

Flat Rock Global

CLO Overview

April, 2025

FLAT ROCK
— GLOBAL —
Where Investors Come First

Disclosures

This is not an invitation to make any investment or purchase shares in any fund and is intended for informational purposes only. Nothing contained herein constitutes investment, legal, tax or other advice, nor is it to be relied on in making an investment or other decision. Nothing herein should be construed as a solicitation, offer or recommendation to acquire or dispose of any investment, or to engage in any other transaction.

Past performance is not indicative of future results

Shiloh Bates



Shiloh Bates, CFA joined Flat Rock Global in 2018 and is a Partner and Chief Investment Officer. Prior to joining Flat Rock Global, Mr. Bates was a Managing Director at Benefit Street Partners where he worked on corporate acquisitions. Prior to that, Mr. Bates was the Head of Structured Products at BDCA Advisor, where he was responsible for investments in CLOs and leveraged loans.

During his 20-year career, Mr. Bates has worked for several CLO managers and is a frequent panelist at CLO conferences. He wrote the book, CLO Investing with a focus on CLO Equity and BB Notes.

A life-long learner, Shiloh has a BA from Virginia Tech in Political Science, an MA in Public Policy from Harvard University, an MA in Financial Mathematics from the University of Chicago, and an MA in Statistics from Columbia University. He was also a specialist in psychological warfare in the US Army Reserves.

Why Learn about CLOs?



\$1.1 Trillion AUM Market¹



Attractive Risk-Adjusted Returns



Investment Opportunities from AAA-Rated Notes to Equity



Floating Rate Investments



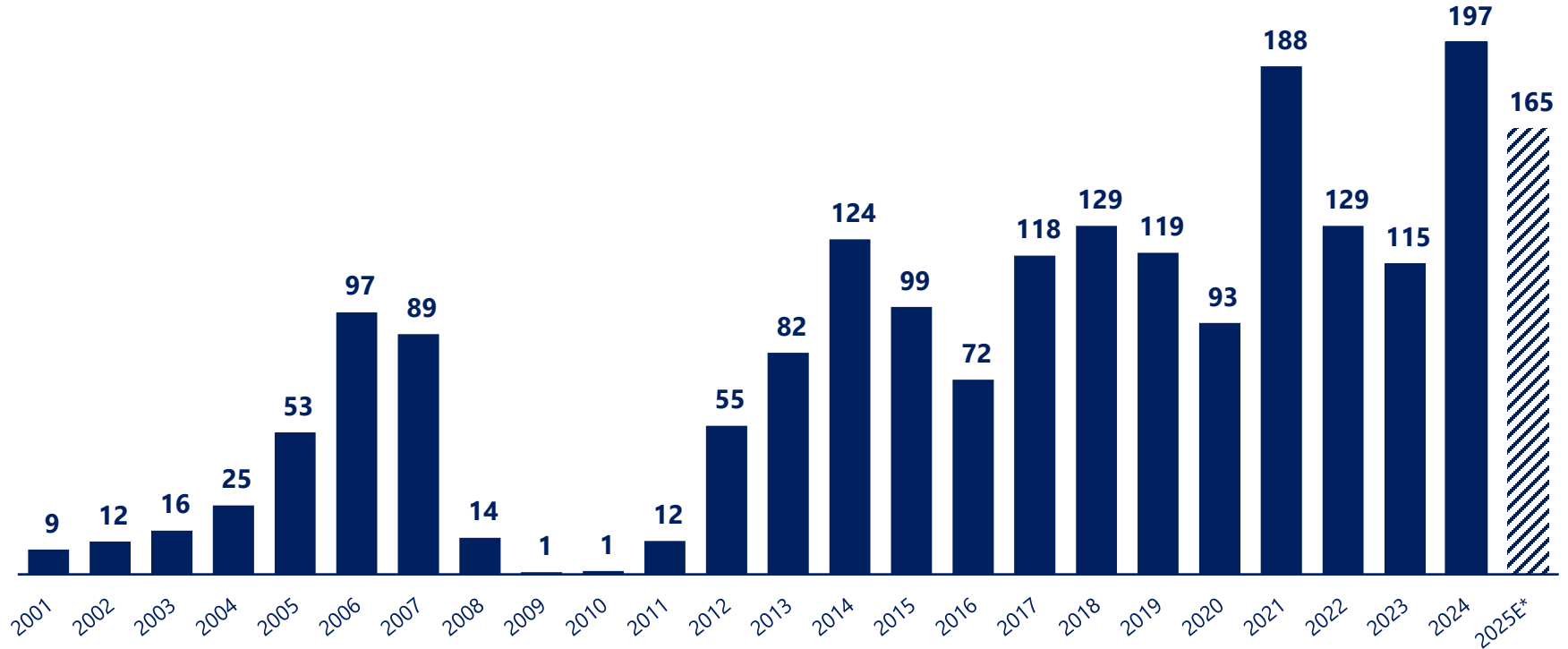
A little complicated, but in a fun way

1) Source: Bank of America Global Research as of April, 2025

CLOs vs. CDOs

Item	CLOs	CDOs
Underlying Collateral	Senior secured corporate loans	Mezzanine tranches, high grade ABS tranches, subprime mortgages
Transparency	Detailed monthly reporting including all loans, purchases, sales, loan ratings, and prices	Reporting generally did not link to underlying assets
Management	Actively managed by some of the largest US asset management firms	Static and managed portfolio of securitizations
Correlation of underlying assets	CLOs are required to have a diverse portfolio across industries and borrowers	Highly correlated to home prices
Returns	Favorable returns for the equity tranche	Defaults on investment grade tranches

