

The CLO investment opportunity

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- Collateralised loan obligations (CLO) have gained increased attention in the press and from allocators in recent years, but remain poorly understood, as misperceptions surrounding CLO risk persist.
- While the design of CLOs is more intricate than traditional fixed-income products, their unique securitisation structure has historically granted these assets a durability not easily found in other areas of leveraged credit.
- The yield available on CLO securities stands out for its attractiveness in comparison to similarly rated fixedincome asset classes.
- We believe that Eaton Vance has an edge in this asset class, which is backed by our deep expertise and long experience as managers and investors in CLOs.
- We believe that a properly executed CLO investment strategy can be attractive as a stand-alone proposition, complement a floating-rate loan strategy or play a constructive role for investors in a multi-asset credit strategy.



Introduction

Within the credit universe, collateralised loan obligations (CLOs) have garnered increased attention lately by investors and the financial press. In part, the growing focus by the media reflects the significant role that the structures play as investors in the loan market: CLOs accounted for 71.4% of primary loan demand as at 31 December 2019, up from 50.0% in the 10 years earlier.¹

In turn, investors increasingly have taken notice of CLOs for the attractive investment advantages that they offer in today's evolving investment environment, which has been characterised by higher volatility and lower yields across global financial markets.

Notwithstanding the increased attention, the complexity associated with CLO securitisation has meant that the structures remain poorly understood, as misconceptions related to their risk persist. Within asset-backed securities (ABS), CLOs are a niche area where products are slightly more bespoke and receive less attention from tradtional ABS investors. That lack of coverage can, however, create an alpha opportunity for managers with the right skill set and specialist expertise.

At Eaton Vance, we have deep experience in this asset class as CLO managers for nearly 20 years and investors in third-party CLOs for 15 years. In our view, the CLO securitisation structure is durable not in spite of its complexity, but precisely because of it. In this paper, we explain the basics of CLO securitisation, securitisation's role as an anchor to stability and what the potential advantages of CLO investing include.

Understanding CLO securitisation

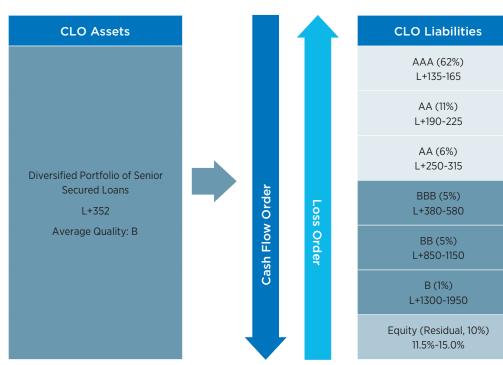
The securitisation structure of CLOs is the key feature defining the asset class's risk and return profile. In Exhibit A, we illustrate how CLOs are structured. CLO assets, on the left-hand side, include a diversified pool of senior secured loans (typically B-rated average quality), which provide cash flows for funding CLO liabilities, those being tranches of debt issued at differing priority levels for repayment and loss.

Payment priority is ordered by seniority (the more subordinated the tranche, the lower the credit quality), with the residual income accruing to the CLO equity holders. The equity tranche, which is typically not rated, sits in the first loss position.

Given the broad range of risk and return characteristics on offer, the investor base across the CLO capital structure spans a broad and diverse array of institutional investors, including banks, insurance companies, asset managers and other small and large buy-side investors.

Credit enhancement is bolstered by the equity tranche, a key benefit to the CLO capital structure. In essence, the structure is overcollateralised, holding more assets than liabilities. Transparency on the underlying collateral and regular performance tests further fortify the CLO design. Tests on asset credit quality, par value and interest coverage are embedded into CLO covenants and act to alert the CLO manager and external investors to any deterioration in the quality of collateral.

