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PineBridge® INVESTMENTS

Seeing Beyond the Complexity: A CLO Primer for US Insurers

Collateralized loan obligations (CLOs) are opportunity-rich debt instruments that offer the potential for above-average risk-adjusted returns versus other fixed income strategies. CLOs are also gaining wider prominence in markets, with US insurers' allocations to the asset class reaching $271 billion by year-end 2023.[1] Here, we explore why these instruments offer an attractive premium over comparably rated fixed income securities and the associated considerations for insurers investing in CLO tranches, including capital concerns.

[1]Source: National Association of Insurance Commissioners, "U.S. Insurers' Collateralized Loan Obligation Exposure Continues to Climb in 2023 but at a Slower Pace," published 13 December 2024 with data as of 31 December 2023.

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CLOs offer a compelling combination of above-average yield and potential appreciation, so it's no surprise that they are gaining wider prominence in markets. These assets may be especially attractive to insurers because they are capital efficient, with relatively low interest rate duration and high spreads.

For many insurers, CLOs can provide a compelling return on risk-based capital. And yet, while CLO allocations have grown significantly in recent years, some insurance companies may still shy away from CLOs due to their complexity, along with some misconceptions associated with the asset class.

Here, we take a closer look at CLOs, including their benefits and risks, how they work, and what they can offer insurance investors – and clear up some misconceptions along the way.

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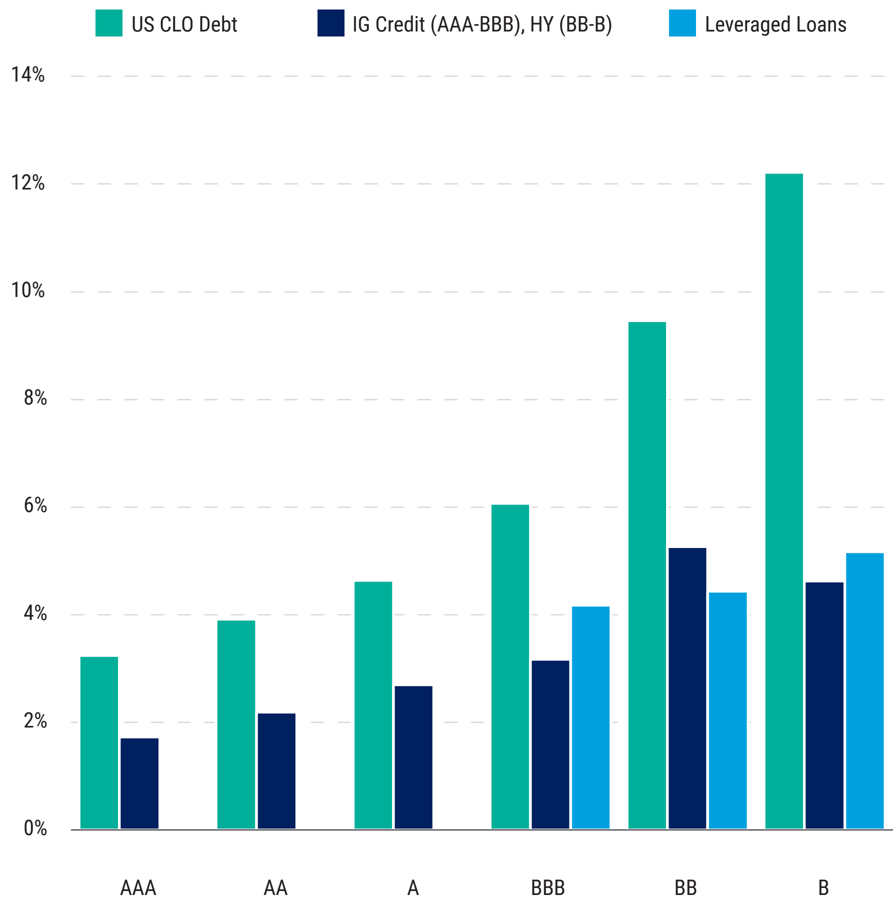
A wealth of benefits for insurers

CLOs can offer insurance investors multiple benefits, both on their own and versus other fixed income sectors.

Strong returns. Over the long term, CLO tranches have outperformed other corporate debt categories, including bank loans, high yield bonds, and investment grade bonds, and have significantly outperformed at lower rating tiers. CLOs have also outperformed on both a risk- and capital-adjusted basis, generating higher Sharpe ratios and above-the-line yield per unit of risk-based capital (RBC) than many other credit asset classes. Although CLOs are typically a floating-rate product, they have demonstrated attractive relative value through interest rate cycles.

CLOs Historically Have Offered Attractive Returns vs. IG Credit, High Yield, and Leveraged Loans …

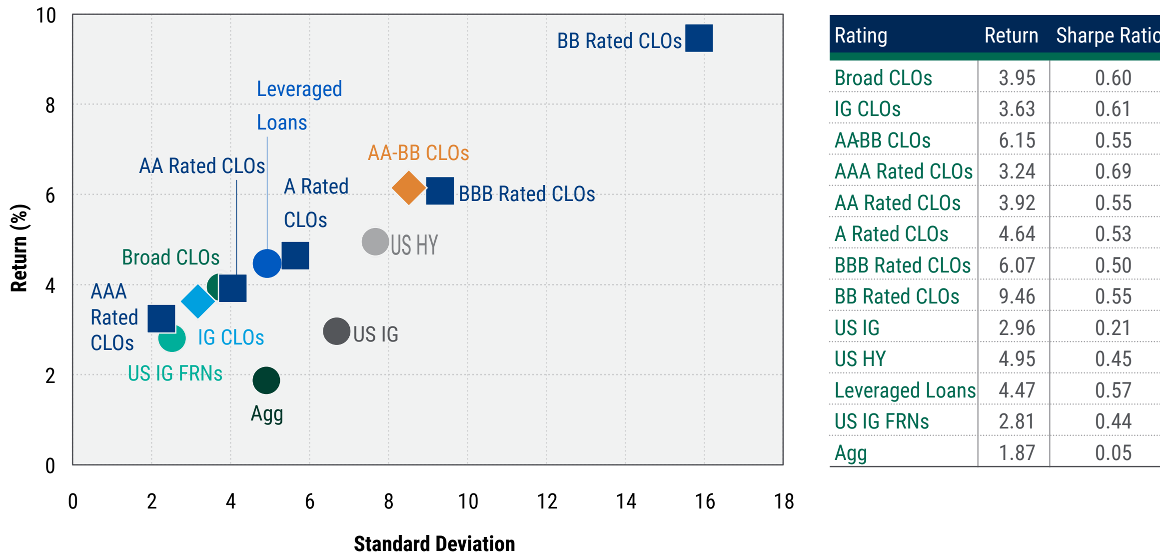
10-year US annualized return comparison



Sources: J.P. Morgan, Bloomberg, and LCD as of 30 September 2024. US CLO debt 10-year annualized returns represented by the J.P. Morgan CLOIE Index; IG credit: Bloomberg US Credit Index; High yield bonds: Bloomberg US Corporate High Yield Bond Index; Leveraged loans: Morningstar LSTA Leveraged Loan Index. Past performance is not indicative of future results.

… And on a Risk-Adjusted Basis

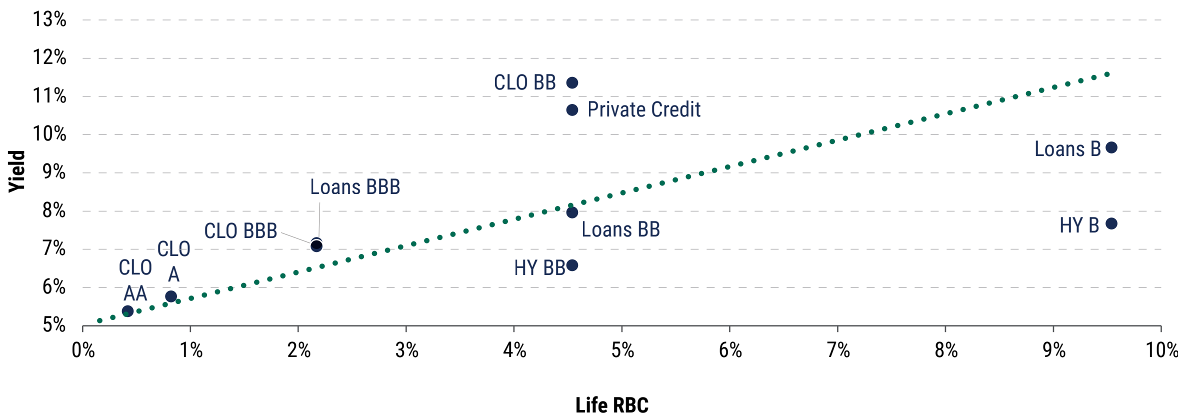
Attractive risk-adjusted returns vs. other asset classes (10 years as of 30 September 2024)



Rating	Return	Sharpe Ratio
Broad CLOs	3.95	0.60
IG CLOs	3.63	0.61
AABB CLOs	6.15	0.55
AAA Rated CLOs	3.24	0.69
AA Rated CLOs	3.92	0.55
A Rated CLOs	4.64	0.53
BBB Rated CLOs	6.07	0.50
BB Rated CLOs	9.46	0.55
US IG	2.96	0.21
US HY	4.95	0.45
Leveraged Loans	4.47	0.57
US IG FRNs	2.81	0.44
Agg	1.87	0.05

Source: Morningstar as of 30 September 2024. CLOs represented by J.P. Morgan CLO Index, CLO IG by J.P Morgan CLO IG Index, AAA Rated CLOs by J.P. Morgan CLO AAA Index, AA Rated CLOs by J.P. Morgan CLO AA Index, A Rated CLOs by J.P. Morgan CLO A Index, BBB Rated CLOs by J.P. Morgan CLO BBB Index, BB Rated CLOs by J.P. Morgan CLO BB Index, US IG by ICE BofA US Corporate Index, US HY by ICE BofA US High Yield Index, Agg by the ICE BofA US Broad Market, US IG FRNs by MVIS US Investment Grade Floating Rate Note Index, Leveraged Loans by Morningstar LSTA US Leveraged Loan 100 Index. Past performance is not indicative of future results.

