



Collateralized Loan Obligations Primer

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Collateralized loan obligations (CLOs) backed by broadly syndicated leveraged loans have grown from a niche structured credit product into one of the largest segments of the syndicated loan market. Although the CLO label is sometimes applied to vehicles backed by private credit or middle-market loans, this paper focuses exclusively on broadly syndicated CLOs. Despite their size and relevance, CLOs remain less widely understood than traditional corporate bond asset classes.

This paper introduces CLOs as an asset class, describes how the structure works, and reviews the return and risk characteristics of investing at different points in the CLO capital structure.

Key Takeaways

- › CLOs are actively managed, securitized portfolios of broadly syndicated loans, issued in tranches that range from AAA to unrated equity, with subordination and overcollateralization protecting the more senior tranches.
- › The global CLO market exceeds \$1.3 trillion, with US issuance representing roughly 80% of the market. New issuance and refinancing have each been highly cyclical. CLOs are now the marginal buyer for roughly two-thirds of outstanding broadly syndicated loans, making CLO market conditions a primary driver of credit availability across the broader loan market.
- › Historical default rates on investment grade CLO tranches have been low. No AAA-rated CLO tranche has experienced a principal loss since the product was created in the early 1990s. That record reflects mostly benign credit conditions punctuated by two stress periods, the GFC and the COVID shock.
- › CLO tranches have historically offered a spread premium over similarly rated corporate bonds, reflecting structural complexity, liquidity, and the embedded loan exposure rather than credit quality alone. The spread premium widens further down the capital structure. CLOs have also shown low historical correlation with high-quality rate-sensitive bonds, though correlation with equities and broader credit rises meaningfully for lower-rated tranches.
- › CLO equity provides leveraged exposure to a diversified loan portfolio and has historically delivered equity-like returns. However, its risk and return profile is distinct, characterized by meaningful volatility, mark-to-market sensitivity, and cash flow distributions that differ from both public equities and the J-curve dynamics typical of private equity investments.
- › Implementation options range from dedicated CLO debt or equity funds to multi-asset credit mandates, ETFs targeting AAA and AA tranches, and direct participation in the primary market.

What are CLOs?

A collateralized loan obligation is a specific type of securitization. Securitization is the process of pooling various financial assets (e.g., loans, mortgages) and converting them into securities that can be sold to investors. This technique allows institutions to transfer the risk and cash flows associated with the underlying assets to a broader investor base.

More precisely, a CLO is formed by bundling together a portfolio of broadly syndicated loans (BSL), which are then structured into different “tranches” based on risk and return profiles (see Figure 1). A tranche is simply a slice of a larger pool of assets, where each slice is backed by the same pools of underlying loans but each slice has a different level of risk and a correspondingly different expected return. Investors choose the slice that matches their risk appetite, with safer slices getting paid first but earning less, while riskier slices get paid last but earn more.

These tranches are issued to investors, ranging from less risky, senior tranches to riskier junior tranches (sometimes referred to as mezzanine tranches). The cash flows from the underlying loans are distributed to the different tranches according to a predefined hierarchy, known as a cash flow “waterfall,” which prioritizes payments to senior tranches thereby providing protection against losses.

Other CLO features that provide protection to the senior tranches include subordination and overcollateralization.

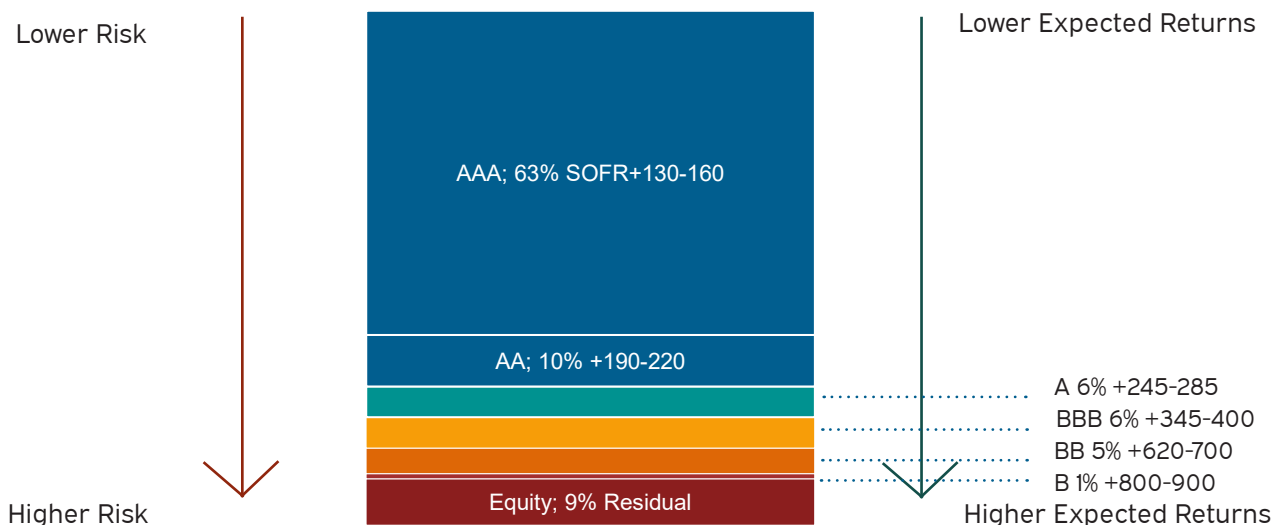
Subordination refers to the pecking order that determines who gets paid first when the underlying loans generate cash or incur losses. Investors in more senior positions get paid before those below them, meaning that junior investors absorb losses first and effectively act as a buffer protecting the investors above them. Overcollateralization means that the value of the loans in the CLO exceeds the value of the notes issued against them. That cushion means the loan portfolio can absorb a certain level of defaults before any noteholder suffers a loss.

CLOs are finite-life vehicles with a defined maturity, typically eight to twelve years from closing. CLOs are special purpose vehicles, not funds in the regulatory sense.

A feature that distinguishes a CLO from most other securitization structures is active management. Most securitization structures (e.g., mortgage-backed securities) are static. The pool of assets is assembled at closing, locked in, and then winds down as borrowers make payments over time. The investors know exactly what assets back their securities from day one, and those assets do not change. By contrast, in CLOs, a collateral manager selects the initial portfolio of (usually 150 to 400) loans and then can actively buy and sell loans within the portfolio during a “reinvestment period” that typically lasts five years. During reinvestment, principal repayments from the underlying loans are used to purchase additional loans rather than paying down CLO debt tranches.

Figure 1

Illustration of CLO Tranches by Risk & Return Profiles



Source: Tranche sizing per Meketa (see Figure 3: Representative CLO Capital Structure). This visual is illustrative and may not be fully accurate to any actual CLO transaction. General risk/return relationship across the CLO capital stack reflects standard structuring. For example, according to Guggenheim Investments, “The CLO’s most senior and highest-rated AAA tranche carries the lowest coupon but is entitled to the highest claim on the cash flow distributions and is the most loss-remote. Mezzanine tranches pay higher coupons but are more exposed to loss and have lower ratings. The most junior and riskiest part of the CLO capital structure is the equity tranche, which is neither rated nor coupon bearing” (source: Guggenheim Investments, “Understanding Collateralized Loan Obligations,” accessed 2026).

