



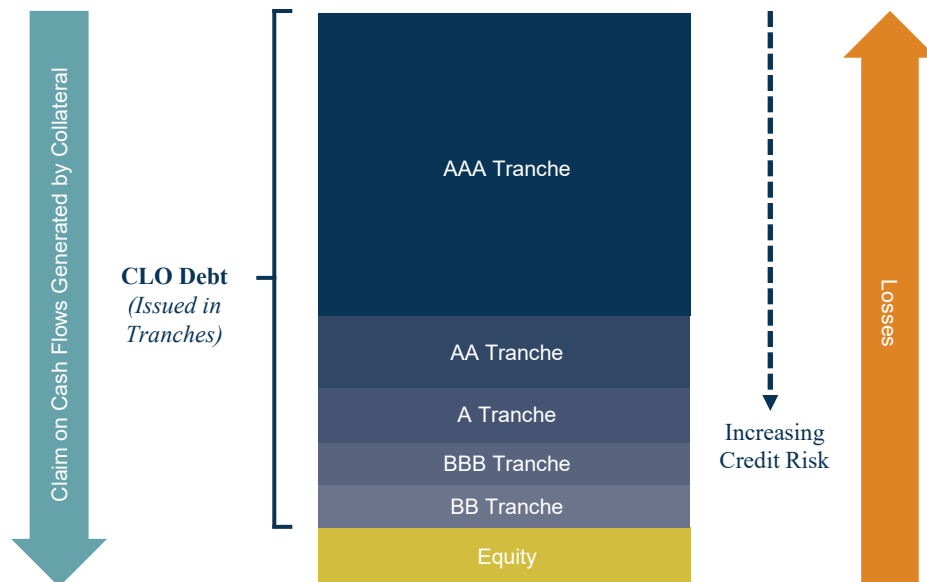
CLO Myth-Busting: The Top Three Misconceptions

In the last decade, the global market for collateralized **loan** obligations (CLOs) has grown to more than \$1 trillion,¹ but these securitized products continue to be misunderstood by many investors. This is partly because securitization – the process of pooling assets into marketable securities – developed a bad reputation following the Global Financial Crisis of 2007-09. Popular media often portrayed it as an overly complex form of financial alchemy that amplified risk in capital markets. Some securitized products deserved this opprobrium, most notably the collateralized **debt** obligations (CDOs) that were at the epicenter of the crisis. But many others did not, particularly CLOs. So we’re here to separate fact from fiction as we explore three of the most common misconceptions about this increasingly important part of the global financial system.

Myth #1: CLOs’ complexity makes them inherently risky

CLOs, like all structured credit products, may appear to be complex at first, but a CLO is simply a financial entity with assets and liabilities. The assets are a portfolio of leveraged loans compiled by a CLO manager.² To finance this portfolio, the manager issues floating-rate bonds (the liabilities) in tranches with varying levels of seniority and credit ratings ranging from AAA to BB. (See Figure 1.) The interest and principal payments of these bonds are made using cash flows from the underlying loans, and the debt tranches are always paid in order of seniority. The cash flows left over after the debt has been serviced go to the equity tranche, which offers the highest return potential but also the greatest risk, as it absorbs the initial losses if the loans in the portfolio default.

Figure 1: How a CLO Works



CLOs are created based on the assumption that an economic downturn will occur during the typical five-year life of the CLO – and thus that some defaults in the underlying loans will occur. **As such, CLOs are structured to be self-protective.**

This built-in protection starts with the **strength of the collateral**. Leveraged loans are senior secured debt, meaning they have the senior-most claim on a borrower's assets in the event of a bankruptcy. This status has helped leveraged loans consistently record both lower default rates and higher recovery values than unsecured high yield bonds over the last decade.³ Moreover, CLOs reduce risk through **diversification**, as the portfolios normally feature 150–250 loans covering many industries. And these diverse portfolios are **actively managed by credit specialists**, so risk can be continuously assessed and potentially limited with prudent trading. Importantly, CLOs have strict rules that prevent managers from making concentrated bets or investing in securities deemed highly speculative due to their seniority, rating, or geography.

