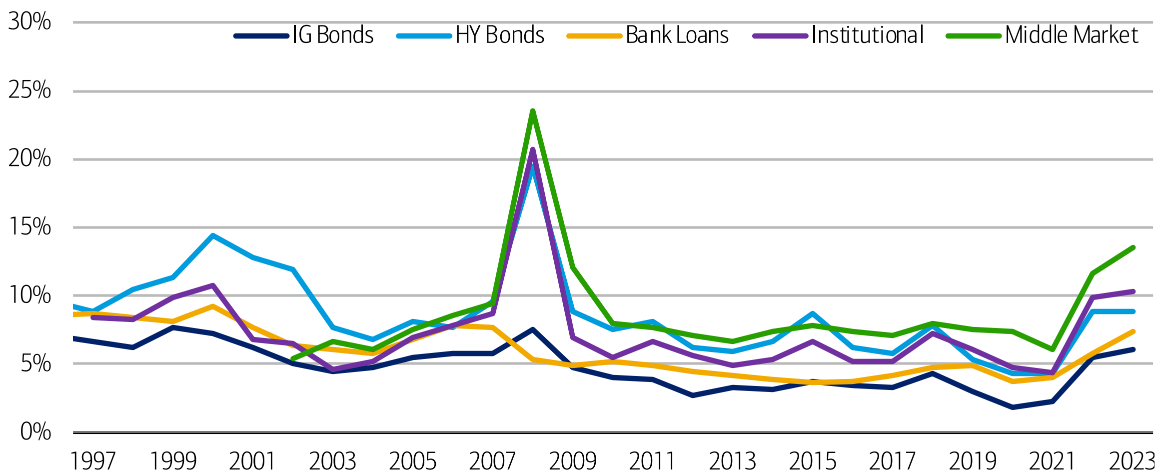
Yields have risen across the board (Exhibit 6) to mitigate the incremental fundamental risk described above. However, the deterioration is expected to varying degrees as seen by the current vs projected coverage ratios for each asset class.

Exhibit 6: Yields across loan asset classes vs IG & HY corps
Yields have risen across the board



Source: BofA Global Research, Bloomberg, LCD, CapIQ

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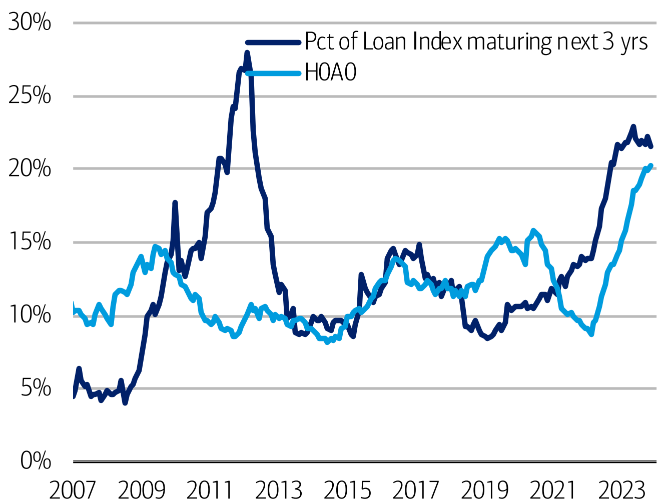
Maturities building up in select LevFin pockets

Despite challenges, loan issuers have been able to push maturities by tapping various sources of demand. While there were concerns around the $50bn capital gap left by CLOs exiting RP earlier in the year, issuers have been able to attract outside pools of capital – HY bond as well as Pvt Debt investors to refinance their outstanding loans. YTD 32% of refinanced loans have found such non-traditional investors.

Even so, maturity walls are far from pristine. Within US loans, 10% and 22% of maturities are due next 2 and 3 years, higher vs a year ago. The figures stand at 7% and 20% for US HY, representing all-time records. Within EU, 8% and 26% of the loan index is maturing next 2 and 3 years, while in HY, these figures also stand at historical records, with 17% of maturities due in 2 years and 43% due in 3 years (Exhibit 7 and Exhibit 8).

Exhibit 7: Percentage of US loan and HY indices due over next 3yrs
Maturity walls remain a concern in LevFin universe



Source: BofA Global Research, Markit, ICE

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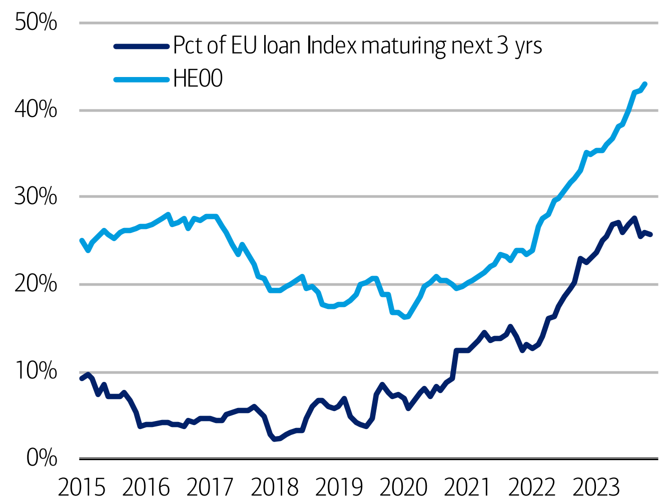
Exhibit 8: Percentage of EU loan and HY indices due over next 3yrs
Percentage of EU HY index maturing in 3yrs is at historical high



Source: BofA Global Research, LCD, ICE

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For the HY market, both in US and EU, maturities have never been at more aggressive levels before, not even during the GFC. This has come as a result of fixed-rate issuers trying to "wait out" the spike in rates, believing that cuts will come soon, which never happened. As such we are approaching a point where obtaining financing will transition from being optional to becoming necessary for some. Issuers will have to stop timing the market. Another market with comparatively aggressive maturities is the middle market, which we discuss in the Private Debt section.

To us these maturity walls are a precursor of two things: increasing supply pressures especially in HY bonds and middle market, along with increasing default pressures for those issuers that are unable to secure financing in the public or private markets. All things equal this should lead to marginally weaker technicals in 2024 compared to the extremely strong conditions this year. Add to that the fundamental deterioration that may materialize if earnings don't resuscitate, and we can see that the path of downgrades, defaults, spreads and issuance is higher in 2024.

Risk premia to increase in 2024

Out of the 4 economic scenarios described earlier, only 1 encourages incremental risk taking – Goldilocks. All other scenarios either challenge issuer earnings or keep debt costs high, or both. Either way, we see a high probability of negative impact to LevFin issuer cashflows next year. Given increased market volatility and LevFin defaults, we think credit risk premia will increase marginally in 2024. Investors will respond by moving up the capital structure and quality curve, remaining conservative and cash rich. Dispersion and distress will increase, value will trump growth.

The only way to change this narrative for the better is if we see widespread evidence of either 1) improving real earnings or 2) capital injections to support issuer deleveraging. We don't anticipate the former amongst LevFin issuers. We are seeing the latter play out in the sponsored universe, but it is not widespread enough to diminish projected credit losses for next year.

The silver lining is that the pace of coupon increases for fixed rate instruments and thus associated downgrade/default risk will be measured, given that only 15% of the HY market refinances annually. Additionally, between decent cash balances and large amounts of private dry powder, capital availability for the "right" corporates is plentiful, and sponsors have demonstrated willingness to put higher equity capital to delever their deals. Finally, high coupons have generated an enviable source of demand for the loan market – YTD coupon income has totaled $100bn, surpassing demand from new CLO issuance. These factors are expected to keep technicals supportive and spreads in check.

> The new rates regime will encourage value transfer from equity to debt. Dispersion across corporates will increase-Loans have taken the first impact, HY will follow, and IG will remain insulated due to strong fundamentals. Expect LevFin coverage ratios to decline, reaching 2.3x in loans, 2.1x in private credit and 4x in HY bonds. Loan maturity walls are still a concern, and HY walls are at record levels, driving both issuance and defaults higher. We expect LevFin defaults to finish in the 3-5% range.

US Loans

In the US we expect corporate fundamentals to deteriorate as the economy slows, disproportionately impacting lower quality credits. This is despite pricing in 3 cuts to push rates to 4.5%, because for coverage ratios to noticeably improve, the key rate threshold to be reached is 3%, which is unlikely to transpire next year.

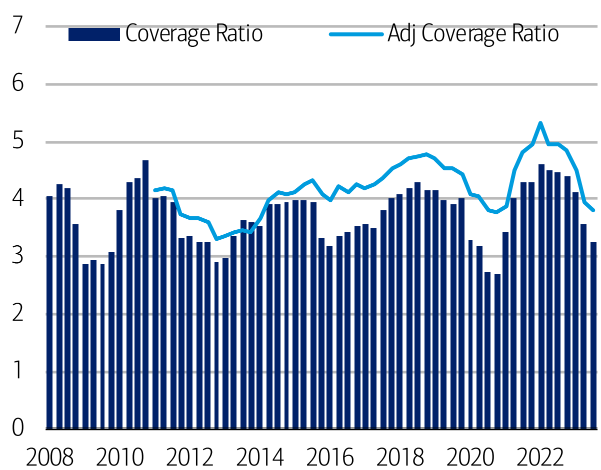
Defaults are projected to increase to 3.5%, though downgrades slow to 10%. In tandem, loan spreads and credit losses are likely to post incremental increases. The high carry of the loan index should help deliver 7% returns in 2024 but with dispersion underneath. We expect BBs to outperform on account of a solid current yields, and benign credit risk. On the contrary, CCCs are expected to bear the brunt of the capital and credit losses. In the context of shrinking debt markets, technicals are expected to remain reasonably strong in 1H, even as supply increases and net demand retreats from record levels.

Fundamentals

Cash and coverage erosion continues

Coverage ratio for public issuers has continued to decline over the last year dropping to 3.3x in Q3 on a gross basis and 3.8x on an adjusted basis (Exhibit 9). This sample of issuers tends to be dominated by BBs, and our market level coverage estimate is 2.7x. Headline revenues are hovering at 4%, which netted for inflation leaves real revenue growth near zero. As a result, balance sheet cash has been eroding post the COVID-era boom. Short-term debt remains high on account of approaching loan and bond maturities. Exhibit 10 shows that cash as a proportion of short-term debt has posted large declines, underscoring the limited cash runway issuers have left in the context of high rates and no earnings growth.

Exhibit 9: Evolution of coverage ratio for Loan issuers
Coverage has dropped from the 3.6x level in Q2 to 3.3x in Q3



Source: BofA Global Research, LCD, Bloomberg

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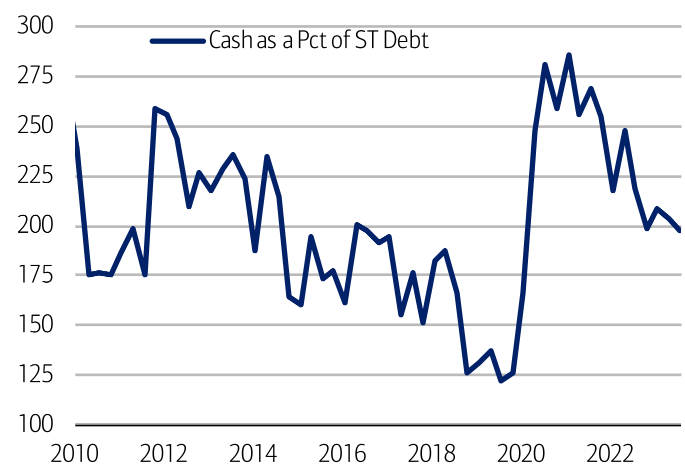
Exhibit 10: Cash as % of short-term debt amongst loan issuers
Cash as a proportion of short-term debt has posted large declines



Source: BofA Global Research, LCD, Bloomberg

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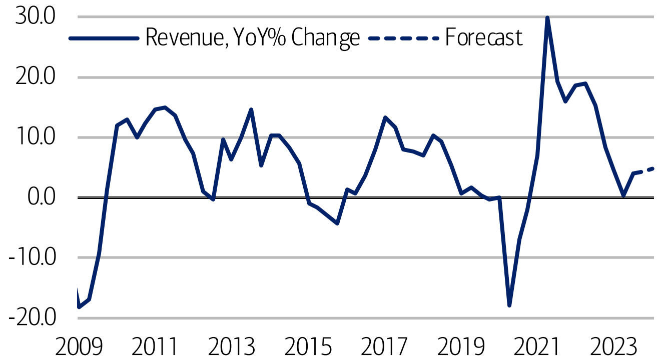
Revenue growth still positive

Revenues and Ebitdas are still posting growth. For Q3, they came in at 4% and 5% respectively vs our projections of 5.3% and 2%. As-reported (unadjusted) Ebitda grew at 2%. Based on factors such as expected trajectory of PMI and small cap earnings, we expect Ebitda growth to turn negative in Q4 (Exhibit 12). However, that is driven in a large part by small cap earnings expectations – should they beat consensus like they did in Q3, there could be upside to our Ebitda projection. As for revenues, we expect growth to remain in the 5% context in Q4 (Exhibit 11).

Revenue beats are decreasing every quarter and Q3 was no exception. Ebitda beats marginally improved as cost pressures declined. However, future outlook remains mixed and dispersion is heavy amongst issuers.

Exhibit 11: YoY Revenue growth for Loan issuers
Nominal revenue growth has improved to 4% in Q3, real growth is flat



Source: BofA Global Research, Bloomberg, LCD

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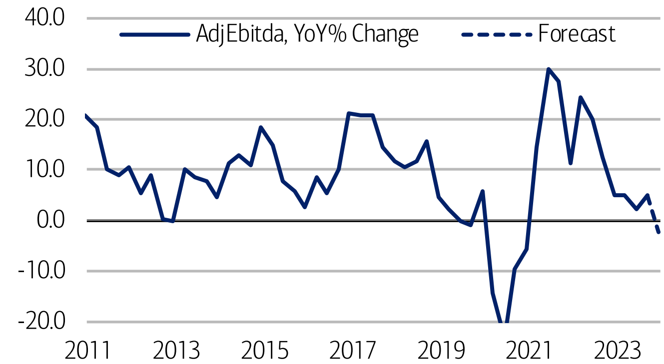
Exhibit 12: YoY % Adjusted Ebitda growth for Loan issuers
Ebitda growth projected to deteriorate



Source: BofA Global Research, Bloomberg, LCD

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Projected coverage ratios by macroeconomic scenario

The primary pain point for LevFin issuers is liquidity and ability to meet debt service. To assess their fundamental health going forward, we have stress tested coverage ratios (Ebitda and cashflow coverage[1]) under all reasonable rate and earnings scenarios. This spans Fed Funds rate from 1% to 6% and Ebitda growth from -10% to +10%. We also tested margin increases from 25-75bps, but it shows low sensitivity, so we omit showing it here for the sake of brevity, and assume a flat increase of 50bps.

The outcome is heavily dispersed by ratings. For Ebitda coverage (Exhibit 13) BBs maintain healthy ratios – above 3x under all scenarios. B1s dip <3x if either rates stay at current 5% levels or earnings contract. B2s dip into questionable territory (<2.5x) with rates above 3%. An average B3 today is already a downgrade candidate (<1.5x) and will likely stay that way if rates stay above 3%, unless they generate earnings growth.

Exhibit 13: Ebitda coverage under different scenarios of FF rates, Ebitda growth and margin increase
Key rate threshold for coverage ratios to improve noticeably is 3%, which is unlikely to be reached in 2024

			Ebitda coverage						
FF rate	**Ebitda chg**	**Margin chg**	**BB1**	**BB2**	**BB3**	**B1**	**B2**	**B3**	**CCC**
Actual median coverage as of Q3			5.8	4.6	3.9	2.8	2.3	1.5	0.2
3.0%	-10%	0.50%	5.7	4.3	3.8	2.9	2.4	1.5	0.1
3.0%	-5%	0.50%	6.0	4.6	4.0	3.1	2.6	1.6	0.2
3.0%	0%	0.50%	6.4	4.8	4.2	3.3	2.7	1.7	0.2
3.0%	5%	0.50%	6.7	5.0	4.4	3.4	2.8	1.8	0.3
3.0%	10%	0.50%	7.0	5.3	4.6	3.6	3.0	1.9	0.3
4.0%	-10%	0.50%	5.3	4.2	3.6	2.7	2.2	1.4	0.1
4.0%	-5%	0.50%	5.6	4.4	3.8	2.8	2.3	1.5	0.2
4.0%	0%	0.50%	5.9	4.6	4.0	3.0	2.4	1.5	0.2
4.0%	5%	0.50%	6.2	4.9	4.2	3.1	2.5	1.6	0.3
4.0%	10%	0.50%	6.5	5.1	4.4	3.3	2.6	1.7	0.4
5.0%	-10%	0.50%	4.9	4.0	3.4	2.4	2.0	1.3	0.1
5.0%	-5%	0.50%	5.2	4.3	3.6	2.6	2.1	1.4	0.2
5.0%	0%	0.50%	5.5	4.5	3.8	2.7	2.2	1.4	0.3
5.0%	5%	0.50%	5.8	4.7	4.0	2.8	2.3	1.5	0.3
5.0%	10%	0.50%	6.0	4.9	4.2	3.0	2.4	1.6	0.4

Source: BofA Global Research, Bloomberg, LCD

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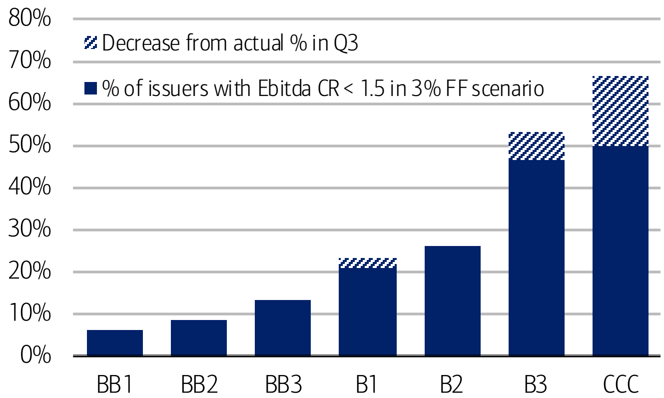
The 3% rate threshold happens to be a crucial one when it comes to downgrade risk. Consider the incremental change in pct of issuers that fall <1.5x coverage, a key threshold when it comes to CCC downgrades. If rates move down to 4%, we see only a 7% decrease of such low-coverage issuers in B3 bucket (Exhibit 15). However, when rates fall to 3% (Exhibit 14), 17% of CCC issuers fall out and likely become upgrade candidates, along with some B3 issuers as well.