Exhibit A
CLO securitisation – structure, cash flows and ownership



Banks, Insurance Companies,
Asset Managers

Insurance Companies
Asset Managers
Hedge Funds
Banks
Mutual Funds
Pension Funds

Asset Managers, Insurance
Companies, Permanent Vehicles

Sources: Eaton Vance, LCD, Citi Velocity, 30 October 2020.

¹Source: S&P/LCD. As at 31 December 2019.



Historically, the combination of these factors has helped to sustain a high level of credit support for CLO tranches and an overall low level of credit impairment.

In Exhibit B, below, we can see that in the past a loss rate of 8% on a CLO's underlying collateral would have been required before a typical BB-rated tranche of CLO debt became impaired. The chart also shows how elevated a loss rate at that level would be in comparison to historic averages.

Exhibit C references the most robust analysis in the market for the historic impairment of CLO debt tranches. Moody's rated 7,265 tranches in U.S. CLOs from 1993-2016, listing just 53 principal impairments and zero interest impairments.

Almost 80% (42 out of 53) of the U.S. CLO tranche impairments were from pre-2003 CLOs, when structures were less robust than now. Of the 11 impairments on 2003-2007 vintage CLOs, seven were caused by distressed exchanges initiated by the equity investors.

Four stages of the CLO lifecycle

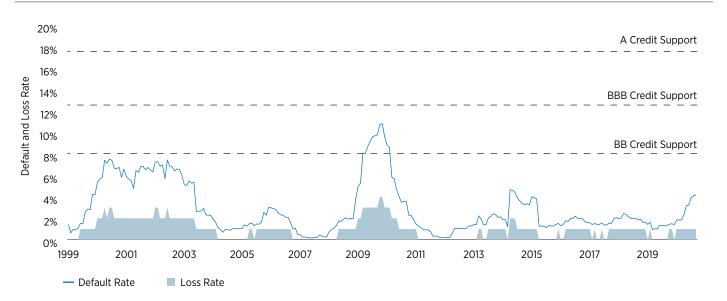
Similar to other structured credit products, CLOs have a fixed lifecycle. The typical lifecycle for a CLO lasts between 10-12 years and consists of four key stages. The first stage, the warehouse period, is when managers acquire the initial assets as collateral. The duration of this stage is deal-specific, varying from manager to manager.

When the warehousing period closes, the ramp-up period begins, usually lasting around six months. In this second stage, managers deploy additional capital to top up the portfolio of collateralised loans.

Next, the reinvestment period creates an opportunity for the CLO manager to add value through actively trading in the loan market. This third stage is typically around five years in length.

In the final amortization period, the manager pays out the tranches by order of seniority until all obligations have been met.

Exhibit B **CLO tranche support**



Sources: Eaton Vance, Citibank Velocity, Macrobond, LCD, an offering of S&P Global Market Intelligence, 30 September 2020. Past performance is not a reliable indicator of future results. Data provided are for informational use only. CLO tranches are USD 2.0 CLOs. CLOs represent the JPMorgan CLOIE Post-Crisis.

Exhibit C Moody's US CLO impairments, 1993-2016

Vintage	Α	Baa	Ba	В	Total by Vintage
1993-1996	-	-	-	-	-
1997-2002	-	21	18	3	42
2003-2007	1	3	6	1	11
2008-2016	-	-	-	-	-
Total by original rating	1	24	24	4	53

Sources: Moody's, Wells Fargo Securities, Wells Fargo Research, as of 31 December 2016.

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The CLO advantage

CLOs derive a number of benefits directly from the underlying loans held in the structure, such as their potential as a hedge against inflation and interest-rate risk. While loans are rated below investment grade, they are secured and rank senior in a company's capital structure, which grants an extra line of credit protection to the collateral pool. The benefits of CLOs do not stop there, however, as several other distinguishing features remain that institutional investors may find attractive.

