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ADVANCED INSIGHTS SERIES

A PRIMER:
Investing in Collateralized Loan Obligations

In the second issue of our Advanced Insights Series, we introduce an income-generating investment category that has been historically targeted to institutional investors and generally unavailable to individual investors. Given low nominal yields, negative real yields, and rising interest rates, this investment class is attracting substantial attention and inflows — and opportunities.

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SECTOR/TOPICS	READ TIME
Corporate/Senior Secured Loans Collateralized Loan Obligations	11 - 15 minutes

Series Overview

As a fund sponsor of alternative asset classes, Bluerock seeks to be a leader in

- Offering individuals access to investments typically only available to institutions;
- Creating differentiated, alternative strategies that target equity-like capital appreciation, attractive risk-adjusted return profiles, and meaningful income;
- Identifying and partnering with best-in-class managers and advisors, and performing robust diligence of investment opportunities; and
- Leveraging in-house knowledge and industry leading expertise of the interval fund structure to optimize portfolio construction and oversight.

We strongly believe that these skillsets are translatable and complementary across asset classes. In this issue of the Advanced Insights Series, we expand beyond real estate and share our perspectives on a growing investment class that may help meet investors' important need for income.

Synopsis

We provide perspective on a **differentiated investment category** with several distinguishing features:

- Potential for generating distributable cash flows **in excess of 8% annually**
- Exposure to senior secured corporate loans with **highest payment priority and secured** by corporate assets
- Significantly **reduced risk** from rising interest rates
- **Diversification potential** to broader markets
- Mandated **structural protections** for investors

The strategy intends to invest primarily in vehicles comprised of diversified pools of floating rate, senior secured loans. These vehicles, known as collateralized loan obligations (CLOs), offer attractive risk-adjusted yield via a tranche structure as well as distinct benefits such as built-in investor protections, active loan management, and low default rates through multiple economic cycles. Furthermore, investing in CLOs via an '40 Act interval mutual fund structure offers additional benefits, such as increased diversification via multiple CLO investments, transparency of daily NAVs, ease of access given low investment minimums, quarterly liquidity, and ‘40 Act governance.

Key Component: Senior Secured Loans

Senior Secured Loans (SSLs) are floating rate loans issued by corporations, holding primarily first-priority liens on the assets of the borrower. Senior secured loans are predominantly used to fund a company's strategic initiatives. Some of the key features and significant benefits of senior secured loans are:

- **Priority of payment:** SSLs typically have first priority on corporate assets and cash flows (i.e., are senior in the capital stack). Thus, issuing corporations are obligated to pay these types of loans before other debt and equity obligations.
- **Collateral backing:** The loans are secured by corporate assets, such as cash, receivables, inventory and PP&E, in the event of default. As a result, recovery prospects for SSL investors are high compared to other lower portions of the corporate capital structure.

Historically, senior secured loans have seen consistent historical yields, low default rates and high recovery prospects.

- **Consistent cash flows and performance:** Because of various attributes (such as the collateral-secured nature of the loans), corporations are highly incentivized to meet SSL payment obligations and thus the asset class has delivered positive returns 93% of the time over the last 29 years.[1]
- **Minimized interest rate risk:** Investors are minimally exposed to rising interest rates as the loans’ yield adjusts based on the current yield of a predefined benchmark rate. SSL yields are typically defined as a stated spread amount above a baseline rate such as LIBOR or SOFR. Thus, if the baseline rate increases (such as from rising interest rates), the nominal yield on SSLs increases as well.

SSL Landscape: Attractive Characteristics Drive Expansion of Market

The senior secured loan market has seen continued growth and issuance in the last decade. SSL proceeds have historically been used by companies for strategic purposes, such as mergers or acquisitions. Investors have also benefited from growth in the senior secured loan market, not only because of the attractive yields, but also from the previously mentioned collateral-secured nature of the loans and floating rate characteristics, which result in attractive risk-adjusted returns.