A Brief History

The modern CLO market dates to the early 1990s, when structures originally developed to finance banks' corporate loan portfolios began to attract a broader investor base. Issuance was episodic through the 1990s and grew steadily in the early 2000s alongside the expansion of the broadly syndicated loan market. So-called "CLO 1.0" deals (i.e., those issued before the Global Financial Crisis) reached a peak of approximately \$90 to \$95 billion in US issuance in 2006 and 2007. Issuance stopped almost entirely from 2008 to 2010.¹

It is important to distinguish CLOs from the collateralized debt obligations (CDOs) that featured prominently in the Global Financial Crisis (GFC). Those CDOs were typically backed by subprime residential mortgage securities, and they suffered severe losses during 2007 to 2009. CLOs behaved very differently during that period.²

The market reopened in 2010 with what became known as "CLO 2.0 deals," featuring stronger structural protections, shorter reinvestment periods, and tighter eligibility criteria for the underlying collateral. Issuance grew rapidly through the 2010s, crossing \$100 billion annually in the US in 2014. Since that period, the Dodd-Frank risk-retention rules have been relaxed for open-market CLOs,³ and a further structural evolution, sometimes called "CLO 3.0," has introduced tighter limits on exposures such as second-lien loans and covenant-lite loans, though in practice most CLO 2.0 features have continued.

Starting in the 2010s, CLOs progressively displaced other buyers of broadly syndicated loans, including hedge funds and loan mutual funds, as the dominant source of demand. That dominance accelerated after 2018. By the mid-2020s, CLOs had become the marginal buyer for the majority of new BSL issuance, holding over two-thirds of all outstanding loans.⁴ This makes CLO market conditions a primary determinant of credit availability and pricing across the broader BSL market.

Market Size and Composition

As of year-end 2025, outstanding US CLO issuance stood at approximately \$1.1 to \$1.2 trillion across more than 1,500 active deals, and the global CLO market is close to \$1.4 trillion when European and other issuance is included.⁵ For context, this is roughly the same size as the US high yield bond market. Annual new issuance in the US has ranged between roughly \$72 billion and \$202 billion over the last decade, with additional volume from refinancings and resets of existing deals (see Figure 2).

Investors in CLOs include a mix of US and non-US banks (concentrated in AAA tranches), insurance companies (concentrated in investment grade tranches), asset managers, hedge funds, and pension plans. Equity tranche investors have traditionally included hedge funds, CLO managers themselves, private credit firms, and specialist CLO equity funds. The buyer base has broadened considerably over the past decade, and a growing ETF market for CLO debt (concentrated at AAA and AA) has made CLO tranches accessible to retail and smaller institutional investors.

Figure 2

US CLO Market New Issuance (\$ billions)

Year	New Issuance	Refi / Reset	Total Activity
2016	\$72	\$38	\$110
2017	\$118	\$167	\$285
2018	\$128	\$157	\$285
2019	\$118	\$42	\$160
2020	\$93	\$77	\$170
2021	\$186	\$246	\$432
2022	\$129	\$37	\$166
2023	\$117	\$21	\$138
2024	\$202	\$308	\$510
2025	\$202	\$250	\$452

Source: Bank of America CLO Factbook, LCD by PitchBook, and Deutsche Bank Research. Reflects US broadly syndicated loan CLO issuance only. 2024 figures from PineBridge Investments and Deutsche Bank Research; 2025 figures from Bloomberg News, December 17, 2025, and Deutsche Bank Research, January 2026.

How a CLO is Structured

A typical broadly syndicated loan CLO issues six to seven tranches plus an unrated equity tranche. CLO structures vary, and skipping one or more tranches is common. The specific capital structure of any given CLO is determined by the manager and investor demand, market conditions, and the economics of the deal at the time of issuance. The senior-most class, which is essentially universal, is rated AAA and represents the largest share of the capital structure, usually 60% to 65% of total proceeds. Successive tranches may be rated AA, A, BBB, BB, and B, with each providing credit support to the tranches above it through subordination. The equity tranche, which is unrated, sits at the bottom of the capital structure and bears the first dollar of loss from defaults on the underlying collateral. In return, equity investors receive any remaining income and payments generated by the deal, in addition to the remaining principal after all other tranche holders have been paid (see Figure 3).

The Cash Flow Waterfall

The cash flows generated by the underlying loans, which include both interest payments and principal repayments, are allocated through a strict “waterfall” that prioritizes payments to the most senior tranches first. Interest is paid first to the AAA tranche, then sequentially to each subordinate class, and any residual interest after all debt coupons and fees have been paid flows to the equity. During the reinvestment period, any principal payments that come in from the underlying loans are typically used to buy more loans. After the reinvestment period ends, principal payments are instead used to pay down, or amortize, the CLO’s debt tranches in order, starting with the most senior (AAA-rated) tranche and moving down to the more junior tranches. This process helps ensure the most senior investors are paid first. Two types of tests, known as overcollateralization (OC) tests and interest coverage (IC) tests, protect the more senior tranches if the underlying portfolio of loans deteriorates.⁶ If an OC or IC test fails at a given tranche level, interest that would otherwise flow to more junior tranches is instead used to pay down the senior tranches until the test is passed.

This “self-correcting” feature is central to why CLO structures have historically exhibited low default rates at investment grade levels, but it also means the most junior debt and equity tranches can experience significant cash flow

interruptions during periods of credit stress even if ultimate principal losses are limited.

The Reinvestment Period

During the reinvestment period, the manager has the flexibility to actively manage the portfolio by buying and selling loans. This enables them to adjust the portfolio in response to changing market conditions, replace loans that show signs of credit weakness, and ensure compliance with deal-specific guidelines and tests related to collateral quality and concentration limits. These management actions help protect the overall quality of the CLO’s collateral and support the ratings of each tranche. Thus, actions taken by the manager during the reinvestment period can materially influence the expected life, spread, and performance profile of every tranche in the deal.

The manager’s ability to reinvest may be constrained by collateral quality tests, concentration limits (e.g., for individual issuers, industries, and loan characteristics), and portfolio-level metrics including a weighted average rating factor, a weighted average spread test, and a diversity score. These constraints are typically negotiated with rating agencies and investors at deal inception and are designed to preserve the risk profile that supported the tranche ratings at issuance.

Figure 3
Representative CLO Capital Structure

Tranche	Rating	Size (% of deal)	Indicative Spread (over SOFR)	Role
Class A	AAA	~63%	130-160 bps	Senior secured
Class B	AA	~10%	190-220 bps	Mezzanine senior
Class C	A	~6%	245-285 bps	Mezzanine
Class D	BBB	~6%	345-400 bps	Mezzanine
Class E	BB	~5%	620-700 bps	Junior mezzanine
Class F	B ⁷	~1%	800-900 bps	Junior
Equity	Unrated	~9%	Residual	First-loss

Source: Meketa analysis of representative 2025 US broadly syndicated loan CLO primary issuance data from Bank of America, Deutsche Bank, and JP Morgan. Tranche sizes and spreads vary by manager tier, deal vintage, and market conditions; figures are approximate ranges. Spreads are over the Secured Overnight Financing Rate (SOFR).

Nature of Risk of CLOs

CLO investors face a set of risks that are structurally similar to those in corporate bonds but with important complications arising from the waterfall, the potential use of leverage, and active management. The primary risk remains credit risk (driven by defaults and downgrades in the underlying loan portfolio), as well as interest rate and basis risk, liquidity risk, manager risk, and structural or documentation risk.