- Growing opportunity. In the 10 years ending 31 December 2019, growth in the U.S. CLO market has been impressive. Assets under management for CLOs have more than doubled to U.S.\$670 billion. At the same time, the proportion of postcrisis CLOs have increased, as precrisis structures gradually amortised. Crucially, the postcrisis structures enjoy higher levels of credit enhancement.
- Return potential. CLOs are low-duration securities offering yield pickup. In today's income-starved environment, CLOs can provide an attractive source of additional yield that is not easily found elsewhere. In Exhibit D, we see the extra yield on BB and BBB rated CLO 2.0 tranches in comparison to a selection of similarly rated sectors in the fixed-income universe. As at the end of September 2020, a yield to worst of 10.95% on a BB-rated tranche was significantly higher than the 4.87% available on US high-yield and 4.37% on emerging-market sovereign bonds.
- Durability. As mentioned, CLO securitisation can enhance the durability of the structure. Concentration limits on an issuer, credit quality, deal size and industry basis help ensure a diversified collateral pool, with a skew toward more liquid and broadly syndicated senior secured and first lien loans. In times of high volatility, the absence of mark-to-market tests can act as another stabiliser, as CLOs would be unlikely to face forced collateral sales. Lastly, active management provides managers with an additional control for risk mitigation.

- Active management. In contrast to some securitised products, CLO managers are free to change the collateral allocation mix during the vehicle's reinvestment period, usually a window of 4-5 years. Within the parameters of the CLO prospectus, the managers can buy and sell the underlying loan securities to realise capital gains, to take advantage of spread and value opportunities and, as mentioned above, to actively manage the loan portfolio for risk.
- Call protection. CLOs afford investors a higher degree of protection from the prepayment risk. Unlike floatingrate loans, which have light call protections and generally see repayments rise when financing costs fall, CLO bonds typically have noncall periods lasting 1-2 years from the close of the structure. That is an advantage for CLO tranche investors, but implies that CLO managers must be prepared for potential prepayments and act to manage cash flows.

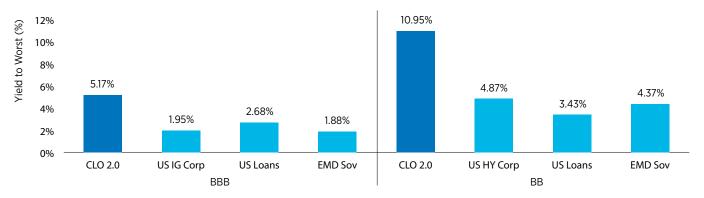
Potential risks

Although the potential yield advantage that CLOs offer investors is apparent when compared to similarly rated areas within fixed income (Exhibit D), it is important to highlight that CLO's extra yield serves as compensation for taking some additional risks, of which investors need to be mindful.

These potential risks include:

Credit risk: While CLOs derive many benefits from their underlying collateral, they also share some similar credit risks, which can be higher for subinvestment-grade securities, not least in times of market stress. However, unlike mutual funds, CLOs reapportion the risk-and-reward profile across the capital structure: equity holders and investors in lower-rated tranches assume greater risk, albeit with the potential for earning higher returns (notably, CLO tranches rated AAA and AA have never experienced a default and the default experience of lower-rated tranches compares favourably to corporate equivalents).

Exhibit D
Comparative yields for BBB and BB tranches of CLOs



Sources: Eaton Vance, Citibank Velocity, Macrobond, LCD, an offering of S&P Global Market Intelligence, as at 30 September 2020. Past performance is not a reliable indicator of future results. Data provided are for informational use only. CLO tranches are USD 2.0 CLOs. Loans represent the S&P/LSTA Leveraged Loan Index. CLOs represent the JPMorgan CLOIE Post-Crisis. US IG Corp represent the ICE BofA US Corporate Index 1-10 Year. US HY Corp represent the ICE BofA US High Yield Index. EMD Sov represent the J.P. Morgan EM Bond Index (EMBI) Global Diversified.