[1] ***Source:*** *Morningstar Direct, Credit Suisse, as of Dec 31, 2021. The Credit Suisse Leveraged Loan Index tracks the investable universe of the US dollar-denominated leveraged loan market. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Similarly, since 2001, from a total return perspective, the S&P/LSTA Leveraged Loan Index experienced only two down years (2008 and 2015 with returns of -29.1% and -0.7%, respectively). The S&P/LSTA Leveraged Loan Index is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market based upon weightings, spreads and interest payments.*

Creating a Dedicated Investment Vehicle that Targets Different Investor Types

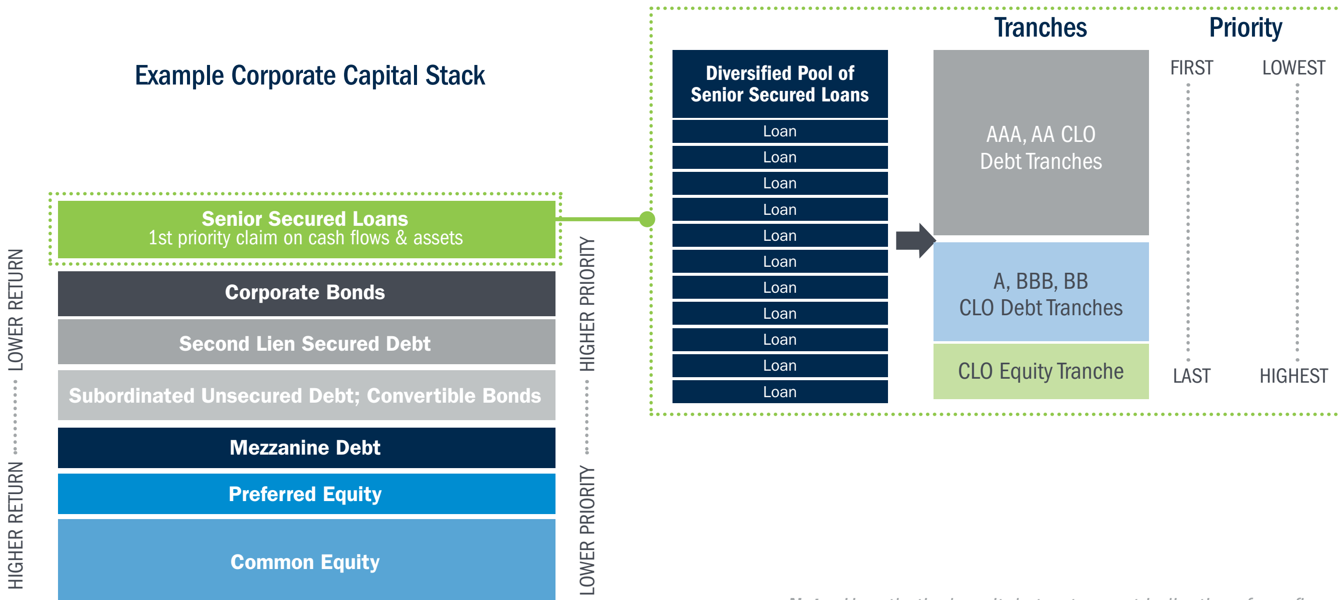
Investing in SSLs directly is usually limited to institutions that can deploy tens of millions of dollars at a time, such as banks, insurance companies, endowments and pension plans. In addition to these institutions, specially dedicated vehicles known as collateralized loan obligations (CLOs) are also significant purchasers of SSLs.

CLOs strategically invest in commingled pools of 150-200 senior secured loans, investors elect specific categories (or tranches) based on their return objectives and risk profiles, unlike a mutual fund where all investors have the same risk and return exposures.

A CLO rearranges the commingled pool of senior secured loans into specific categories, or tranches, where each tranche has varying return objectives and risk profiles.

Figure 1 below conceptually shows how senior secured loans are used to create a CLO with various tranches.

FIGURE 1 | **Diagram of Corporate Capital Stack, Senior Secured Loans, and Collateralized Loan Obligations.**
Tranches are a key characteristic of CLOs.



Note: *Hypothetical capital structure not indicative of any firm.*

CLOs have a closed-end structure with a finite life, typically 6-10+ years, after which the vehicle is “wound down” using the SSL’s principal payments.