Credit Risk

Because the underlying collateral is typically composed of below-investment-grade corporate loans, credit risk is ultimately the dominant source of risk in a CLO. What distinguishes CLOs from a direct investment in broadly syndicated loans is that the tranche structure distributes credit risk unevenly across investors. For example, a typical CLO AAA tranche benefits from approximately 37% subordination, meaning that nearly 37% of the collateral pool would need to be lost before the AAA tranche would begin to experience principal impairment. Stated differently, more than one-third of the underlying loan portfolio would need to default with no recovery before principal losses would be allocated to the AAA tranche.⁸ In practice, senior secured loan defaults peaked at 9.8% during the GFC, and even then, recoveries averaged approximately 50% to 60%.⁹ This means losses in the AAA tranche would require unprecedented, simultaneous, and sustained collateral deterioration.¹⁰

By contrast, credit risk for the junior debt tranches (e.g., the BB and B tranches) is meaningful. Still, on average, it is less than for comparably rated corporate bonds (see Figure 4). This is because of two features of CLOs. First, the underlying loan portfolio is diversified across 150-400 borrowers, so idiosyncratic defaults are dampened by the breadth of the pool. Second, CLO loans are senior secured, meaning recovery rates in default are generally higher than for unsecured corporate bonds.

The historical record bears this out. S&P and Moody's impairment studies show no realized principal loss on an AAA US broadly syndicated loan CLO tranche from deal inception in the early 1990s through 2024. Realized losses at AA, A, and BBB have been low but non-zero, concentrated in weaker CLO 1.0 vintages. Junior mezzanine (BB, B) and equity tranches have experienced meaningful losses, particularly in 2008 and 2009, though even in that

environment BB default rates were substantially below those on similarly rated corporate bonds.¹¹

It is worth noting that markets evolve and what happened historically may not be a perfect proxy for what to expect in the future. For example, given that CLOs are now the marginal buyer for roughly two-thirds of outstanding BSLs, if CLO formation slows (due to rate moves, spread widening, or investor pullback), loan market credit availability could tighten in a way that's self-reinforcing during a downturn.

Interest Rate Risk

CLO tranches are almost always issued as floating-rate notes that pay a spread over SOFR. The underlying loans are also floating rate. Because both the payments to investors (on the CLO tranches) and the interest received from the loans held within the CLO adjust with changes in short-term rates, direct interest rate sensitivity is low. When short-term rates change, both loan income and investor payments move together, so when rate increases or decreases happen across the board (i.e., parallel rate shifts), the effect on CLO tranche values is limited. In contrast to fixed-rate high yield bonds, which lost value during the 2022 rate hiking cycle, CLO debt tranches experienced only modest mark-to-market declines during that period, and coupons quickly adjusted to reflect the higher rate environment.

Figure 4
CLO Tranches vs. Corporate Bonds — 10-Year Cumulative Rates

Rating	CLO Impairment Rate ¹²	CLO Loss Rate ¹²	Corporate Bond Default Rate ¹³
AAA	0.0%	0.0%	0.6%
AA	0.0%	0.0%	0.9%
A	0.1%	0.0%	1.7%
BBB	2.2%	0.7%	3.5%
BB	7.2%	4.8%	10.9%
B	28.9%	13.5%	24.6%

Source: Moody's Investors Service, "Impairment and Loss Rates of US Structured Finance Securities, 1993-2024," June 2025; Moody's Investors Service, "Annual Default Study: Corporate Default and Recovery Rates, 1920-2024," February 2025. Table shows reconstructed 10-year cumulative impairment rates for US broadly syndicated loan CLO tranches versus 10-year cumulative default rates for US corporate bonds, by rating category.

Basis risk arises when the interest rate on the CLO’s assets and the interest rate on its liabilities move by different amounts, or at different times, even when both are floating rate. For example, if the loans in the portfolio reset their rates monthly based on one benchmark while the CLO’s notes reset quarterly based on a slightly different benchmark, the two sides of the balance sheet can drift out of sync. That mismatch can compress the net interest income available to equity holders and, in extreme cases, create stress further up the capital structure.

Liquidity Risk

Secondary market liquidity in CLO tranches is lower than in broadly syndicated loans and meaningfully lower than in investment grade corporate bonds as evidenced by lower turnover ratios (e.g., ~13-32% annual turnover for CLO tranches vs. materially higher loan trading volumes), wider bid-ask spreads (10-30 basis points for AAA CLOs vs. materially higher for mezzanine/equity), and longer execution times and smaller trade sizes.¹⁴ While AAA and AA tranches from large, recognizable managers trade with relatively tight bid-ask spreads of a few tenths of a point in normal conditions, spreads for mezzanine and equity tranches can widen considerably. For example, during the COVID-19 shock of March 2020, bid-ask spreads on mezzanine CLO tranches widened by 5 to 10 points within days, and the equity tranche market effectively closed for a period.¹⁵

Liquidity appears to be improving as a result of the growing AAA CLO ETF market,¹⁶ which has provided an additional source of demand for the most senior tranches and has tightened primary spreads. However, much of this growth has occurred during a relatively benign credit environment, and the extent to which these vehicles support liquidity during periods of market stress remains largely untested. For investors able to hold tranches to maturity, the primary risk is realized credit loss, but for investors who may need to transact before maturity, liquidity should be carefully considered, particularly below investment grade.

Manager Risk

Because CLOs are actively managed, the quality of credit selection and trading decisions can materially

affect performance, especially for the equity and junior debt tranches. There are more than 100 US CLO collateral managers, ranging from large multi-sector firms managing dozens of CLO transactions across their platforms to smaller credit specialists.¹⁷ CLO investment managers will invest in the CLO debt and/or equity tranches of CLO deals managed by the CLO collateral managers. This leads to both manager risk related to the CLO collateral manager and the investment manager, who is actively allocating to those CLO structures. Performance dispersion among CLO investment managers has been meaningful, particularly in stressed environments, reflecting differences in credit selection (CLO collateral manager selection), quality allocation, and trading activity. Top-tier CLO investment managers have outperformed lower-tier peers by approximately 640 basis points per annum (see Figure 5). This level of dispersion between higher- and lower-performing managers is similar to that observed for active US equity managers, and much higher than that for bond managers.

An investor allocating to CLO equity or junior debt tranches should conduct manager-level due diligence similar to that which they typically perform for any other actively managed credit strategy, including review of the manager’s CLO deal selection, trading activity, and historical workout experience. For senior tranche investors, manager risk exists but is attenuated by the deep subordination below them.

Figure 5
Interquartile Spread of CLO Allocator Manager Returns

Asset Class	IQ Spread
CLOs	6.4%
Investment Grade Bonds	0.9%
High Yield Bonds	1.9%
US Large Cap Equities	5.9%

Source: Meketa Investment Group analysis of data from eVestment Alliance. Reflects the trailing ten years as of September 30, 2025. The CLO eVestment universe is a debt-focused universe; the higher dispersion is between the funds that target mezzanine tranches (BB/BBB) relative to the investment grade focused funds. For more information on methodology, see Meketa’s Manager Alpha white paper. Third-party analysis corroborates this finding. See Collateralizedloanobligations.com, “CLO Manager Rankings and Evaluation,” May 2026.

Structural and Documentation Risk

CLO legal agreements are lengthy and complicated, and small differences in definitions (e.g., of defaults, of eligibility criteria, of OC test cushions, of permitted workout loans) can have a big impact during times of market stress.

In recent years, some deals have included provisions that allow managers to purchase distressed debt or to extend reinvestment periods. Careful document review is an important part of CLO due diligence.

Return Characteristics

Yield and Spread

CLO tranches have generally offered a spread premium over similarly rated corporate bonds, though the size and consistency of that premium varies meaningfully by rating. For example, a AA-rated CLO tranche has traded at an average yield premium of 117 basis points relative to AA-rated corporate bonds, while ranging between 23 and 285 basis points (see Figure 6). The size of the spread generally increases by tranche. At one end of the spectrum, the premium for AAA-rated CLOs averaged just 32 basis points and occasionally turned modestly negative during benign credit environments. The spread pickup has been more consistent further down the capital structure, averaging 241 basis points at the BBB level and widening

to 474 basis points for BB-rated CLOs.¹⁸ The yield premium for CLOs is likely due to several factors: the analytical effort required to evaluate CLO structures, the lower secondary market liquidity, and the relatively narrower buyer base. For investors with the ability to analyze and hold CLO tranches, this premium has historically been attractive on a loss-adjusted basis, especially at investment grade.