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- Volatility and liquidity risk: We assess the risk of default and losses given default very carefully as we invest in lower-rated tranches of CLO debt. While we believe that this risk is typically lower than it is in corporate credit, we accept that the price volatility may be greater. Broadly speaking, liquidity decreases as you move down the capital structure with smaller tranches of debt issued and thinner trading liquidity.
- Complexity: CLO investing is not for the uninitiated. True, the complex design grants the assets a certain level of durability, but that complexity can obscure the analysis of risk and relative value between assets and across the capital structure of individual CLOs. The sophisticated design presents an opportunity for investors to earn a complexity premium when they have the right skills and tools to do so.

For investors with long-term time horizons (e.g., pension funds), the compensation available for the liquidity and volatility risks in this asset class is, in our view, very attractive.

The final potential risk concerns the performance variability from one CLO manager to the next, a consideration that merits close attention for prospective investors to the asset class. With an outlook for continued variance in returns for CLOs (and leveraged credit more broadly), the capabilities and investment approach of allocators to CLO tranches will remain key. Overall, we continue to see value in the asset class and believe that risks, where they exist, can be managed and mitigated through a careful and judicious approach to security selection.

Investment approach is key

Complexity can make CLOs a challenging investment area. CLOs are more intricate in design than traditional fixed-income assets, having characteristics that lend themselves to skilled investment expertise. It is not always easy, however, to find managers having the capability and breadth of investment experience across CLOs and floating-rate loans.

Association fallacy: CLOs are not CDOs

Risk perceptions of CLOs may rest upon a mistaken premise: Specifically, that CLOs are similar to precrisis collateralised debt obligations (CDOs), which inflated the bubble in the U.S. subprime mortgage-backed securities (MBS) market before 2008. True, CLOs and CDOs bear a passing resemblance in name and both are forms of structured credit, but there are crucial differences between the two in several key respects.

- Historical performance Historically, the performance of CDOs and CLOs has been starkly different. Whereas just over 40% of CDO tranches originally rated AAA registered losses in the wake of the global financial crisis, similarly rated CLOs remained strong. In fact, they have never registered any losses, during the crisis or otherwise.
- Diversification CLOs are diversified, investing in individual and easily analysable credits across a broad loan universe. In contrast, precrisis CDOs were concentrated in opaque products, which included subprime MBS (circa 65% in 2007) and other CDOs (over 10%) through instruments known as "CDOs squared."²
- Synthetics CDO collateral was not only concentrated, but the nature of the collateral had changed, too, with over half represented by noncash derivatives (i.e., credit default swaps on MBS securities) by 2007. Synthetic collateral for CLOs, historically and today, has been de minimis.

- Transparency The CLO investor base, which has existed for over two decades, has readily available tools for risk evaluation, with regular audits and monitoring by investors. In contrast, the subprime mortgages backing CDOs were notorious for their "low documentation" and "no documentation" features that made their true degree of leverage impossible to analyse.
- Bank exposure In the U.S., the largest market for CLOs, bank exposure to CLOs remains low. Only 2.6% of the federally insured U.S. depository institutions hold CLOs, which are worth U.S.\$104 billion in total. Relative to the U.S.\$19 trillion in assets held by U.S. banks that is a modest sum.³
- Global risk While today's CLO market is slightly larger than the US\$641 billion market for CDOs in 2007, the systemic risk posed by each is starkly different. Unlike the multiderivative CDOs, which saw synthetics and credit default swaps amplify losses, CLOs are long only. Moreover, CLOs have greater subordination. To match CDO losses, CLO loss and recovery rates would have to be far higher and lower, respectively, than at any level in history.⁴

Overall, CLOs do not share the congenital weakness of yesteryear's CDOs. CLOs have become, in fact, even more robust in the past 10 years, with stronger credit support for postcrisis vintages. Accordingly, we do not believe that any "guilt by association" conflating CLO and CDO risk is at all warranted.