[1] Ebitda coverage is defined as LTM Ebitda divided by LTM interest expense; cashflow coverage is defined as LTM free cash flow (before interest expense) divided by LTM interest expense

Exhibit 14: Pct of issuers with Ebitda CR < 1.5x in 3% FF scenario
17% of CCC issuers fall out and likely become upgrade candidates



Source: BofA Global Research, LCD, Bloomberg

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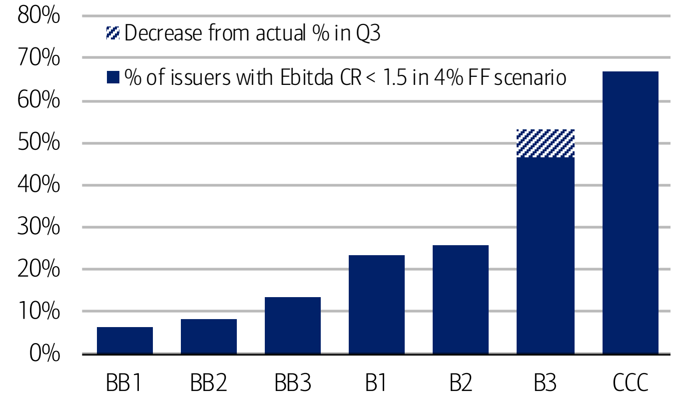
Exhibit 15: Pct of issuers with Ebitda CR < 1.5x in 4% FF scenario
7% of B3 issuers fall below 1.5x CR threshold



Source: BofA Global Research, LCD, Bloomberg

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CCCs have very poor coverage and will continue to drive defaults higher. Exhibit 16 shows cashflow coverage by rating bucket. CCC levels are firmly <1x in all combinations, ie they are unlikely to meet debt service with their current annual free cash flow. They can alleviate pressure by adding back capex budgets, but even so, in our base case of 4% rates, they can meet debt payments only if they generate earnings growth. The only scenario where earnings don't matter is if rates are cut to 2% or lower, a very unlikely scenario in our opinion. As such restructuring pressures are unlikely to be alleviated solely as a result of rate cuts, but will need other complementing factors such as investors willing to inject equity to tide CCCs over. Unfortunately, both these triggers – rates decreasing to 2-3%, or earnings growth turning positive, are unlikely to be met near term, which means even in our central scenario of rates falling to 4.5%, downgrade and default pressures will remain intact.

Exhibit 16: Cashflow coverage under different scenarios of FF rates, Ebitda growth and margin increase
For CCCs to get away with negative earnings growth, rates need to be <=2%, a very unlikely scenario next year

			Cashflow coverage (net Capex)							Cashflow coverage (adding Capex)						
FF rate	**Ebitda chg**	**Margin chg**	**BB1**	**BB2**	**BB3**	**B1**	**B2**	**B3**	**CCC**	**BB1**	**BB2**	**BB3**	**B1**	**B2**	**B3**	**CCC**
Actual median coverage as of Q3			3.2	3.0	2.9	2.1	1.9	1.7	0.4	5.0	4.4	3.8	2.7	2.7	2.0	0.8
3.0%	-10%	0.50%	3.1	2.9	2.7	2.1	2.0	1.6	0.3	4.7	4.3	4.0	2.9	2.9	2.0	0.7
3.0%	-5%	0.50%	3.4	3.1	3.0	2.2	2.1	1.7	0.4	5.0	4.5	4.2	3.0	3.0	2.2	0.8
3.0%	0%	0.50%	3.6	3.4	3.3	2.4	2.2	1.8	0.5	5.3	4.8	4.4	3.2	3.2	2.3	0.9
3.0%	5%	0.50%	3.9	3.6	3.6	2.6	2.3	1.9	0.6	5.6	5.0	4.6	3.4	3.4	2.4	1.0
3.0%	10%	0.50%	4.2	3.8	3.8	2.8	2.4	2.1	0.6	5.9	5.2	4.7	3.7	3.6	2.5	1.1
4.0%	-10%	0.50%	2.8	2.7	2.4	1.8	1.8	1.5	0.3	4.4	3.9	3.6	2.6	2.5	1.9	0.6
4.0%	-5%	0.50%	3.0	2.9	2.7	2.1	1.9	1.6	0.3	4.7	4.2	3.8	2.8	2.7	2.0	0.7
4.0%	0%	0.50%	3.3	3.1	3.0	2.2	2.0	1.7	0.4	5.0	4.4	4.0	2.9	2.8	2.2	0.8
4.0%	5%	0.50%	3.6	3.4	3.3	2.4	2.1	1.8	0.5	5.3	4.6	4.2	3.1	2.9	2.3	0.9
4.0%	10%	0.50%	3.8	3.6	3.5	2.5	2.2	1.9	0.6	5.6	4.8	4.3	3.3	3.1	2.4	1.0
5.0%	-10%	0.50%	2.5	2.5	2.2	1.7	1.5	1.4	0.2	4.0	3.8	3.3	2.5	2.3	1.7	0.6
5.0%	-5%	0.50%	2.8	2.7	2.5	1.8	1.7	1.5	0.3	4.4	4.0	3.4	2.6	2.4	1.8	0.7
5.0%	0%	0.50%	3.0	2.9	2.8	2.0	1.8	1.6	0.4	4.7	4.2	3.6	2.6	2.5	1.9	0.8
5.0%	5%	0.50%	3.2	3.1	3.0	2.1	1.9	1.7	0.5	5.0	4.4	3.8	2.8	2.6	2.0	0.8
5.0%	10%	0.50%	3.5	3.3	3.2	2.3	2.0	1.8	0.6	5.3	4.7	3.9	3.0	2.7	2.1	0.9

Source: BofA Global Research, Bloomberg, LCD

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Earnings, cash and coverage remain under pressure. For fundamentals to noticeably improve, either rates need to fall to 3%, or real earnings need to grow. Both these triggers are unlikely to be met next year, which means downgrade and default pressures will remain intact.

Defaults, Downgrades and Recoveries

Given the pressure on fundamentals, downgrades and defaults have increased this year. The 12M downgrade/upgrade ratio hit 1.8x in May, the highest since COVID, before receding to 1.5x levels. Rolling 12m default rate by par has increased meaningfully from sub 50bps lows to 2.1% today, matching pre-Covid levels. Lower quality issuers have contributed disproportionately to this increase given their sensitivity to earnings and interest costs as seen in the coverage scenarios above.

Exhibit 17: LTM default rates by par
Rolling 12m default rate by par has increased to 2.1% today

Source: BofA Global Research, LCD

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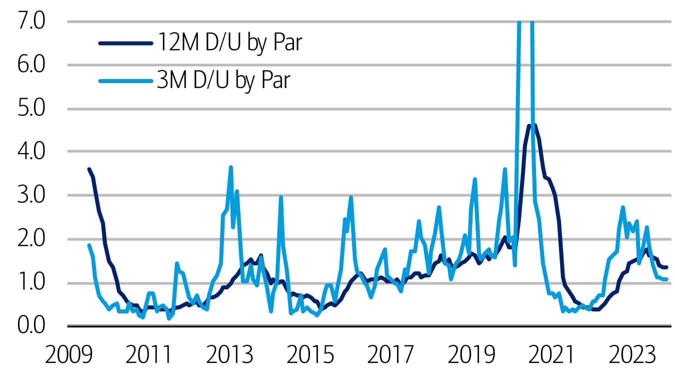
Exhibit 18: Downgrade/Upgrade ratio
Downgrades have risen sharply, but are off their peaks



Source: BofA Global Research, LCD

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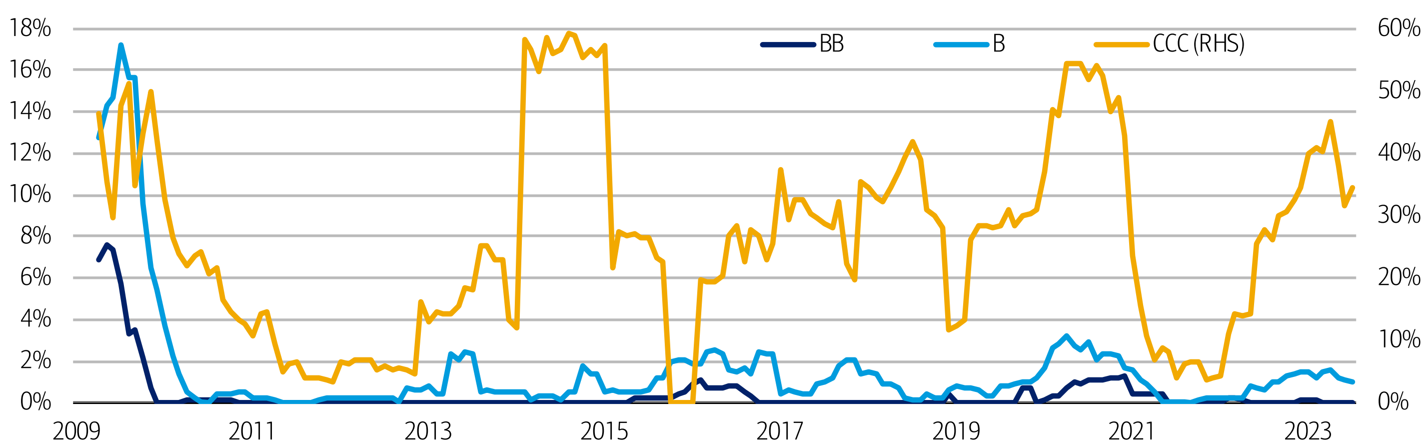
Factors driving default risk

Macroeconomic factors are clearly important and dictate where we are in credit cycle. From a bottom-up perspective, rating and remaining life have a direct relationship to default probability. Ratings are self-explanatory: as fundamentals deteriorate issuers get downgraded, and the burden of defaults is carried by CCCs (Exhibit 19). During pullbacks, CCCs default in 30%-50% context, Bs are rarely >2% and BB defaults are negligible.

Exhibit 19: LTM par default rate by ratings
CCCs bear the burden of defaults



Source: BofA Global Research, LCD

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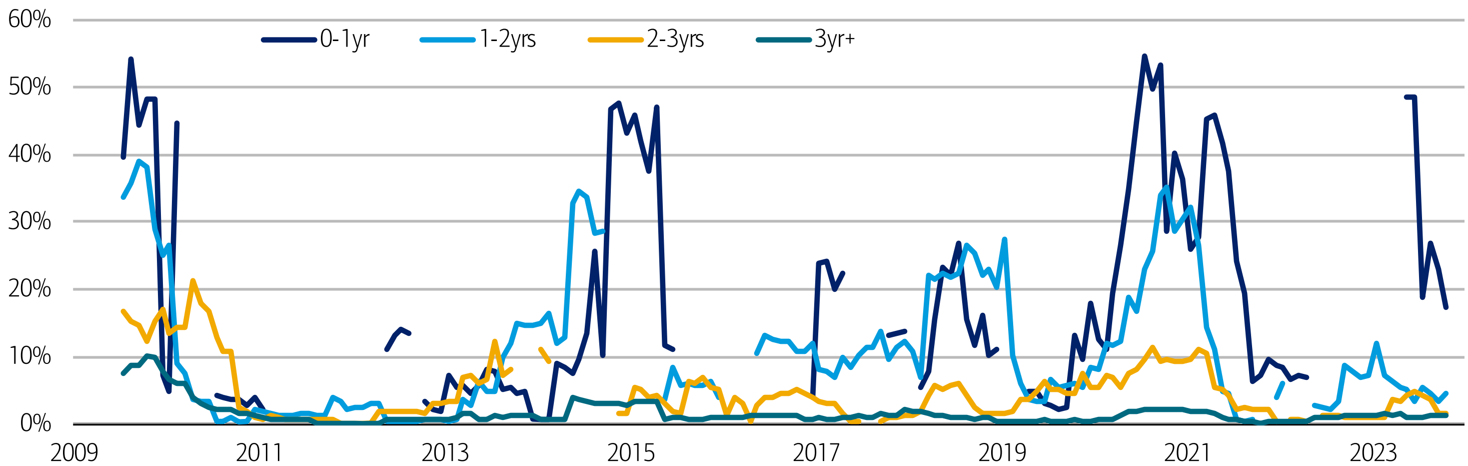
In terms of life remaining, the nearer the maturity, the more likely it is that the inability to extend is being dictated by the market and not the issuer. We see this coming through in Exhibit 20 where the incidence of defaults is the highest amongst loans maturing within 1 year (30-50%), and decreases amongst longer maturities. Default rate of loans with 1-2yrs remaining peaks between 20%-30%, loans with 2-3yrs remaining default ~5% of the time, and defaults amongst loans with 3+ yrs remaining is negligible.

Exhibit 20: LTM par default rates by maturity
Default rates in short dated loans increase meaningfully in periods of stress



Source: BofA Global Research, LCD

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US loan defaults to reach 3.5%

In our opinion, higher for longer rates will make unviable the capital structures built primarily on their ability to borrow at low cost. This is expected to transpire as increasing debt costs and stagnant earnings impact cashflows of low-quality issuers, resulting in greater pressures around cashflows, downgrades and defaults.

In our base case of a soft-landing scenario, the default trajectory will look less like a cycle, but more like a reset higher of baseline attrition. In this situation we expect default rates to stay in the 3-5% context per annum until front end rates remain high. In projecting defaults, we combine information from our top-down macro models as well as bottom-up analysis discussed below. Based on macro-level factors such as expectations of risk premium, GDP and employment in 2024, the NTM par default rate forecast comes to 3.5% within US loans. To complement this output, we also draw information from issuer/loan level metrics such as ratings and maturities.

The simplest way to assess fundamental default risk is by looking at ratings composition of a market (Exhibit 21). Given the strength of high quality issuers in the backdrop of a soft-landing, we assume very low default pressures in BBs. For Bs and CCCs, we assume that defaults will be higher than where they are today, but lower than peaks reached over the last year when recession as increasingly being factored in Exhibit 19. Taking into account the current weights of index ratings, the overall default estimate comes to 3.6%.

Exhibit 21: Index weighted par defaults by rating
We assume moderate default pressures in next cycle

Rating	Est DR	Ind Wt	Weighted DR
BBB	0.0%	6%	0.0%
BB	0.2%	22%	0.0%
B	1.3%	61%	0.8%
CCC	35%	8%	2.8%
NR	1.5%	2%	0.0%
DR projection			**3.6%**

Source: BofA Global Research, LCD

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Exhibit 22: Index weighted par defaults by time to maturity
Short term loans could experience higher defaults than long term loans

Life	Est DR	Ind Wt	Weighted DR
0-1yrs	50%	1%	0.5%
1-2yrs	15%	7%	1.1%
2-3yrs	2.5%	12%	0.3%
3+ yrs	1.5%	80%	1.2%
DR projection			**3.1%**

Source: BofA Global Research, LCD

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We do the same assessment based on prevailing distribution of maturities (Exhibit 22). The current default cycle is being driven less by excesses in any particular sector, but more by balance sheet liquidity squeezed by increasing operating and financing costs in the context of the inability to push prices to consumers anymore. As such, we think loans due in the next 2 years could default in line with non-recessionary peaks in default rates.

Whereas, loans due 2+ years, may see marginally higher defaults vs today but lower than LTM peaks. Doing this gets us to an estimate of 3.1% for '24. Combining all three, we project loan par default rate for 3.5% next year. Issuer default rate could wind up +50-100bps as smaller issuers have a higher propensity to default.

Downgrades 10% of index, upgrades 5%, CCCs to reach 12%

In 2024, we expect both downgrades and upgrades to slow down marginally from the current brisk pace. In a high rate environment, we expect inter-rating bucket downgrades (for ex BBs to Bs) to impact 10% of the index totaling $135bn. Including intra-rating bucket migrations as well (for ex B+ to B-), downgrades will be higher at $225bn, representing 16% of the index. These forecasts are comparatively more benign vs realized LTM levels where 19% of the index has sustained downgrades. Actual downgrades are likely even higher than 19% given the survival bias of the index (CCC and defaulted issuers exiting the index after sustaining downgrades). For the same reason, realized downgrades might wind up few pct pts lower than projections.

Of the total downgrades, a lion's share – $90bn are poised to enter CCCs. Accounting for upgrades and defaults which will leave the CCC bucket, net migration comes to $57bn representing a 50% impact to the CCC bucket and pushing CCC share of loan index to 12% from the current 8% in a soft-landing scenario. We forecast loan upgrades to be 5% ($70bn) and 12% ($177bn) of the index based on inter and intra-rating bucket migrations respectively. The upgrades are also comparatively lower than last year levels which have reached 13% on an LTM basis. As such, while rating migrations may slow down both in terms of downgrades and upgrades, it is likely to come at a cost of an increase in defaults next year.

Exhibit 23 shows the detailed migration projections in and out of each rating bucket, and the resulting impact on the index. We also show a hard-landing scenario should that [play out. Here the downgrades could reach $200-$300bn, with CCCs nearly doubling their current size. Defaults in this scenario could cross 5%.

Exhibit 23: Net migration forecasts by rating over various economic scenarios ($bns)
CCC share of loan index to increase from 8% to 12% in a soft-landing scenario

Scenario	Rating	Curr Size ($bn)	Current Index %	D/G To	D/G From	Defaults From	U/G From	U/G To	Net Migration	Impact	New Index %
Soft-Landing	BB	304	22%	9	38	2	14	35	(11)	-4%	21%
	B	856	61%	36	86	30	37	16	(101)	-12%	54%
	CCC	112	8%	90	-	17	16	-	57	51%	12%
Hard-Landing	BB	304	22%	10	47	2	11	31	(20)	-6%	20%
	B	856	61%	41	136	35	32	13	(150)	-18%	50%
	CCC	112	8%	144	-	18	14	-	112	100%	16%

Source: BofA Global Research, Moody's

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If the Fed cuts next year as is currently priced in the rate markets, this will provide some relief to default and downgrade pressures at the lower end of the quality spectrum. However, it will also impact total returns as coupon income from higher quality issuers decreases.

Recoveries

The most surprising aspect of YTD defaults has been the very low number of recoveries. LTM recoveries calculated based on 30-day post-default trading prices are at $48, below our base case of $55 (Exhibit 24), with YTD recoveries even lower. Below we look at recovery distribution across bond-loan and loan-only issuers as well as sponsors and non-sponsors to identify the drivers of low recoveries.

Exhibit 24: LTM recovery as calculated by 30-day post default prices
Recoveries are converging to our base case of $55

Source: BofA Global Research, IHS Markit

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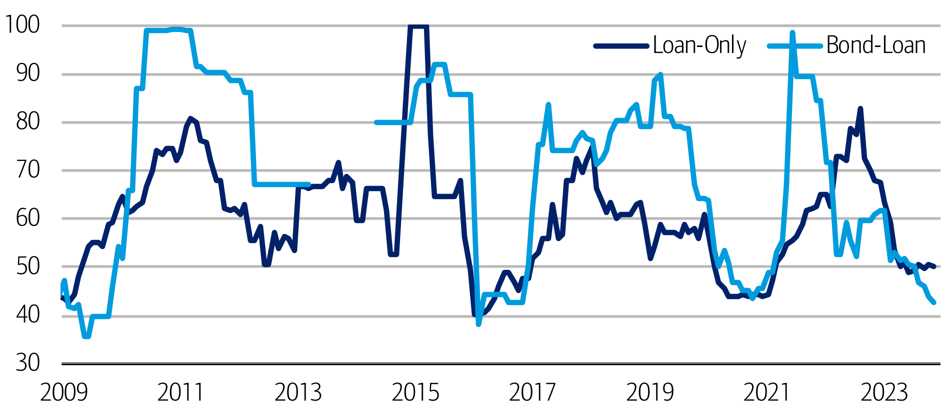
Loan-only vs bond-loan issuers

Loan-only issuers have lesser subordination for their loans, bringing to question just how "secured" the loan really is. Historically median loan recoveries for bond-loan issuers have been 10pts higher than loan-only issuers at $70 and $60 respectively, mainly because the peaks for large capital structures are higher than peaks of smaller issuers (Exhibit 25). However, recoveries bottom out for both sets of issuers at about the same level – $40 at cycle troughs. In fact, recoveries for loan-only and bond-loan issuers have diverged since midyear 2023 – with bond-loan issuer recoveries fallen below $43 recently, lower than loan-only issuers which now hovers around the $50 level.