CLOs also include many structural features designed to mitigate risk that must be tested regularly. For example, all CLOs have covenants that require the manager to test the portfolio's ability to cover its interest and principal payments. The most common of these tests are (a) the interest coverage test, which dictates that the income generated by the underlying loans must be greater than the interest due on the outstanding debt in the CLO, and (b) the overcollateralization test, which requires the principal amount of the underlying loans to be greater than the principal amount of the outstanding debt tranches. If a CLO fails to pass these tests, the manager must divert the cash flows that would have gone to the lowest-rated debt and equity tranches and begin retiring the senior-most debt tranches.

These protections help limit the risk of loss for most CLO debt tranches, even in severe downside scenarios.

Consider the risk faced by a holder of a typical BB-rated CLO tranche, a below-investment grade security. The investor normally wouldn't incur a dollar of principal loss unless 30% of the loans in the portfolio defaulted over a four-year period, assuming a 60% recovery rate for the loans.⁴ CLO debt investors historically haven't faced widespread permanent losses even when a meaningful portion of the underlying loans have defaulted largely because – as we noted before – CLOs are structured based on the assumption that the economy will suffer a downturn during the life cycle of the CLO.

At times when loan downgrades are increasing, it's common to hear financial news outlets report that CLOs may soon become “forced sellers” of their CCC-rated loans. This claim is based on the fact that CLO documents typically state that the percentage of CCC-rated loans that a manager can hold must not exceed 7.5% of the total portfolio. **However, CLO documents never require managers to sell loans that they (and the equity investors) would prefer not to sell.** While the allocation of cash flows will be impacted if the 7.5% limit is breached, there is never a requirement to sell the underlying assets.

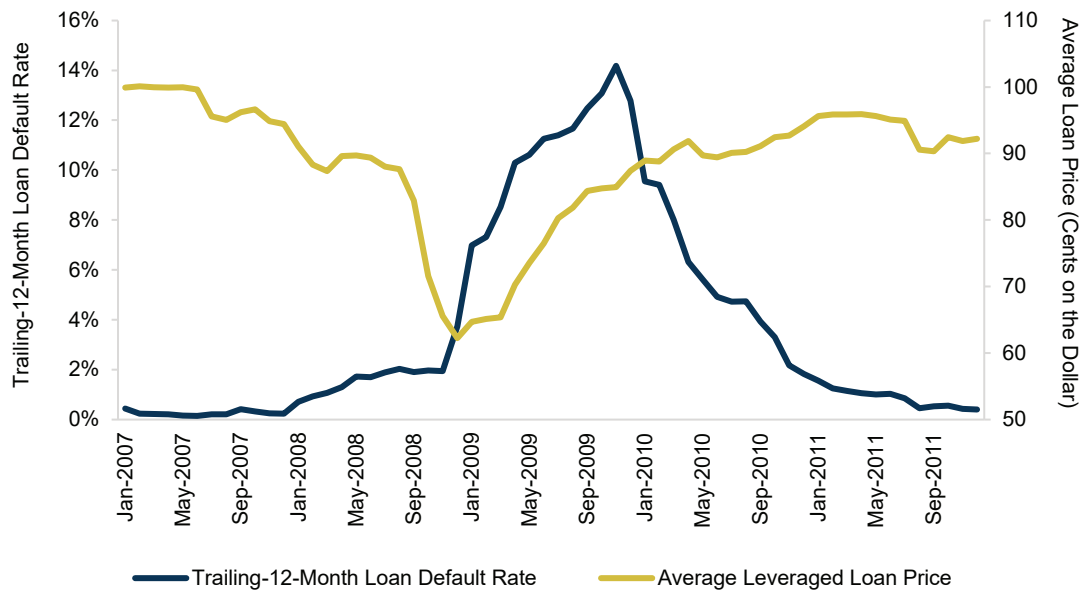
Despite all of the above, investors shouldn't assume that all CLOs offer the same degree of risk protection. As we previously noted, **CLOs are actively managed, so the quality of the collateral – and the prevalence of defaults during market downturns – can vary significantly depending on the style or risk appetite of the manager.** Thus, we believe it's critical to consider a CLO manager's capabilities, approach, and reputation before investing.