One of several features that CLOs offer to investors is an active management component. In the middle of the CLO vehicle’s life (referred to as the "investment period"), the CLO investment manager may tactically buy and sell the underlying secured loans to gain (or reduce) exposure to certain credits or industries, and for additional return potential.

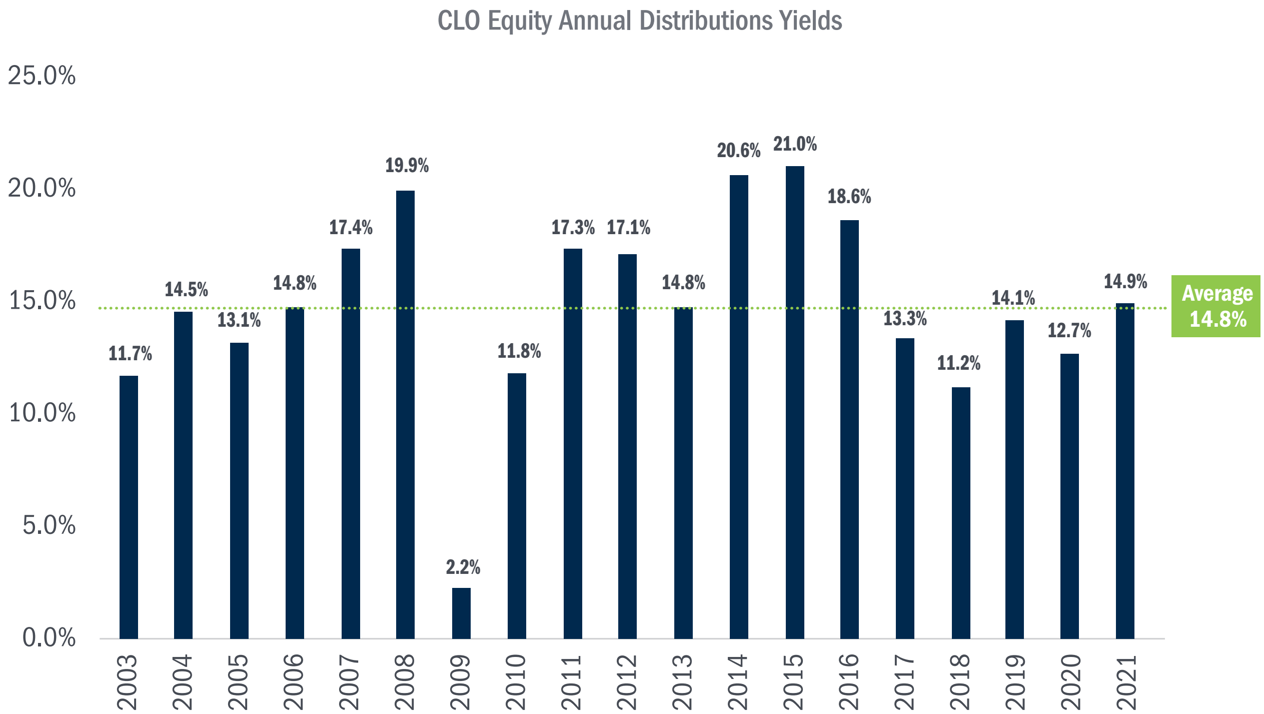
Tranches are Central to CLOs and Permit a Range of Risk and Reward Profiles

Similar to the debt and equity capital structure of a corporation, CLO tranches determine the priority of payment, risk exposure, and return potential. Investors in AAA and AA tranches are most senior (meaning they receive payments first), but also receive the lowest yielding payments, at about 1.25-2.0% annual yield above the benchmark rate on average as of March 2022[2]. A, BBB, and BB tranche investors are next in line, at higher yield ranges. Finally, similar to a corporation, investors in the final CLO tranche, known as the equity tranche, are paid last but **receive all the excess spread (or residual)** and have the potential for the highest payments.

[2] *Source: Morgan Stanley CLO Tracker, March 2022*

Historically, this excess spread has resulted in average distributions of 14.8% for CLO equity investors over the last two decades. Figure 2 shows the historical CLO equity yields every year since 2003.