Exhibit 25: LTM recovery by capital structure
Bond-loan structures have recovered lower than loan-only structures this year



Source: BofA Global Research, IHS Markit

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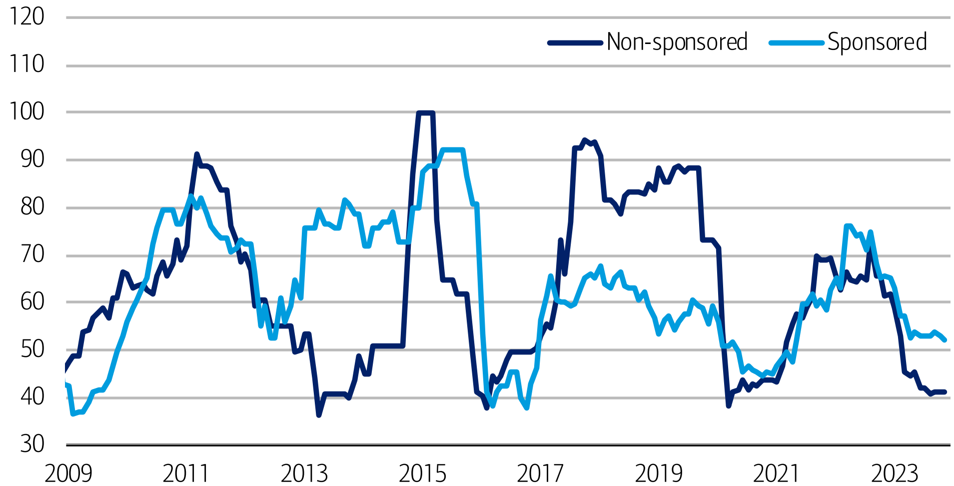
While smaller loan-only capital structures (particularly 1L only) pose a material subordination issue, this argument has to be balanced with increasing amount of equity capital on loan deals. Average contribution today is at 45% vs 35% a decade ago, mitigating the loss of subordination arising from lack of 2L or bond debt on loan issuer capital structures. This likely explains why the troughs for loan-only issuers have not been much lower than bond-loan issuers.

Sponsors vs non-sponsors

Looking from this point of view paints an interesting picture. The recent collapse in recoveries is being driven by non-sponsored defaults, rather than sponsor-related ones. Non-sponsored corporate defaults have generated extremely poor, recessionary-level recoveries YTD, with current LTM recoveries near cycle lows at $40 (Exhibit 26). Comparatively, recoveries for defaults involving private equity investors are at $52, more commensurate with where we are in the broader credit cycle.

Exhibit 26: LTM recovery based on sponsor participation

Non-sponsored loans have recovered lower than sponsored loans this year



Source: BofA Global Research, IHS Markit

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Analyzing the very low number of non-sponsored recoveries, we find two patterns. About half of these issuers had loans trading at distressed levels a year before default, indicating these were known problematic issuers turned zombies for an unfavorably long time, losing value and eroding assets that should have been recovered by lenders had defaults or DEs materialized sooner. The other half of the sample saw swift precipitous declines from near par, leading to $70-$90pt declines.

In comparison, sponsored loans had a similar proportion of zombies trading distressed for >1yr. However, the other half of the sample which was non-distressed a year earlier saw $40-$50pt declines. This is wherein the divergence lies – the "surprise" defaults in the sponsored cohort did a lot better than the non-sponsored cohort.

The first issue of zombie issuers is a classic by-product of loose covenants, which allows problematic issuers to remain operational due to limited ability of lenders to force a default. In some cases this buys issuers important time to engineer a turn-around. But in a lot of other situations, is just kicks the can further down the road, leaking out any remaining value to recover by the time the eventuality strikes. As such, loose docs not only suppress defaults but also recoveries. This is an overarching issue with both non-sponsored and sponsored loans.

The second issue of "surprise" defaults seems to paint a picture where smaller issuers with sub $500mn loans are better off having a private sponsor backing rather than relying on public equity and debt markets in times of need to inject liquidity and support asset valuations in fluid situations.

As sponsor-preferred distressed exchanges become more prevalent, recoveries should continue to converge towards our 55% forecast.

We project par default rates to reach 3.5% in 2024, downgrades to hit 10% of the index while 5% upgrades provide some offset. CCCs could reach 12% of the index. Recoveries, though low initially, should continue converging towards our 55% forecast.

Spreads and Returns

We expect spreads to rise 40bps next year. Credit losses are expected to increase as defaults build. However, coupons are large enough to compensate on an index level, delivering lower than 2023, but still attractive returns of 7% in 2024.

Spreads to leak wider

We expect loan 3yrDMs to leak marginally wider next year. This will be mainly a function of higher credit loss (CL) as liquidity premium (LP) is already higher than median levels. We arrive at fair value spread targets by calculating LP and CL under each scenario and adding them up. In our base case of a soft-landing, we expect CL to rise to 109bps and LP to stay at the current 490bps, pushing loan 3yrDM to 600bps, an increase of 40bps from current levels. We also lay out the case for hard-landing in Exhibit 27.

Exhibit 27: Breakdown of fair-value spread into LP and CL components, by economic scenario
We expect loan spreads to reach 600bps next year in the soft-landing scenario

	YE 2024		Current
	Soft-landing	Hard-Landing	
Liquidity Premium	**490**	**540**	**490**
Default Rate	3.5%	4.5%	2.1%
Recovery Rate	55	50	55
Starting Price	80	80	80
Credit Loss	109	169	65
3yrDM Target	**599**	**709**	**555**
Price Target	**94.5**	**92.0**	**95.5**

Source: BofA Global Research, LCD, Moody's
Valuations as of early November 2023

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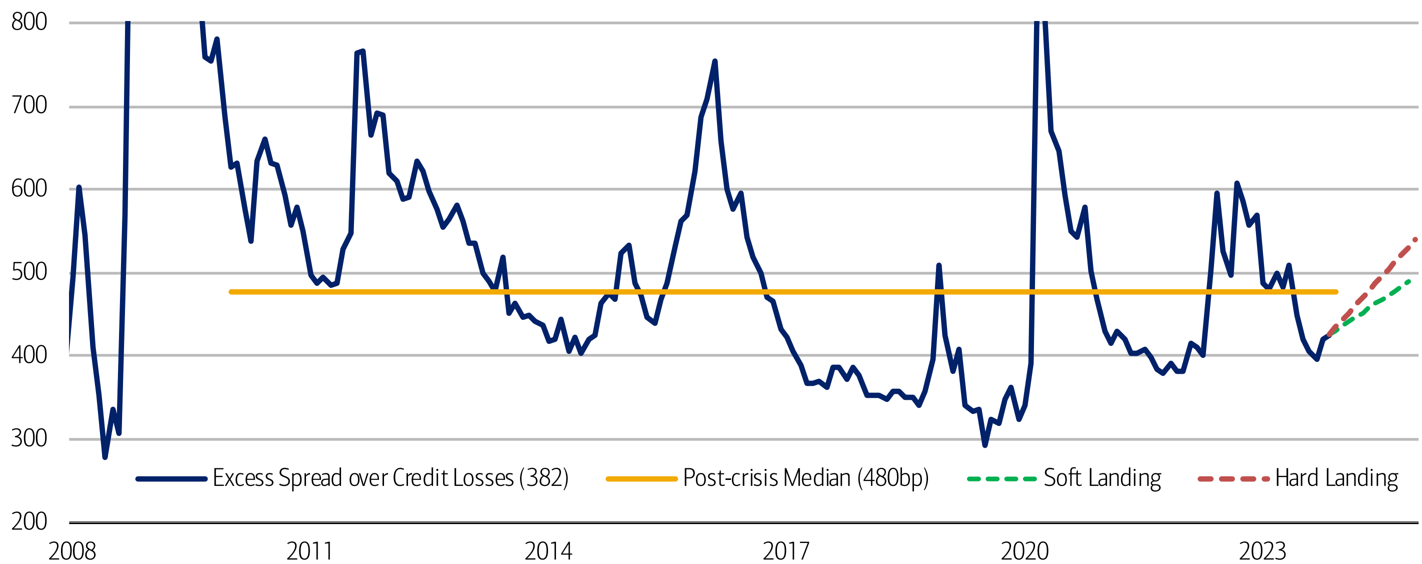
For 2024, plugging in a default rate of 3.5% and a recovery of 55, we get a CL of 109bps, assuming an investor buys the market today at $80. This is a 40bps increase over where credit losses are today. LP today stands at 490bps, 15bps above its long-term median. Given our expectation of economy moderating, we think this is an appropriate level of compensation, being higher than median, but below late 2022 peaks when a recession was being priced in. Putting the two, CL and LP expectations together we arrive at a fair value index spread of 600bps in 2024, (Exhibit 27) which translates to a price target of $94.5 on the index.

Exhibit 28: Loan market excess spread over credit losses, ie Liquidity Premium (LP)
LPs have reached 750bps in deeper pullbacks such as those that occurred in 2012 and 2016



Source: BofA Global Research, LCD, Moody's

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We also sketch out a hard-landing scenario should one play out. In this case LPs could rise to 540bps – levels seen late last year when base economic case as fast transitioning to a recession. Credit losses will also be higher in this scenario – to the tune of 170bps as default rates jump to 4.5%. Combined together, this translates to fair value 3yrDM of 700bps.

Loans to generate 7% total return in 2024

Below we put together our spread targets and default forecasts to calculate return scenarios for loans in 2024. Our base case calls for loans to return 7.2% (Exhibit 29). Main factors driving this performance profile are:

a) Current income of 9.5% (average of today 9.7% and NTM expectation of 9.4%), marginally lower than this year, on the back of expected lower front-end rates.

b) Capital loss of 1.2% due to spreads leaking higher.

c) Credit loss of 1.1% as discussed earlier.

This is lower than the sizable returns loans have generated in 2023 (9.7% YTD, 11% by year-end), reflecting that the best for the asset class is behind us. In a hard-landing scenario, returns get hit significantly on the back of lower current income (7.4%) along with high capital and credit losses (3.9% and 1.7% respectively). However, even under recessionary conditions, loans offer positive returns at 2.3%.

Another way to think about the attractiveness of investing in loans next year is through the concept of breakevens in the below table. The math here suggests that spreads will have to rise to 820bps (or prices fall to $89), and default rates rise to 5% levels, for an investor to wipe out their entire annual coupon income earned.

Exhibit 29: US Loan Total Return forecasts by scenario
In our base case, loans can generate 7.2% in 2024 on the back of high current income

		2024 YE		
	Current	**Soft-Landing**	**Hard-Landing**	**Breakevens**
Price, pts	**95.5**	**94.5**	**92**	**89**
DM 3yr, bps	**559**	**600**	**707**	**824**
Avg index Libor, bps	540	500	300	500
Coupon equivalent, bps	924	884	684	884
Current Yield, bps	**968**	**935**	**743**	**989**
Spread change, bps	-89	41	148	265
Key Rate change, bps	132	-40	-108	-40
Capital gain, bps	**267**	**-124**	**-392**	**-795**
Default Rate, pct	2.1	3.5	4.5	5.0
Recovery Rate, pct	57	55	50	50
Assumed current price of future defaults, pts	80	80	80	80
Credit Loss, bps	**50**	**109**	**169**	**188**
Total return, pct	**9.7**	**7.2**	**2.3**	**0.0**

Source: BofA Global Research, LCD, Moody's
Valuations as of early November 2023

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In 2023 CCCs have outperformed on a total return basis (+14%), but BBs outperformed on a risk adjusted basis (+8%) – both close to our projections (see our report, How will loans and CLOs fare in a soft-landing). In 2024, we think BBs will also outperform on a total return basis due to their attractive carry yet low credit risk profile. We expect BBs to generate 9% returns on account of relatively benign capital and credit losses. On the contrary, we think CCCs will bear the brunt of the pain – potentially suffering -5% in capital losses and shaving off 12% in default losses, more than wiping out their entire current income of 13% (Exhibit 30). This is a sharp turn of fate from their 2023 sheen, but one that might be likely if rates stay at high levels next year. Bs are expected to return on top of the index at 7.6% in a soft-landing scenario.

The dispersion of returns in favor of higher quality becomes all the more apparent if the economy heads towards a recession in 2025. In this scenario, BBs, Bs and CCCs are projected to return 6.5%, 3% and -25% respectively.

Exhibit 30: Loan return expectations by rating category in a soft-landing scenario
BBs to provide best returns in base case, with Bs close behind

	Soft-Landing		
	BBs	**Bs**	**CCCs**
Current Prices	99.1	96.3	77.5
Target Price, pts	**99.5**	**95.0**	**75.0**
Target DM 3yr, bps	**305**	**591**	**1,795**
Avg index Libor, bps	500	500	500
Coupon equivalent, bps	787	895	1,013
Current Yield, bps	**791**	**942**	**1,351**
Spread change, bps	-15	53	165
Key Rate change, bps	-40	-40	-40
Capital gain, bps	**44**	**-159**	**-496**
Default Rate, pct	0.2	1.3	35
Recovery Rate, pct	60	55	40
Credit Loss, bps	**5**	**39**	**1,150**
Target Total return, pct	**8.5**	**7.6**	**-2.9**

Source: BofA Global Research, LCD, Moody's

BofA GLOBAL RESEARCH

Exhibit 31: Loan return expectations by rating category in a hard-landing scenario
CCCs could be deeply negative in a hard-landing

	Hard-Landing		
	BBs	**Bs**	**CCCs**
Current Prices	99.1	96.3	77.5
Target Price, pts	**98.0**	**92.5**	**71.0**
Target DM 3yr, bps	**361**	**697**	**2,084**
Avg index Libor, bps	300	300	300
Coupon equivalent, bps	587	695	813
Current Yield, bps	**599**	**751**	**1,145**
Spread change, bps	-7	159	454
Key Rate change, bps	-108	-240	-240
Capital gain, bps	**21**	**-477**	**-1,418**
Default Rate, pct	0.3	1.4	40
Recovery Rate, pct	60	50	35
Credit Loss, bps	**10**	**53**	**1,667**
Target Total return, pct	**6.6**	**3.3**	**-18.6**

Source: BofA Global Research, LCD, Moody's

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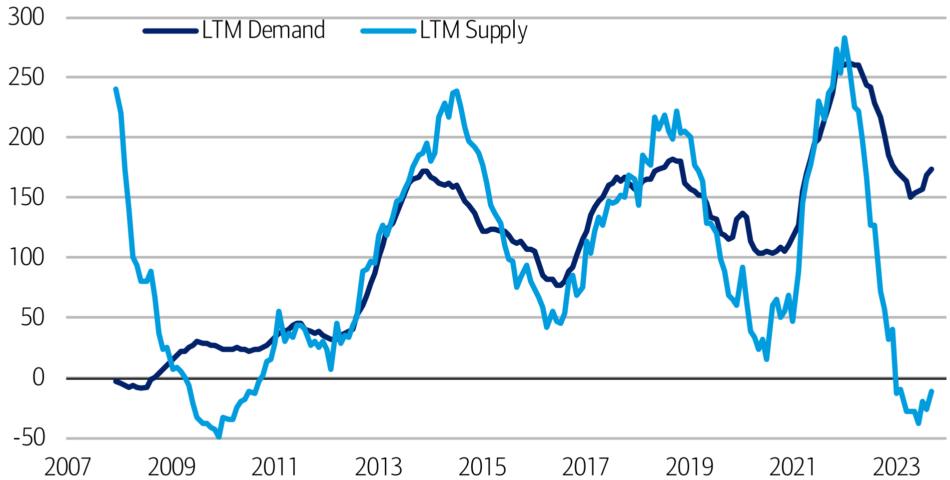
We expect spreads to rise marginally to 600bps or 94.5 px. Credit and capital losses will increase, though high carry of 9% will help loan index deliver returns of 7.2% in 2024. BBs to outperform at 8.5%, with Bs at 7.6% and CCCs at -2.9%.

Demand and Supply

Technicals have been extremely strong this year, one of the key reasons loan spreads have remained supported. Exhibit 32 shows aggregate net demand and net supply on an LTM basis. Net demand, though off 2022 peaks, remains well above average, turning the corner earlier in the year. At the same time net supply has cratered into negative territory on the back of limited new supply and a surge in issuer repayments. Below we discuss outlook for both in 2024.

Exhibit 32: LTM demand and supply in US loans ($bn)

US loan demand remains elevated due to high coupons, while supply has cratered due to repayments



Source: BofA Global Research, LCD

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Supply

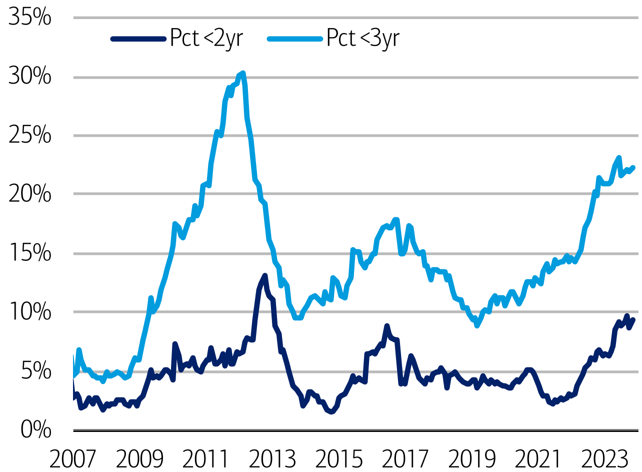
While slow out the gates this year, YTD loan supply has caught up to last year's pace. HY bonds have seen a supply increase of 51%, though net supply remains borderline negative in both asset classes. As consensus shifted from hard to soft-landing through the summer, the primary market reinvigorated, bringing more even driven activity in a sign that risk-taking is partially alive.

In 2024, we expect supply to increase 8% to $240bn, assuming we end 2023 near $220bn which will turn out to be only 2% behind 2022. We think most of the supply increase will once again be driven by refinancings which are projected to increase by 12% YoY. Sponsors driven LBO activity comes at +10% while corporate M&A could increase by the least: 6%. To come to this conclusion, we take a look at the dynamics from issuer, sponsor, investor and arranger perspective.

Corporates

Rising cost of debt for LevFin issuers is still the biggest problem. At the start of the year, issuers particularly within HY bond market, kicked the refi can down the road in hopes that the rates increase was temporary, because they could afford to. Things have now changed. First, as the reality of higher for longer rates sets in issuers will shift stance from timing the market to instead right sizing their balance sheet. Second, maturity walls still loom large and many who had the luxury to wait a year ago, now don't. This issue is the most pressing in HY market where bonds due over next 2,3 years is at post-GFC highs (Exhibit 34).

Exhibit 33: Percentage of loan Index maturing next 2 and 3 yrs
US loan maturities remain elevated but not record level



Source: BofA Global Research, Markit

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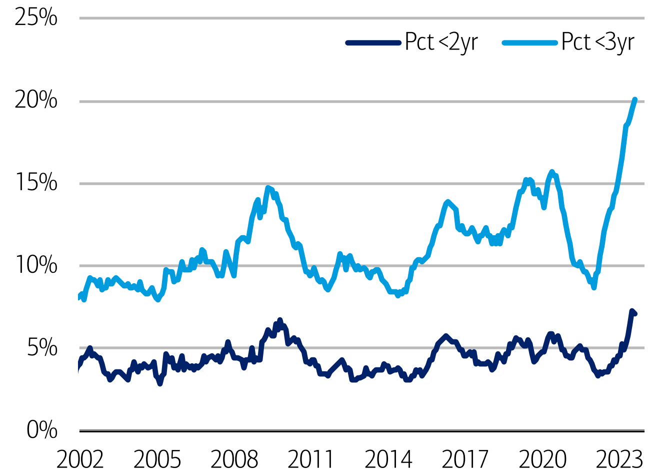
Exhibit 34: Percentage of HY Index maturing next 2 and 3 yrs
US bond maturities are at records and will spur refi activity



Source: BofA Global Research, ICE

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Within loans, maturity walls are marginally worse vs a year ago (Exhibit 33) despite a 120% jump in refis this year. Of course for this asset class, market timing matters less given the floating nature, but nevertheless we expect refi pressures to increase thereby informing our 12% increase in opportunistic activity YoY.

