AXA Investment Managers

November 2023

AXA IM CLO Market Update

CLO investors in the fast lane

Dear all,

One word could summarise November for almost every asset class: rally. And this rally was close to record levels – from sovereign debt to equities, credit, and CLOs. It was fuelled by better-than expected news and data in every main current theme: geopolitical risk, earnings season, economic indicators and central banks guidance. A good testimony of this 'risk on' sentiment was the VIX Index dropping below 12.5, a level not seen since pre-Covid, and 10-year Treasuries moving from a yield of c.5% to 4.3%.

In the Middle East, Israel entered its 'third phase' of retaliative invasion with its ground operation in the Gaza Strip. However, on the 24th of

November, a ceasefire and hostage release contributed to some de-escalation.

Q3 earning season came to an end and provided average results, but with significant regional dispersion (+4.5% in the US and -14% in Europe). Notably, ex-Energy earnings growth was positive across the board (+8% in the US and +2% in Europe), which helped to dampen fears of a 'hard-landing'.

From a macro perspective, both GDP and CPI surprised on the upside. The US posted solid 5.2% real GDP QoQ growth, while core inflation softened to 0.2%, from 0.3% the previous month. In Europe, growth was muted with flat to negative numbers depending on countries. However, there was a positive surprise from CPI figures with core inflation dropping to 3.6%, its lowest level since April 2022.

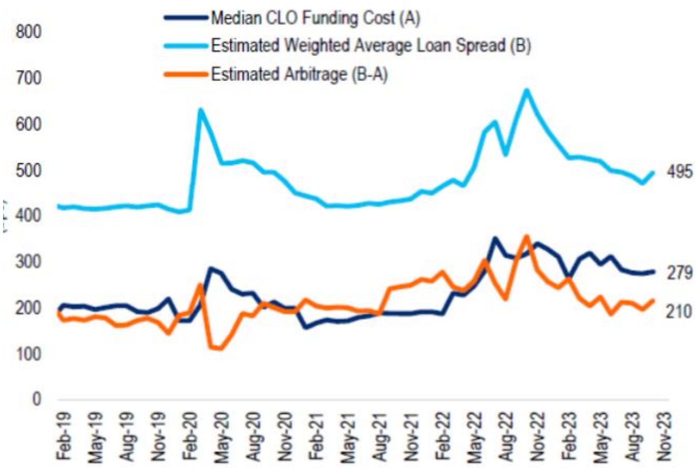
Despite central bankers trying to push back investors' expectation of a rate cut, they still clearly indicated that the hiking cycle should come to an end and that inflation "is moving to the right direction".

Altogether, the positive headlines have been reflected in assets valuations and the sustainability of the rally could be questioned. In particular, inflation data may prove volatile in the short term and – more pertinently – concerns could resurface around defaults following quantitative tightening and consumers weakness.

Primary CLO Markets

A particularly interesting month in the context of tight arbitrage, which dissuaded third party investors from financing the equity part. On both sides of the Atlantic, it highlighted the fact that new issue activity this year was more or less confined to CLO managers that either retain their own equity or have captive equity funds.

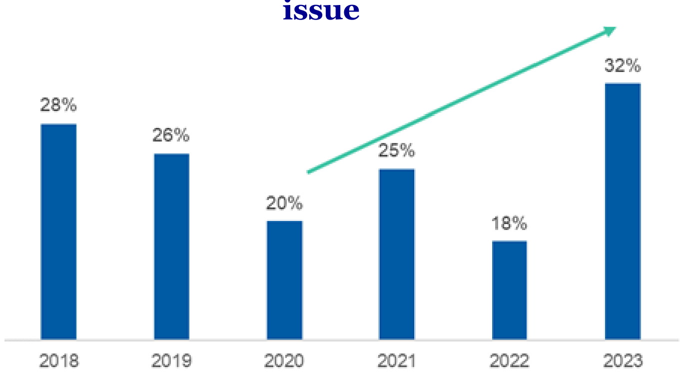
CLO Asset/Liability cost & Arbitrage



Source: AXA IM, Citi

This theme is predominant in the US where 2023 has brought a record market share of 'Tier 3' CLO manager (more retained) issuance at the expense of 'Tier 1' (more third party).