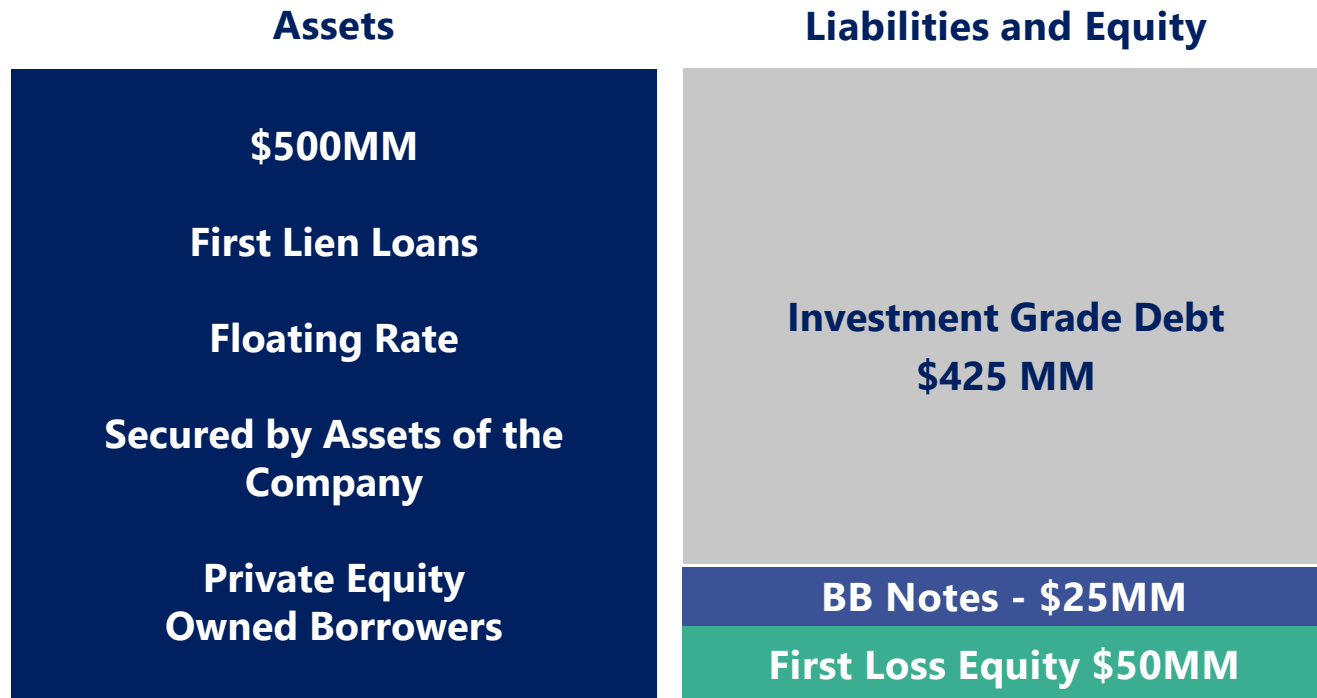
CLO Issuance by Year (\$bn)



Source: Nomura Securities CLO Research. 2025E based on Nomura estimates for the full-year issuance in 2025

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Example CLO Structure¹



¹ Example broadly syndicated CLO tranche sizes, which may vary from CLO to CLO.