Given the high cost of debt, corporates will be discouraged to borrow for any organic or inorganic growth, and even equity transactions might be challenged in a world of high volatility and geopolitical risk. In addition, an election year always creates additional hesitation for corporates to spend without knowing the political outcome. We think the C-suite will have more pressing problems to discuss next year than how to fund their next new acquisition. Their focus is likely to be on operational and liquidity challenges emanating from a slowing economy and rising debt service costs.

Having said that, these are similar dynamics as already witnessed in 2023, prompting M&A volumes to decline by 50% YoY. We think these lows are hard to replicate and expect a small bounce back of 6%. Note that while this reflects an absolute increase, M&A share of overall new supply will theoretically decrease as total supply is expected to increase by 8%.

In the context of elevated rates, we expect repayments to remain high. LTM repayments have totaled $230bn, a 25% increase vs 2022, and we expect them to increase to $250bn next year as issuers attempt to delever. A knock-on effect of this is that net index growth will remain negative for a second consecutive year. For context, in 2023, loan index shrunk by 5%, its first such decline post GFC.

Sponsors

Given cost of debt, the economics continue to remain unfavorable for most leveraged buyouts. However, faced with the need to generate returns and return capital, we think sponsors will be incentivized to make deals work even if that comes at the cost of providing more equity capital and lower expected returns. On balance, we are penciling in a +10% bounce in sponsor activity next year.

Arrangers

Banks are still operating in a constrained environment with reduced capacity to underwrite new deals. Regulatory risk has curbed willingness to arrange highly leveraged profitable deals, while market volatility has reduced appetite to fund transactions with uncertain timelines. We think marquee deals can and will be done, but fringe issuers may have to turn to nonbanks/private debt to find financing solutions.

Nonbanks have the advantage of deep pockets, flexible financing solutions and timelines, as well as lower cost of financing. Most large platforms now also arrange the deals and have their own pipelines of deals, sponsored or otherwise. These advantages have made it possible for them to continue to take market share away from traditional banking system. This is a secular trend which we see continuing in the future.

Demand

CLOs are the largest investor in the loan market holding 50-60% of outstanding loans. However the largest incremental source of additional investment capital this year has not been CLOs. Exhibit 35 shows how loan coupons have provided the largest incremental source of demand YTD, $98.5bn (+92% YoY), overtaking YTD CLO issuance at $75bn (-29% YoY). Retail demand has been waning as expected, while demand for SMAs is roughly flat. While overall demand has increased marginally at 3% this year, YTD total supply (defined as new issuance minus repayments) has decreased dramatically from $45bn to $3bn due to a surge in repayments.

Exhibit 35: YoY change of demand and supply components in the US loan market
Surging coupons have mitigated reduced demand from CLOs; High repayments have pushed total supply to zero

	Demand				Supply		
US Loans	**Retail Flow**	**CLO**	**Coupon**	**Total Demand**	**New Issuance**	**Repayment**	**Total Supply**
YTD 2023	-11.4	74.7	98.5	161.8	202.6	199.9	2.7
YTD 2022	0.3	105.6	51.2	157.1	198.1	153.1	45.0
YoY %change	-4050%	-29%	92%	3%	2%	31%	-94%

Source: BofA Global Research, LCD

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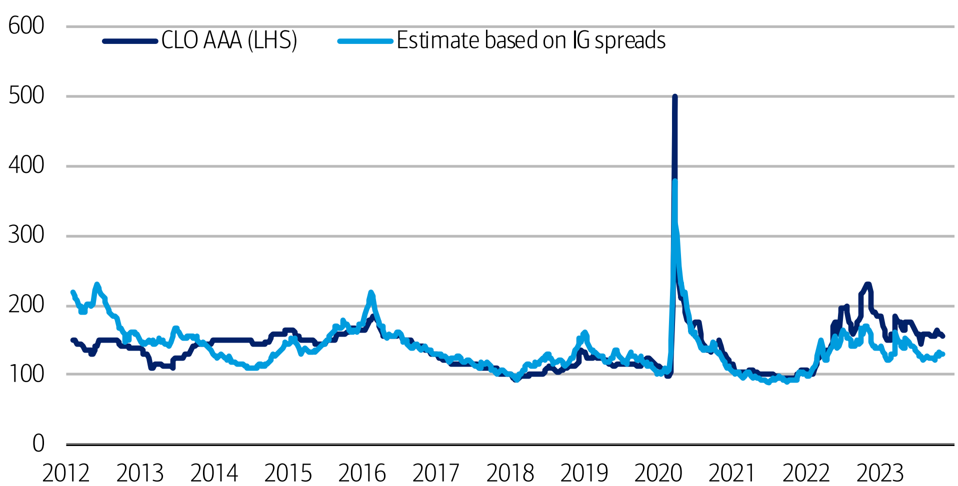
CLOs

Loan demand from CLOs is expected to decline marginally but remain in firm territory. Challenge for CLOs this year has been the wings: AAAs and equity. AAA spreads remain wide vs their own history and also vs corporate debt. Exhibit 36 shows how CLO AAAs have diverged from IG spreads – AAA secondary spreads are at 155bps, 25bps higher than where they should be based on their long-term relationship to IG secondary spreads (130bps). The divergence has refused to buckle due to a) banks unable to increase their participation in AAAs due to more punitive risk capital b) RV to other securitized products such as CMBS AAA which remains at post-COVID wides. This has kept CLO WACC high, compromising arbitrage (Exhibit 37) which is unlikely to improve given no meaningful changes projected in asset and liability valuations next year.

Exhibit 36: CLO AAA actual vs estimated spread based on IG valuations
CLO AAAs have been wider than their fair value indicated by IG spreads all year



Source: BofA Global Research, ICE

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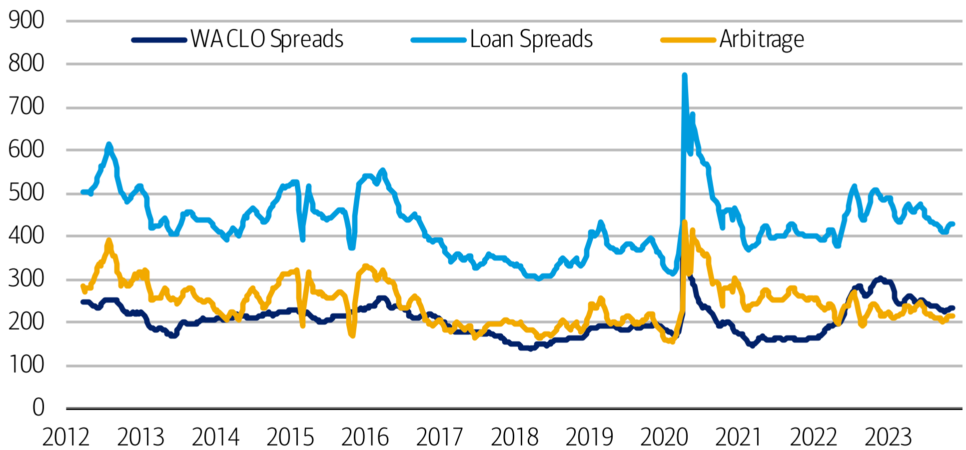
However, there is enough incentive to put the CLO machinery in overdrive should loans drop 2-3 points, providing a floor to loan prices. Given the better economic environment vs earlier in the year, and low projected loan default losses next year, CLO equity is becoming less of a concern amongst market participants. In addition, while CLO CCC baskets and OC ratios continue to deteriorate, projected loan credit losses are not high enough to create widespread damage to CLO creation.

Exhibit 37: CLO arbitrage remains challenged
The state of the CLO primary market is expected to remain unchanged in 2024



Source: BofA Global Research, LCD

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In a soft-landing, CCC pct of loan index will likely be at 12% vs 16% in a hard-landing scenario. The percentage of CCCs in CLOs generally tends to be 1-2% lower than the index because active management of portfolios allows managers to rotate out of CCCs ahead of time to position themselves effectively.

If assuming CLOs migrate to ~10% CCCs next year, this will result in relatively minor erosion of JR OC cushion, 70bps, assuming a 30% CCC haircut. The bigger impact comes from defaults. Exhibit 38 shows that in our base case of 3.5% defaults and a 55% recovery, JR OC impact is 1.6%, creating an aggregate erosion of 2.3% between defaults and downgrades. Today CLOs JR OC median cushions are at ~4.7%, so the available cushion may drop to 2.5%, still higher than levels they troughed at during COVID (1.8%).

It's a hard-landing scenario which could take a toll on the CLO structure. Mounting downgrades in this scenario alone are enough to dent JR OC cushions by 3.3%. Including the additional impact from defaults, 2.5%, takes total haircut to 5.8% eroding the entire available cushion. There will always exist mitigating factors including managers preferring to take a par hit instead of shutting down cashflows, but nevertheless, widespread JR OC test failures are a risk for loan demand in a hard-landing.

Exhibit 38: Jr OC erosion under various economic scenarios
Loan demand from CLOs is likely to suffer only in a hard-landing scenario

	Soft-Landing	Hard-Landing
CLO CCC bucket	10.0%	14.0%
Bucket Overage	2.5%	6.5%
CCC markdown	30%	50%
Downgrades impact	**0.7%**	**3.3%**
Default Rate	3.5%	5%
Recovery	55%	50%
Defaults impact	**1.6%**	**2.5%**
Total loss of cushion	**2.3%**	**5.8%**
Current Jr OC	4.8%	4.8%
Remaining cushion	**2.5%**	**-1.0%**

Source: BofA Global Research

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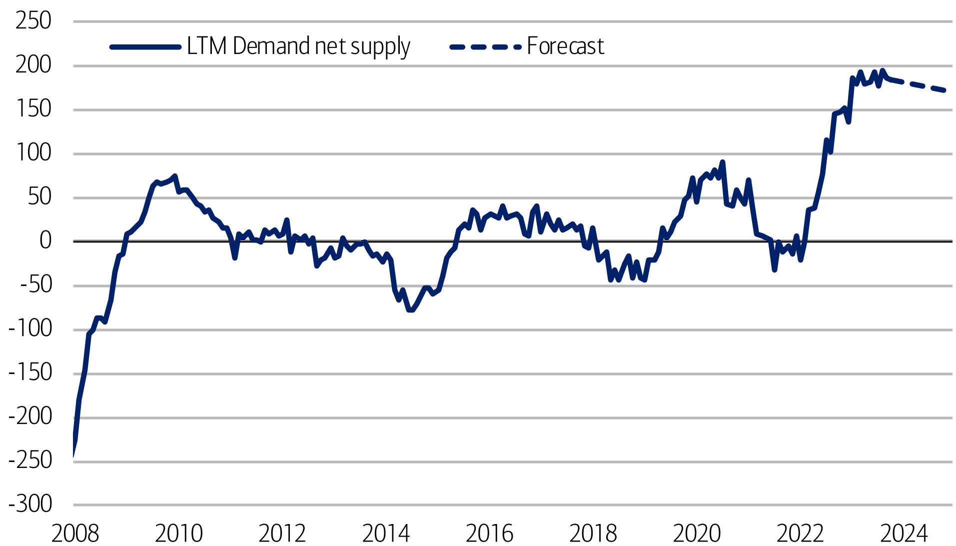
Therefore, as long as we avoid a recession, CLO demand for loans is likely to remain firm, though post small declines vs 2023 due to challenging arbitrage.

Other sources of demand

We expect coupon payments to decline with rate cuts, yet, provide significant tailwinds to loans next year. Retail is expected to remain a sideshow, though ETFs, which are correlated to the equity market, will drive temporary dislocations in either direction. Private Debt funds will continue to remain an important cog in the wheel of LevFin financing we explain in its dedicated section later in the report. These platforms have the ability to play both middle market and syndicated deals and will gravitate towards where value is, which today exist in the middle market given high premiums over syndicated loan market. However, private equity dealflow there continues to remain a challenge which could be an offset, pushing Private Debt investors back towards larger syndicated loans.

Exhibit 39: Technicals to soften but remain supportive
LTM demand net of supply is poised to decrease but remain at high levels in 2024



Source: BofA Global Research, LCD

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On balance, we project loan technicals to soften marginally, though still remain quite supportive in 2024. The marginal increase in supply will be more than offset by higher repayments, resulting in more negative net supply. However, we expect demand to soften comparatively more. Coupons are expected to decrease with rate cuts, and retail will continue to shrink. Simultaneously CLOs, that are already running at -30% YoY will not provide any incremental buying power. Putting this together, demand net supply is projected to decline 10% next year, albeit from record highs. We think technicals will deteriorate more towards the back half of the year as HY bond issuance and sponsor activity increase.

In 2024, we expect supply to increase 8% to $240bn, driven by 12% increase in refinancings. Higher repayments mean continued negative net supply. Aggregate demand could decline relatively more as CLOs and coupon payments scale back. Overall technicals are expected to soften vs ’23 but remain supportive.

EU Loans

Economy and Rates

Macroeconomic uncertainty is higher on the other side of the pond. Between geopolitical fragility surrounding the twin wars, still unresolved energy backdrop, and the tussle between growth and inflation, Europe will remain subject to higher market risk.

Unlike the Fed which may be able to successfully orchestrate a soft-landing in the US, the ECB is caught between a rock and a hard place. Core consumption in the region is lower vs US because the lack of COVID era fiscal stimulus created no excess demand like it did in the US (core CPI is projected to fall faster in EU to 1.8%, while it remains sticky in the US at 3.1% next year). Most inflationary forces in EU were supply side driven which resolved post COVID reopening. This would argue for low baseline rates.

However, unlike the Fed that puts emphasis on core inflation, ECB cannot afford to strip out the energy component, because the issue of energy sufficiency is still front and center in Europe, and spike in oil is a real risk. The region may have averted the worst-case scenario in terms of the size of the energy hole to plug, but the problem has not vanished. Headline CPI in EU stands at 5% vs 3.6% in US. As such, the ECB has been forced to remain hawkish, arguably pushing rates in overly restrictive territory.

Our house view is that while ECB is committed to return inflation to target, economic concerns are becoming more prominent. As such, we expect ECB to start cutting rates in June next year, 25bps quarterly, ending with a terminal rate of 3.75% by YE ’24.

That said, the risk is high that ECB seeks to avoid rate cuts despite clearly softening core growth. Restrictive policy may be needed to continue to suppress topline energy demand (painfully so) to match permanently lower supply. However, this could drive core demand even lower. Downside scenario is that oil prices spike again, ECB cannot deliver rate cuts, but core demand is already soft and fundamentals weakening, which pushes EU towards a technical recession. EU GDP YoY growth currently stands at 0.5% and is expected to stay at this level in 2024. Some of the largest economies such as Italy and Netherlands are projected to be uncomfortably near zero growth, while the largest – Germany is already in a recession. Somewhat balancing this are Spain, Portugal and Greece with ~1% projected GDP growth but these are comparatively smaller economies.

> Low core consumption in EU argues for lower rates, but energy prices are driving hawkish monetary policy. Rates are overly restrictive and could push the region into a recession. Geopolitical risk is also elevated leading to higher macroeconomic uncertainty in the region. We expect ECB to cut rates next year, though risk is high that it doesn’t.

Fundamentals

Like the US, balance sheet liquidity remains key to fundamental performance across EU corporates. Today, coverage ratio amongst EU issuers is at 3x levels, higher than our estimates of US issuer coverage at 2.7x. This has been a function of monetary policy divergence between the geographies, wherein the Fed frontloaded hikes in ’22 while EU is playing catch-up this year, giving EU corporates more time at lower rates.

For perspective, at the beginning of 2022, US issuers on average were paying 370bps margin + 40bps floor for a total of 410bps. Today they are on the hook for 360bps margin + 550bps base rate for a total of 910bps, representing a 120% increase in debt service. EU issuers have seen a comparatively lesser increase of 70%, paying 425bps (all margin cost) a year ago to 730bps today (380bps margin + 350bps base rate).

EU issuers have benefitted from starting with negative rates last year coupled with compressing margins (-40bps) as base rates have increased. In addition, anecdotally, a majority of issuers have locked in some kind of hedges and have lower pressure on debt service as well as input costs. Whereas US issuers have started at zero base rates with a low preponderance of floors thus magnifying the impact of a steep rates climb. There hasn't been much margin compression (-10bps), and ~26% of outstanding floating rate debt is hedged.

However, projections at current high rates show that EU fundamentals are set to decline at a more rapid pace than the US and reach 2.5x by next year, closing in on US issuers. This is because US still has some economic tailwinds in the form of positive revenue growth and a strong labor market, while EU, given its economic malaise, does not. In Q3, EU LevFin issuers posted YoY revenue and Ebitda growth of -4% and -11% respectively, a full 10-15 pct pts below where US LevFin issuers finished. Simultaneously, as debt service continues to tick up, incremental cash outlays will be higher in EU vs US.

That said, credit losses in Europe tend to undershoot model outputs. For the same levels of distress and severity of macro backdrop, hard defaults tend to be lower due to a preference for out of court restructurings. This in turn is a function of the lack of cohesiveness of the workout process across various jurisdictions making the bankruptcy process cumbersome and expensive. Given better counterparty behavior, recoveries have been comparatively higher, lowering loss pressures in the region.

All told, the fate of EU corporates is predicated on the path of rates. If ECB cuts as markets expect, this will be a tailwind for EU corporate debt as interest costs subside. But combined with EU LevFin earnings that are contracting faster than the US, this likely isn't enough to stop coverage levels from decreasing, and credit losses from increasing. Thus we see fundamental pressures building and risk premia inching higher, more so than the US.

We expect EU loan spreads to widen 60bps, but default rates (2.5%) and credit losses to remain lower than the US, delivering returns in 5% context next year. Unlike the US, we think peak net downgrades in EU are yet to come – we project downgrades to hit 12% of the index and CCCs to reach 8%. Given approaching maturities, we expect supply to be 5-10% higher next year.

> Coverage ratios are higher in EU vs US but projected to decline faster given contracting revenues and earnings amongst LevFin issuers.

Defaults and Downgrades

Defaults have risen 3x over the last year, albeit from a low base 0.5% to 1.3% by par. Because realized default rates in EU tend to be lower, the actual credit losses are likely somewhat higher than the headline rate implies. We assess rating drift by calculating the downgrade to upgrade (D/U) ratio on a last 12m and 3m basis. Exhibit 41 shows the current state of downgrades in Europe. On a last 12m basis, D/U ratio peaked at 2x earlier in the year. While it has since receded from peaks, it is still >1 indicating downgrades continue to outpace upgrades over a rolling 12-month period. D/U ratio on a last 3m basis peaked at 4.2 in March, it currently stands at 1.2, near local troughs.

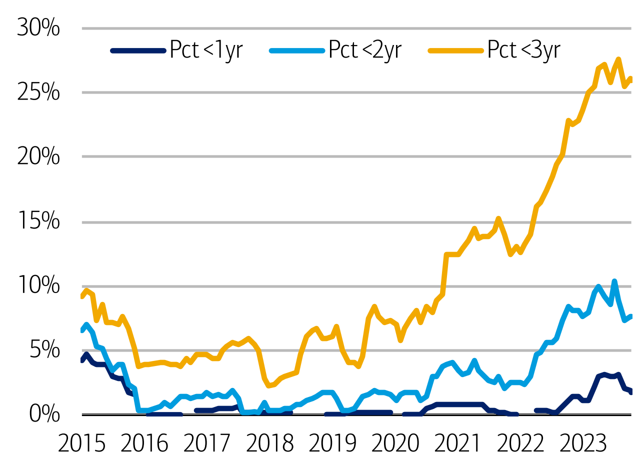
Defaults to rise to 2.5%

In 2024, we expect defaults to rise further to 2.5%. To get to these forecasts, we use a similar process to the US – of reconciling top-down macro models outlining default/downgrade pressure, with bottom-up processes looking at the distribution of ratings and maturities and layering that with appropriate default rates observed from the past.