Historical Performance of CLO Debt

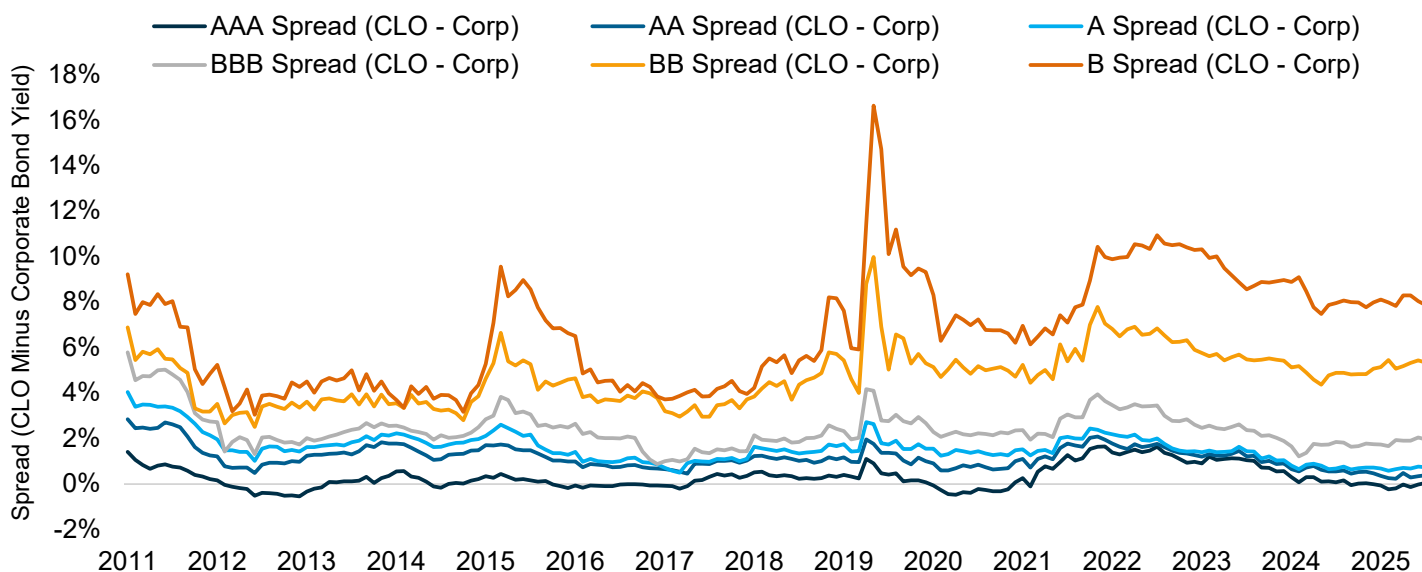
Performance measurement for CLO debt tranches is complicated by the short public history of broad indices. The JP Morgan CLOIE index series began in 2011 and the Palmer Square CLO indices in 2013.

Since 2012, AAA-rated CLO tranches produced annualized total returns of 3.5% with standard deviation of 1.9% (see Figure 7). They produced better risk-adjusted returns than investment grade corporate bonds over the same period, largely due to the absence of duration drag during the 2022 rate shock. BB-rated CLO tranches returned 11.2% annualized with standard deviation of 14.0%, exhibiting considerably higher volatility and returns than high yield bonds over the period.

Drawdowns in CLO debt were sharpest during the March 2020 COVID shock, when the market briefly priced in substantial loan default scenarios that did not

Figure 6

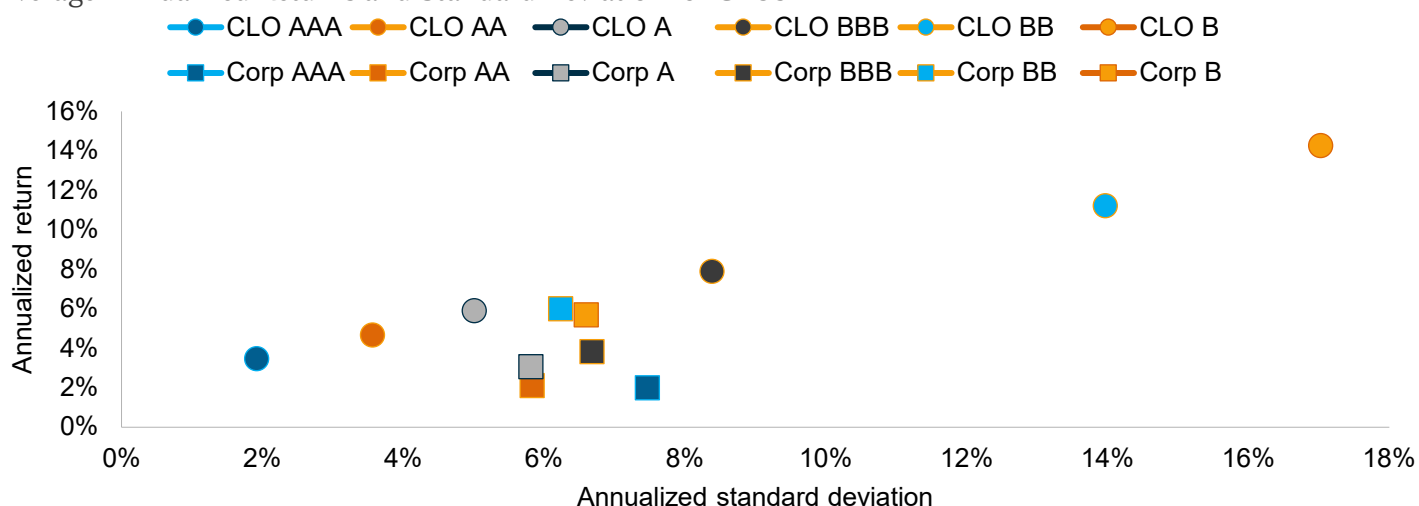
CLO Yield Premium over Corporate Bonds by Rating



Source: JP Morgan CLOIE Index (CLO tranche yields), Bloomberg US Corporate/High Yield Indices (corporate bond yields). Spread reflects the difference in yield-to-worst between CLO tranches and corporate bonds of equivalent rating, monthly observations, December 2011–June 2026.