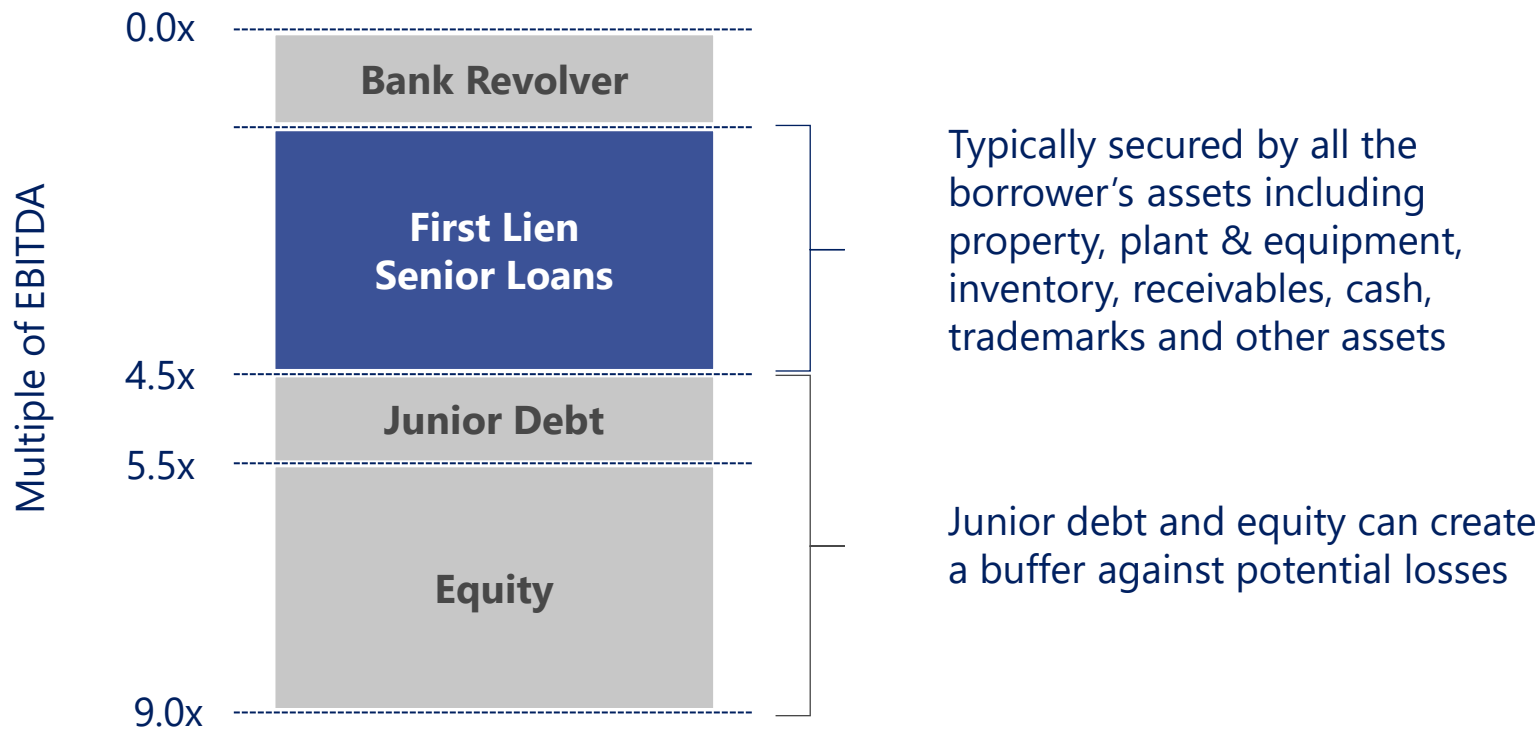
Top CLO Managers 2024

Rank	Manager	Size (\$bn)	Market Share
1	UBS	16.1	3.8%
2	Blackstone	16.1	3.8%
3	Elmwood	15.2	3.5%
4	Carlyle Group	14.6	3.4%
5	CIFC	12.9	3.0%
6	Ares	12.7	3.0%
7	Neuberger Berman	11.8	2.8%
8	Oak Hill	11.8	2.8%
9	Onex	11.6	2.7%
10	Palmer Square	10.5	2.5%

Source: CreditFlux CLO manager ranking by new CLO issuance in 2024 as of 12/31/24

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Underlying Loans with Conservative Loan to Value



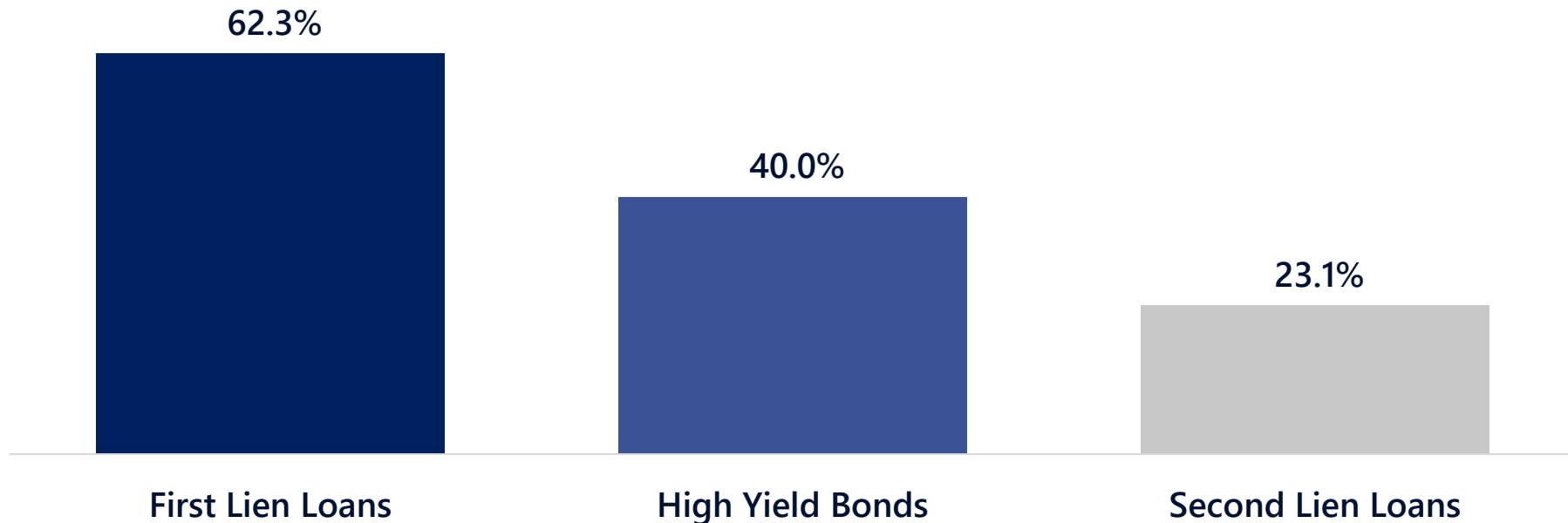
Note: There is no assurance the collateral used to back the loans will hold its value and the value of the collateral may deteriorate. Past performance is not indicative of future results

Top Ten US CLO Holdings¹

Rank	Issuer	CLO Holdings (\$BN)	Issuer Description
1	Asurion	4.9	Wireless handset insurance
2	TransDigm	4.7	Aerospace manufacturing company
3	Medline	4.1	Medical supplies manufacturer
4	Quikrete Companies	3.7	Manufacturer of packaged concrete
5	Virgin Media	3.6	Cable and satellite services
6	TIBCO Software	3.4	Enterprise software
7	Peraton	3.4	Comms, network & security services
8	Calpine	3.4	Energy and power generation
9	Acrisure	3.3	Insurance services
10	Allied Universal	3.3	Janitorial and security solutions