Myth #2: CLOs and CDOs recorded similar default rates and losses during the GFC

As we noted earlier, CLOs are often erroneously conflated with CDOs – securitizations of mostly subprime mortgage-backed securities – that recorded massive losses during the GFC.⁵ In mid-2006, U.S. housing prices began to decline after rising precipitously for multiple years. At the same time, many borrowers with mortgages designated as subprime or Alt-A (those with a risk profile between prime and subprime) were facing spiking interest payments. With no ability to refinance, mortgage holders began to miss payments. Thus, concerns began to escalate about the U.S. housing market and the trillions of dollars in securitized products that were built on top of it. By 2008, the value of CDOs' collateral had plummeted. Many CDOs ultimately defaulted, saddling their investors with significant permanent losses. AAA-rated CDOs – the “safest” tranches – issued before 2008 recorded roughly \$325 billion in losses during the crisis.⁶

The story was quite different for CLOs. While CLOs experienced significant volatility during the GFC – as they did during the Covid-19-induced market panic in 2020 and other significant market downturns – this volatility didn’t translate into widespread permanent losses. Even though the default rate for loans spiked during the GFC, it never reached a level that would have generated losses for most CLO investors. (See Figure 2.) A mere 0.88% of the approximately \$500 billion of U.S. CLOs issued from 1994-2009 that were rated by S&P Global Ratings experienced defaults, and no defaults were recorded among the AAA- and AA-rated tranches rated by Moody’s.⁷ **In fact, default rates among CLOs were not only lower than those of CDOs, but also lower than those of similarly rated corporate bonds.⁸**

Figure 2: How Leveraged Loans Performed During the GFC



Source: JP Morgan for trailing-12-month loan default rate.⁹ Credit Suisse for leveraged loan price.

So what accounts for the difference between the track records of CLOs and CDOs? It’s primarily the nature of their collateral:

- First, CLO portfolios are almost entirely composed of first lien senior secured loans, which sit at the top of a company’s capital structure and thus have senior claims in the event of a bankruptcy. The collateral of CDOs was more junior: It didn’t include the senior-most tranches of mortgage-backed securities.
- Second, CDO collateral was highly correlated: The values of all the assets were dependent on real estate prices and mortgage availability. In contrast, CLOs have diverse portfolios of loans that span many industries, so a problem in one part of the economy is unlikely to affect all of these loans in the same fashion.
- Third, in a CDO, the creditworthiness of the underlying borrowers wasn’t monitored after origination and was only lightly evaluated then – as the originators and bankers were highly incentivized to continue churning out mortgages, mortgage-backed securities, and CDOs. Conversely, CLOs are actively managed and regularly receive detailed financial statements about the underlying borrowers. Active management also enables CLO managers to act opportunistically and buy loans at discounts when market volatility increases, potentially mitigating any losses that do occur. (This process is referred to as “par building.”)

During the GFC, losses among CDO investors were exacerbated by a host of ill-conceived features that made certain CDOs especially vulnerable in a downturn. (This is what led to the creation of the infamous CDO-squared, the CDOs backed by other CDO tranches.) CLOs made little use of exotic, risk-amplifying structural features and thus were in far less danger when the crisis hit.