Figure 7

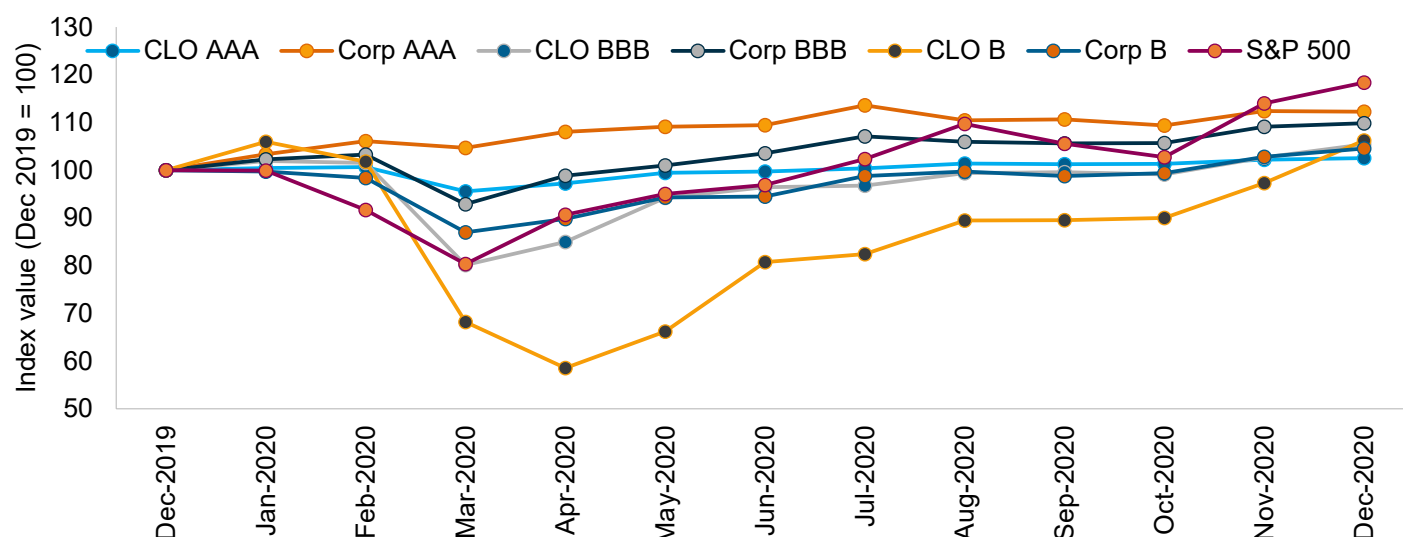
Average Annualized Returns and Standard Deviation for CLOs



Source: JP Morgan CLOIE Index (CLO tranches), Bloomberg US Corporate/High Yield Indices (corporate bonds). Annualized return computed geometrically from monthly total returns. For the period January 2012 through June 2026 (i.e., since CLO index inception).

Figure 8

Downside Performance of CLOs and Bonds



Source: JP Morgan CLOIE Index (CLO tranches), Bloomberg US Corporate/High Yield Indices (corporate bonds). Monthly total-return index levels rebased to 100 as of December 2019 (pre-COVID baseline).

ultimately materialize (see Figure 8). The AAA-rated index experienced a max drawdown of 4.4%, while the max drawdown was 19.8% for the BBB-rated index and 41.4% for the B-rated index. Putting this in perspective, the drawdown for the US equity market was approximately 34%. Importantly, the stress experienced by lower-rated CLO tranches was driven not only by concerns over future loan defaults, but also by the risk that deteriorating overcollateralization and interest coverage tests would trigger cash flow diversion mechanisms. Across many CLOs, interest and principal proceeds that would otherwise have been distributed to equity holders

and junior tranches were redirected to repay senior debt, reinforcing structural protections for higher-rated tranches while reducing cash flows to subordinated investors. The magnitude of these losses relative to similarly rated corporate bonds implies that CLO tranches should not be treated as risk-equivalent to similarly rated corporate bonds. In addition, the COVID episode should not be viewed as a worst-case stress scenario, as both spread widening and underlying loan defaults fell well short of the levels experienced during the Global Financial Crisis.

CLO Equity

CLO equity occupies a unique position in the capital structure. Unlike the rated debt tranches, which receive fixed contractual coupons and have defined principal repayment rights, the equity tranche has no guaranteed return. Instead, equity holders receive whatever cash is left over after all other obligations have been met, including loan portfolio management fees, administrative expenses, and the interest payments owed to every debt tranche from AAA down to the most junior rated debt tranche. This residual claim means equity holders are last in line to receive cash and first in line to absorb losses.

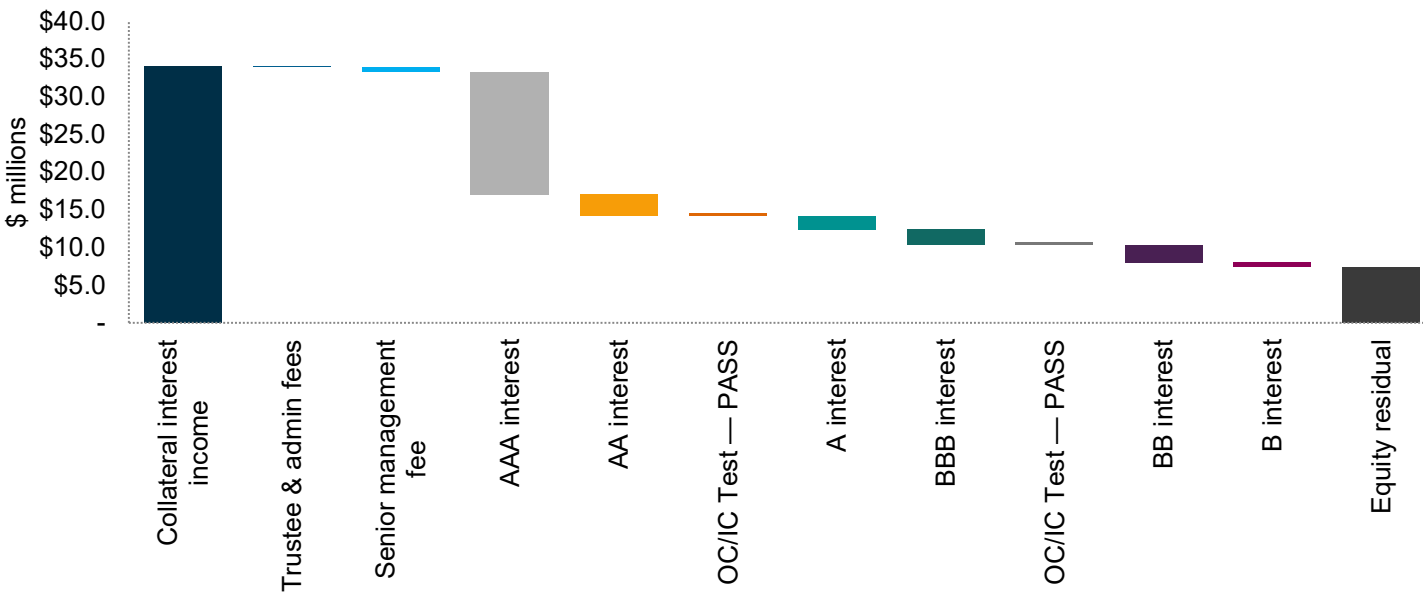
The appeal of the equity tranche lies in leverage. Because debt typically comprises around 90% of a CLO’s capital structure, equity holders are effectively controlling a large pool of loans with a relatively small amount of their own capital. The equity tranche earns the difference between what the loan portfolio yields and what the CLO pays to its debt investors, multiplied across the entire portfolio. If that spread is, say, 1.5% on a \$500 million portfolio, the equity tranche (assuming it represents 10% or \$50 million of that total) captures \$7.5 million of net income annually,

implying a 15% return on invested equity. This illustrates the mechanics of leverage working in the equity holder’s favor.