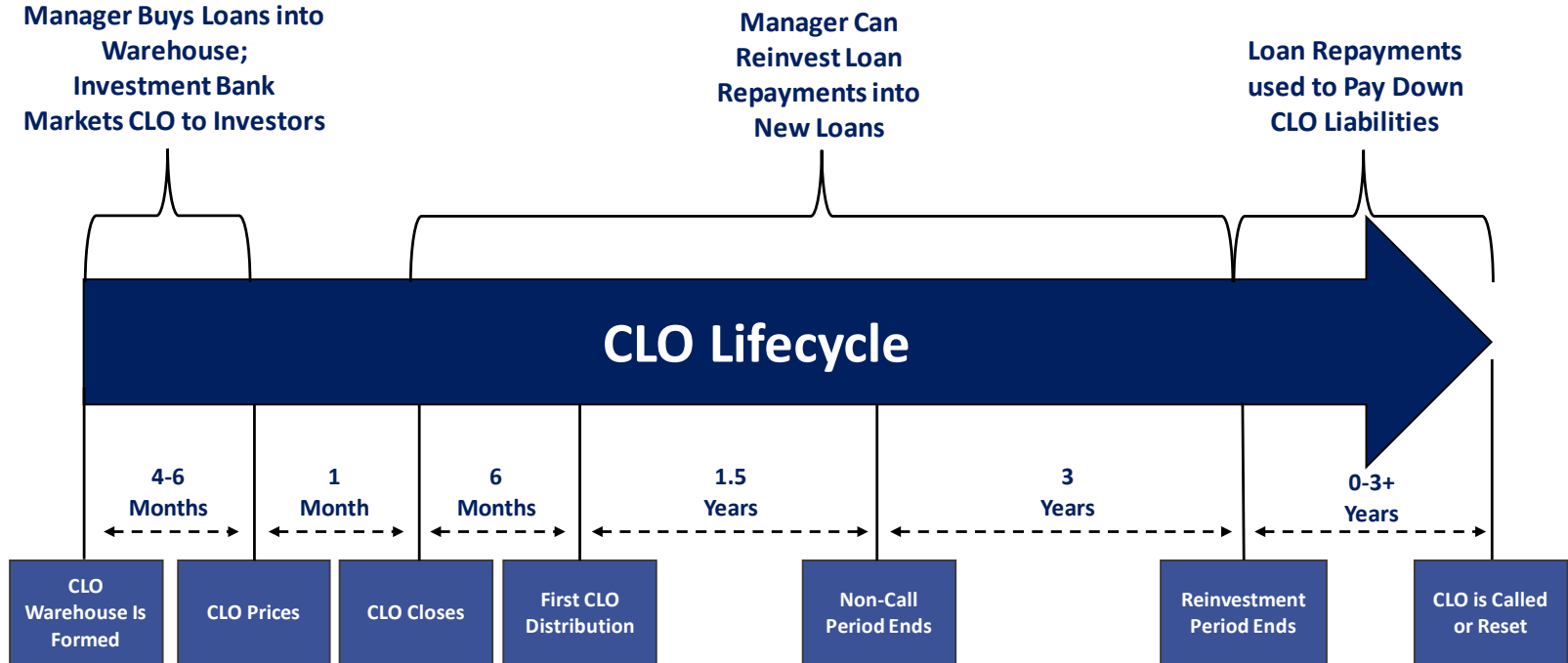
1) Source: Intex data as of 04/21/2025

Leveraged Finance Recovery Rates



Source: JP Morgan Default Monitor (April 2025). First lien loan data begins 1990. Senior unsecured bonds data begins 1984. Second lien loan data begins 2008. First lien loans, high yield bonds, and second lien loans are different in many respects including default rates, returns, and volatility. Past performance is not indicative of future results.

CLO Lifecycle



CLO BB Notes vs. CLO Equity

CLO BBs	CLO Equity
Equity may act as a potential buffer against losses	First loss on leveraged loan defaults in the CLO
Cash flow based on base rate + fixed spread	Variable cash flows based on a number of factors
Lower risk / potentially lower returns	Higher risk / potentially higher return
No rights to dictate how long CLO is outstanding	Has right to call/reset deal after non-call period
Generally more liquid in secondary trading	Generally less liquid in secondary trading

Characteristics of CLO Equity



High current Income



Potential for equity-like returns with low correlation to stocks and high yield bonds



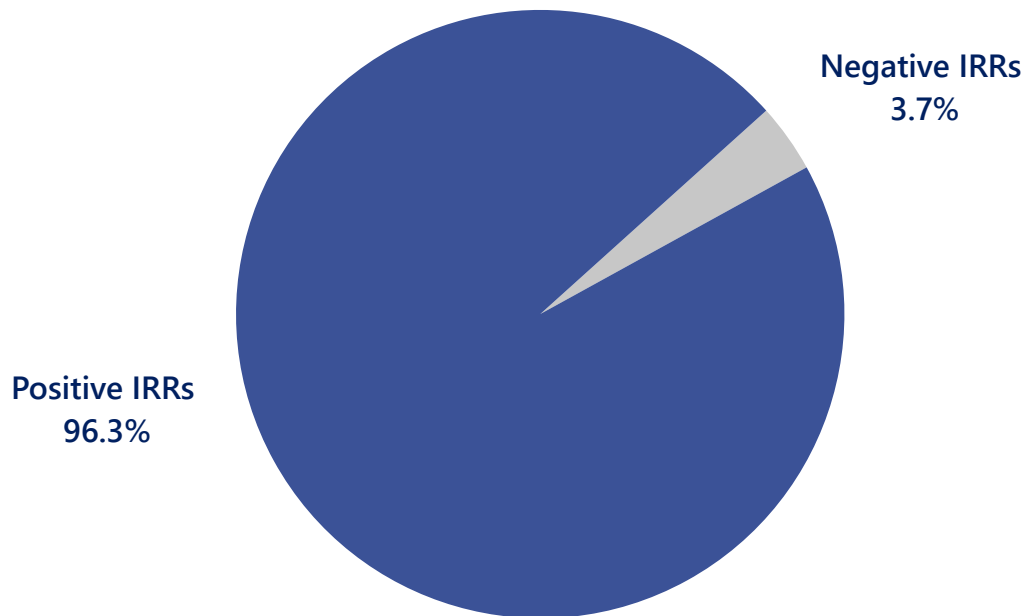
A loan loss reserve is included in CLO modeling assumptions



Inefficient market with potential for alpha

CLO Equity Distribution of Returns

Of CLO equity tranches issued between 2002 and 2021, 3.7% had negative returns



Source: Nomura Securities.

Note: Represents CLOs which have fully realized returns.
Past performance is not indicative of future results.