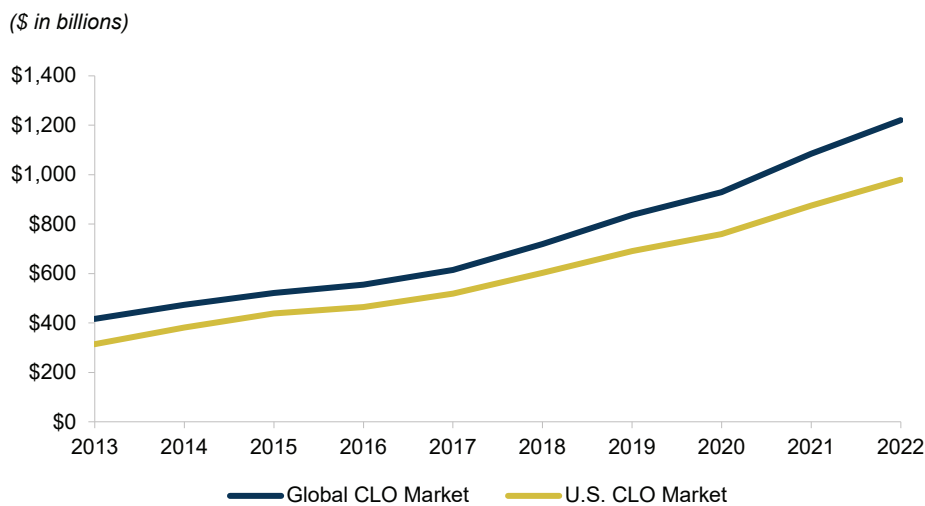
Figure 3: How CDOs Differ From CLOs

	Attribute	CDOs	CLOs
Collateral	Type	<ul style="list-style-type: none"> Mostly residential mortgage-backed securities (RMBS) 	<ul style="list-style-type: none"> Mostly senior bank loans
	Seniority	<ul style="list-style-type: none"> Junior: Senior-most RMBS tranches weren't included 	<ul style="list-style-type: none"> Senior: Primarily first lien senior secured loans
	Correlation	<ul style="list-style-type: none"> High: Portfolio value driven by U.S. home prices and homeowner behavior 	<ul style="list-style-type: none"> Low: Portfolios include diverse borrowers across many different industries
	Active Management	<ul style="list-style-type: none"> No: Selected by investment banks, originators, and mortgage specialists 	<ul style="list-style-type: none"> Yes: Selected and actively managed by asset managers with capital at risk
Borrower Qualifications	Creditworthiness	<ul style="list-style-type: none"> Underlying mortgages were often made to borrowers with low incomes and few assets 	<ul style="list-style-type: none"> Loans made to well-known companies with financial statements evaluated by credit professionals
	Monitoring	<ul style="list-style-type: none"> No: Information regarding credit-quality only provided at the time of borrowing 	<ul style="list-style-type: none"> Yes: Detailed financial statements provided quarterly and annually
Impact of the Global Financial Crisis	Volatility	<ul style="list-style-type: none"> High: Prices declined during the GFC and never fully recovered 	<ul style="list-style-type: none"> High: Prices declined during the GFC but eventually recovered
	Losses	<ul style="list-style-type: none"> All junior tranches of RMBS CDOs suffered significant impairments during the GFC 	<ul style="list-style-type: none"> Almost all CLO debt tranches issued before the GFC were fully paid off

Myth #3: Dramatic growth in the CLO market over the last decade has increased risk in the financial system

The global CLO market has roughly tripled in size since in the last decade, eclipsing \$1 trillion in 2021.¹⁰ (See Figure 4.) This striking growth is partly attributable to the ultra-low interest rates and slim yield spreads present during this period. Investors could typically earn only minimal yields with traditional credit instruments, so many were eager to find investments with greater risk-adjusted return potential. Below-investment grade CLO debt and equity tranches became appealing options. Meanwhile, banks and insurance companies needed to hold large amounts of low-risk assets to meet enhanced capital requirements put in place after the GFC, which created significant appetite for investment grade CLO debt.