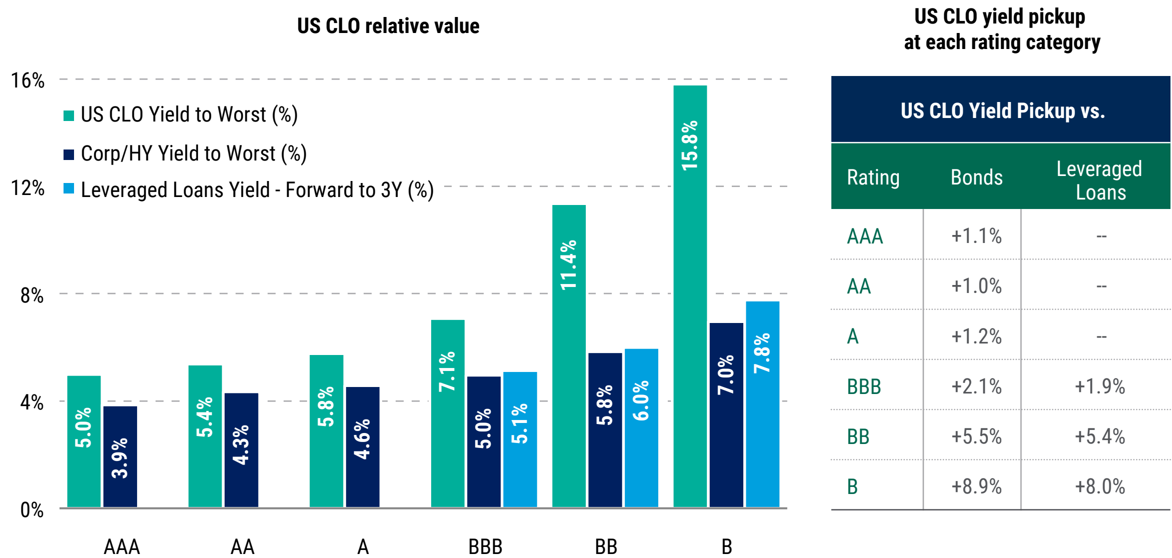
CLOs Have Earned Higher RBC-Adjusted Yields



As of 30 September 2024. Sources: CLO data JPM CLOIE. US Corps data Bloomberg US Credit Index. Loan data Morningstar LSTA Leveraged Loan Index. High Yield data Bloomberg US Corporate High Yield Index. Private Credit data LSEG LPC Middle Market First Term Lien Direct Lending Only. CML yields are observed market data, Blue Vista. For illustrative purposes only. We are not soliciting or recommending any action based on this material. This information does not imply that any investor recommends or otherwise endorses an investment in any fund or other product and the materials are not intended to convey any client approval or disapproval of the advisory services.

Wider yield spreads. CLO spreads typically are wider than those of other debt instruments, reflecting CLOs' greater complexity, lower perceived liquidity, and regulatory requirements (see "Breaking down the CLO yield premium" for more information). Compared with other investment grade corporates, as well as other higher-yielding debt sectors – notably high yield and bank loans – CLO spreads are especially compelling.

CLOs Offer Higher Yields Versus Comparably Rated Corporate Bonds and Loans



US CLO Yield Pickup vs.		
Rating	Bonds	Leveraged Loans
AAA	+1.1%	--
AA	+1.0%	--
A	+1.2%	--
BBB	+2.1%	+1.9%
BB	+5.5%	+5.4%
B	+8.9%	+8.0%

Source: J.P. Morgan, Bloomberg, and LCD as of 30 September 2024. US CLO debt represented by the J.P. Morgan CLOIE Index; IG credit: Bloomberg US Credit Index; High yield bonds: Bloomberg US Corporate High Yield Bond Index; Leveraged loans: Morningstar LSTA Leveraged Loan Index. Past performance is not indicative of future results.

Low interest-rate sensitivity. CLO tranches and their underlying collateral, leveraged loans, are floating-rate instruments, priced at a spread above a benchmark rate (such as SOFR and Euribor). As interest rates rise or fall, CLO yields will move accordingly, and their prices have historically moved less than those of fixed-rate instruments. These characteristics can be advantageous to insurers in diversified fixed income portfolios.

Attractive risk profile. As demonstrated by a variety of key metrics – default/impairment and loss rates as the most notable examples – CLOs have historically presented less risk with lower levels of principal losses than similarly rated corporate debt and other securitized products.

Of the approximately $500 billion of US CLOs issued from 1994-2009 and rated by S&P (vintage 1.0 CLOs – see "What is a CLO?" section for more information on CLO vintages), only 0.86% experienced defaults, and an even smaller percentage of those, 0.40%, were originally rated BBB or higher (see table). Among CLOs rated by Moody's, there have been zero defaults on the AAA and AA tranches across all vintages (1.0 through 3.0). Loss rates are also very low, with tranches originally rated AAA-A never experiencing a principal loss, while Baa, Ba, and B tranches having cumulative 10-year loss rates of just 0.58%, 3.76%, and 10.47%, respectively; this compares to loans and corporate bonds, which have average annual loss rates of 30.7% and 57.3%, respectively.[2]

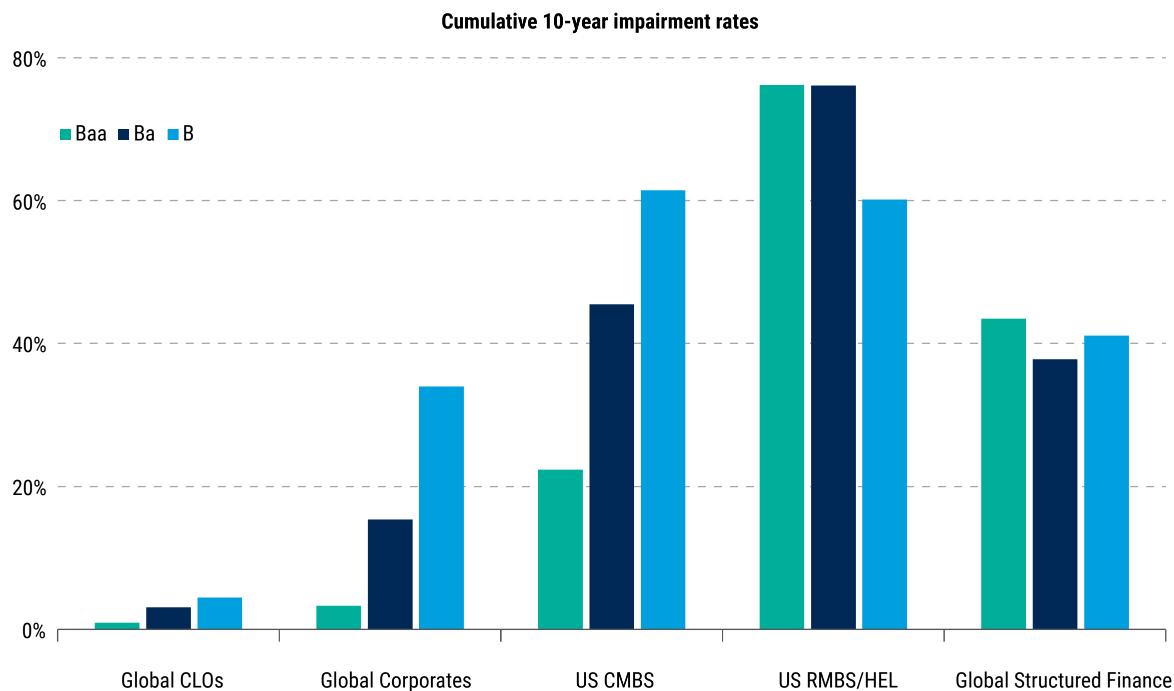
[2]Source: Moody's Investors Service, "Impairment and loss rates of structured finance securities, 1993- 2022," published 26 June 2023, and "Default Trends – Global: Annual default study: Corporate default rate to moderate in 2024 but remain near its long-term average," published 28 March 2024. Data for both CLOs and corporates through year-end 2022.