CLO “Self-Healing” Mechanism



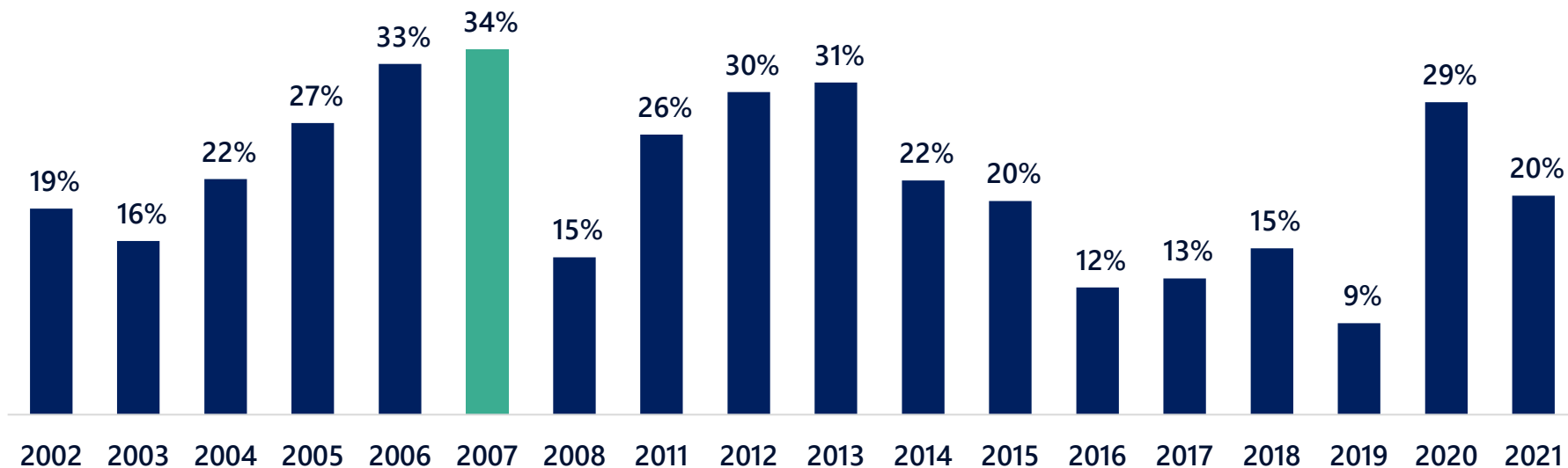
Flat Rock's standard modeling assumption is for the CLO to buy loans at an average price of 99 during normal economic environments.

As loans trade down during a recession, the CLO can reinvest in new loans at lower prices and higher yields, potentially increasing the CLO's profitability.

Source: Morningstar Leveraged Loan Index.
Past performance is not indicative of future results.

Attractive Returns for Terminated CLO Equity

CLOs with the most exposure to the Great Financial Crisis had some of the best returns



Source: Nomura Securities.

Note: Internal Rates of Return for CLOs by year of CLO's inception. 2009 and 2010 data not available, as almost no CLOs were issued this year and there is not a representative sample of return data.

CLOs issued in 2021 and later have largely not terminated.

Past performance is not indicative of future results.

Simplified CLO Equity Model

Unlevered Component			Levered Component			CLO Equity	
Loan Interest Rate ¹	8.25%		Loan Interest Rate ¹	8.25%		Unlevered Component	7.25%
CLO Manager Fees	(0.40%)		CLO Manager Fees	(0.40%)		Levered Component	9.00%
Projected Loan Losses	(0.60%)	+	Projected Loan Losses	(0.60%)	=		
			Cost of Debt	(6.25%)			
				1.00%			
			Leverage ²	9.0x			
<hr/>			<hr/>			<hr/>	
	7.25%			9.00%		Total Return	16.25%

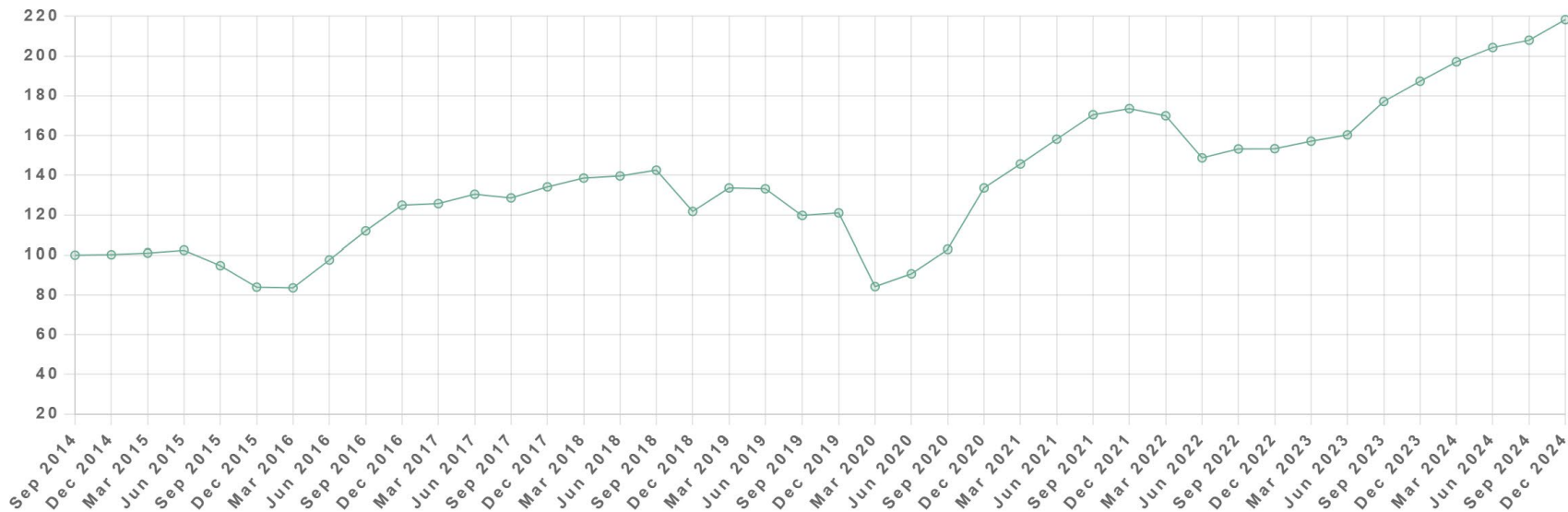
¹ Assumes SOFR rate of 4.5% and a spread of 3.75% with the proceeds of leverage.