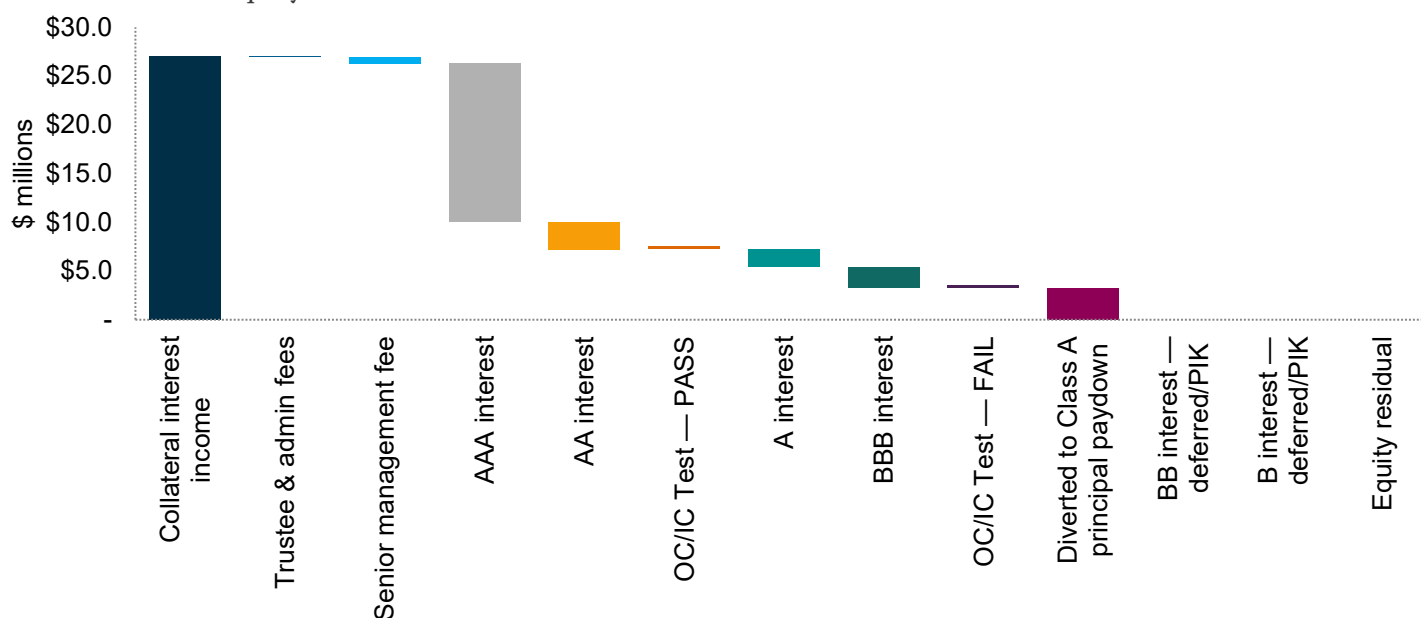
When credit conditions are benign and defaults are low, this dynamic can be powerful. Cash-on-cash distributions to equity holders of 15% to 25% annually have historically been achievable in favorable environments, particularly in the early years of a deal if the portfolio is performing well and the manager has full reinvestment flexibility.¹⁹

The risk, however, is symmetric. CLOs typically include coverage tests that monitor whether the value and income of the loan portfolio remain sufficient to support the debt tranches above the equity. If defaults erode the portfolio sufficiently, these tests fail, and the waterfall automatically redirects cash that would otherwise flow to equity holders toward paying down senior notes instead (see Figure 10). In a severe scenario, equity distributions can stop entirely for extended periods. Unlike a debt investor who continues to accrue interest even in stress, the equity holder’s income is purely contingent on the health of the underlying portfolio and the continued passage of cash through every layer above them.

Figure 9
Illustrative CLO Equity Cash Waterfall when Overcollateralization and Interest Coverage Tests Pass



Source: Tranche sizing and indicative spreads per Meketa’s Figure 3 (Representative CLO Capital Structure). Dollar figures shown are hypothetical and for illustrative purposes only, constructed by Meketa to demonstrate the mechanics of CLO waterfall cash flow priority and are not derived from an actual transaction. For illustrative purposes, this example includes only two OC/IC tests. Actual CLO structures typically contain multiple overcollateralization and interest coverage tests at various levels of the capital structure, with tranche-specific thresholds designed to protect more senior noteholders. General payment waterfall structure, including sequential interest priority and OC/IC test-driven cash diversion, reflects standard CLO mechanics as described in PineBridge Investments, “A CLO Primer for US Insurers” (citing Morgan Stanley Research, “A Primer on Global Collateralized Loan Obligations (CLOs),” September 2021).

Figure 10**Illustrative CLO Equity Cash Waterfall when Junior Tests Fail and Cash is Diverted**

Source: Tranche sizing and indicative spreads per Meketa's Figure 3 (Representative CLO Capital Structure). Dollar figures shown are hypothetical and for illustrative purposes only, constructed by Meketa to demonstrate the mechanics of CLO waterfall cash flow priority and are not derived from an actual transaction. For illustrative purposes, this example includes only two OC/IC tests. Actual CLO structures typically contain multiple overcollateralization and interest coverage tests at various levels of the capital structure, with tranche-specific thresholds designed to protect more senior noteholders. General payment waterfall structure, including sequential interest priority and OC/IC test-driven cash diversion, reflects standard CLO mechanics as described in PineBridge Investments, "A CLO Primer for US Insurers" (citing Morgan Stanley Research, "A Primer on Global Collateralized Loan Obligations (CLOs)," September 2021).

CLO tranches are similar to closed-end funds in that capital is raised once at closing, they are finite-life vehicles, investors cannot redeem their positions, and the manager deploys the fixed pool of capital over the life of the deal. Further, the equity tranche has potentially irregular and uncertain cash flows that are sensitive to when they occur, not just how much they total. That finite life, combined with cash flow sensitivity, makes IRR the appropriate return metric for equity tranches and vintage year analysis meaningful.

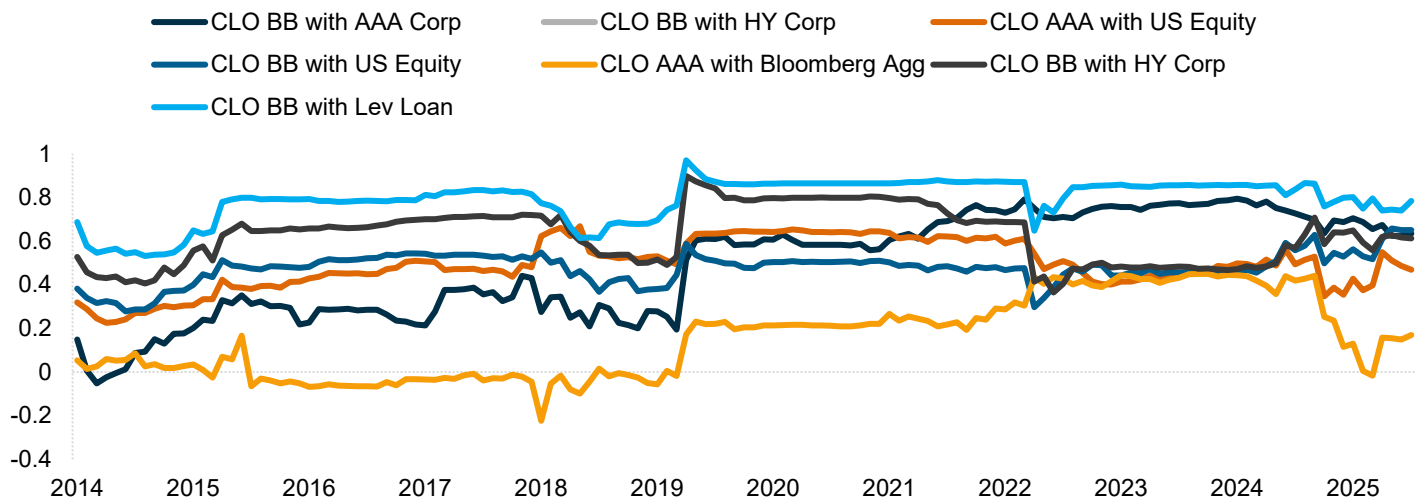
Historically, CLO equity vintages from 2003 through 2022 have generated a median unlevered internal rate of return of approximately 12%, assuming each investment was purchased at new issuance and held through deal conclusion.²⁰ Vintage matters substantially: equity from deals priced at wide loan spreads has outperformed, while equity from tight-spread vintages (notably 2014 and 2021) has delivered lower returns.