US CLO Default/Impairment Rates Have Been Low Historically

US CLO defaults by original rating (1994-Q1 2024)

	Issued Pre-GFC "CLO 1.0"			Issued Post-GFC "CLO 2.0"		
	# Ratings	# Defaults	% Defaults	# Ratings	# Defaults	% Defaults
AAA	1,540	0	0.0%	3,840	0	0.0%
AA	616	1	0.2%	3,112	0	0.0%
A	790	5	0.6%	2,582	0	0.0%
BBB	783	9	1.1%	2,355	0	0.0%
BB	565	22	3.9%	1,919	0	0.5%

Source: S&P Global, "CLO Spotlight: Thirty Years Strong: U.S. CLO Tranche Defaults From 1994 Through First-Quarter 2024." Past performance is not indicative of future results.



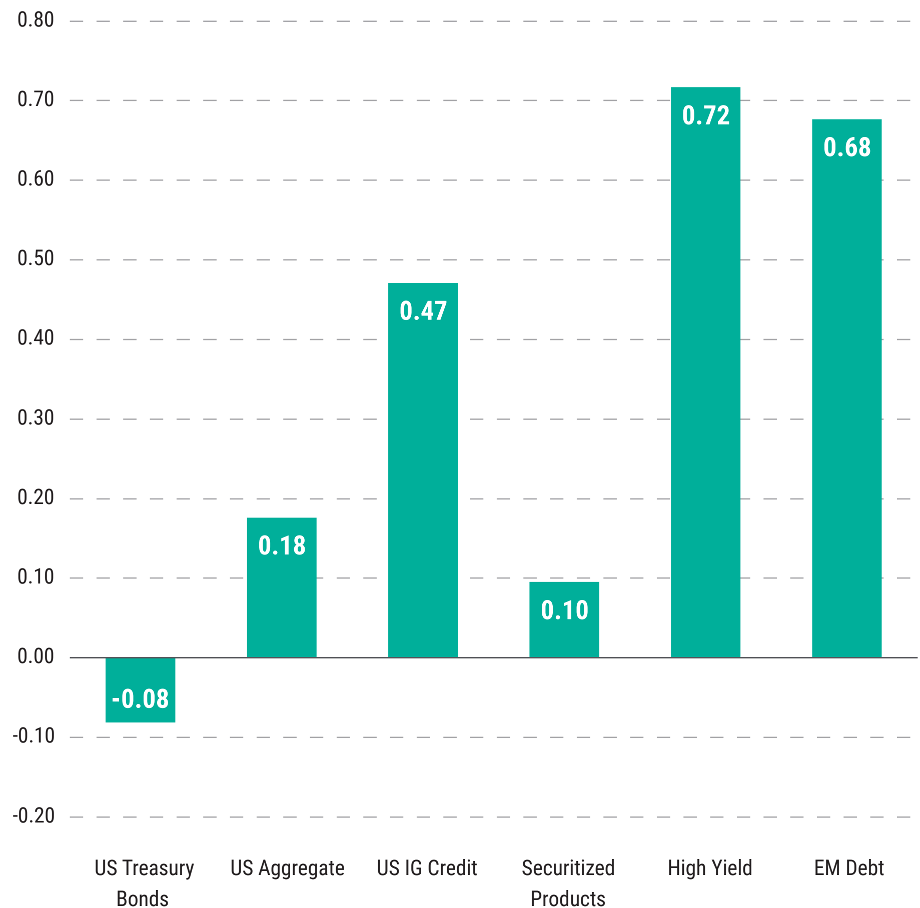
As of 25 June 2024. Source: Moody's Investor Service. The multi-year cumulative withdrawn rating (WR) unadjusted impairment rates by original rating were reported June 2023 and covered 1993-2023 time horizon for Global CLOs, CMBS, US RMBS/HEL, and Global Structured Finance, while Global Corporates represent the average cumulative issuer-weighted global default rates and covered 1983-2022 time horizon. Past performance is not indicative of future results.

Inflation and rising-rate hedge. CLOs' floating-rate yields make them an effective hedge against inflation and rising interest rates, since their coupons adjust based on a reference rate (SOFR or Euribor) and therefore have lower interest rate duration risk versus similarly rated fixed income alternatives.

Strong credit quality. Unlike most corporate bonds, leveraged loans are both secured and backed by first-lien collateral.

Diversification. CLO correlations with other fixed income categories are relatively low, meaning that many CLOs have historically increased the effective diversification of a broader portfolio.

US CLO Correlations With Other Fixed Income Asset Classes
Ten years as of 30 June 2024



Source: J.P. Morgan and Bloomberg as of 30 June 2024. CLOs represented by the J.P. Morgan CLO Post-Crisis Index; US Treasury bonds by the Bloomberg Long Treasury Index; US aggregate by the Bloomberg US Aggregate Index; US IG credit by the Bloomberg US Credit Index; Securitized products by the Bloomberg US Securitized: MBS/ABS/CMBS and Covered TR Index; High yield by the Bloomberg US Corporate High Yield Index; and EM debt by the J.P. Morgan EMBI Global Diversified Composite Index.

Addressing common concerns among insurers

Liquidity. CLOs can be viewed as semi-liquid instruments, similar to leveraged loans and high yield bonds. The investment grade tranches are more traditionally held by buy-and-hold investors (such as insurance companies and banks). The non-investment-grade tranches, however, tend to be traded more often by asset managers and hedge funds. Typically, when CLOs are sold via auction, each security receives between 10 and 20 bids from dealers at any time, which we consider fairly liquid.

The "double layer" of fees. This is a common misconception about CLOs. When investing in CLO debt tranches through an external asset manager, the investor pays one management fee to the SMA or ETF provider for the management of the strategy itself (akin to a management fee for any other fixed income mandate). The CLO management fee that is paid to the issuer in each CLO transaction is split between a senior management fee and a subordinated fee. (See the cash flow waterfall chart in the "All about the cash flows" section below.) The senior fee that comes out of the cash flows on the underlying collateral is paid before the senior interest payment to the debt tranche investor, but it does not come out of the interest on the note. This is in contrast to the return or "coupon" paid to the equity investor.

So, if the AAA note in theory pays 10% interest and the senior management fee is 15 bps, the note still receives 10% interest. In contrast, if the senior management fee is 25 bps, the note still receives 10% interest, but the equity return will be less. In summary, the CLO management fee structure impacts the equity returns and not the debt coupon return (i.e., the debt investor is not paying a fee).

Capital considerations

Capital is a key concern when making any new investment decision and can play an important role in an insurer's asset allocation. Here, we outline and describe the primary capital regimes relevant to a US- or Bermuda-domiciled insurer investing in CLOs.

The National Association of Insurance Commissioners (NAIC) Risk Based Capital (RBC) framework measures the minimum amount of capital required to support overall business operations. The summary table below shows the rating-based charges for CLOs. The NAIC has been rethinking the regulatory frameworks for structured securities regarding their designation and RBC charge due to considerations related to "equal risk, equal capital" across collateral portfolios and capital structures. Given CLOs' overall outstanding data and documentation transparency, CLOs have become another asset class, in addition to RMBS and CMBS, for which the NAIC is pursuing a model-based designation approach. Separately, the NAIC, in partnership with the American Academy of Actuaries (AAA), plans to revise the RBC charges for CLOs and more broadly for asset-backed securities.

Overall, we expect the updated RBC charges to be lower for higher-rated CLO tranches. For CLO equity, however, the RBC charge has been raised to 45% from 30% for life insurers during the interim period. We expect more clarity toward year-end 2025 regarding the outcomes of the NAIC's model-based designations and updated RBC charges.

The S&P Capital Adequacy Model seeks to capture the value of expected economic losses to a degree of certainty that is commensurate with the targeted rating category of the insurer. Confidence levels are established based on rating categories of AAA-BBB. The summary table shows CLO capital charges for a target rating of AA. These charges will differ based on different target ratings.

AM Best's Capital Adequacy Ratio (BCAR) depicts the quantitative relationship between a rating unit's balance sheet strength and key financial risks that could affect such strength. Net required capital – the capital needed to support such financial risks – is computed for different confidence intervals (VaR levels), resulting in BCAR scores for each of these levels. The capital charges applied to determine required capital will vary based on a number of factors, including credit risk and maturity of the underlying investments as well as the size of the insurer's rating exposures. The summary table shows a sample rating unit's investment risk charges.

The Bermuda Monetary Authority (BMA) regulates Bermudian insurance companies. Capital requirements are calculated based on the Bermuda Solvency Capital Requirement (BSCR) by applying capital factors to various capital and solvency return elements, including the investments of the insurer. CLOs are admissible under the Scenarios Based Approach, subject to BMA approval. Non-investment-grade CLOs are admissible, typically subject to a cap. The summary table provides the risk-based charges for CLO investments.