Share of US Tier 3 CLO as part of new issue

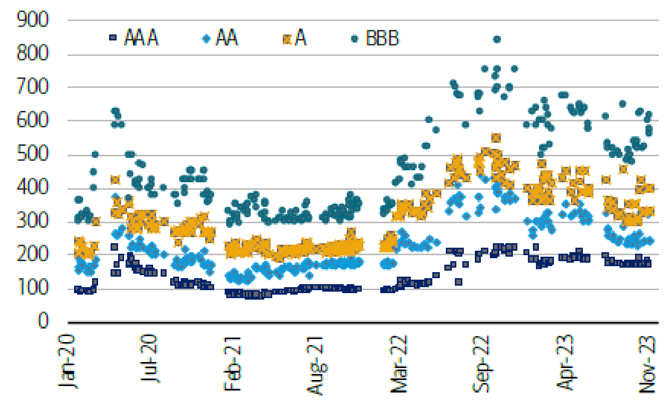


Source: AXA IM, MS

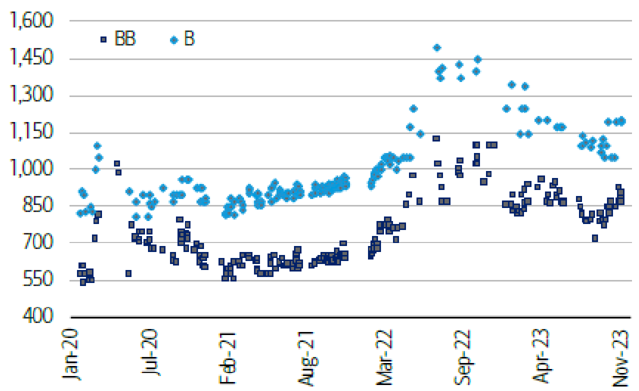
In the US, 28 new issue deals and 5 resets priced, totalling $11.9bn and $2.4bn, respectively, over the course of the month. Overall volume is down c.17% YTD but a clear dispersion appears between BSL CLO (based on larger loans and more transparent) and MML CLO (loans from smaller or private companies): BSL CLO volume are down c.-30% while MML are up c.+100%. This clearly illustrates the continued and expanding appetite for private credit as it provides competitive pricing while giving sponsors the certainty of pricing in a volatile environment. We expect this trend to continue and potentially reach Europe, where managers have started to sound out investors.

In Europe, November saw €3.7bn of CLO creation, the second-biggest month of the year and just a shade behind €3.77bn in February. The pricing of three new CLO managers during the period brought the total number of new entrants in 2023 to seven, a rate of increase not seen for many years. These newcomers saw their investment grade mezzanine tranches priced significantly wider than established CLO managers, while their high yield tranches priced with premium but deemed fair by purchasers. This is a reminder of the value from being a large, established market player - particularly at the top of the capital structure. A deal can be penalised if the CLO manager is not known and trusted by big institutions.

European IG CLO primary pricing



European High Yield CLO primary pricing

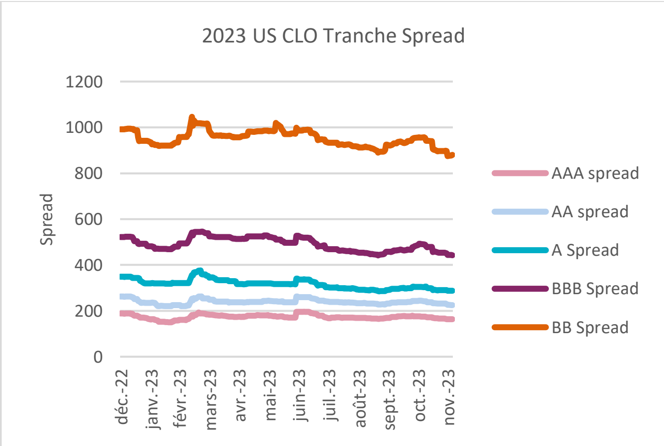


Source: AXA IM, Bofa

December is expected to be a quiet month in terms of new issuance. Entering 2024, we believe the spread across the capital structure to be healthy, providing attractive value both on an absolute and relative basis.

Secondary CLO Markets

CLO trading volume was robust this month both in Europe and the US, as investors started to position their portfolio ahead of the New Year. All tranches benefitted from a spread tightening in line with the 'risk on' sentiment observed globally.



Source: AXA IM, Bloomberg, JPM

In the US, we observed $5bn of CLO tranches auctioned this month versus a 4bn$ long-term average. It was well split across the capital structure with a slight emphasis toward the AAA tranche as investors reinvested the prepayment and amortization.

In Europe €1,7bn of CLO tranches was traded, well above the 1bn€ monthly average. Activity was concentrated at the AAA, AA and BB level in November, simply because supply met demand there. To be noted that year to date, BBBs witnessed the highest turnover as they have accounted for around 20% of auction volume for a tranche that represent c.10% of the capital structure.

European CLOs continue to provide spread pick-up and additional convexity compared to its US equivalent. If the risk-on thematic persists, European CLOs would outperform US. However, the latter has higher liquidity and better macro fundamentals.

Leveraged Loan Markets

The Leveraged Loan market logically benefitted from the global rally, the Morningstar US Leverage Loan Index gained c.60cts and the European one c.30cts. It is to be noted that the rally was less intense than in the High Yield market which benefitted both from the spread and rate decrease. Consequently, the YTD performance between Leverage Loans and Bonds narrowed sharply: the gap stands only at +2% in the US and +2.5% in Europe versus +4.2% and +4% end of October. In terms of new issue supply looks decent in the first place, but only a small portion comes from LBO and M&A and is mainly driven by extension and refinancing.