Our top-down models using macro-level inputs such as risk premium and GDP show EU loan default rates to finish at 3.4% in 2024. However, credit losses in Europe tend to undershoot model outputs. For the same levels of distress and severity of macro backdrop, hard defaults tend to be lower due to a preference for out of court restructurings. This in turn is a function of the lack of cohesiveness of the workout process across various jurisdictions making the bankruptcy process cumbersome and expensive. Given better counterparty behavior, recoveries have been comparatively higher, lowering loss pressures in the region. As such, we out more weight on the bottom-up default analysis described below.

The highest default probability historically has been within the bucket of loans maturing in the next 1-year timeframe. This group today amounts to $5.4bn, representing 2% of the EU loan index, vs $4bn or 1.5% a year ago, implying higher near-term default pressures (priced in). EU loans coming due in 2yrs remains at 8%- same as last year. However, loans coming due in the next 3 years as a proportion of the outstanding index is at 26% vs 23% a year ago. These are meaningfully higher than their COVID levels as well, implying increasing refinancing and default pressures over the next 2-3 years in European region. (Exhibit 40).

Exhibit 40: Pct of EU loan maturing next 1,2,3 years
Maturities have built up and likely to pose a problem for EU issuers



Source: BofA Global Research, LCD

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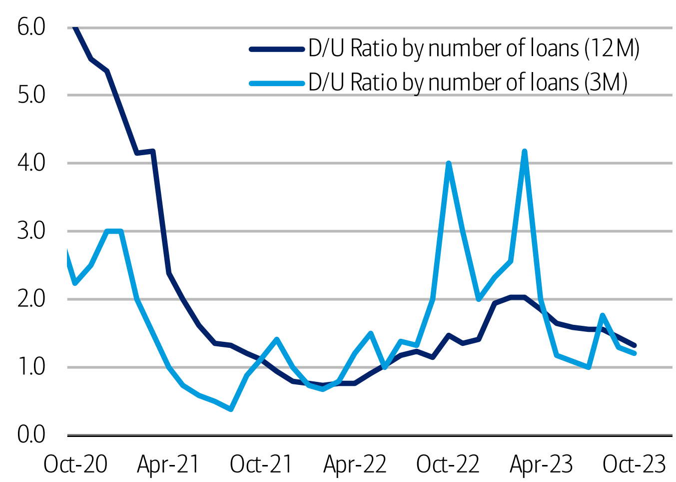
Exhibit 41: EU D/U ratio over last 3 and 12 months
Downgrades continue to outpace upgrades



Source: BofA Global Research, LCD

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Taking the index pct maturing in the 1,2,3 and 3+ year timeframe, and applying the same probability of default matrix to EU loans as the US, we get an expected default rate of 3% in the next 12 months (Exhibit 43). Balancing this result is a similar exercise based on EU loan ratings distribution, which is more benign compared to EU loan maturity distribution. The analysis leaves us with a 2% expected default rate over next 12 months (Exhibit 42), providing us the range of default outcomes for EU.

Exhibit 42: Index weighted defaults by rating
Default rates gross up to 2% by rating

Rating	Est DR	Ind Wt	Weighted DR
BBB	0.0%	2%	0.0%
BB	0.2%	12%	0.0%
B	1.3%	77%	1.0%
CCC	35%	3%	0.9%
NR	1.5%	6%	0.1%
DR projection			**2.0%**

Source: BofA Global Research, LCD

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Exhibit 43: Index weighted defaults by time to maturity
Default rates gross up to 3% by time to maturity

Life	Est DR	Ind Wt	Weighted DR
0-1yrs	50%	2%	0.9%
1-2yrs	15%	6%	0.9%
2-3yrs	2.5%	18%	0.5%
3+ yrs	1.0%	74%	0.7%
DR projection			**3.0%**

Source: BofA Global Research, LCD

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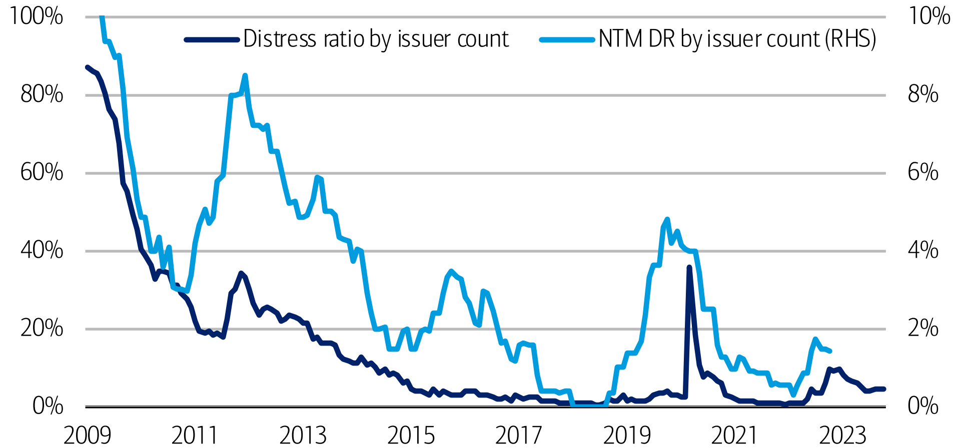
Looking at this from a distress ratio viewpoint as well, there are indications that EU default rates should remain contained. Distress ratio is a leading indicator of future defaults, on roughly a 12months basis as seen in Exhibit 44. Percentage of EU loan issuers in distress reached 8% levels a year ago when EU recession was a base case. Since then distress ratio has halved to 4%, suggesting defaults should remain contained at ~2%.

Exhibit 44: Distress ratio vs NTM default rates
We expect default rate to remain contained at ~2% based on current levels of distress



Source: BofA Global Research, LCD

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All told, we think that par default rates could reach 2.5% across EU loans, with issuer defaults landing 50bps higher. While this is lower than our US par default rate forecast of 3.5%, note that the increase in defaults is higher in EU (going from 1.3% to 2.5%) than the US which is already at 2.1% LTM.

Downgrades 12% of index, upgrades 9%, CCCs to reach 8%

In Europe we think the brisk pace of downgrades will remain the same, while upgrades are poised to recede. We expect downgrades of $38bn, or 12% of the EU loan index. Counting only inter-rating downgrades, we estimate $21bn or 7% of the index will be impacted. Comparatively we think upgrades will slow down to $28bn, representing 9% of the index ($10bn counting only intra rating), generating a net downgrade rate of 3%. Half of the total $38bn in downgrades is project to land in CCCs. This represents a large jump in CCCs, increasing the proportion of the index from current 3% to 8%.

Exhibit 45: Net migration forecasts by rating over various economic scenarios ($bns)
CCC share of loan index to increases from 3% to 8% in a soft-landing scenario

Scenario	Rating	Curr Size ($bn)	Current Index %	D/G To	D/G From	Defaults From	U/G From	U/G To	Net Migration	Impact	New Index %
Soft-Landing	BB	34	12%	0	5	0	1	7	2	6%	13%
	B	213	77%	4	15	7	8	1	(26)	-12%	67%
	CCC	8	3%	16	-	1	1	-	14	174%	8%
Hard-Landing	BB	34	12%	0	5	0	1	7	2	4%	13%
	B	213	77%	5	19	8	8	1	(30)	-14%	66%
	CCC	8	3%	19	-	1	1	-	17	219%	9%

Source: BofA Global Research, Moody's

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EU loans are lagging US loans with the full brunt of downgrades yet to come. US loan index has already seen a large wave of LTM migrations: 19% of index notional has been impacted while upgrades have impacted 16% of index. CCCs have increased from 5% to 8% of the index. Comparatively, EU loans have not witnessed downgrades to the same extent – LTM par impacted has totaled $32bn (11% of index) while upgrades have totaled $37bn (13% of index). CCC proportion remains increased to 4.5% mid-year, but has since receded to 3% owing to survival bias. As such, the year-end CCC proportion might also be lesser than our projected 8% as defaulted loans leave the index.

Spreads and Returns

We expect spreads to leak 65bps wider next year. That said, reasonably strong demand and supply dynamic should keep capital losses in check. Credit losses are expected to increase as defaults build. However, coupons are large enough to compensate on an index level, delivering lower than 2023, but still positive 5% returns in 2024.

Spreads to leak wider

We break down spread into its components – credit losses (CL) and liquidity premium (LP). We estimate both these measures to increase as the year progresses and some of the macro headwinds we outlined earlier become apparent. We think that both LP and CL could potentially rise by 30bps each to take the 3yrDM higher by 60bps to 620bps or $94 price equivalent on the index. In a pessimistic scenario, we can see spreads reaching 760bps or $91 price equivalent on the index (Exhibit 46).

Exhibit 46: Breakdown of fair-value spread into LP and CL components, by economic scenario
We expect EU loan spreads to reach 620bps next year in the soft-landing scenario

	YE 2024		
	Soft-Landing	Hard-Landing	Current
Liquidity Premium	**555**	**630**	**520**
Default Rate	2.5%	3.5%	1.3%
Recovery Rate	60	50	60
Starting Price	80	80	80
Credit Loss	63	131	33
3yrDM Target	**618**	**761**	**553**
Px target	**94.3**	**91.0**	**95.7**

Source: BofA Global Research, Moody's, LCD
Valuations as of early November 2023

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EU loans to generate 5% total returns

Exhibit 47 shows EU loan return expectations under various economic scenarios. In our base case, current income of 810bps (avg of YE'23 and YE'24) is enough to offset 185bps of capital losses and 60bps of credit losses to generate positive total returns of 5.1%. Even in a hard-landing, returns could be positive at 3.6%. It would take index price to go to $90.7, and default rates to rise to 5% levels for investors to wipe out their coupon income in that market. Thus, the cushion is relatively less attractive than US loans which can take a hit of up to $89 before swinging to losses (Exhibit 29).

Exhibit 47: EU Loan Total Return forecasts by economic scenario
We expect EU loans can generate 5.1% total returns in a soft-landing scenario in 2024

		2024 YE		
	Current	Soft-Landing	Hard-Landing	Breakevens
Price, pts	**95.9**	**94.4**	**91.0**	**90.7**
DM 3yr, bps	**554**	**616**	**764**	**775**
Avg Euribor, bps	398	350	200	398
Coupon equivalent, bps	793	745	595	793
Current Yield, bps	**827**	**789**	**654**	**874**
Spread change, bps	-164	62	45	221
Key Rate change, bps	185	-48	-13	0
Capital gain, bps	**492**	**-185**	**-136**	**-663**
Default Rate, pct	1.3	2.5	3.5	5.0
Recovery Rate, pct	60	60	50	50
Assumed current price of future defaults, pts	80	80	90	80
Credit Loss, bps	**27**	**63**	**156**	**188**
Real total return, pct	**10.8**	**5.1**	**3.6**	**0.0**

Source: BofA Global Research, LCD, Moody's
Valuations as of early November 2023

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Ratings RV

In terms of ratings performance, since we expect a majority of defaults and downgrades to originate within the B and CCC baskets, we think lower quality categories will underperform next year. BBs are likely to outperform given their ability to pay higher interest costs and remain relatively protected from the deterioration of interest coverage amid rising rates and decreasing corporate earnings.

Sector RV

We look at sectors through the lens of the RV table (Exhibit 48). Current retracement levels suggest that Telecoms and Cable/Media have corrected the most (~50% retracement from 1yr tights), while Retail has corrected the least, followed by Services and Food Producers.

Amongst the wide sectors, Telecoms is likely to enjoy a growing tailwind into 2024 if energy prices continue to normalize, while Cable/Media may see some revenue pullback as companies cut ad-spending to preserve cash on the back of a still uncertain macroeconomic backdrop.

Amongst tight sectors, we think Food Producers may face challenges in revenue growth due to disinflation. We expect to see dispersion in Retail and Services. Given no wage inflation and softening core consumption in the region, disposable income will be under pressure and consumer behavior may shift more towards essential and non-discretionary goods & services. As such, we think sectors like Travel, Leisure and Gaming are likely to underperform, whereas Healthcare may outperform due to its relative defensiveness.

Exhibit 48: EU loan relative value across ratings and sectors

Telecoms and Cable/Media have retraced most from 1yr highs while Retail, Services and Food Producers have retraced the least

	3yr Yield	3yr DM		Price		1yr Tights		1yr Wides		YTM	Retracement		Characteristics	
	Spot	Current	YTD Δ	Current	YTD Δ	3yr DM	Price	3yr DM	Price	Spot	From	From		
	(%)	(bps)	(bps)	(pts)	(pts)	(bps)	(pts)	(bps)	(pts)	(%)	Tights	Wides	Count	% by par
All Loans	9.5	535	-167	96.3	4.5	489	97.4	711	91.5	9.2	21%	79%	377	100%
BB Loans	7.7	362	-97	98.6	2.6	339	99.3	492	95.2	7.5	15%	85%	44	13%
B Loans	9.5	537	-167	96.6	4.7	485	97.9	716	91.6	9.2	23%	77%	276	78%
CCC Loans	20.5	1,538	36	77.7	-0.6	1,231	82.4	1,622	76.1	20.9	79%	21%	16	3%
NR Loans	10.6	634	-255	94.3	5.8	570	95.7	899	88.3	10.3	19%	81%	33	5%
BBB-	6.7	267	3	99.4	0.9	221	99.9	290	97.8	6.7	67%	33%	8	2%
BB+	6.2	222	-93	99.7	1.8	213	100	335	97.4	6.2	7%	93%	2	0%
BB	8	390	-28	98.6	2.1	334	99	466	94.8	7.8	42%	58%	17	5%
BB-	7.6	353	-146	98.5	3	332	99.4	525	95	7.4	11%	89%	25	8%
B+	8.6	453	-128	97.8	4	414	98.8	596	93.4	8.4	21%	79%	37	14%
B	9.3	515	-158	97.1	4.5	464	98.3	686	92.2	9	23%	77%	147	41%
B-	10.5	630	-205	94.9	5.4	565	96.4	841	89.4	10.2	24%	76%	92	23%
Cable/Media	9.3	515	-69	95.9	2.3	453	97.4	584	93.5	8.9	47%	53%	19	6%
Capital Goods	10.2	599	-269	95.1	6.3	534	96.7	925	87.6	9.7	17%	83%	18	6%
Chemicals	9.3	517	-60	96.2	2.8	459	96.7	636	92.2	9	33%	67%	24	5%
Energy/Metals	10.5	641	-201	97.2	7.1	563	98.2	885	89.3	10.2	24%	76%	8	2%
Financials	9.7	551	-114	96.5	3	497	97.9	691	92.9	9.2	28%	72%	23	6%
Food Producers	10.2	603	-339	94.8	8.1	539	96.1	970	86.1	9.8	15%	85%	21	5%
Healthcare	9.1	495	-146	96.8	3.8	446	98	643	92.9	8.9	25%	75%	68	19%
Packaging/Paper	9.3	516	-132	97.1	3.9	453	98.7	661	92.8	9.1	30%	70%	15	3%
Real Estate	10.8	655	-254	93.4	6	583	94.9	913	87.2	10.1	22%	78%	25	6%
Retail	9.3	521	-226	97.1	5.9	477	98.1	787	90.3	9.1	14%	86%	33	9%
Services	9.2	508	-120	97	3.7	486	97.9	637	93.1	8.9	15%	85%	38	10%
Technology	9.5	535	-194	96.2	4.7	474	97.5	729	91.5	9.2	24%	76%	39	9%
Telecoms	9.4	528	-35	96.4	2	451	97.2	610	93.4	9	48%	52%	11	5%
Transportation/Autos	8.7	463	-215	97.2	5.6	370	99	713	90.7	8.6	27%	73%	15	4%
Travel/Gaming	9.5	539	-141	96.6	4.1	489	97.9	716	91.7	9.2	22%	78%	20	5%

Source: BofA Global Research, Markit, LCD

Valuations as of mid November, 2023

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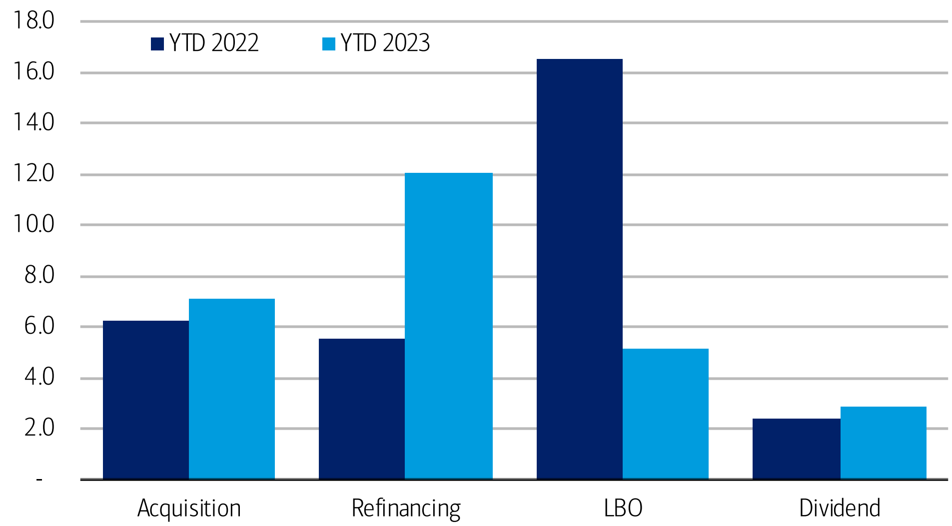
Demand and Supply

EUR loan issuance saw tailwinds over Q3 as corporates became more comfortable floating debt. YTD we have reached €28bn in new money loan issuance, running at -9% behind 2022 total. Exhibit 49 shows how a lion's share of this year's supply has been refinancings, while LBOs look a large step back from last year.

Keeping with the recent momentum, we expect EU loan supply to bounce back from this year's lows, albeit only marginally by 5%-10%. Opportunistic activity is likely to again be in the driver's seat as ~ €23bn loans come due in the next 2 years. Of these <50% are higher quality and likely to get done easily, whereas the remaining are largely B3 below. Of the latter some may not be able to clear the market easily and will have to find other sources of funding like Private Debt. We expect EUR loans to finish the year with €30bn-€35bn in new money supply, of which we think €15bn will come from opportunistic activity, and the rest mostly divided between corporate and sponsor driven.

Exhibit 49: YTD EU primary issuance by UOP

A lion's share of this year's supply has been refinancings, while LBOs look a large step back from last year



Source: BofA Global Research, LCD

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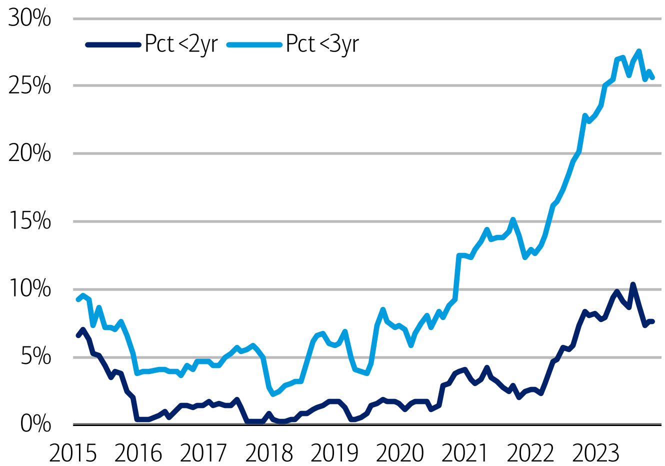
Maturity walls in EU loans are off recent peaks, though remain higher than a year ago. Exhibit 50 shows that 25% of EU loans are due next 3 years vs 22% a year ago. Loans due next 2yrs remains the same at 8% levels, indicating that refinancing activity for EU loans will at least match last year's level, if not exceed it.