Summary of Key Regulatory Capital Charges

	NAIC (RBC)				S&P CLO	AM Best (BCAR)	Bermuda (BSCR)	
Rating	Designation	Life	P&C	Health	All	All	BSCR Class	Structured
AAA	1.A	0.16%	0.20%	0.30%	0.25%	0.33%	1	0.50%
AA	1.C	0.42%	0.60%	0.80%	0.79%	1.23%	2	1.00%
A	1.F	0.82%	1.30%	1.60%	2.25%	2.97%	3	1.80%
BBB	2.B	1.52%	2.10%	2.50%	4.24%	6.28%	4	3.50%
BB	3.B	4.54%	6.00%	7.60%	14.08%	13.82%	5	10.00%
B	4.B	9.54%	7.70%	9.70%	23.12%	30.82%	6	20.00%
CCC	5.B	23.80%	10.90%	13.70%	88.66%	47.26%	7	30.00%
D	6	30.00%	30.00%	30.00%	100.00%	63.02%	8	35.00%

S&P charges are based on 99.8% or A stress for structured securities with five- to 10-year maturities. AM Best data are based on the latest criteria published in April 2018; 99.5 VaR for 10-year maturity. Bermuda capital charge (BSCR) data as of 2024.

How insurers invest in CLOs: to outsource or not to outsource?

Some insurance companies have capable in-house teams to invest in AAA to AA rated CLOs on their own. However, for insurers without these internal capabilities, it's important to hire a third-party investment manager that has extensive experience in choosing the right CLO managers and the right CLOs. This is especially true for the non-investment-grade components of CLOs, which require more specialized experience.

Indeed, the most critical decision a CLO investor can make is the selection of a CLO manager. There are approximately 225 managers with CLOs issued post-crisis to choose from,[3] and each manager creates its own portfolio using its own investment style. And it's worth repeating that historical performance among CLO managers varies greatly. That said, successful managers tend to share several key traits.

Extensive experience

There's no substitute for deep CLO management experience, which provides the combination of skills, practice, tactical and strategic savvy, adjustment-making, and chronological perspective needed to generate strong returns in such a complicated asset class.

Perspective spanning multiple cycles may be the most important aspect of experience in the CLO realm, as the benefit of having managed portfolios before, during, and after the financial crisis and through an evolving regulatory landscape is incalculable.

Excellence of execution

Managers should show strength in the vital competencies that collectively define best-practice portfolio management. These begin with credit selection, as creating a strong collateral base lays the foundation for potential success. Trading skill enables the manager to know when to take gains, avoid losses, and adjust the portfolio as market conditions evolve. Effective management of deteriorating credits affects not just the specific credits involved, but also the entire CLO, due to the way cash flows are distributed through the tranche structure. And the reinvestment of principal proceeds in new collateral can make the difference between good and great performance.

Expertise in handling risk

Sound risk management is both a cause and effect of these best practices: It informs everything the manager does and is reflected in the results. In addition to oversight of the portfolio, it includes skillful execution of coverage tests; an understanding of the nuances and idiosyncrasies of CLO documentation, which is nonstandard and complex; and a talent for balancing the numerous portfolio metrics by optimizing as many as possible while taking a hit on as few as possible. Insurers may also want to consider an investment manager that has in-house leveraged loan and high yield teams available to perform collateral analysis and other research and due diligence on the underlying loans and high yield bonds.

The complexity of CLOs comes with a number of risks that investors should consider carefully:[4]

Credit risk. While CLOs enjoy strong credit quality due to the senior secured status of leveraged loans, it's important to keep in mind that leveraged loans carry inherent credit risk: They're issued to below-investment-grade companies whose revenue streams are sensitive to fluctuations in the economic cycle.

Collateral deterioration. If a CLO's loans experience losses, cash flows are allocated to tranches in order of seniority. Depending on the severity of the losses, the value of the equity tranche could be wiped out and junior CLO tranches could lose principal.

[3]Source: Intex, PineBridge Investments as of 31 January 2024.
[4]This should not be considered an exhaustive list of potential risk factors related to CLOs, rather an illustrative description of some potential factors affecting a CLO investment.

Nonrecourse and not guaranteed. Leveraged loans are senior obligations and, as such, have full recourse to the borrower and its assets in the event of default. A CLO, however, has recourse only to the principal and interest payments of the loans in the portfolio.

Loan prepayments. Leveraged loan borrowers may choose to prepay their loans in pieces or completely. While experienced CLO managers may anticipate prepayments, they're nonetheless unpredictable. The size, timing, and frequency of prepayments could potentially disrupt cash flows and challenge managers' ability to maximize portfolio value.

Trading liquidity. CLOs generally enjoy healthy trading liquidity, but that could change quickly if market conditions turn. Prime examples are the financial crisis and the onset of the Covid-19 pandemic, when trading activity for even the most liquid debt instruments slowed to a trickle. While senior tranches are typically very liquid throughout a market cycle, lower-rated mezzanine tranches can see significant declines in trading activity during periods of severe market stress.

Timing of issuance. While market conditions could be strong when a CLO is issued, they might not be during its reinvestment period. We saw this with 2003 vintages, for which the end of the reinvestment period coincided with the onset of the financial crisis and its resulting drop-off in trading volume.

Manager selection. CLO managers' historical performance encompasses a wide spectrum of returns, underscoring the importance of choosing seasoned managers with solid long-term track records.

Spread duration. While interest rate duration is low due to the floating-rate nature of CLO tranches (indexed off three-month SOFR or Euribor), spread duration is a consideration that should be taken into account. Due to CLOs' typical reinvestment period of four to five years, spread duration is usually between 3.5 and nine years. Because each CLO is redeemed sequentially, the higher up the capital stack, the lower the spread duration (and vice versa), making duration higher in the lower-rated tranches.

CLO Overview: Key Questions Answered

What is a CLO?

Put simply, a collateralized loan obligation is a portfolio of leveraged loans that is securitized and actively managed as a fund. Each CLO is structured as a series of tranches that are interest-paying bonds, along with a small portion of equity, which receives excess payments.

CLOs originated in the late 1980s, similar to other types of securitizations, as both a financing tool and a way for banks to package leveraged loans together to provide investors with an investment vehicle with varied degrees of risk and return to best suit their investment objectives. The first vintage of "modern" CLOs – which focused on generating income via cash flows – was issued starting in the mid- to late-1990s. Commonly known as "CLO 1.0," this vintage included some high yield bonds, as well as loans, and were the standard CLO structure until the financial crisis struck in 2008.

The next vintage, CLO 2.0, began in 2010 and changed in response to the financial crisis by strengthening credit support and shortening the period in which loan interest and proceeds could be reinvested into additional loans.

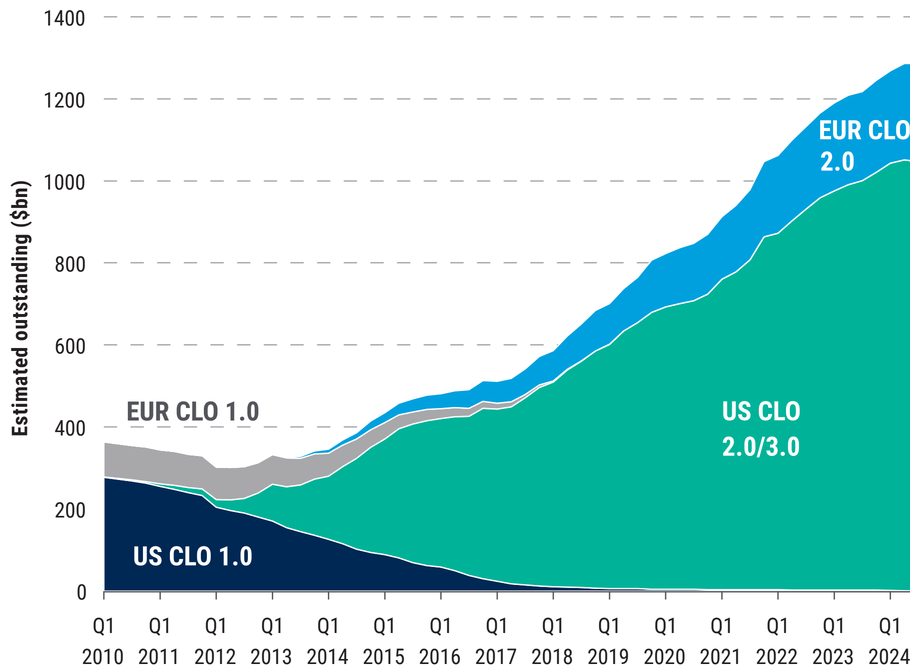
The current vintage, CLO 3.0, began in 2014 and aimed to further reduce risk by eliminating high yield bonds and adhering to the Volcker Rule and other new regulations. In 2020, the Volcker Rule was further amended, and high yield bonds were allowed back into CLOs. Currently, few CLOs allow for investments into high yield, and those that do generally limit the exposure to 5%-10%. To compensate for the exposure to high yield, these CLOs have increased levels of subordination to better protect debt tranches.