Figure 4: How the CLO Market Has Grown in the Last Decade



Source: JP Morgan

Importantly, this growth hasn’t been accompanied by a reduction in investor protections – a trend seen in many other credit markets that expanded over the last decade. In fact, multiple post-GFC trends in the CLO market have helped reduce risk for many investors. For example, the period during which CLO managers can invest in new loans has been shortened, and enhanced par subordination has become common, meaning CLO investors have more protection against losses. Moreover, CLOs have been subject to the heightened regulations put in place after 2008, including the Volcker Rule, a broad measure that has limited the type of assets that CLOs can hold.

This isn’t to say the dramatic expansion of the CLO market has created no cause for concern. For one, CLOs now control roughly 70% of the U.S. loan market and an even larger percentage in Europe.¹¹ This concentration could lead to herd behavior, especially during periods when loan downgrades are accelerating. Moreover, borrowers and private equity sponsors have become highly dependent on the buying activity of CLOs, so when CLO creation slows, market demand for loans and thus companies’ ability to borrow are often both heavily curtailed. Finally, non-CLO investors in the loan market aren’t sizeable enough to reliably provide CLOs with liquidity or significantly improve price transparency.

Importantly, risk in the underlying loan market has also risen in the last decade. This is primarily because the demand to purchase loans rose sharply during this period – creating a borrower-friendly environment. This trend was obviously driven largely by increased CLO issuance. Additionally, interest rates were at ultra-low levels, so loans – which mostly have floating interest rates – were attractive to retail investors seeking protection from future interest rate increases. This



dynamic enabled companies to borrow with ever-increasing amounts of leverage and to do so while accepting fewer covenants (i.e., restrictions on borrowers' behavior). In fact, over 90% of loans issued in 2021 and early 2022 were considered "covenant-lite,"¹² meaning many borrowers have had more leeway to engage in activities, such as taking on additional debt, that could reduce the value of a lender's claim in a restructuring.

While we believe it's important to be aware of these risks, we still think it's highly unlikely that a financial or economic crisis will be triggered by weakness in the CLO market. First, as we've noted previously, CLOs have embedded protections that are designed to impede the type of self-destructive, risk-amplifying dynamics that we saw with CDOs in 2008. Even though banks control a significant percentage of the CLO market – almost 20% in the U.S. – these securities represent only 1-2% of the banks' total assets, and their exposure is mostly to AAA- and AA-rated tranches.¹³ If there is a banking crisis in the near future, we believe the cause is more likely to be unsecuritized commercial mortgages backed by near-empty buildings or unsecuritized consumer loans.

Ultimately, if banks ever record significant losses in their highly rated CLO holdings, they – and the U.S. economy – will have bigger problems, as this would likely mean (a) that default rates had spiked to the highest level in a century and (b) that many asset classes had already experienced widespread losses.

Beyond the Myths: Assessing the CLO Market Today

CLOs offer investors many potential benefits, including diversification, structural protections, low sensitivity to interest rate increases, and higher average yields than similarly rated traditional fixed income. But as we noted above, risks are increasing in today's loan market. Importantly, many companies with leveraged loans outstanding are facing higher-than-anticipated borrowing costs due to the dramatic spike in interest rates in the last year. Consequently, credit rating downgrades in the loan market are already on the rise, and it's reasonable to assume that default rates will increase from today's ultra-low levels.¹⁴ **Thus, it's more important than ever for CLO managers to closely monitor the credit quality of their portfolios.** For example, managers not only need to ensure that the value of borrowers' assets is adequate, but they also need to consider what the senior debt they hold is senior *to* – as the answer in some cases may be "very little." **Consequently, it's now especially critical for CLO investors to scrutinize managers to ensure they have a long track record of successfully managing loans.**

We believe that CLOs may experience volatility in the near term, given the tremendous uncertainty in today's macroeconomic environment. But we think this will offer attractive opportunities to skilled managers capable of both controlling risk and identifying bargains. To find them, CLO investors first need to separate fact from fiction.