One factor to consider is the impact from EU bond issuance. Maturity walls in the EU HY market are at record highs (Exhibit 51), with 17% of the market due in the next 2 years and 42% due over the next 3yrs (new record by a wide margin). Granted most of these are BBs and thus would be easily done, large volumes of bonds repricing 30-50% higher in the primary could impact the secondary and spillover to EU loans impacting spreads there.

Exhibit 50: Percentage of EU loan index maturing in 2 and 3 yrs
Maturity walls in EU loans are off recent peaks



Source: BofA Global Research, LCD

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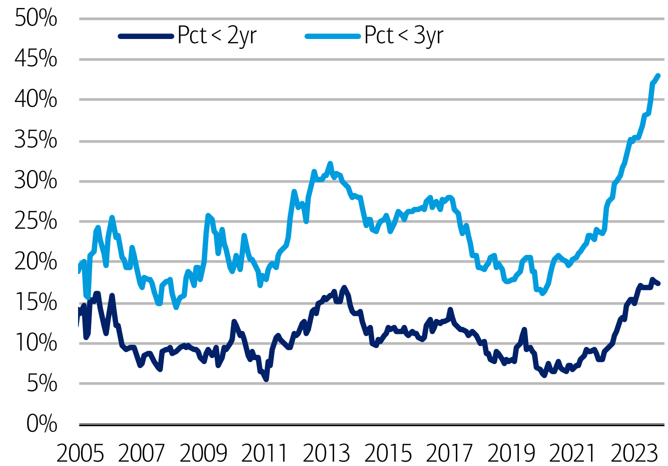
Exhibit 51: Percentage of EU HY index maturing in 2 and 3 yrs
Maturity walls in the EU HY market are at record highs



Source: BofA Global Research, ICE

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Most of the demand for EUR loans has traditionally come from CLOs since retail is notably absent. However this year we saw demand from them decrease by 8% (Exhibit 52). On the other hand, coupons have doubled vs last year due to the high carry offered by floating rate market, pushing YoY demand higher by 20%. Comparatively US demand remains flat due to 30% decline in demand from CLOs.

New money issuance has decreased -9%, but repayments have contracted more, -20%, leading to growth in Total supply. This is in contrast to US where issuance has kept pace but surging repayments have brought down net supply close to zero.

Over the last 2 years we have seen Private Debt take some share of the LevFin market as well, just like they have done in the US (see Pvt Debt section). Our EU CLO team expects EUR CLOs supply to be in the same ballpark as this year – $24bn with a bit of upside, which means Private Debt and asset managers will end up increasing their participation in the EUR loan market.

Exhibit 52: YoY change of demand and supply in the EU loan market
YTD Demand from CLO decrease by 8% while coupons have doubled

	Demand			Supply		
EU Loans	**CLO**	**Coupon**	**Total Demand**	**New Issuance**	**Repayment**	**Total Supply**
YTD 2023	21.7	16.2	37.9	30.1	20.0	10.1
YTD 2022	23.5	8.4	31.9	32.9	24.8	8.2
YoY %change	-8%	93%	19%	-9%	-19%	24%

Source: BofA Global Research, LCD

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We expect EU loan spreads to widen 60bps to reach 620bps or $94.3pts. Default rates (2.5%) and credit losses to remain lower than the US, delivering returns of 5.1% next year. Unlike the US, we think peak net downgrades in EU are yet to come – we project downgrades to hit 12% of the index and CCCs to reach 8%. Given approaching maturities, we expect supply to be 5-10% higher in '24.

Private Debt

Private Debt funds facilitated 23% of all capital raised by leveraged corporates in 2022, 2x that of the year prior. 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 – credit conditions have improved as the likelihood of a soft-landing increases, MM valuations have now corrected and reached our fair value target, and PD fundraising and deployment has slowed down. As such, we expect PD to source a bulk of their investments from the middle market going forward, leaving 2022 as an anomaly. Below we discuss opportunities and challenges for Private Debt in this new rates regime. Please also find our full PD outlook in Private Debt: Opportunities and challenges in a new rates regime.

Opportunities

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, and we expect vintages 2022 and newer, to outperform public credit.

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.

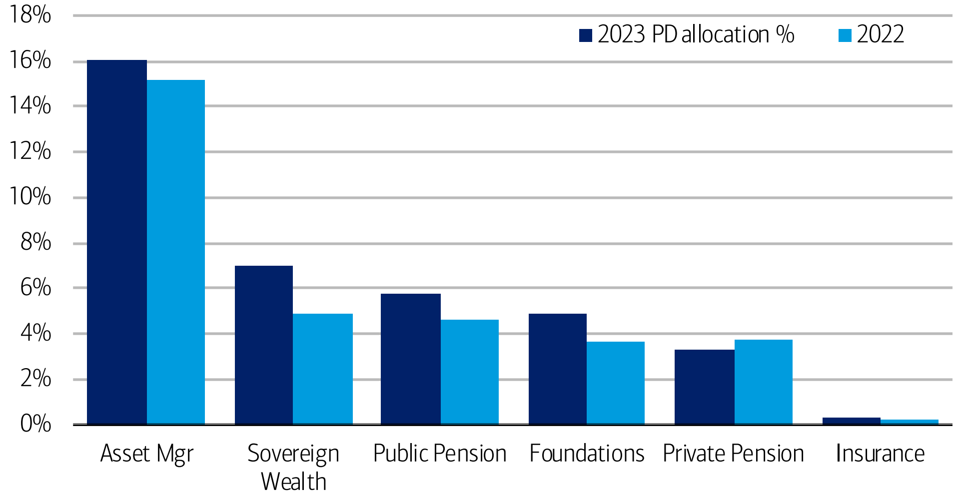
Exhibit 53 shows annual asset allocations within a group of 50 largest investors in alternative assets with an aggregate AUM of $3.8tn amongst them. PD allocations amongst most investor types has grown YoY. Though asset managers have the largest percentage of their portfolios in Private Debt given the 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.

Going forward, we expect private capital to remain sticky. As per industry surveys [2], 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.

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.

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

Exhibit 53: 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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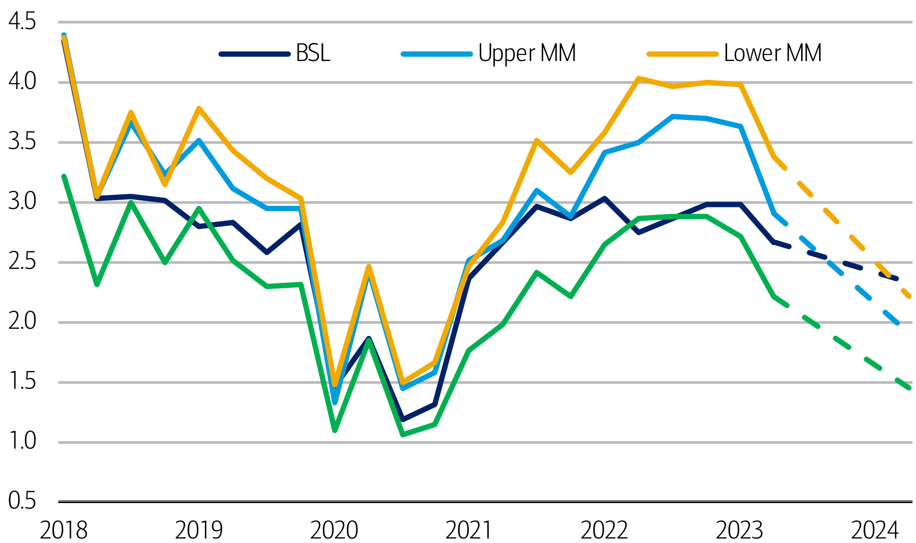
Challenges

Private Debt (middle market loans) faces arguably more 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, 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 middle market 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 syndicated market finishes at the top end of that range (Exhibit 54). 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.

Exhibit 54: 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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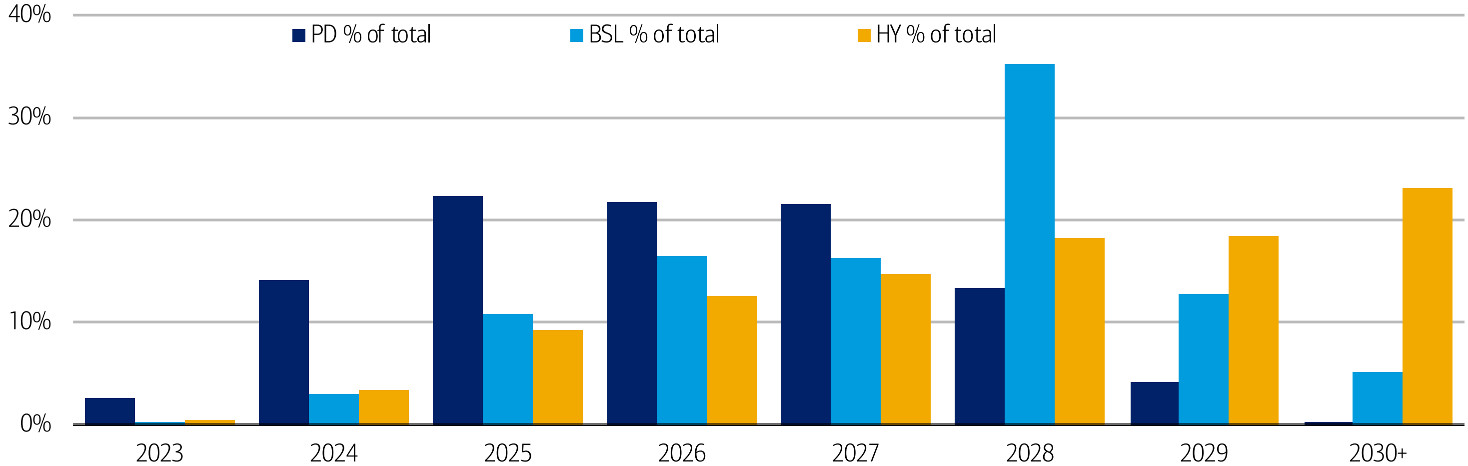
Private Debt maturity profile is also relatively more aggressive vs other parts of the LevFin market. Exhibit 55 shows the percentage of deals due by year in each asset class. While syndicated HY bonds and loans have successfully pushed back maturities to '25/'26, Private Debt still has >10% of its deals due next year and another 20% in 2025. This means some potential problematic situations here remain unaddressed and are likely to surface near-term. We expect workout conversations to increase, and along with that, restructurings and write-downs.

Exhibit 55: 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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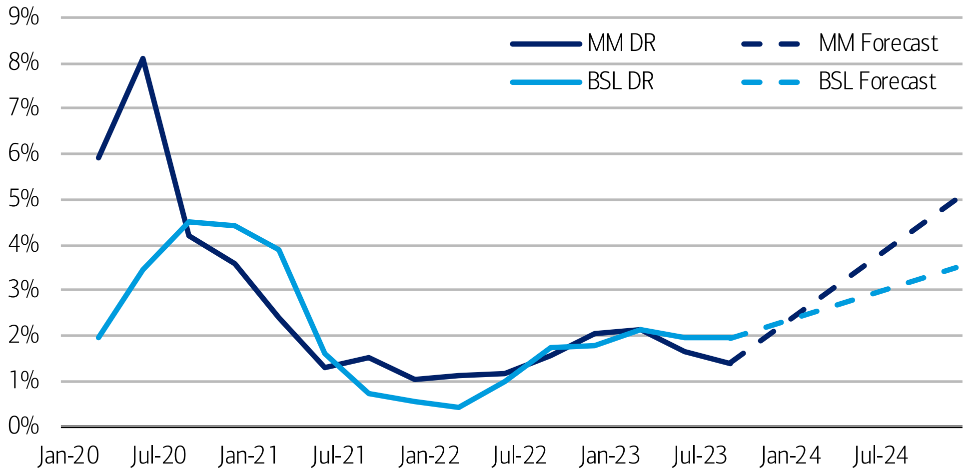
There also exist mitigating factors that will suppress losses for private credit investors. First, sponsors have shown their inclination to inject liquidity and delever deals, as a means to win over creditors in new deal executions and refis. Second, there is higher stakeholder ability and willingness to resolve issuer payment problems within close-knit private markets, especially for good business models stuck within the confines of bad balance sheets.

On balance, we expect credit losses within PD to increase with default rates reaching 5% at their highs driven by increasing credit losses in older vintages (Exhibit 56). This is an environment where BSL defaults reach 3.5%. From here, if in our central scenario of soft-landing, default rates could subside to 4%. However, if a hard-landing scenario becomes inevitable, defaults amongst middle market firms could surge to 7%, per our estimates.

Exhibit 56: 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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Middle Market CLOs

We think middle market activity is poised to increase next year. MM loan yields have reached 12% from 7% a year ago which will attract larger pockets of capital, including Private Debt platforms and MM CLOs. PD platforms have accumulated a large amount of dry powder. Capital raises are reenergizing yet deployment has slowed this year, prompting these platforms back in action next year.

One issue could be sourcing equity for LBOs. As we have previously concluded, there is likely to be compression of returns between debt and equity on a look-forward basis, which all things equal could dissuade new deal formation. We think a solution to this issue could be middle-market CLOs, which can provide structural leverage to equity holders in order to juice up returns. As such we think that MM CLO formation is poised to pick up next year amid attractive MM loan premiums.

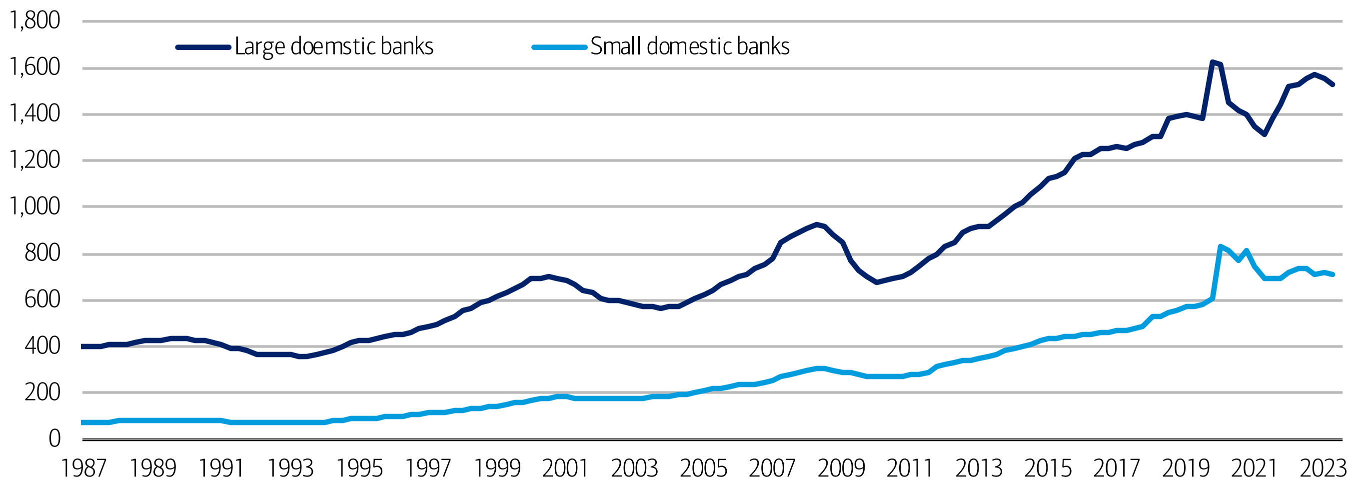
Middle market issuers face sharp coverage declines and have substantial upcoming maturities. We estimate Private Debt defaults could reach 5% at its peak in '24 with most vulnerabilities in unitranches, BDCs and older vintage funds with highly levered deals. Post-2021 vintages could outperform public credit, while banks scaling back has widened nonbanks' opportunity set. Middle market CLOs are poised to gain market share.

Bank Loans

Bank loans represent the largest portion of USD loans outstanding by far – at $2.7tn. We define this segment as the group of loans that are carried out via bilateral agreements and largely sit on bank books to maturity with no active secondary market. This is naturally an illiquid market, but at the same time the most important source of credit for US corporates because it is cheaper than accessing either bond or loan primary, and can be tapped in size. For perspective, most corporates that issue in the IG, HY and Loan markets also have revolvers or TLAs with large/regional banks that they rely on for key needs. Yields in this universe have increased to 7.4%, and remain well inside of the rest of the loan market (Exhibit 6). Net charge-offs, which indicates fundamental pressures amongst borrowers have also increased to 0.7%.

Exhibit 57: C&I loans outstanding ($bn)

Small bank lending has receded back to its COVID lows while large bank balance sheets are still larger vs COVID



Source: BofA Global Research, FRED

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Given its size and scale, this market is central in determining health of US credit. Two large events have threatened to disrupt credit creation over the last 12 months – last year when the Fed embarked on an aggressive tightening cycle, and then again this year during the regional bank turmoil. Data collected from the Fed flow of funds shows that while credit creation remained intact last year, there has been a small setback this year.

To understand where the impact is coming from, we divide the dataset into its components of large and small banks (Exhibit 57). Large banks have combined $1.5tn on their balance sheets as of June '23, a decline of $50bn from Dec '22 peaks (-2.7%). Small banks have combined $700bn on their balance sheets, and have seen a decline of $25bn from last year's peak levels (-3.3%). Though declines are on a similar scale, small bank lending has receded back to its COVID lows while large bank balance sheets are still larger vs COVID. This is because small bank lending never increased to the same extent post COVID, but then suffered an additional set back due to the regional bank turmoil.

The higher rates backdrop has both advantages and disadvantages for the banking industry. While higher rates increase NIM (Net interest margin) thereby encouraging lending, they also squeeze liquidity due to asset write-downs as evidenced by bank HTM portfolios this year. In addition, recent Fed stress tests have increased the need of regulatory capital for banks thereby impacting their ability to invest in credit products such as CLO AAAs and certain kinds of loans.

We think higher for longer rates will impact the appetite to borrow, decreasing the demand for bank loans. Supply of loans may also weaken – regional banks face imminent tightening of regulatory oversight in the aftermath of the bank turmoil, which is likely to decrease size of their available balance sheet. It's conceivable that banks reduce investment in areas secondary to their business away from mainstream lending which will limit the decline in C&I loans.

Small regional banks are integral to the bilateral loan ecosystem, especially in the context of funding middle-market corporates. As such, our projected decline in C&I lending will be of greatest consequence to middle market borrowers some of which will need to find alternate sources of funding such as Private Debt platforms. Larger issuers have more funding options such as public debt and equity markets and will face less punitive interest rate increases.

On balance we expect C&I bank loans to continue to decline in 2024, and yields to stay high as net charge offs increase due to liquidity stress building amongst fringe borrowers.

> We expect C&I lending to decrease with small banks and issuers getting impacted proportionally more. High rates will suppress issuer appetite to borrow, while loan supply may also weaken due to imminent tightening of regulatory oversight in the aftermath of the bank turmoil.