Vintages 2.0 and 3.0 represent the biggest chunk of the market, with over $1 trillion in principal outstanding, while less than 0.1% of the market remains in CLO 1.0 vintages.[5]

The vast majority of CLOs are called "arbitrage CLOs" because they aim to capture the excess spread between the portfolio of leveraged bank loans (assets) and classes of CLO debt (liabilities), with the equity investors receiving any excess cash flows after the debt investors are paid.[6] The market for arbitrage CLOs is valued at $1.29 trillion globally, with about 81% issued in the US and 19% in Europe.[7]

CLOs Get Better With Age

US CLO vintages 2.0 and 3.0 represent the biggest share of the market today



Source: Bank of America Global Research as of 30 September 2024.

[5]Source: Bank of America Global Research as of 30 September 2024. $920 billion in broadly syndicated loans and $128 billion in middle market CLOs.
[6]Ibid.
[7]Ibid.

Leveraged loans: more than just collateral

Leveraged loans are more than simply the underlying collateral for CLOs: They're the fuel that powers CLOs' attractive income stream and the first of several levels of risk mitigation built into the CLO structure.

S&P defines leveraged loans as senior secured bank loans rated BB+ or lower (i.e., below investment grade) or yielding at least 125 basis points above a benchmark interest rate (typically SOFR in the US and Euribor in Europe) and secured by a first or second lien.[8] Several characteristics make leveraged loans particularly suitable for securitizations. They:

- Pay interest on a **consistent monthly or quarterly basis**;
- Trade in a **highly liquid secondary market**;
- Have a **historically high recovery rate** in the event of default; and
- Originate from a **large, diversified group of issuers**.

As of 30 September 2024, the amount of leveraged loans outstanding was $1.39 trillion in the US and €295 billion in Europe.[9]

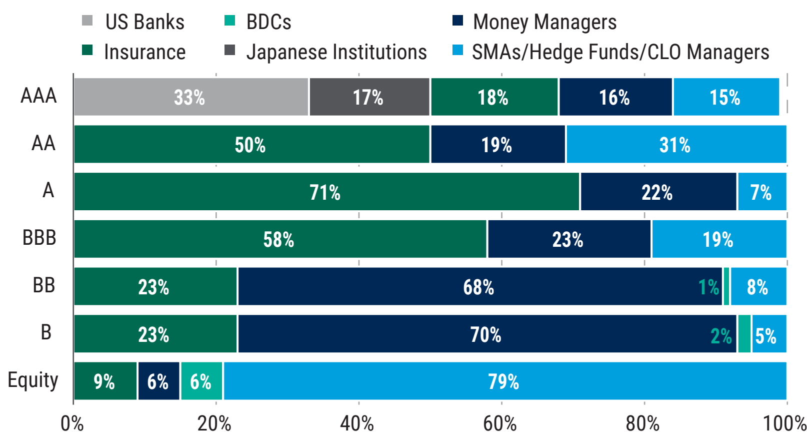
Who issues, manages, and owns CLOs?

CLOs are issued and managed by asset managers. Of the approximately 225 CLO managers[10] with post-crisis deals under management worldwide, PineBridge estimates about two-thirds are in the US and the remaining third are in Europe.

Ownership of CLOs varies by tranche. The least risky, senior-most tranches are mainly owned by insurance companies (which favor income-producing investments) as well as banks (which need high-quality capital to meet regulatory requirements). The equity tranche is the riskiest, offering potential upside and a degree of control, and appeals to a wider universe of investors.

CLOs Have a Diverse Investor Base

The largest US CLO owners by investor type and tranche*



Typical Equity Tranche Investors†	
	• Hedge funds • Sovereign wealth funds/family offices • CLO managers • Money managers • Business development companies • Insurance companies • Credit funds • Risk retention vehicles

For illustrative purposes only. *Source: BofA Global Research, SNL, Bloomberg, Company filings, S&P LCD, "CLO Alert: Analyzing NAIC scenario results for CLOs: AAA-A: good, BBB: mixed, BB: unfair" as of 17 September 2024. †Source: Morgan Stanley Research as of 20 September 2021 and Barclays Research as of 22 January 2021.

[8]Source: S&P Global Market Intelligence, Leveraged Commentary & Data (LCD): Leveraged Loan Primer, as of 30 September 2021.
[9]Source: Morningstar LSTA Leveraged Loan Index and Morningstar LSTA European Leveraged Loan Index.
[10]Source: Intex, PineBridge Investments as of 31 January 2024.

How are insurers allocating to CLOs?

Of the approximately $271 billion in insurance assets allocated to CLOs at the end of 2023, most are from life insurers. Life insurers accounted for 80% of the industry's exposure, with property & casualty (P&C) and health accounting for the remaining 17% and 3%, respectively, according to the NAIC.[11]

US Insurers' Exposure to CLOs by Industry Type: 2021-2023 ($BACV bil.)

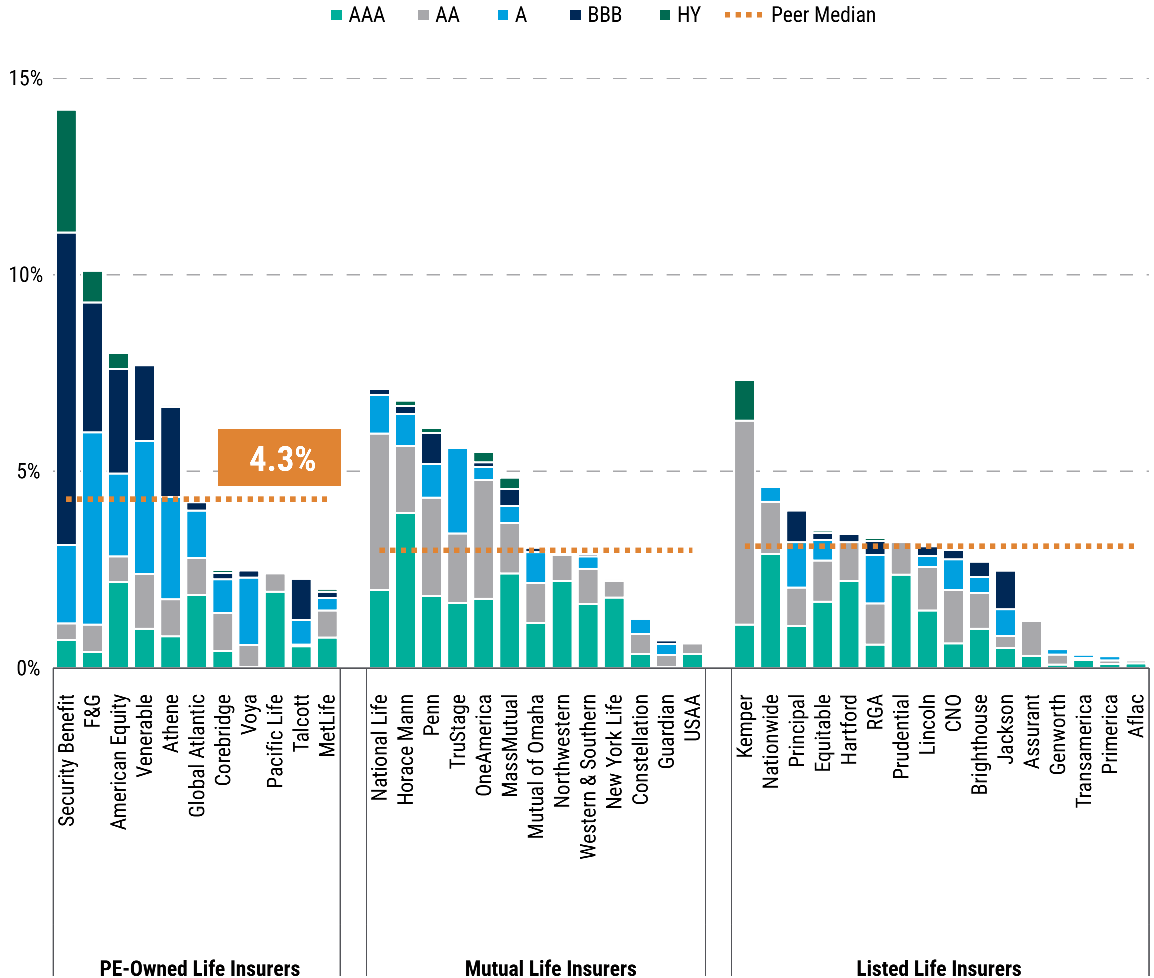
Industry type	YE 2023	% of YE 2023 total	YE 2022	% of YE 2022 total	YE 2021	% of YE 2021 total
Life	217.1	80%	192.3	78%	163.6	76%
Property & casualty	46.3	17%	47.4	19%	45.5	21%
Health and title	7.6	3%	8.0	3%	7.2	3%
Total	**271.0**	**100%**	**247.7**	**100%**	**216.3**	**100%**

Source: NAIC Capital Markets Bureau, Capital Markets Special Report, "U.S. Insurers' Collateralized Loan Obligation Exposure Continues to Climb in 2023 but at a Slower Pace," published 13 December 2024 with data as of 31 December 2023. BACV – Book/adjusted carrying value.