The underlying exposure in equity tranches is credit risk on corporate borrowers, which has more in common with other credit strategies than with equity ownership of

companies. Hence, CLO equity is better compared with private credit or opportunistic credit hedge funds than with public equity.

Role in a Portfolio

CLO tranches can fit into an institutional portfolio in several distinct ways depending on which part of the capital structure is targeted. At the AAA and AA levels, CLO debt can function as a short-duration, high-quality, floating-rate fixed income allocation, substituting for a portion of a core bond allocation that an investor wishes to insulate from interest rate risk. However, it should be noted that they do not offer the price appreciation that characterizes traditional safe-haven assets (i.e., their returns will not increase as is often witnessed for Treasuries during a flight-to-quality environment). Their correlation with high-quality bonds has been very low historically, typically ranging between 0.0 and 0.4 (see Figure 11).

Figure 11**Rolling Correlation with Stocks and Bonds**

Source: JP Morgan CLOIE AAA Index and JP Morgan CLOIE BB Index; Bloomberg US Aggregate Bond Index; ICE BofA US High Yield Index; Morningstar LSTA US Leveraged Loan Index; S&P 500 Total Return Index. 36-month rolling correlation of monthly total returns, December 2014–June 2026.

Lower-rated CLO debt is similar to a traditional credit allocation, in that it offers spread-like returns while taking on credit risk. More precisely, CLO debt is most analogous to BSLs, but with added complexity and somewhat lower liquidity than the BSL secondary market, in exchange for a spread premium that compensates investors for that complexity and less liquidity. CLO equity should be viewed as a higher-risk asset that is highly sensitive to the economic and credit cycle. As the first-loss tranche in the capital structure, CLO equity can generate attractive returns during favorable credit environments but is also more vulnerable to losses during periods of rising defaults and market stress. The correlation between lower-rated CLOs and credit has typically been high, usually ranging between 0.4 and 0.8.

Implementation Considerations

Allocating to CLOs

CLO exposure can be obtained through separate accounts, commingled funds (private or registered), ETFs, interval funds, and direct purchases of CLO tranches in the primary and secondary markets. Separate accounts are typically available only to investors with \$100 million or more in dedicated CLO debt allocations, while commingled funds are accessible at lower minimums.

For most institutional investors, the most practical way to integrate CLOs in their portfolio is through a multi-

asset credit or broad credit mandate in which CLO debt is one of several instruments a manager can use. Accessing CLOs directly requires specialized analytical resources to evaluate structures, dedicated operational infrastructure to handle the OTC settlement and reporting characteristics of CLO tranches, and sufficient scale to build a diversified position across multiple deals and vintages. A multi-asset credit manager with existing expertise, infrastructure, and deal flow can address all three challenges.

Dedicated CLO debt funds and institutional mandates have become increasingly common, particularly among investors seeking floating-rate credit exposure. More recently, AAA-rated CLO ETFs have grown rapidly and expanded access to the asset class, although large institutional investors continue to access CLOs primarily through separate accounts, commingled vehicles, and direct tranche investments. Dedicated CLO equity funds also exist, though they are typically offered through private fund structures that limit participation to sophisticated or qualified investors. As a practical matter, the complexity, illiquidity, and first-loss characteristics of CLO equity have further concentrated ownership among institutional investors with dedicated structured credit expertise.

Fees and Costs

Management fees for institutional CLO debt mandates are generally in the range of ~25-40 basis points for investment grade strategies, with higher-fee mandates extending into the ~40-60 basis points range depending on mandate complexity and credit focus.²¹ Higher-yielding CLO strategies (e.g., BB/B-focused mandates) tend to command higher fees, reflecting greater trading intensity and credit work. Fees often vary based on mandate size, customization, and strategy design. Publicly traded CLO ETFs have emerged as another vehicle, particularly for investors seeking daily tradability and operational simplicity when accessing senior CLO tranches.

Separately, CLO collateral managers earn a management fee embedded within the CLO structure itself, distinct from the mandate-level fee described above. Debt tranche investors are largely insulated from this embedded fee, since it is paid ahead of their fixed coupon out of excess spread; equity investors bear it directly, as it comes out of their residual cash flow before any distribution is made to them. CLO equity funds may charge private-credit-style fees ranging from a 0.5% to 1.5% management fee plus a performance fee with a hurdle.²²

Trading costs can be meaningful in the secondary market, particularly for mezzanine and equity tranches, and are reflected in realized performance. They are likely to have the largest impact in higher-turnover strategies and during periods of market stress.

Active vs. Passive

There is no truly passive approach available for investing in CLOs. CLO tranches are privately negotiated, over-the-counter instruments with no centralized exchange, inconsistent pricing, and a secondary market that is too thin and episodic to support the continuous buying and selling that index replication requires. Building a representative portfolio of CLO tranches and rebalancing it systematically as the index composition changes would be operationally impractical and prohibitively expensive in transaction costs. Even index-like ETFs rely on partial replication and optimization using liquid constituents because full replication of a broad CLO index is impractical.

At the AAA and AA levels, structural protections are deep enough that virtually no realistic level of portfolio defaults would impair those tranches. As a result, one AAA CLO tranche performs much like another regardless of who manages the underlying portfolio, and manager selection has little practical impact on outcomes. What drives return differences at the senior tranche level is implementation efficiency: fees paid to access the vehicle, distribution structure, and liquidity terms. This stands in contrast to mezzanine and equity tranches, where manager selection, vintage timing, and portfolio construction can produce materially different outcomes and where active judgment genuinely plays a meaningful role.

Benchmarking

The most widely used CLO debt benchmarks are the JP Morgan CLOIE indices and the Palmer Square CLO indices, each of which publishes sub-indices by rating level.²³ For CLO equity, there is no established public benchmark. A private credit composite provided by a major vendor would probably be the most appropriate benchmark for CLO equity. Vintage year categorization is central to evaluating CLO equity fairly, as the macro and credit cycle conditions prevailing during the reinvestment period are a primary driver of outcomes, and comparisons against a rolling credit index ignore that entirely.

Conclusion

CLOs are a large, mature part of the global credit market, offering floating rate, structured credit exposure with a long history of low realized losses at senior rating levels. That track record has held up across two genuinely different stress periods, the GFC and the COVID shock, though it reflects a market that has mostly operated in benign credit conditions. The asset class rewards the analytical effort required to understand its structural features, but it also asks investors to be thoughtful about where in the capital structure they take risk, how the liquidity profile might behave under stress, and how CLO exposure complements or overlaps with other credit and equity allocations already in the portfolio.

The appropriate role for CLOs likely varies by what an investor is looking for. AAA and AA CLO debt may suit investors seeking floating-rate, high-quality fixed income with a spread premium over similarly rated corporates, and its historically low correlation with high quality bonds could support its use as a diversifying allocation within core fixed income. Mezzanine CLO debt and CLO equity

carry a different risk profile, with correlation to credit and equities that rises meaningfully further down the capital structure; these tranches are probably better suited to investors with a higher risk tolerance and the governance to support ongoing manager oversight. In all cases, the selection of vehicle and manager will likely be the primary driver of long-term investor outcomes.