² A typical CLO uses 9x leverage (i.e. total return on the leveraged portion = 9x the levered return).

Note: Projected returns may not be achieved. Past performance is not indicative of future results

CLO Equity Index

Flat Rock's CLO Equity Index is available at flatrockglobal.com/clo-equity-index/

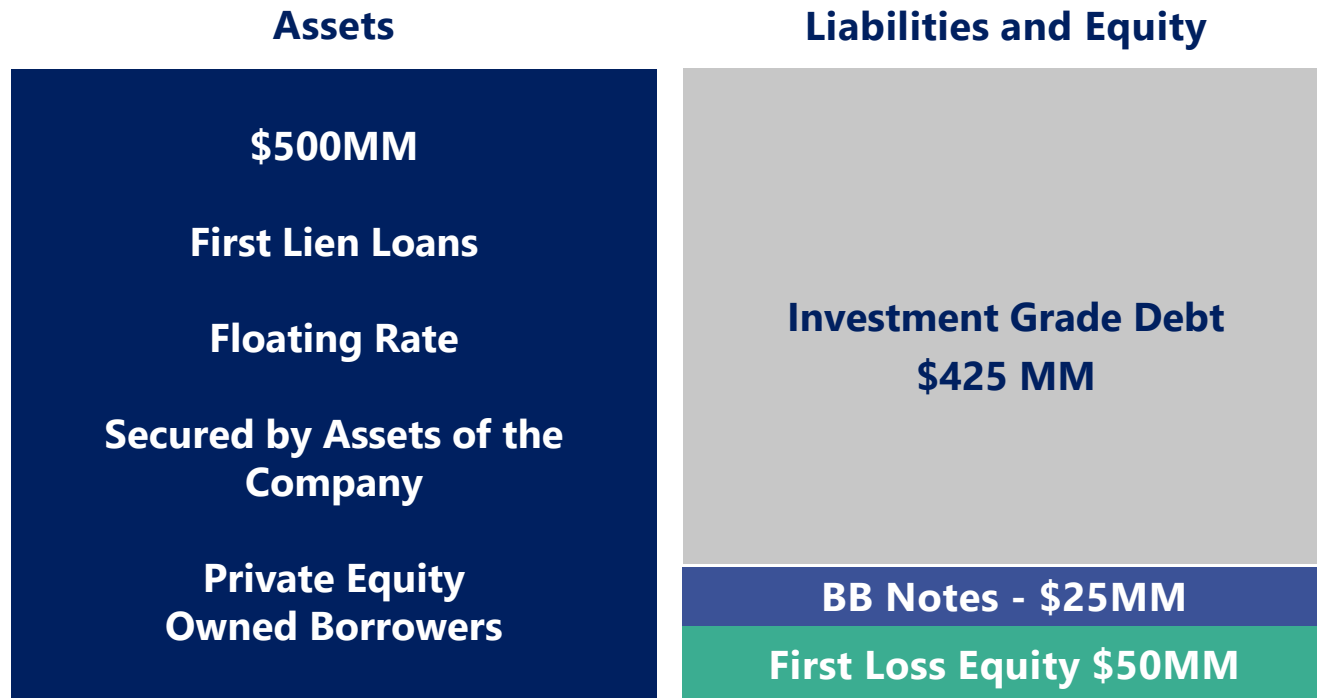


Note: Projected returns may not be achieved. Past performance is not indicative of future results

The Flat Rock CLO Equity Returns Index seeks to measure the unlevered, gross of fee performance of US CLO equity tranches as represented by the market-weighted performance of the underlying assets of funds that publicly disclose their holdings and fair market values to the U.S. Securities and Exchange commission. The reporting funds satisfy certain eligibility criteria. The index inception date is September 30, 2014. The index is calculated quarterly on a 75-day lag.

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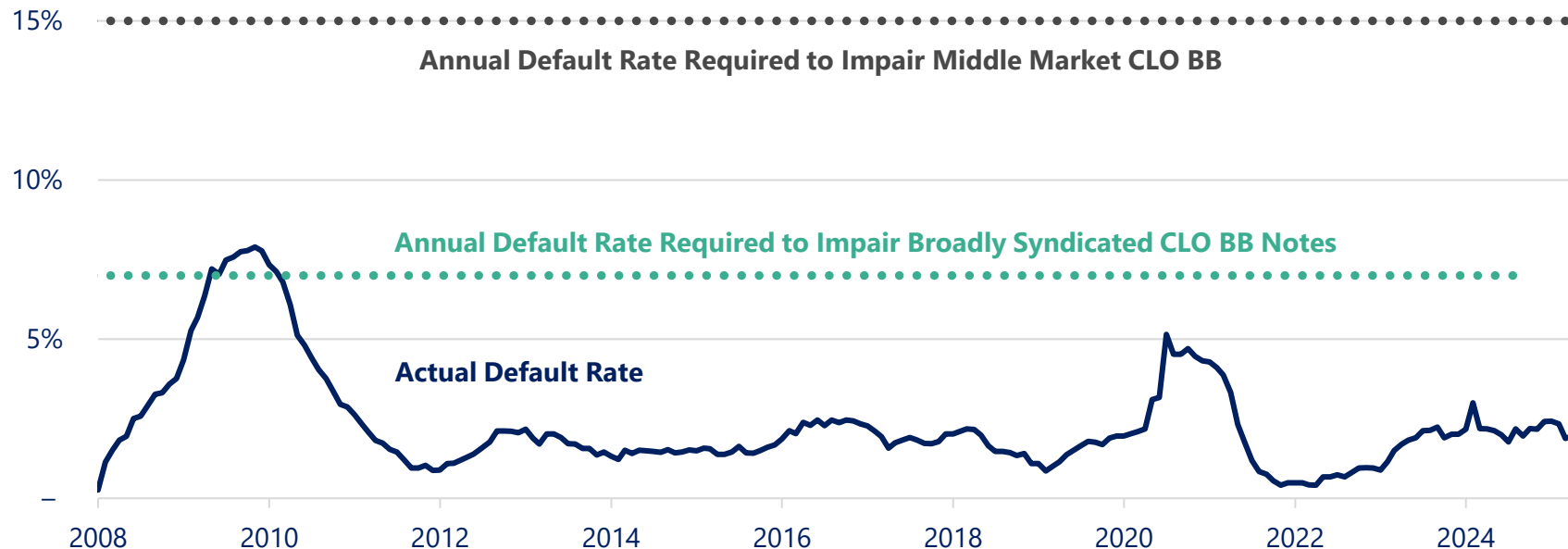
Example CLO Structure¹