Larger insurance companies represent the majority of insurers investing in CLOs. According to the NAIC, 10 US insurance groups accounted for 42% of the US insurance industry's total CLO exposure, with the top 25 insurers accounting for almost 70% (as of year-end 2023).[12] A special report published by Moody's showed that private equity-owned life insurers in the US typically maintained higher CLO allocations across the full credit spectrum at a peer median of 4.3% of total cash and invested assets; for non-private equity owned life insurers in the US, the median was 3.1%.[13]

[11]Source: NAIC Capital Markets Bureau, Capital Markets Special Report, "U.S. Insurers' Collateralized Loan Obligation Exposure Continues to Climb in 2023 but at a Slower Pace," published 13 December 2024 with data as of 31 December 2023.
[12]Ibid.
[13]Source: Moody's Investor Service as of 31 December 2023.

US Life Insurers' Asset Allocations: CLOs as a % of Total Cash and Investments

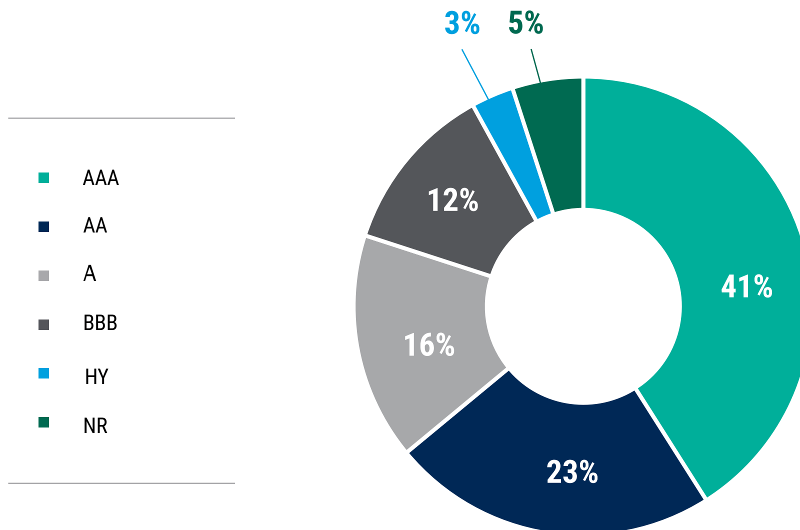


Source: Moody's, "Life Insurance – US: CLO holdings rise as regulators review capital charges," and PineBridge Investments analysis and interpretation. Data as of 31 December 2022.

Regarding credit quality, insurers tend to invest in investment grade CLOs, which are potentially a capital-efficient way to increase yield for these investors. The NAIC also states that tranches rated investment grade (BBB and higher) increased to 82% of total CLO investments at year-end 2023 from just under 80% in 2021.[14] CLOs accounted for 3.2% of total cash and invested assets at year-end 2023, up from 3% at year-end 2022 and more than one percentage point higher than at year-end 2018 (1.9%).[15] As a percentage of total bond investments, CLOs increased to 5.2% at year-end 2023, up from 4.9% at year-end 2022 and 2.8% in 2018.[16]

[14]Source: NAIC Capital Markets Bureau, Capital Markets Special Report, "U.S. Insurers' Collateralized Loan Obligation Exposure Continues to Climb in 2023 but at a Slower Pace," published 13 December 2024 with data as of 31 December 2023. Note: this excludes CLO investments rated BBB-, which were about 10% of total CLO exposure at both year-end 2023 and year-end 2022.
[15]Ibid.
[16]Ibid.

US Insurers' CLO Holdings by Credit Rating (year-end 2023)
US$271 billion



Source: NAIC Capital Markets Bureau, Capital Markets Special Report, "U.S. Insurers' Collateralized Loan Obligation Exposure Continues to Climb in 2023 but at a Slower Pace," published 13 December 2024 with data as of 31 December 2023. Non-rated (NR) category includes CLO debt tranches that were reported without a rating, as well as CLO equity tranches that are not rated by nationally recognized statistical rating organizations (NRSROs).

Are CLOs mark-to-market vehicles?

Investors new to the asset class may be surprised that CLOs are not mark-to-market (MTM) vehicles, as the underlying loan portfolios are marked at par. Only if a CLO is failing certain performance or quality tests (for example, CCC/Caa exposure exceeding the typical 7.5% trigger) would a portion be carried at market value. In fact, CLOs may benefit from market volatility, as it allows managers to buy quality credits at significant discounts to par. This in turn may benefit investors in a CLO by adding additional credit subordination. Ultimately, this translates to improvements in the junior overcollateralization (OC) cushion and market value OC as the loan market recovers from lower market values.

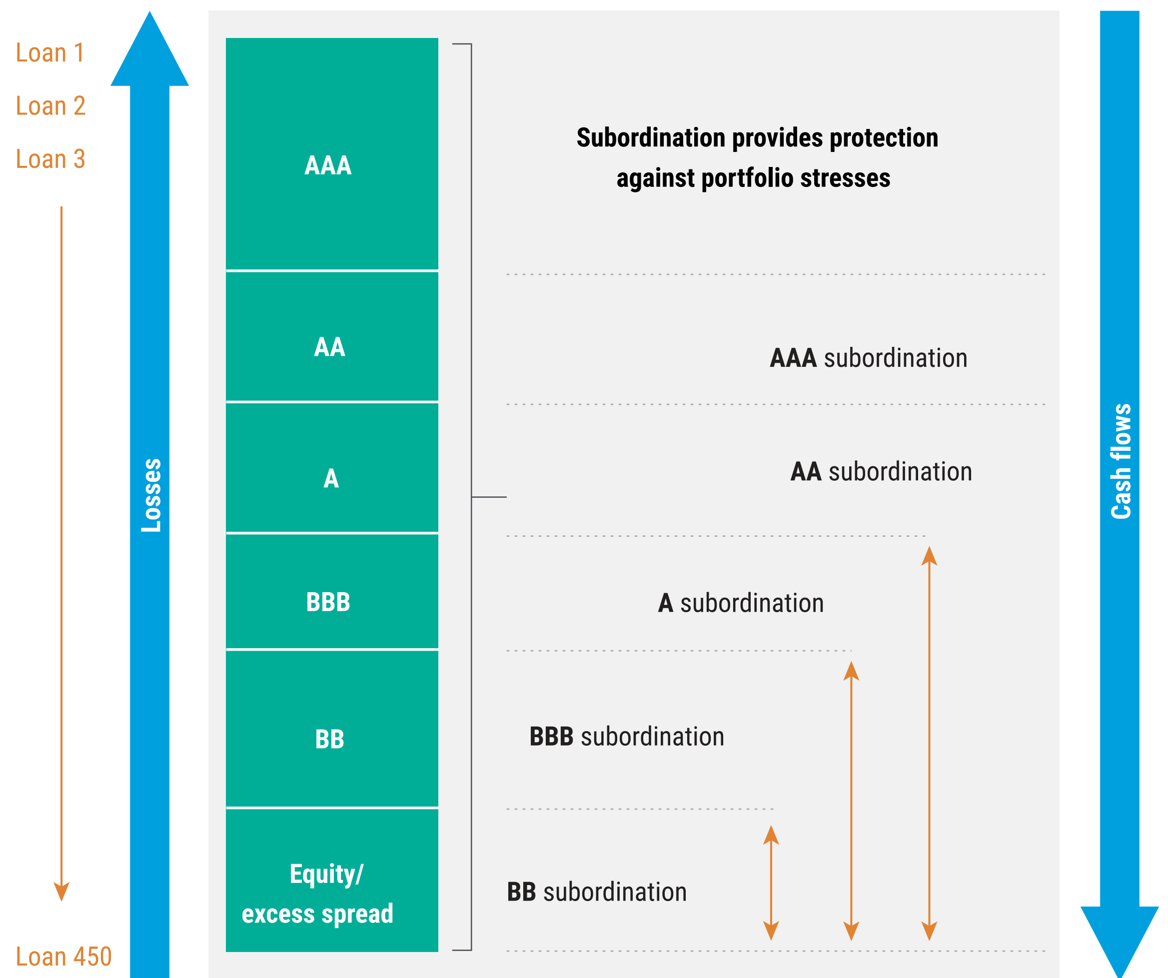
Why opt for broadly syndicated loan CLOs vs. middle-market CLOs?

For insurers, some key differences between investing in middle-market CLOs and broadly syndicated loan (BSL) CLOs – related to the ability to re-underwrite the credits in the portfolio and liquidity considerations – could make BSL CLOs a more attractive option. Because middle-market leveraged loans are smaller, they tend to be placed among a handful of investors. For an investor in a middle-market CLO, most, if not all, of the credits will be unknown, so the investor must rely solely on the quality of the manager and the manager's credit selection process. Additionally, if a credit were to underperform, selling the exposure would be more difficult, as liquidity in middle-market loans is low due to the small number of investors in the original deal.