Relative Value

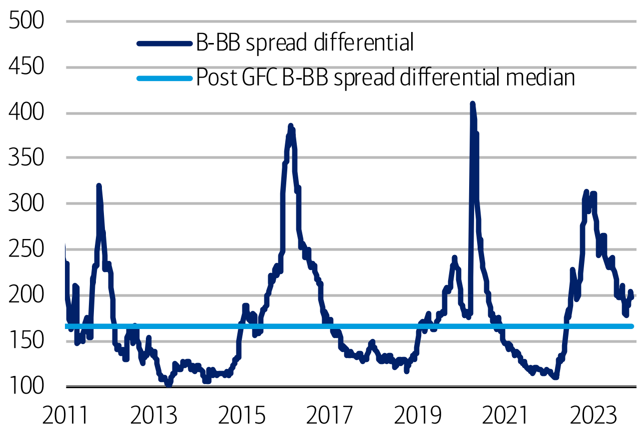
US Loan Ratings

CCCs have outperformed in 2023 on an absolute basis delivering 14%. However BBs, and even Bs did better on a risk adjusted basis delivering 9% and 12% respectively, both consistent with our soft-landing call for the year. As we think about 2024, we have to weigh in the expected fundamental deterioration amongst the lower quality issuers. This will continue to drive dispersion – the wedge between winners and losers. BBs are likely to outperform on even an absolute basis next year as credit and capital losses increase amongst B3s and CCCs.

BBs have the advantage of high carry as well as better fundamentals. Their earnings are more resilient to economic slowdown and they have more funding sources. They are also likely to have the best pro forma coverage ratios next year – they have higher cashflows to meet increasing debt costs, and they also hedge out proportionally larger amounts of their floating rate exposure, thereby blunting the impact of interest rates. As such, BBs are likely to deliver 8.5% returns in our base case, and 6.6% in a hard-landing scenario.

On the other hand, CCCs are likely to substantially underperform next year for similar reasons which serve as tailwinds for BBs – CCCs have weaker earnings, balance sheets, cashflows, lack of interest rate protection and available cash to meet coupons, all leading to higher default rates. In our base case we expect them to finish with -2.9% returns, while in a recession, losses could aggregate to -18%. Bs are in between with a forecast of 7.6% total return in our base case, and 3.3% hard-landing scenario.

Exhibit 58: B minus BB spread differential
The spread advantage that Bs have over BBs today is >200bps



Source: BofA Global Research, LCD

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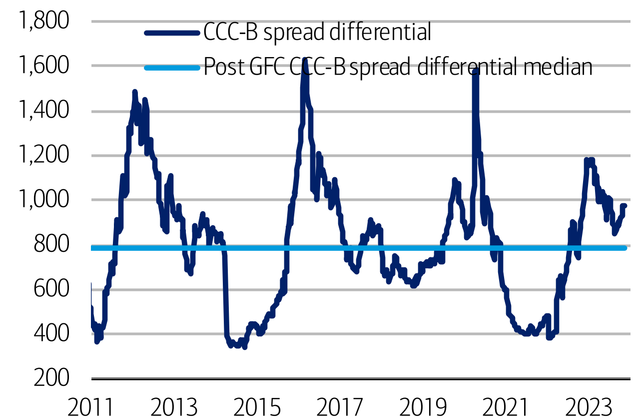
Exhibit 59: CCC minus B spread differential
CCCs have not decompressed enough



Source: BofA Global Research, LCD

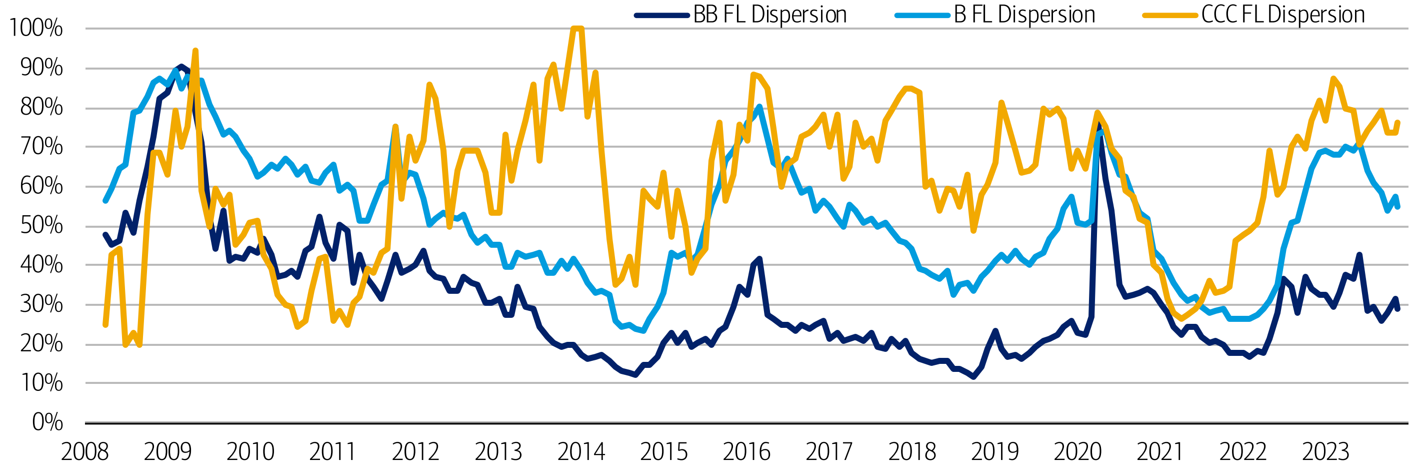
BofA GLOBAL RESEARCH

The YTD rally has led to compression across ratings. The spread advantage that Bs have over BBs decreased 120bps reaching historical medians in mid-Sep, and is little off the tights today at 190bps (Exhibit 58). CCCs have rallied 300bps vs Bs and are offering ~1000bps premium today (Exhibit 59). Bs need to fall 1pt to match BB projected returns, another 3pts to beat BBs more decisively. CCCs at their current price levels of $77.5 are expected to meaningfully underperform Bs as discussed in the returns section. For CCCs to beat the 7% return projection for Bs, prices need to fall to $72.5. To be unequivocally attractive CCCs need to fall to $70. This suggests that CCCs, despite the recent price pullback, are not yet at valuations compelling enough to enter given fundamental headwinds.

Dispersion

We note that dispersion within CCCs remains high (not the case amongst BBs) underscoring that not all CCCs are equal and could enable credit pickers to shine. Today, 80% of the CCC 1L universe is trading "at the wings" rather than the center of the distribution, indicating that the wedge between the winners and losers is large. This compares to the 30% dispersion levels reached in 2021 at cycle tights. BBs on the other hand are at low dispersion levels since fundamentals there are expected to remain resilient (Exhibit 60).

Exhibit 60: Dispersion across ratings
Dispersion within CCCs remains high



Source: BofA Global Research, Markit

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We calculate dispersion as the proportion of loans in the rating bucket (by count) that are trading +/- 100bps outside the average discount margin of that rating bucket. However, for CCC, we apply a threshold of 300bps instead of 100bps as the overall level of spreads is higher compared to other ratings.

BBs are likely to outperform given their better fundamentals and low default probability. Bs need to fall 1pt to beat BB returns in '24, while CCCs need to fall 5pts to beat Bs. CCC dispersion remains high.

US Loan Sectors

We look at sectors through the lens of the RV table (Exhibit 61) and complement it with issuer fundamentals and near-term headwinds and demand trends that we collect by evaluating issuer earnings transcripts.

Exhibit 61: US relative valuations across ratings and sectors

We like defensives such as Food and certain parts of Healthcare. We think Travel, Leisure and Capital Goods may run out of steam. Autos and Chemicals pose downside

	3yr Yield	3yr DM		Price		1yr Tights		1yr Wides		YTM	Retracement		Characteristics	
	Current (%)	Current (bps)	YTD Δ (bps)	Current (pts)	YTD Δ (pts)	3yr DM (bps)	Price (pts)	3yr DM (bps)	Price (pts)	Current (%)	From Tights	From Wides	Count	% by par
All Loans	10.4	554	-83	95.5	2.5	520	96.2	640	93	9.9	28%	72%	1458	100%
BB Loans	8.1	324	-44	99.1	1.5	307	99.4	388	97.1	7.7	21%	79%	292	22%
B Loans	10.3	540	-145	96.3	4.1	503	97.2	688	92.2	9.7	20%	80%	829	62%
CCC Loans	18.8	1,394	-68	80	0.2	1,323	81.8	1,532	78	18.2	34%	66%	209	8%
BBB-	7	212	-17	99.9	1	200	99.9	247	98.4	6.8	26%	74%	37	3%
BB+	7.4	258	-21	99.8	1.6	230	100.1	284	98	7.1	52%	48%	69	5%
BB	8.1	326	-53	99.2	1.3	305	99.7	420	96.5	7.7	18%	82%	97	8%
BB-	8.5	363	-55	98.5	1.5	352	98.7	466	95.5	8.1	10%	90%	126	9%
B+	9	418	-70	98.5	2.5	391	99	491	95.9	8.6	27%	73%	158	13%
B	10	516	-109	96.8	3.1	479	97.8	639	93.3	9.5	23%	77%	327	25%
B-	11.2	635	-219	94.5	5.6	590	95.5	856	88.9	10.5	17%	83%	344	24%
Autos	10.3	546	-103	95.8	3.1	482	97.3	653	92.6	9.5	37%	63%	50	4%
Cable	9.2	439	0	96.3	0.9	359	97.5	533	93.7	8.9	46%	54%	26	3%
Capital Goods	9.7	483	-78	97.1	2.5	459	97.8	592	94.3	9.1	18%	82%	76	5%
Chemicals	10.7	586	-30	94.9	1.7	514	96.5	652	92.6	10.1	52%	48%	65	4%
Energy	9.1	422	-65	99.4	1.8	408	99.7	525	96.6	8.7	12%	88%	36	2%
Financials	9.4	459	-101	97.8	3.1	445	98.3	579	94.3	8.9	10%	90%	98	8%
Food Producers	10	514	-99	95.6	3.2	468	96.7	619	92.3	9.7	30%	70%	46	2%
Gaming	8.8	399	-72	98.7	2.4	369	99.4	495	95.7	8.3	24%	76%	25	2%
Healthcare	11.1	624	-127	93.8	3.1	601	94.5	753	90.3	10.7	15%	85%	166	12%
Media	10.6	579	-41	94.7	1.8	505	95.9	680	91.9	10.4	42%	58%	64	4%
Metals	10.2	537	-98	97.7	3.2	520	98.1	640	94.5	10	14%	86%	24	1%
Packaging/Paper	10.4	555	-17	95	0.7	465	97.2	577	94.2	9.8	80%	20%	44	3%
Real Estate	9.6	474	-170	96.9	4.5	447	97.5	668	91.8	9.1	12%	88%	90	5%
Retail	11.3	645	-26	93.9	1.3	580	95.1	676	92.5	10.9	68%	32%	113	7%
Services	11	619	-66	94.8	2.4	565	95.9	691	92.2	10.3	43%	57%	123	7%
Technology	10.6	578	-110	95.2	3	546	95.9	691	92.2	10	22%	78%	237	18%
Telecoms	13.2	830	60	88.6	-0.8	726	90.5	961	85.6	12.6	44%	56%	51	4%
Transportation	9.7	483	-170	96.8	4.2	435	97.8	656	92.6	9.1	22%	78%	29	2%
Travel	8.6	380	-126	99.1	3.7	375	99.3	509	95.4	8.4	4%	96%	54	4%
Utilities	9.8	491	-13	96.9	0.9	455	97.4	533	95.3	9.7	46%	54%	39	2%

Source: BofA Global Research, Markit

Valuations as of mid November 2023

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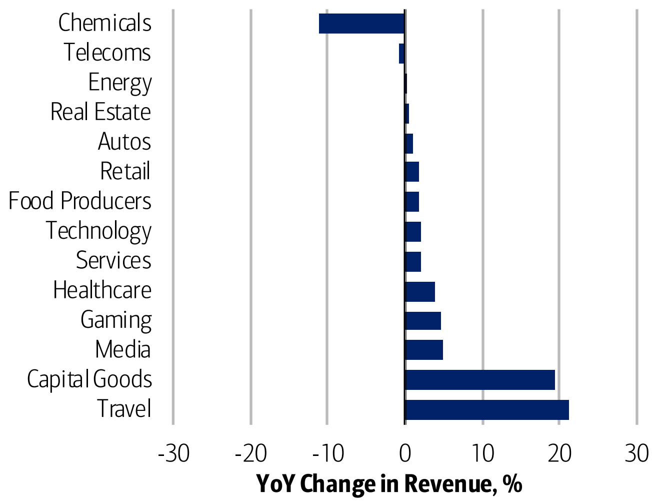
Exhibit 62 and Exhibit 63 show the YoY percentage change in revenue and adjusted Ebitda by sector as of Q3'23. Travel has posted a great quarter, leading all sectors in both metrics. It also has the largest proportion of issuers reporting strong near-term demand among all sectors. However, this sector is at 1yr tights with only 4% retracement from highs. This indicates most of the upside has already been priced in. Moreover, as household balance sheet deteriorates, consumers are likely to cut down discretionary spending including travel & leisure, posing downside risk to the sector.

Capital Goods is another sector that has posted strong earnings growth this quarter, but is trading relatively tight (18% retracement from 1yr tight). Company guidance shows that the sector faces fundamental challenges ahead as issuers are seeing increasing headwinds in input costs, supply chain issues and softening overseas markets.

On the other end of the earnings spectrum, Chemicals continue to lead all sectors as the worst performer. Destocking and softening demand has been the theme for this sector throughout the year. Although it currently looks cheap (52% retracement from 1yr tights, 3rd highest among all), we don't foresee the sector turning things around anytime soon due to global demand headwinds.

Exhibit 62: YoY % Revenue changes by sector
Travel and Capital Goods lead while Chemicals lag



Source: BofA Global Research, LCD, Bloomberg

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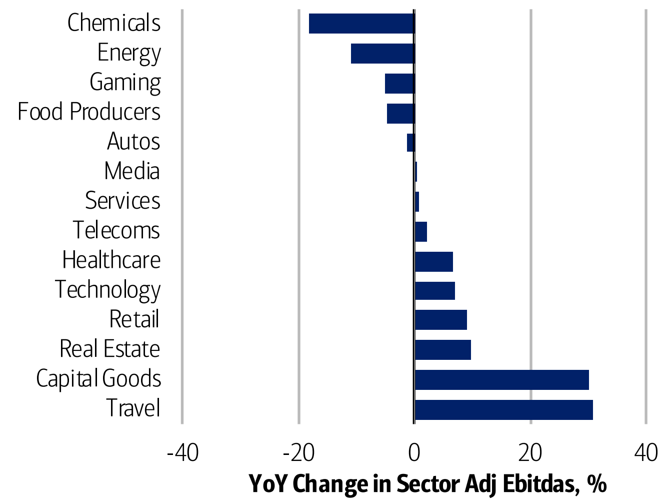
Exhibit 63: YoY % Adjusted Ebitda changes by sector
Travel and Capital Goods lead while Chemicals lag



Source: BofA Global Research, LCD, Bloomberg

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Healthcare and Technology – the two largest sectors in the loan index – have been trading relatively tight lately with 15% and 22% retracement from their 1yr tights, respectively. Despite the tightness, Healthcare could outperform on the back of decreasing labor costs and resilient demand, while Technology could benefit from rates potentially going down in 2024. In addition, only 18% of Technology issuers expect to face near-term cost headwinds going forward, which is a 33% drop compared to the previous quarter and the lowest among all sectors in Q3'23. We also like Food at 30% retracement due to its relatively defensiveness.

We see potential value in Retail – the sector is at 68% retracement (2nd highest amongst all sectors), and despite structural headwinds might be ripe for bottom picking given positive revenue and ebitda growth in Q3. Services are also relatively wide at 43% retracement, backed up by stable earnings growth for now. However, we think the story of dispersion applies. As consumers run out of excess savings and cut spending, discretionary goods and services will be the first to take hit whereas defensives will hold up relatively well.

Another sector we think worth mentioning is Autos. Recent UAW strikes and wage increases have made outlook uncertain if not bleaker. In Q3 Autos leads all sectors in proportion of issuers reporting near-term headwinds, particularly rising labor costs. This sector currently has retraced 37% from its 1yr tight, not enough to be attractive. Overall we think it has more downside risk than upside-potential in 2024.

> We think Travel, Leisure and Capital Goods may run out of steam next year as consumers and companies rein in discretionary spending. We like being in defensives like Food and certain parts of Healthcare, while Retail may be ripe for bottom-picking. Autos and Chemicals pose further downside.

Loans vs HY vs IG

Index-level RV

In a year dictated by high rates, loans have understandably outperformed their high duration credit counterparts. Even so, loan spreads today are relatively wider than HY and most of the YTD outperformance has been a result of the high loan carry. Loan 3yrDM is currently at 560bps which represents 64th percentile in its post-GFC spread history. HY OAS currently at 390bps comes in at 29th percentile. Divergence at an index level makes sense because 1) HY is a better quality portfolio than loans given higher pct of BBs 2) HY spreads have less of a widening bias given fixed coupons, 250bps lower than loans.

However, with time some of this divergence is likely to vanish as more HY issuers tap the market due to upcoming maturities. Moreover, differences exist at the rating level as well where risks are similar regardless of the instrument type (see our report, Are loans riskier than bonds). Divergence is most stark at the B level (24%), followed by CCCs (21%), then BBs (12%). In our base case soft-landing scenario, bulk of the credit pressure will be borne by loan CCCs, the reason why the spread differential with bonds exists. However, B-rated bonds and loans have very similar credit risk profiles as seen by the default study we did through the COVID default cycle.

Exhibit 64: Spreads expressed in percentiles of their range post GFC
HY-Loan spread discrepancy is the highest in single-B category

	Loans	HY	IG (RHS)	
Index	64%	29%	30%	Index
BB	36%	24%	13%	AA
B	56%	32%	44%	A
CCC	77%	57%	25%	BBB

Source: BofA Global Research, Markit, ICE

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Exhibit 65: Prices expressed in percentiles of their range post GFC
IG is the most compelling investment across credit today

	Loans	HY	IG (RHS)	
Index	35%	11%	2%	Index
BB	49%	8%	2%	AA
B	41%	11%	2%	A
CCC	19%	13%	2%	BBB

Source: BofA Global Research, Markit, ICE

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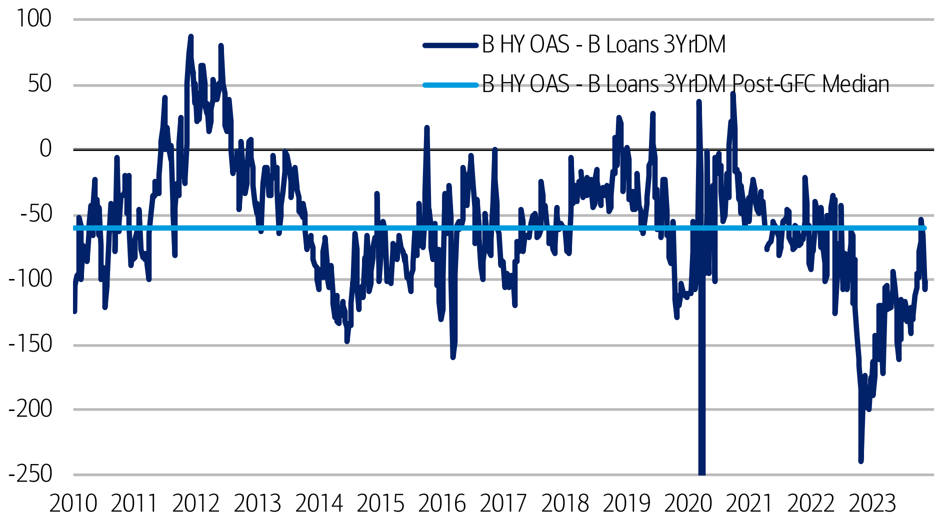
A large portion of the B-level bond-loan spread differential has corrected vs last year (Exhibit 66), but it still leaves room to mean revert by ~50bps due to the recent rally in B-rated bonds. For similar reasons, we think BB-level spread differential should also collapse in due time.