¹ Example broadly syndicated CLO tranche sizes, which may vary from CLO to CLO.

CLO BBs Structured to Withstand Downturns

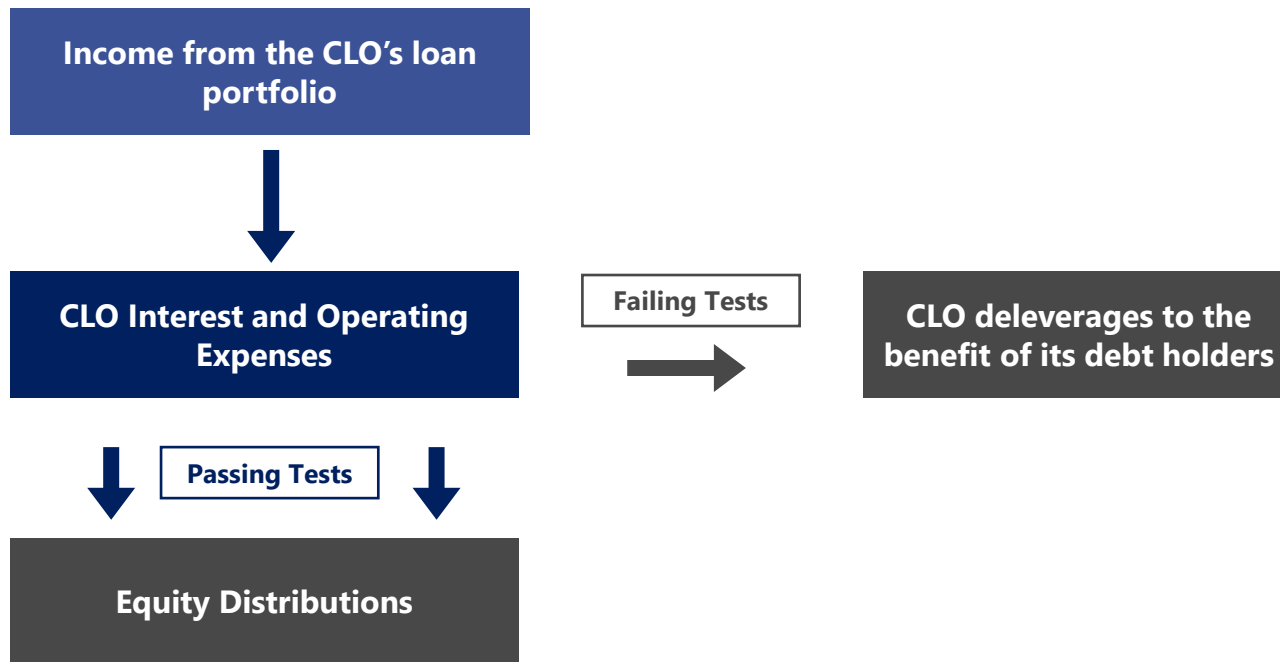
7% annual default rate on loans needed to impair BSL BBs, or 15% for middle market BBs according to our modeling using Intex Solutions



Source: Intex, JP Morgan Default Monitor (April 2025). Results are from a new issue middle market CLO with a four-year reinvestment period. Assumes a loan recovery rate of 70% and a pre-payment rate of 25%. The CLO modeling software is called Intex that determines the 15% result. Projected returns may not be achieved. Past performance is not indicative of future results