How CLOs work

CLOs are complex structures that combine multiple elements with the goal of generating an above-average return via income and capital appreciation. They consist of tranches that hold the underlying loans, which typically account for about 90% of total assets, and a sliver of equity. The tranches are ranked highest to lowest in order of credit quality, asset size, and income stream – and thus lowest to highest in order of riskiness.

Tranches Allocate Assets, Income, and Risk
Typical CLO tranche structure



Source: Citibank as of 30 September 2021.

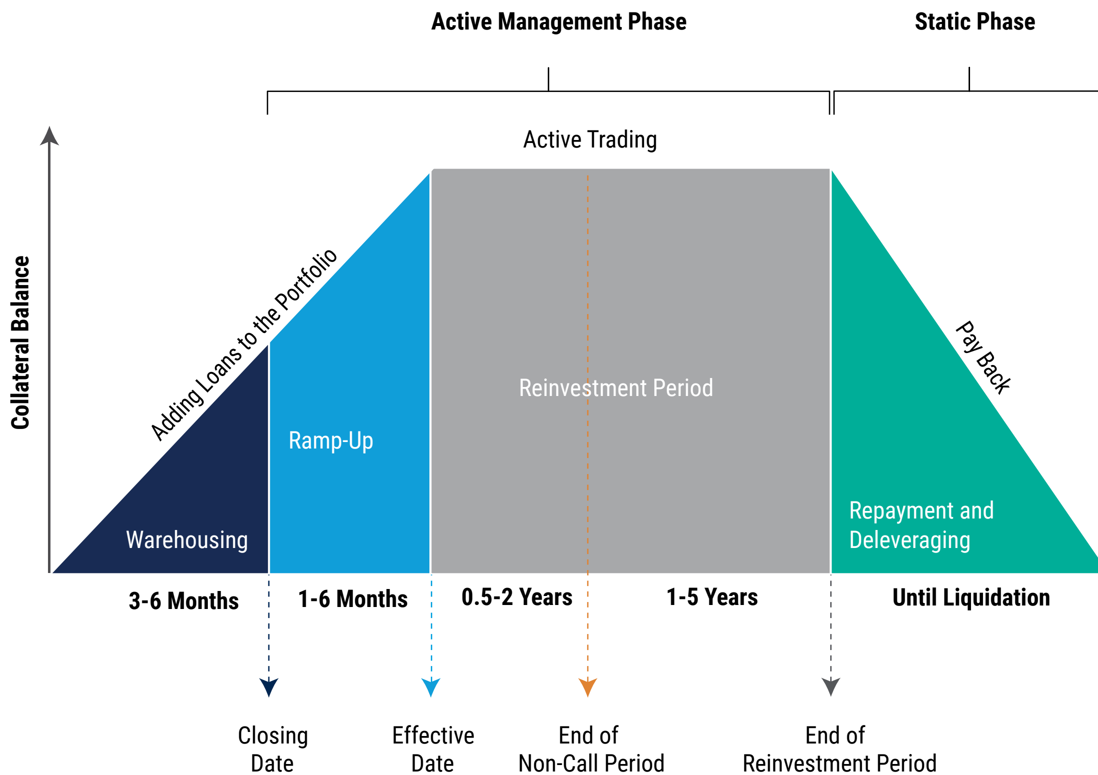
Although leveraged loans themselves are rated below investment grade, most CLO tranches are rated investment grade, benefiting from diversification, credit enhancements, and subordination of cash flows.

Each CLO has a defined lifecycle in which collateral is purchased, managed, redeemed, and returned to investors. The standard lifecycle includes five stages:

1. **Warehousing (3-9 months):** The manager purchases the initial collateral before the closing date.
2. **Ramp-up (1-6 months):** Following the closing date, the manager purchases the remaining collateral to complete the original portfolio. After the ramp-up is complete, the manager also performs monthly tests to ensure the portfolio's ability to cover its interest and principal payments.
3. **Reinvestment (1-5 years):** Following the ramp-up period, the manager can reinvest all loan proceeds, either purchasing or selling bank loans to improve the portfolio's credit quality.
4. **Non-call (first 0.5 to 2 years of reinvestment):** CLO-tranche holders earn a per-tranche yield spread specified at closing, after which the majority equity-tranche holder can call or refinance outstanding CLO tranches.
5. **Repayment and deleveraging (1-4 years):** As underlying loans are paid off, the manager pays down the CLO tranches in order of seniority and distributes the remaining proceeds to the equity-tranche holders.

CLO Lifecycle

CLOs typically have a final maturity of up to 11-13 years but a shorter expected life due to loan amortization.



Source: VanEck. For illustrative purposes only.

All about the cash flows

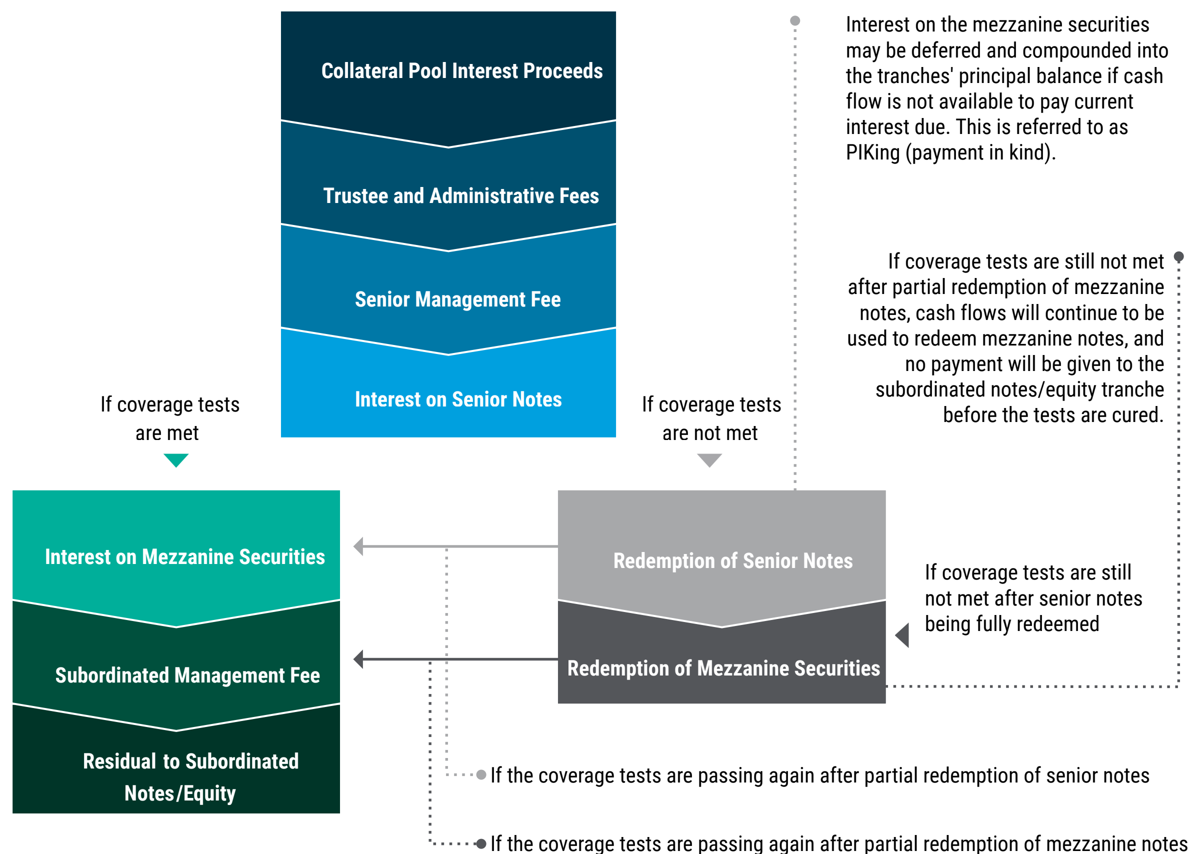
Cash flows are the lifeblood of a CLO: They determine the distribution of income and principal, which determines the return on investment. The key concept is that distributions are paid sequentially starting with the senior-most tranche until each CLO tranche has been paid its full distribution. Equity-tranche holders absorb costs and receive the residual distributions once the costs have been paid.

Coverage tests are a vital mechanism to detect and correct collateral deterioration, which directly affects the allocation of cash flows. All CLOs have covenants that require the manager to test the portfolio's ability to cover its interest and principal payments monthly. Among the many such tests, the most common are the interest coverage (IC)[17] and overcollateralization (OC)[18] tests. Covenants specify baseline values for each test.

If the tests come up short, the manager must take cash flows from the lowest debt and equity-tranche holders and divert them to retire the CLO tranches in order of seniority. The diagram that follows illustrates the "waterfall" process in which cash flows are paid when the portfolio either passes or doesn't pass its interest coverage tests.

The Cash Flow Waterfall Has Two Streams

Interest payments are based on the results of the coverage test



Source: Morgan Stanley Research, "A Primer on Global Collateralized Loan Obligations (CLOs)," as of 20 September 2021.