Exhibit 66: HY B spreads minus loan B spreads
B bonds are at record tights vs B loans today



Source: BofA Global Research, LCD, ICE

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Which credit segment offers the best value?

The answer is predicated on economic trajectory. In our central scenario of a soft-landing and 3 rate cuts, IG is poised to outperform due to its highest duration sensitivity. 3 of 4 economic scenarios laid out earlier are characterized by some form of monetary policy easing in 2024. The only scenario offering no rate cuts initially is a reacceleration scenario, which ultimately may transition into a hard-landing scenario leading to deep rate cuts anyway. As such, we find IG to present the best value within credit today – the downside risk to prices from further rates selloff (high inflation) is now lower than the upside risk to prices from a rates rally (declining inflation, and/or recession).

HY vs loans are roughly even with a slight tilt towards loans. 2 of 4 economic scenarios lead to loan outperformance (soft-landing, goldilocks) as a beta rally ensues in the context of already high loan coupons. Hard-landing and reacceleration carry the risk of a flight to quality which will allow HY to outperform vs loans given portfolio quality differences. Below we show sample total return calculations for HY and IG bonds in '24.

We derive our fair value estimates of HY and IG OAS based on loans spread forecast. If US loans end up at ~600bps in a soft-landing, this equates to US HY at 450bps given their mutual past relationship. Combining this with a rosy rates outlook (see our report, Bond fairy tails), we derive a projected total return of 6% for HY (Exhibit 67). This compares to 7.2% forecast for US loans. Put in another way, HY OAS will need to be at 410bps or 5yr rally to 3.3% for HY to outperform loans in a '24 soft-landing. While we could certainly see HY OAS at 410bps if demand is strong, we find it hard to imagine 5yr under 3.5% next year so rates will provide limited tailwind to HY.

In an upside scenario should HY OAS reach 375bps (local tights) this would be equivalent to loans at 500bps. Even in this situation loans will outperform with 10% returns while HY generates 8.7% in a higher rates backdrop. In the downside scenario of a hard-landing, HY OAS could reach 540bps, but a large retracement in treasuries will provide an adequate offset, generating 4% returns. This compares to loans at 700bps and 2% returns, thus underperforming.

While it may be tempting to favor HY over loans in a year of decreasing rates, its noteworthy to remember that HY bonds are going into the year with 250bps lower carry. At current OAS, 5yr will need to rally 80bps to offset the lower carry in HY. **Additionally, the credit loss for HY is not low enough, and capital gain not high enough vs loans, for HY to come up ahead in a soft-landing scenario**.

Exhibit 67: US HY Total Returns in 2024

In a soft-landing scenario, US HY OAS could reach 450bps, total return 6.0%. Upside: 8.7%. Downside: 4%

	YE 2022	YE 2023	YE 2024
Price	85.9	89.0	90.0
OAS	**481**	**392**	**450**
Avg Treasury bps	405	452	375
Coupon equivalent, bps	577	598	620
Current Yield, bps	**672**	**672**	**689**
Spread change, bps		-89	58
Spread Duration		4	4
Key Rate change, bps		47	-77
Rate Duration		4	4
Capital gain, bps		**147**	**61**
Default Rate, pct		3	4
Recovery Rate, pct		35	35
Assumed current price of future defaults, pts		60	60
Credit Loss, bps		**104**	**146**
Total Return, pct		**7.1**	**6.0**

Source: BofA Global Research, ICE

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We follow a similar process with IG. In our central scenario, IG generates 8%+ returns riding a rates rally (see Bond fairy tails). Risk here is that spreads blow out (hard-landing) or rates stay stubbornly high (higher R*). However, in the former scenario, base rates will compress, and in the latter IG spreads will. Both provide an offsetting tailwind to IG, allowing returns to finish in the range of 7-12% next year. In the former IG could outperform LevFin by an even wider margin, but in the latter it may underperform.

Exhibit 68: US IG Total Returns in 2024
In a soft-landing scenario, US IG could generate 8% returns given sensitivity to rate cuts.

	YE 2022	YE 2023	YE 2024
Price	89.1	88.5	95.0
OAS	**138**	**123**	**125**
Avg Treasury bps	388	453	400
Coupon equivalent, bps	373	395	395
Current Yield, bps	**419**	**446**	**416**
Spread change, bps		-15	2
Spread Duration		7	7
Key Rate change, bps		65	-53
Rate Duration		7	7
Capital gain, bps		**-325**	**374**
Default Rate, pct		0	0
Recovery Rate, pct		100	100
Assumed current price of future defaults, pts		90	90
Credit Loss, bps		**0**	**0**
Total Return, pct		**1.1**	**8.0**

Source: BofA Global Research, ICE

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Putting all of this together, across credit, we think the best risk-reward is currently offered by IG, followed by BB bonds (riding rate cuts and low defaults) BB loans (low defaults), B bonds, and then B loans. We think there is downside risk in CCCs.

Capital structure RV

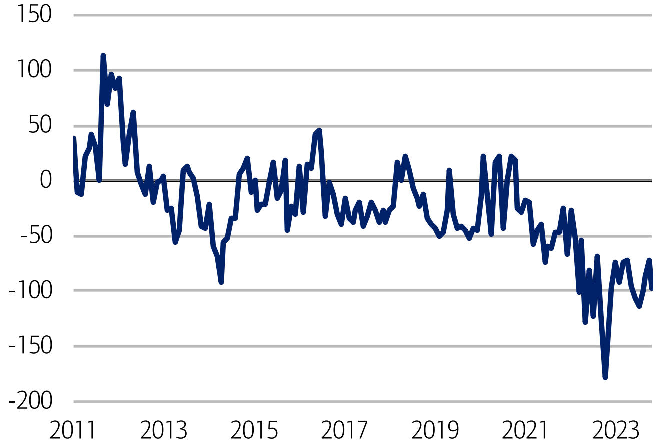
We also like to do this RV exercise on an issuer-matched basis eliminating noise from sector and rating mismatches. The below charts are based on capital structures which have both bonds and loans outstanding. The secured bond-secured loan data is based on 100+ issuer sample, while unsecured bond-secured loan data is based on 200+ issuer sample.

Looking at secureds – this pair of securities has the same, default/recovery risk and in a lot of cases similar liquidity risk as well. Yet differences exist between their spreads on the same capital structure, average being near -100bps today (Exhibit 69). Having said that, the differential has retraced to a large extent – a call we had made last year. The remaining premium is likely to collapse to the median -50bps levels only once rates decline.

The unsecured bond-secured loans spread differential is at average levels ~100bps (Exhibit 70), while historically it has ranged between 250bps (bear market) and 50bps (bull market). Here the direction is dependent on economic path. In decreasing growth scenarios the differential should increase in favor of secured loans, and vice-versa in stable growth scenarios.

Exhibit 69: Spread diff b/w secured bonds and loans

Spread diff b/w secured bonds and loans currently stands at -100bps



Source: BofA Global Research, IHS Markit

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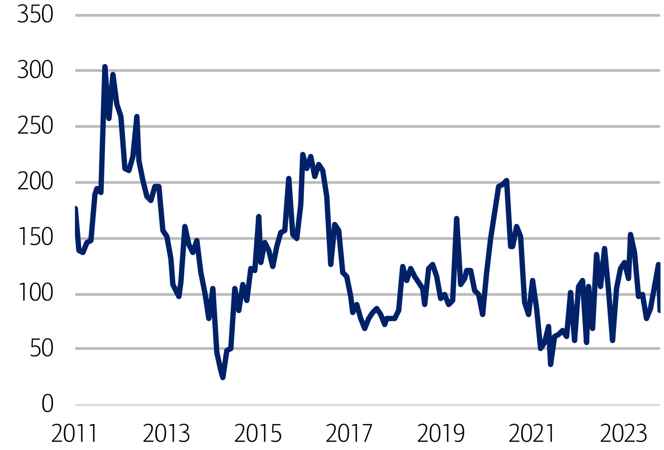
Exhibit 70: Spread diff b/w unsecured bonds and loans

Spread diff b/w unsecured bonds and loans currently stands around 100bps



Source: BofA Global Research, IHS Markit

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IG offers the best value within credit given sensitivity to rates, which are projected to fall in 3 of 4 possible economic scenarios. 2 of 4 economic scenarios lead to loan outperformance over HY: soft-landing, goldilocks. Hard-landing and reacceleration scenarios will allow HY to outperform loans.

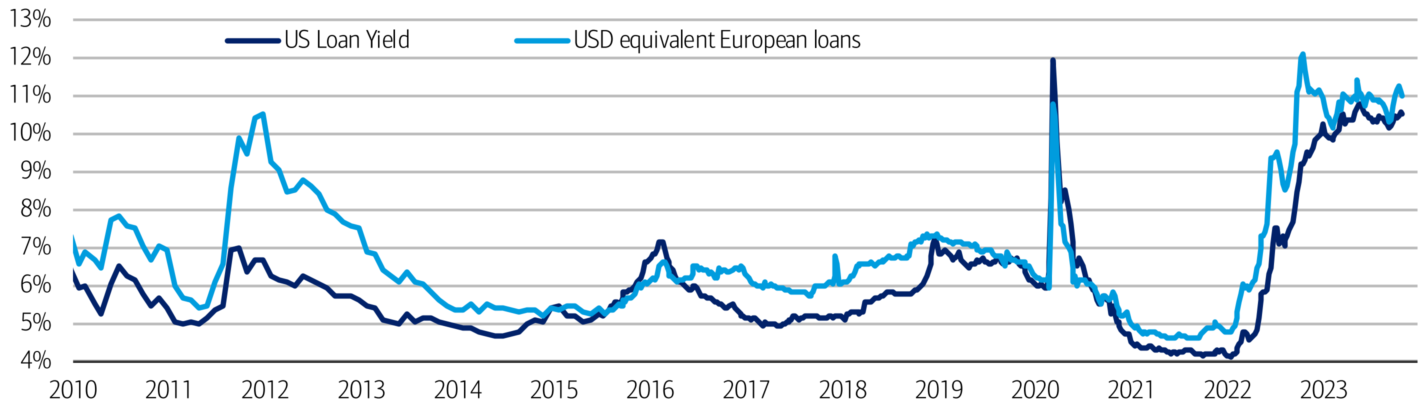
it may be tempting to favor HY in a year of decreasing rates, but its noteworthy to remember that HY bonds are starting out with 250bps lower carry vs loans. On top, capital and credit losses for HY are not low enough vs loans for HY to come up ahead vs loans in soft-landing.

We estimate ’24 returns at 8% in IG vs 6% in HY and 7% in Loans.

US vs EU

On a nominal basis yields in EU loans (9.4%) are lower than US loans (10.6%). Currency forwards provide EU assets a 1.75% bump in yields, reaching 11.1%. The same FX-adjusted pickup is 0.7% for EU BBs and 0.4% for EU Bs. Though, this makes EU loans on an FX-adjusted basis look marginally more attractive for US investors (Exhibit 71), we don't think the compensation is enough to take EU macro risk.

Exhibit 71: US Loan yields vs. FX-adjusted EU Loan yields
Factoring in FX-adjustments, EU loans out-yield US loans by 1.7% due to currency forwards



Source: BofA Global Research, Bloomberg, LCD

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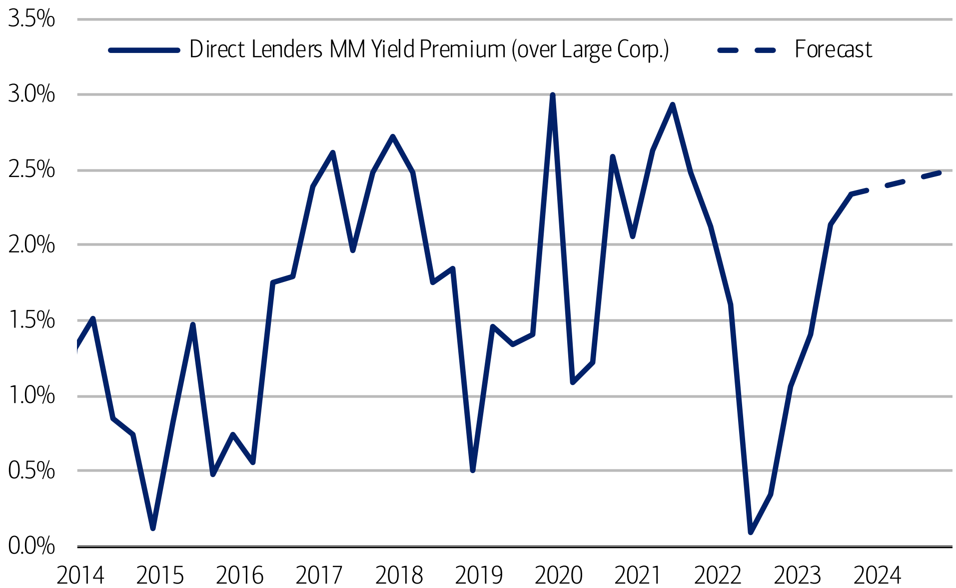
Given our expectation that EU growth remains lackluster and the looming downside of a recession in the region, we like migrating up the capital structure and ratings. This means secured loans over unsecured bonds and BBs over Bs. A word of caution on EU HY – there is record maturity build up for the asset class which could force large supply volumes next year, upsetting the strong technicals in the EU credit space. However, most of the higher quality assets will be successfully absorbed, leaving lower quality B3/CCCs at risk of not finding appropriate refi avenues. It is reasonable to assume that this could leak into credit spreads in the EU loan space as well, temporarily widening spreads.

FX-adjusted yield pickup for US investors in EU loans is 0.7% for BBs and 0.4% for Bs: not enough to take EU macro risk. We like moving up in quality and think that the large EU HY refi wall poses a technical risk.

Broadly Syndicated Vs Middle Market Loans

To assess relative value between the two markets, we turn to primary valuations. Exhibit 72 shows the relationship between them over time. The yield premium offered by new loans in the MM primary vs the BSL primary is cyclical and driven by risk appetite. The premium peaks during pullbacks, as seen during COVID when it reached ~3%, and troughs during rallies, reaching ~50bps a few times over the last 10 years. Middle market loans have decompressed adequately against BSL loans – as was our call from last year. We think room for further decompression is limited, topping out at 2.5% from current 2.3% over the next 1 year.

Exhibit 72: Direct lenders MM yield premium over large corps
We expect MM yield premium to increase to 2.5% by YE 2024



Source: BofA Global Research, LPC, LCD

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On an LTM basis, BSL primary yields have risen from 9.4% to 10% (+60bps), while MM loans have risen from 9.7% to 12.3% (+260bps). MM spreads have widened as a function of slowing economic growth which impacts smaller companies more, and regional banks scaling back credit in the aftermath of the banking turmoil earlier this year. This has helped the MM premium reach cycle peaks. We think that there is limited room for premium to widen from here.

As discussed in the main PD section, middle market is likely to face headwinds in the form of higher maturities and default rates next year. As such we think there could be some more pressure on yields relative to BSL. We expect MM loan yields to increase by a small margin ~20bps, while BSL yields stay flat as falling base rates are offset by a matching increase in spreads (50bps).

We expect Middle Market yield premium over syndicated loans to reach 2.5% next year. MM spreads have widened as a function of slowing economic growth which impacts smaller companies more, and regional banks scaling back credit. MM is likely to face more headwinds due to higher maturities and default rates next year.

Risks

Geopolitical fragility

Our primary risk is geopolitics. The Russia-Ukraine war already appears to be at a long-term stalemate, and now there are potentially more problematic developments on the horizon with the Israel-Hamas war. The EU region faces significant macro risks with these twin wars. The landscape in Washington isn't a lot more pleasant with (sometimes ugly) partisan politics, stiff posturing, fragile alliances, and inability to make seemingly basic decisions. Add to that an election year, and one could see how geopolitical volatility is expected to remain elevated next year. China has become a perpetual risk to any market call due to the profound implications of fraying China-West relations. The depth and scale of China's relevance for western economics is so significant, that reversing these dynamics will be lengthy and painful. All these dynamics point to the fragile state of today's geopolitical backdrop.

Policy mistake

There is risk of policy mistake on both sides of the pond. The more prominent concern is in EU where there is a high risk of ECB not delivering penciled in rate cuts next year. This could be a function of stubborn headline inflation especially if oil spikes higher again. Given already soft core demand, and already restrictive financial conditions, this is likely to push the region into a recession.

There is also a chance that the Fed does not cut rates here at home. The Fed has successfully managed to bring down inflation to <4% and has been fortunate that the economy was strong enough to absorb the rate shock. This portends the question how much further it is willing to go to return inflation to its actual target of 2% which is a different ballgame – it will be tougher, with possibly very damaging economic impact.

Oil prices

Rising regional military and economic tensions in the Middle East have created upside risks to energy prices. In a scenario where military conflicts remain contained to Israel and Gaza, Brent may finish $90-$95/bbl. However, should the situation escalate engulfing Iran in the issue, or a physical supply disruption occur because of attacks on energy infrastructure, oil could rally to $120-$130/bbl. For perspective, past energy supply shocks such as the Arab oil embargo or the Iran revolution led to triple-digit percentage increases in oil prices. Tighter economic sanctions on Iran could also curb supplies. Any of these issues could lead to a steeper oil term structure and pose upside risk to oil prices, bringing inflationary pressures back and putting global central banks in hawk mode once again. The situation will be particularly problematic for EU region which is contending with structural energy issues. The already wide gap between core and headline inflation in the region will likely force the ECB's hand into keeping rates high and lead to a recession.

"Something breaking"

This is a scenario wherein something of extreme importance breaks before the Fed meets its goal. There is a list of vulnerable areas that could qualify: Treasuries, IG debt, financial institutions, housing. Breakages have clearly already started as we are seeing in the housing, retail, banks, consumers and LevFin corporates, but these have remained behaved enough for the Fed to pursue its inflation goal. However there are vulnerabilities in big markets like treasuries, real estate and consumers, which – if they were to buckle – would push US towards a hard landing.

Over in Europe, the energy backdrop remains a permanent source of risk. The region might have skirted the worst case scenario, but the full ramifications of their race to energy security are yet to play out. Creating new, secure energy alliances and infrastructure could potentially take years, during which the region remains exposed to macroeconomic shocks. There are also many geopolitical challenges in the region, with high dispersion of growth and political views across countries, which makes ECB's job unequivocally harder than the Fed.

Japan and YCC

Japan has been a universal anchor of global fixed income markets this decade due to its policy of yield curve control (YCC), forcing capital to flow outside its borders. The policy was put in place in 2016 to spur its ultra-sluggish growth and inflation levels. Today, Japan is lagging all major central banks in raising rates. This has come at a high cost to its currency – the Yen is down >15% against USD this year, a cause for concern to the BoJ. We wonder if domestic economy and currency become important enough for the BoJ to abandon YCC and unleashing a wave of capital returning onshore. A change of this magnitude could unhinge fixed income markets, putting further upside pressure on asset yields in the US. IG credit will be particularly vulnerable to this catalyst given its high proportion of foreign buyers.

Glossary

AUM: Assets Under Management

BSL: Broadly Syndicated Loan Market

CLO: Collateralized Loan Obligation

CPI: Consumer Price Index

DL: Direct Lending

GFC: Global Financial Crisis

IG: Investment Grade

HY: High Yield

ISM: Institute for Supply Management

LBO: Leveraged Buyout

LCD: Leveraged Commentary & Data

LevFin: Leveraged Finance

MM: Middle Market

OAS: Option-Adjusted Spread

OER: Owners' Equivalent Rent

PD: Private Debt

PPI: Producer Price Index

Refi: Refinancing

RV: Relative Value

SMA: Separately Managed Accounts

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