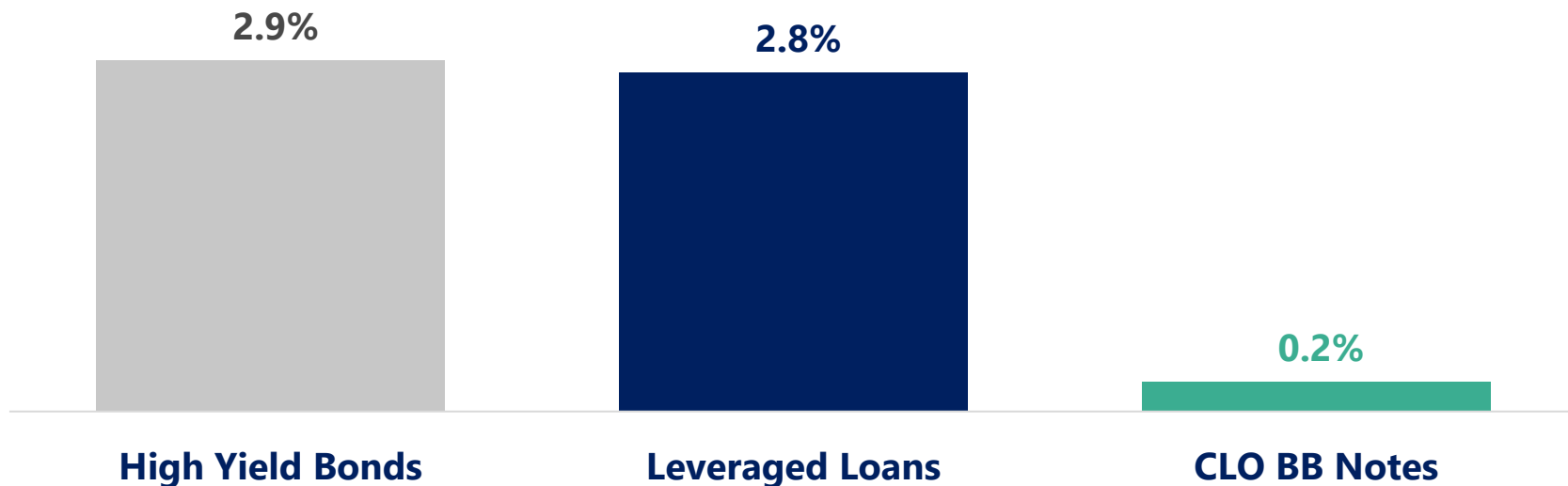
CLOs Delever as Risk Increases

Excess loan downgrades and defaults redirect the CLO's profitability to the benefit of the CLO's debt holders



Historically Low Default Rates

CLO BBs have lower default rates than leveraged loans and high yield bonds



Source: High Yield Bond default rate data from JP Morgan Default Monitor (April 2025) beginning 1984; Leveraged Loan default rate data is from JP Morgan Default Monitor beginning 1992; CLO BB Default Rate is from S&P Global Ratings beginning 1994 and assumes a five-year average life. First lien loans, high yield bonds, and second lien loans are different in many respects including default rates, returns, and volatility. Past performance is not indicative of future results.

CLO Investing Lessons Learned

CLO Expertise Required

Knowledge of the asset class and market trading levels in addition to deep connections in the sector are critical to success

Broad Mandate is Important

Relative value between primary and secondary markets changes over time and it is important to stay nimble and invest where the best value is found

CLO Manager conflict in Equity Investing

CLO managers may have conflicts of interest when managing equity funds – they are incentivized to issue new deals even if the projected return is weak

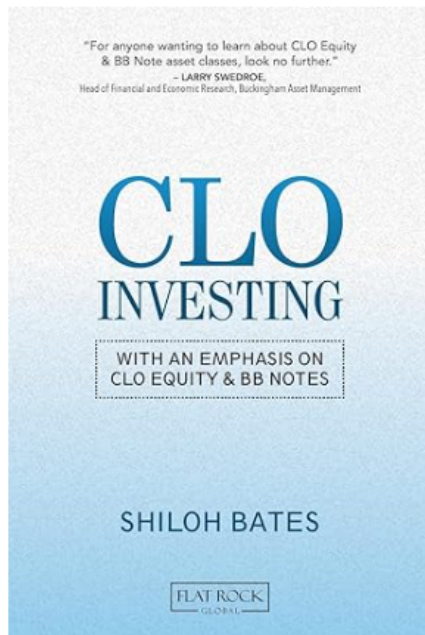
CLO BB Notes are Robust

Even when market value coverage is <100%, CLO BBs have rarely defaulted. The lack of 100% coverage may limit the investor base and present good investment opportunities

Middle Market CLO Exposure

Exposure to middle market CLOs may reduce overall portfolio risk – fewer technical factors impact performance

If you'd like to know more



Roll over image to zoom in

CLO Investing: With an Emphasis on CLO Equity & BB Notes



by Shiloh Bates (Author)

4.6 ★★★★★ 20 ratings

[See all formats and editions](#)

Collateralized Loan Obligations (CLOs) were left for dead after the Global Financial Crisis (GFC) of 2008-2009. Since then, CLOs have made a surprising comeback. Their popularity among investors is partially the result of impressive CLO performance during the GFC and beyond. CLO notes issued before the GFC did not have material defaults, and many CLO equity securities issued prior to the GFC ended up with annualized returns above 20%. Today the CLO market has over \$1 trillion in assets under management and has replaced banks as the largest lender to private equity-backed companies.

CLO Investing: With an Emphasis on CLO Equity & BB Notes describes CLOs in detail, emphasizing the securities with the highest risk and reward potential, CLO BB notes and equity. The readers of this textbook will learn the characteristics of the CLO's leveraged loans, financing structure, payment rules and tests, and historical returns. As CLOs are gaining in popularity, investment professionals of all varieties will benefit from author Shiloh Bates's meticulous understanding of this unique market and the strategies for successfully investing in it.

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If you'd like to know more

The CLO INVESTOR Podcast

With Shiloh Bates

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The CLO Investor Podcast

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★ 6.0 (12) - INVESTING

The CLO Investor Podcast with Shiloh Bates features an in-depth look at the Collateralized Loan Obligation market. Shiloh Bates is the Chief Investment Officer at Flat Rock Global, and author of CLO Investin **MORE**

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6D AGO
#19, Stephanie Setyadi, Partner, Ivy Hill Asset Management

In this episode of The CLO Investor Podcast, Stephanie Setyadi, a Partner at Ivy Hill Asset Management, provides two case studies for the types of businesses that can be found in CLOs.

33 min

MAR 28
#18, Pratik Gupta, Head of CLO Research, Bank of America Securities

Shiloh Bates talks to Pratik Gupta, CLO Head of Research for Bank of America Securities, about CLO securities' performance versus that of corporate debt, CLOs backed by syndicated loans and private credit CLOs, and more in this episode of The CLO Investor podcast.

50 min

FEB 21
#17, Mike Comparato, Head of Real Estate, Benefit Street Partners

Host Shiloh Bates discusses commercial real estate (CRE) CLOs with Mike Comparato, Head of Real Estate at Benefit Street Partners. CRE CLOs are contrasted with the more common CLOs backed by corporate loans that are Flat Rock's speciality.

28 min



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Thank you!

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