Megan Messina

Managing Director and Head of CLO Capital Markets

Ms. Messina leads Oaktree's CLO capital markets efforts and is a managing director for the U.S. Senior Loans strategy. Prior to joining the firm in 2022, Ms. Messina was a director and senior portfolio strategist at Symphony Asset Management where she led the development and distribution of the structured credit platform both internally and externally. Prior thereto, Ms. Messina was a managing director and the Co-Head of Global Structured Credit Products at Bank of America Merrill Lynch and before that was a director at Citi for their global CLO business. In these roles, Ms. Messina oversaw primary issuance, secondary trading, and credit financing businesses in New York and London and was responsible for pitching, pricing and managing client relationships. Additional investment experience includes roles at Citi as a director in Credit Derivatives trading, Salomon Smith Barney in their Retail Credit Markets group and in retail sales within the Taxable Fixed Income department at Painewebber, Inc. Ms. Messina received a B.A. degree from Fordham University.



Ronnie Kaplan, CFA

Managing Director and Portfolio Manager

Mr. Kaplan joined Oaktree in 2016 and is a managing director and portfolio manager for the U.S. Senior Loan strategy. Before joining Oaktree, he was a portfolio manager, managing director and analyst with Levine Leichtman Capital Partners. There, Mr. Kaplan managed a fixed income portfolio investing in leveraged loans and high yield securities. Prior thereto, he was an analyst for the credit opportunities strategy at Wolf Point Capital Management. Additional investment experience, in the distressed debt area, includes serving as vice president at PPM America, Inc.; Bank One, NA; and Renaissance Financial Restructuring. Mr. Kaplan began his career as a senior analyst with Bankers Trust Corporation. He received a B.S. degree cum laude in economics from The Wharton School at the University of Pennsylvania and is a CFA charterholder.



Brendan Beer

Managing Director and Co-Portfolio Manager

Mr. Beer is a managing director and co-portfolio manager for Oaktree's Structured Credit strategy. In addition to his role within the Structured Credit strategy, Mr. Beer also assists with the arranging and optimization of Oaktree-managed CLOs. He joined Oaktree in 2017, having previously worked at Guggenheim Partners Investment Management, serving as a managing director and co-head of structured credit. At Guggenheim, he managed a team responsible for in excess of \$40 billion, which performed credit analysis, trading and risk management across private label RMBS, CMBS, ABS and CLOs, with Mr. Beer specializing in CLOs and Esoteric ABS. Prior thereto, he was a vice president at Citigroup Global Markets, as a secondary CDO trader and in securitized products distribution. Mr. Beer previously spent eight years in the Navy, as a division officer aboard a fast-attack nuclear submarine and as a classroom physics and chemistry instructor. He earned an M.B.A. from the University of Rhode Island, an M.S. in nuclear engineering from the Massachusetts Institute of Technology, and a B.S. in mathematics (honors track) with distinction from the United States Naval Academy.

Endnotes

1. Pitchbook LCD.
2. CLO portfolios can also include a small percentage of other types of assets, such as high yield bonds.
3. NYU Salomon Center/KBRA Altman, Credit Suisse.
4. In addition to a 60% recovery rate, this calculation assumes an 8% starting BB attachment point, a 15% conditional prepayment rate (CPR), a 97% reinvestment price, and a 1.5% benefit from diversion of interest to cure triggers.
5. The collateral included subprime and Alt-A mortgage-backed securities, commercial mortgage-backed securities, and other asset-backed securities.
6. Larry Cordell, Greg Feldberg, and Danielle Saas. "The Role of CDOs in the Financial Crisis." *The Journal of Structured Finance*. 2019.
7. Pinebridge Investments.
8. Moody's Investors Service.
9. TXU was removed from JP Morgan's trailing-12-month default rate calculation for April 2015, which caused the default rate to decline meaningfully from the rate in March 2015.
10. JP Morgan.
11. Pitchbook LCD.
12. Pitchbook LCD.
13. S&P Global Market Intelligence.
14. JP Morgan.

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