[17]The income generated by the underlying pool of loans must be greater than the interest due on the outstanding debt in the CLO.
[18]The principal amount of the underlying pool of loans must be greater than the principal amount of outstanding CLO tranches.

Built-in risk protections

Coverage tests are one of several risk protections built into the CLO structure. Others include:

- **Collateral concentration limits.** Many deals mandate that at least 90% of the portfolio be invested in senior secured loans.
- **Borrower diversification.** The pool of loans typically must be diversified across 150-450 distinct borrowers in 20-30 industries, with a small percentage of the assets (e.g., 1%) invested in the loans of any single borrower.
- **Borrower size requirements.** Deals often restrict managers from purchasing loans to small companies, whose trading liquidity is low.

The equity tranche: the highest risk could mean the highest return

The equity tranche occupies a unique place in the CLO structure. It's essentially a highly leveraged play on the strength of the underlying collateral. Because the equity tranche's success depends on the success of the CLO tranches – it's last in line to receive cash flows and first to realize loan losses – its owners take the most risk of any CLO investors. Their goal, then, is to maximize the value of the equity.

As compensation for providing the majority of equity capital, the majority equity-tranche holder is given potential control over the entire CLO in the form of options, as highlighted below:

- **Call option.** The majority equity investor can direct a refinancing in some or all CLO debt after the non-call period expires to take advantage of accretive opportunities for the equity returns, as follows:
  - **Refi scenario**. CLO debt is refinanced into lower-cost debt with the same maturity and minimal changes to other deal terms.
  - **Reset scenario**. All CLO debt is refinanced, and the legal maturity of the debt is extended. Resets typically extend the reinvestment period of the CLO and the period during which the CLO equity can potentially capture value under volatile leveraged loan market conditions.

  Both options could potentially increase prospective equity returns over the life of the CLO by roughly 50 to 150 bps, depending on the extent of spread tightening since the deal originally priced.
- **Redemption** occurs when the assets are sold, the proceeds are used to pay off the debt, and the residual amount is paid to the equity, resulting in a final internal rate of return (IRR) calculation. Redemption allows the majority equity holder to optimize the value of the underlying collateral by controlling the point in time that the loan assets are liquidated.

To learn more about the potential benefits of CLO equity, read our primer, CLO Equity: How It Works – and Why It's Compelling Now.

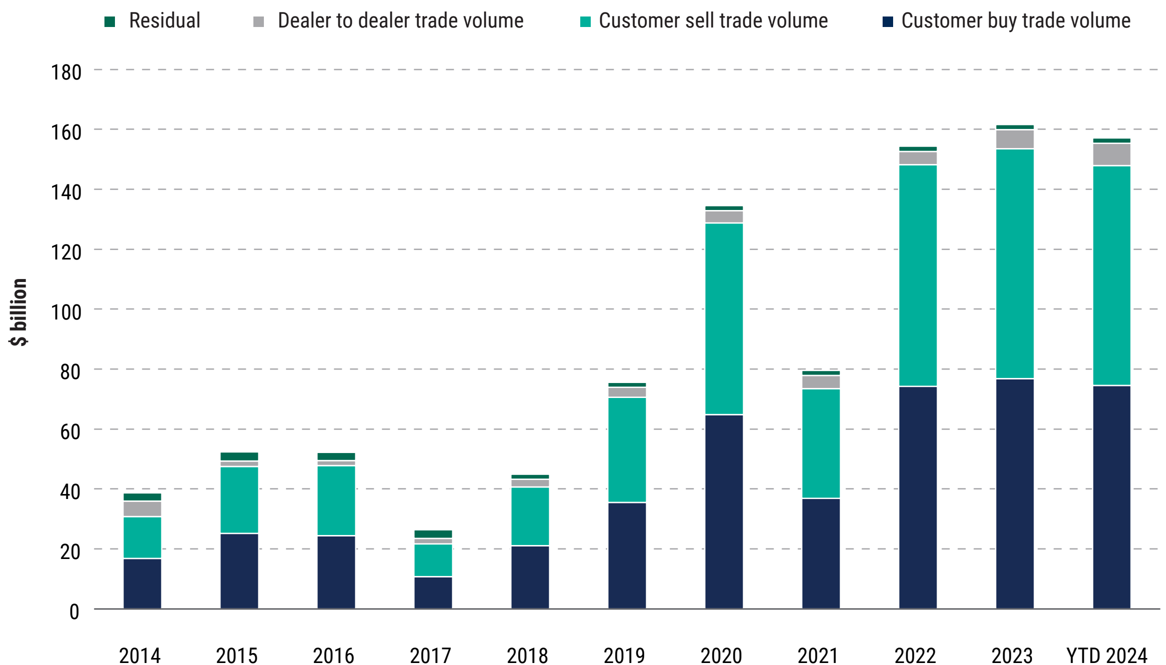
Breaking down the CLO yield premium

CLO complexity premium. The collateral underlying a CLO consists of a dynamic pool of actively managed leveraged loans, and CLO tranches contain call and reset/refi features that require financial expertise. Though CLO debt spreads are set at issuance, asset spreads, equity distributions, and manager performance are all dynamic – and there is an inherent yield premium associated with this complexity. Insurers can mitigate the complexity risk by performing diligent portfolio analysis, structural and legal reviews, and manager selection.

CLO regulation premium. The majority of investment grade tranches are owned by banks and insurance companies. Both banks and insurance companies are highly regulated. Both also have relatively high risk-based capital charges, depending on the rated tranche owned. As a result, banks and insurance companies require a minimum spread to make the investment appealing on an RBC basis.

CLO perceived illiquidity premium. CLOs are typically SEC 144A issuances, which are investable only by qualified institutional buyers (QIBs) under certain conditions. Relative to publicly registered bonds, CLOs have a smaller buyer base and therefore tend to be less liquid. While this relative illiquidity has become less of a factor given the remarkable growth of the CLO market (to roughly $1.2 trillion currently) and an active secondary market, as evidenced by increased trading volumes (see chart), the market still prices in a perceived level of illiquidity premium for owning CLO tranches. Further, insurance liabilities may be long-dated and reasonably predictable – as they are for most life insurance and workers' compensation writers – which means that insurers can invest in less-liquid assets at higher yields. Moreover, insurers typically specialize in running asset-liability matched portfolios and are well positioned to earn an illiquidity premium.

CLO Trading Volumes Show the Illiquidity Premium May Be More Perception Than Reality
IG rated CLO/CDO trading volume reported by TRACE



Source: Morgan Stanley Research, FINRA, TRACE as of 30 September 2024.

More regulation means less risk – and greater appeal to insurance investors

In the wake of securitized investments' difficulties during the financial crisis, US and European regulators took steps to mitigate CLOs' structural risks that made CLOs more attractive for investors.

European regulation is concentrated in several rules governing the capital requirements for banks and insurance companies. Risk retention, commonly known as "skin in the game," has been a requirement in Europe since 2011. It holds that CLO managers must retain 5% of the original value of the assets in their CLOs to align their interests more closely with those of investors.

The US required CLOs to be risk-retention compliant from December 2016 to May 2018. A court case brought by the Loan Syndications & Trading Association (LSTA) reversed the decision, as it was deemed that CLO managers do not "originate" the loans; rather, they buy them. As a result, risk retention is no longer required for US CLO issuers.

A prominent US regulatory development was the implementation of the Volcker Rule, which became effective in 2014. To be in compliance, most 2.0 vintage CLOs issued starting in 2014 were collateralized with leveraged loans only, and many 1.0 CLOs were "Volckerized" to eliminate non-loan collateral (where previously, CLOs had 5%-10% exposure to high yield bonds). While the Volcker Rule has since been amended to allow the inclusion of high yield bonds into a CLO, relatively few CLOs have included these investments; that said, the number of CLOs utilizing this additional flexibility in asset exposure has ticked up over the past couple of years.

Lastly, the sunsetting of Libor at the end of 2021 required US CLOs and their underlying leveraged loans to transition to a new reference rate. The Alternative Reference Rate Committee (ARRC) formally endorsed term SOFR as the fallback rate for the Libor transition in July of 2021, and Libor could no longer be used to issue new loans as of January 2022. While origination of new loans and CLOs linked to Libor ended in 2021, legacy products were permitted to continue to use certain Libor tenors as reference rates until 30 June 2023, after which the one-, three-, and six-month USD Libor rates would no longer be representative. The loan and CLO markets navigated the transition successfully, with most loans transitioning to a new benchmark on or prior to 30 June 2023. Term SOFR is now widely used as the replacement for Libor in US CLOs and broadly syndicated loans.

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Our team of professionals includes portfolio managers averaging 27 years of industry experience and 17 years with the firm, as well as credit analysts, most of whom have been with us for at least 10 years.*

We are differentiated by an experienced team that has been serving the insurance industry across a variety of niche fixed income asset classes.

In fixed income, our multibillion-dollar portfolio is invested across the spectrum of developed and emerging markets, investment grade debt, leveraged finance, and multi-sector strategies.

* As of 30 September 2024.

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