In the US, new issuance went to $28bn which set the year-to-date volume to $317bn. The bulk of the activity went from refinancing (61%), M&A (18%), repricing (15%), dividend distribution (5%) and others (1%). Interestingly the refinancing activity of the US Leverage Loan hit an all-time high while refinancing of CLO hit an all-time low. In terms of flow, US Leveraged Loan trading volumes hit a multi-year low because of a lack of Loan New issue to force rotation. The 12-month default rate remains contained and has decreased from 2% to 1.5% since mid-year but the average price of Loans in default is close to 30%, indicating well below historical recoveries.

In Europe November issuance of €9.2bn made it the third busiest month of the year by volume, just pipping the €9.1bn in October. Both months saw 16 borrowers come to market and nearly all issuances came from single-B rated issuers. This takes year-to-date issuance to €74.7bn, roughly double last year's tally at this point, and surpassing 2020's full-year total – but a long way off the 148.7bn€ over the first 11 months of 2021.

Pushing out maturities

Behind what appear to be decent numbers, is of course the Amend & Extend theme, which has surged to beyond 35bn€ in 2023 to date. To put this into perspective, A&E volume was only around €2.6bn, €2.6bn, and €6.3bn for full years 2022, 2021, and 2020, respectively. The other significant part of the deal flow was refinancing, at around €20bn. Several borrowers also took the chance to reduce or repay their second lien with first-lien debt. This means that new-issue transactions coming from M&A and LBO deals combined have made up just 16% of the activity so far in 2023. Consequently, the 2023 net new issue supply of European Leveraged Loans only expanded by c.4bn€ to reach 400bn€ outstanding. In terms of credit fundamental, the ELLI 12m-lagging default rate has increased to around 1.3% (principal-weighted) and 1.5% (count-weighted). While this is an uptick from around 0.4% principal-weighted in December 2022, default rates remain benign.

Performance and stategy

CLOs are on track to post record annual performance for every tranche across the capital structure and have outperformed so far the vast majority of other fixed income instrument at equivalent rating.

We would like to emphasis that the performance has been driven mainly by what makes the essence of the CLO instrument: elevated carry and floating rate. The spread tightening has also helped but has been limited, and we believe this could be a driver of future returns.

Asset Class	Performance YTD
AAA CLO (USD)	7,9%
AA CLO (USD)	9,9%
A CLO (USD)	12,0%
BBB CLO (USD)	15,3%
BB CLO (USD)	21,0%
European IG Credit (EUR)	6,4%
European High Yield Credit (EUR)	9,7%
US IG Credit (USD)	5,9%
US High Yield Credit (USD)	10,3%

Source: AXA IM, JPM, Bofa

Our portfolio management has been active and has sourced attractive opportunities across the capital structure from the strong CLO pipeline. We targeted primary transactions to benefit from the new issue premium, cleaner underlying portfolio profile and higher optionality. Our view going forward remains positive as the loan market remains globally healthy in terms of defaults, the carry attractive from an absolute and relative basis and the structures robust and can navigate throughout potential increase credit risk environment.

Best regards,

Risk factors

The list of risk factors as shown below is not exhaustive. Each prospective investor should carefully read the portfolio's final prospectus or portfolio management agreement (as applicable) in its entirety, including any of its amendments or supplements.

Liquidity Risk	Low liquidity offered to investors during the life of the strategy.
CLO structure risk (leverage, maturity, subornation/rating migration)	CLO are designed as leveraged exposure to a portfolio of loans. Depending on the rating of the CLO debt tranche, level of leverage varies and thinness of the tranche varies. Reaching a certain level of default and loss post recovery in the underlying portfolio could trigger a downward rating migration and even losses at tranche level. The subordination of any class of CLO securities will affect their right to payment in relation to the more senior securities. Interruptions in payments to subordinated classes may occur. Following acceleration of CLO securities, payments of interest proceeds and principal proceeds from the CLO issuer's assets will generally be applied on a strict seniority basis. The investment in CLO have an expected maturity that may be shorter or longer depending on market conditions and portfolio management. Market conditions may affect CLO tranche maturity and spread when for example there is a refinancing.
Underlying loan exposure risks	CLO are exposed to performance of leveraged loans with inherent risks such as among other things default, recovery, prepayment, liquidity and interest rate risk.
Market Risk	The investments contemplated herein may at any time be subject to significant price movements, which will impact negatively the valuation of the Portfolio and may lead to the loss in case of redemption.
Performance Risk	The investment strategy's performance described herein may be lower than anticipated due notably but not limited to market drawdown, loss in underlying portfolio and forex impact.

Source: AXA IM

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