²Cordell, L., Huang, Y., & Williams, M. (May 2012). "Collateral damage: Sizing and assessing the subprime CDO crisis" (Working Paper No. 11-30/R). Federal Reserve Bank of Philadelphia. ³Shaiman, L. (July 2020). "CLOs are simply not a source of systemic risk to the banking system." Loan Syndication and Trade Association. ⁴U.S. Department of the Treasury Office of Financial Research (July 2019). OFR FRAC Working Group: Leveraged Lending & CLOs.



At Eaton Vance, CLO analysts are embedded within the floating-rate loan team. They are invovled in and have access to all individual asset-level research. Loan analysts, for their part, are well versed in CLO structures and their performance drivers. They assist in the CLO evaluation and management process. As a result, we have a full team who understands CLOs from the inside out and who contribute to an interactive and seamless invesment process.

The Eaton Vance floating-rate loan team, which has been a leader in loan investing since 1989 and today manages U.S.\$30.5 billion in assets, reviews nearly all deals that come to market. For its part, the structured products team has been an issuer and investor in third-party CLOs since the asset class emerged in 1999, currently managing U.S.\$2.9 billion across seven active CLOs with U.S.\$1.1 billion invested in CLO debt tranches.5

We believe that the depth of analytical resources, the synergies that we are able to harness within the leveraged loan space and the long investment experience of our team, which has invested through multiple credit cycles, provide our clients access to an attractive CLO investment opportunity.

Conclusion

In summary, the securitisation structure of CLOs provides investors support and security that is unique in the leveraged credit space. While the structures are complex and are best accessed by managers with the requisite skill set, they are not to be confused with collateralised debt obligations, which had inherent design flaws.

In fact, credit enhancement for CLO vintages has only improved over the past decade and systemic risk, such as to the banking sector, appears low, in our view. Within the leveraged credit space, CLOs offer attractive return potential as well as other risk-mitigating advantages. Considering these factors, we believe that a properly executed CLO investment strategy can be attractive as a stand-alone proposition, complement a floating-rate loan strategy or play a constructive role for investors in a multi-asset credit strategy.

About Risk

An imbalance in supply and demand in the income market may result in valuation uncertainties and greater volatility, less liquidity, widening credit spreads and a lack of price transparency in the market. There can be no assurance that the liquidation of collateral securing an investment will satisfy the issuer's obligation in the event of non-payment, or that collateral can be readily liquidated. The ability to realise the benefits of any collateral may be delayed or limited. Investments in income securities may be affected by changes in the creditworthiness of the issuer and are subject to the risk of non-payment of principal and interest. The value of income securities also may decline because of real or perceived concerns about the issuer's ability to make principal and interest payments. Investments rated below the investment grade (typically referred to as "junk") are generally subject to greater price volatility and illiquidity than higher-rated investments. As interest rates rise, the value of certain income investments is likely to decline. Bank loans are subject to pre-payment risk.

Credit ratings measure the quality of a bond based on the issuer's creditworthiness, with ratings ranging from AAA, being the highest, to D, being the lowest based on S&P's measures. Ratings of BBB- or higher by Standard and Poor's or Fitch (Baa3 or higher by Moody's) are considered to be investment grade quality. Credit ratings are based largely on the rating agency's analysis at the time of rating. The rating assigned to any particular security is not necessarily a reflection of the issuer's current financial condition and does not necessarily reflect its assessment of the volatility of a security's market value or of the liquidity of an investment in the security. If securities are rated differently by the rating agencies, the lower rating is applied. Holdings designated as "Not Rated" are not rated by the national rating agencies stated above. Ratings are based on Moody's, S&P or Fitch, as applicable. Ratings, which are subject to change, apply to the creditworthiness of the issuers of the underlying securities and not to the strategy or composite.

The impact of the coronavirus on global markets could last for an extended period and could adversely affect the strategy's performance.

Important Additional Information and Disclosures

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⁵Assets under management as at 30 September 2020. CLO assets are included in loan strategy figures.



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