Appendix

Figure 12
Benefits and Risks of CLO Tranches

Tranche	Benefits	Risks
AAA / AA	Strong structural protection; floating rate; spread premium over corporate bonds	Lower liquidity than corporate bonds; complexity; tail dependency on loan market
A / BBB	Investment grade with meaningful spread pickup; floating rate	Sensitive to OC test failures in stress; downgrade risk; moderate liquidity
BB / B	High current coupons; historically lower loss rates than similarly rated corporates	Significant mark-to-market volatility in stress; limited liquidity; cash flow interruption risk
Equity	Levered exposure to loan spreads; high current cash flow in benign environments	First-loss position; mark-to-market volatility; manager selection crucial; tax complexity

Source: Meketa Investment Group, 2026.

Figure 13
Key CLO Terminology

Term	Definition
Broadly Syndicated Loan (BSL)	A large corporate loan arranged by a bank and sold to a broad syndicate of investors.
Collateral Manager	The investment manager responsible for selecting and trading the loan portfolio within the CLO.
Reinvestment Period	The period, typically five years, during which the manager can reinvest principal proceeds into new loans.
Overcollateralization (OC) Test	A ratio of collateral par value to tranche par value that, when breached, redirects cash flows to senior tranches.
Interest Coverage (IC) Test	A ratio of collateral interest to tranche interest that, when breached, redirects cash flows to senior tranches.
Weighted Average Spread (WAS)	The par-weighted average spread of the underlying loan portfolio.
Weighted Average Rating Factor (WARF)	A measure of the portfolio's average credit quality, used in rating agency methodologies.
Diversity Score	A statistical measure of portfolio diversification across issuers and industries.
Discount Margin (DM)	The effective floating rate spread to the reference rate (SOFR) that equates a tranche's price to par.
Refinancing/Reset	A repricing of existing CLO liabilities at tighter spreads (refi) or a full restructuring of terms (reset).

Source: Meketa Investment Group, 2026.

End Notes

- ¹ Larry Cordell, Michael R. Roberts, and Michael Schwert, "CLO Performance," NBER Working Paper No. 29410 (National Bureau of Economic Research, 2021), chart on p. 51.
- ² Subprime ABS CDOs suffered cumulative write-downs of roughly 65% of original issuance during 2007-2009, including losses on AAA tranches, whereas broadly syndicated CLOs incurred no realized principal losses on AAA tranches and only de minimis losses on investment-grade tranches (Cordell, Huang, and Williams 2011; Cordell, Roberts, and Schwert 2021).
- ³ Because CLO managers purchase loans in the secondary market rather than originating them, the DC Circuit Court of Appeals found that the policy rationale intended for loan originators did not apply in the same way. "Open-market CLOs" refers to CLOs where the manager assembles the loan portfolio by purchasing loans in the open secondary market, as opposed to receiving loans directly from a bank or originator.
- ⁴ Sources: BofA CLO Factbook (via PineBridge, July 2025), Deutsche Bank Research (via Deutsche Bank Flow, 2025).
- ⁵ Source: Loan Syndications & Trading Association (LSTA), LPC, LSEG Intex; Janus Henderson Investors (Bank of America data); Guggenheim Investments; Trepp.
- ⁶ OC and IC tests are structural coverage tests embedded in a CLO's indenture. The overcollateralization test compares the adjusted par value of the loan collateral supporting a tranche to the outstanding par amount of that tranche and all more senior tranches. The interest coverage test compares interest income generated by the collateral to the interest due on that tranche and all more senior tranches. If either ratio falls below its required threshold, cash flows that would otherwise be paid to more junior tranches are redirected to pay down senior notes until the test is cured.
- ⁷ Note that B-rated tranches are far more common in Europe than in the US (where they are rare).
- ⁸ AAA subordination of approximately 37% reflects typical 2024-2025 broadly syndicated loan CLO new issue structures. Source: Bank of America Global Research, CLO Factbook.
- ⁹ Source: S&P/LSTA Leveraged Loan Index, Moody's Default Studies.
- ¹⁰ For example, default rates during the worst year for credit during the Great Depression, 1933, were 15.4%. Source: Moody's Investors Service, Corporate Default and Recovery Rates. Note that the increased prevalence of covenant-lite loans and looser documentation might compress recovery rates relative to that experienced in the past.
- ¹¹ Source: S&P Global Ratings, "US CLO Tranche Defaults and Recoveries," various editions; S&P Global Ratings, "Annual Global Corporate Default and Rating Transition Study," 2009-2011. During the Global Financial Crisis, cumulative default rates on BB-rated US CLO tranches were in the low-single-digit range (approximately 2-4%), while comparably rated BB corporate bonds experienced cumulative default rates in excess of 20%, reflecting the structural protections and diversification inherent in CLOs.
- ¹² CLO impairment and loss rates: Moody's Investors Service, "Impairment and Loss Rates of US Structured Finance Securities, 1993-2024," June 2025. Reflects US broadly syndicated loan CLO tranches, 10-year cumulative rates by original cohort rating, 1993-2024.
- ¹³ Corporate bond default rates: Moody's Investors Service, "Annual Default Study: Corporate Default and Recovery Rates, 1920-2024," February 2025. Reconstructed 10-year cumulative default rates by rating category.
- ¹⁴ Source: Collateralizedloanobligations.com, "CLO Liquidity Risk," May 2026. Bid-ask spreads widen materially lower in the CLO capital structure, from approximately 10-30 bps for AAA tranches to 75-150 bps for BBB tranches and 300-1,500 bps for CLO equity.
- ¹⁵ Source: Bank of America Global Research, CLO weekly research, March-April 2020 trading data; PineBridge Investments, "CLO Equity: How It Works." Mezzanine and equity tranche bid-ask spreads widened materially during the March 2020 dislocation.
- ¹⁶ Source: Janus Henderson Investors; PGIM Fixed Income; market commentary via Alinvest. The AAA CLO ETF market has grown rapidly, with total assets increasing from approximately \$2-3 billion in 2023 to more than \$25-30 billion by mid-2025, including over \$20 billion in a single ETF (JAAA). This growth has been accompanied by strong inflows and increased participation in AAA tranches, contributing to improved secondary market liquidity and tighter spreads.
- ¹⁷ Source: CLO Research Group (Clopremium), "US CLO Managers' 2024 AUM and Growth Rates Revealed," January 2025. Total US CLO AUM was estimated at \$1.096 trillion at year-end 2024 across more than 100 active managers.
- ¹⁸ Source: JP Morgan CLOIE Index, Bloomberg US Corporate/High Yield Indices. Spread reflects the difference in yield-to-worst between CLO tranches and corporate bonds of equivalent rating, monthly observations, December 2011-June 2026.
- ¹⁹ These figures describe historical outcomes under favorable conditions only and are not a prediction, projection, or guarantee of future distributions. Actual results will vary based on credit performance, manager decisions, and market conditions.
- ²⁰ Source: Ellington Credit, "Why CLOs?" as of 2025; based on Bank of America Global Research "CLO Equity Data" cited by Ellington and PineBridge. Median unlevered IRR of approximately 12% for CLO equity vintages 2003-2022, assuming new-issue purchase and hold to deal conclusion. Realized performance varies widely across vintages and managers.
- ²¹ Source: eVestment CLO and structured credit fee percentile data for separate accounts with \$10 million in assets, as of Q1 2026, reflecting 17 reporting managers.
- ²² Source: Meketa analysis of a sample set of offering docs.
- ²³ Source: JP Morgan and S&P Dow Jones Indices index methodology documentation. The JP Morgan CLOIE family includes sub-indices by rating (CLOIE AAA, CLOIE AA, CLOIE A, CLOIE BBB, CLOIE BB) and is the most widely cited public CLO debt index series.

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