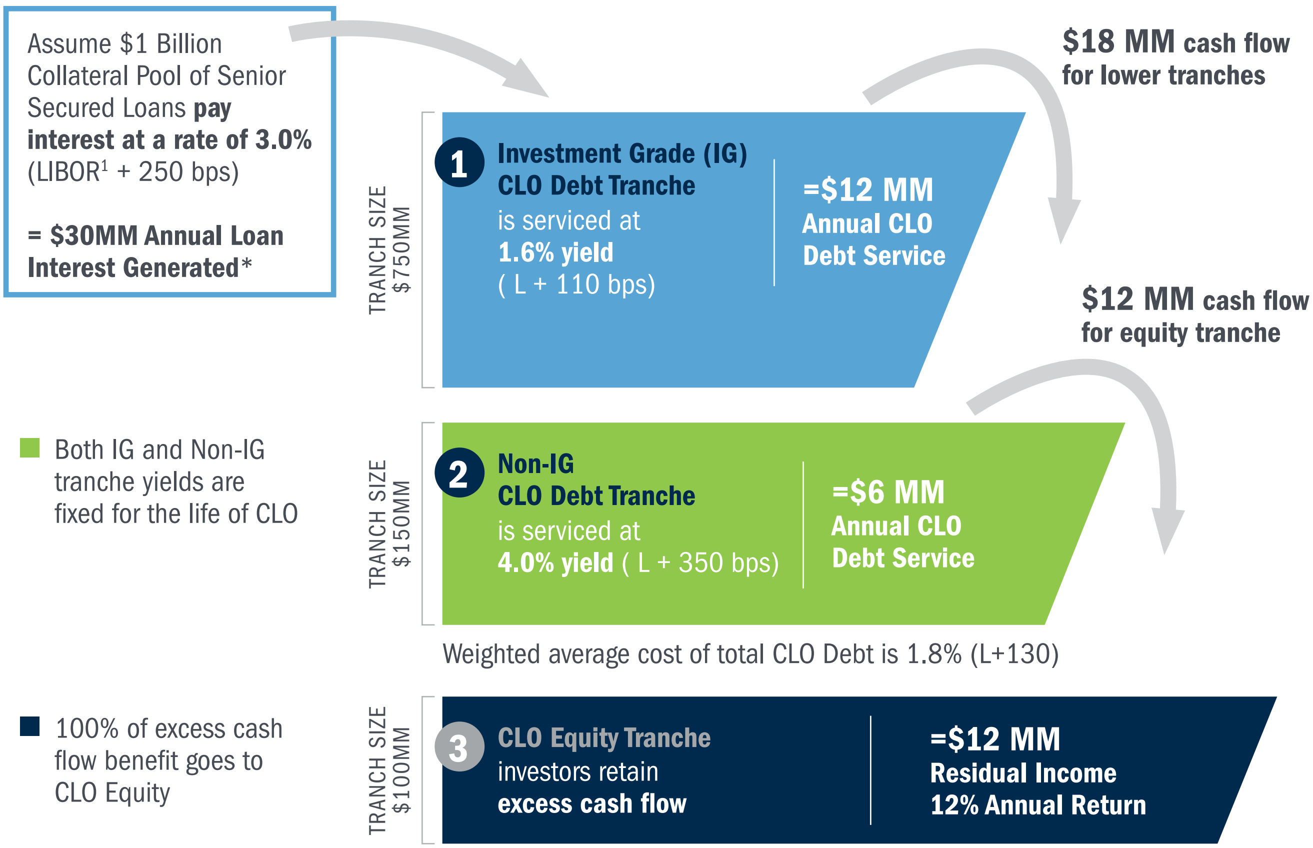
FIGURE 2 | CLOs Have Delivered Attractive Yields Across Multiple Economic Cycles



CLO Equity (or CLO equity tranche): The tranche within a CLO that is paid any excess spread. The equity tranche payment is prioritized after all the debt and subordinated tranches. ***Source:*** *Kanerai, Intex, Markit, Barclays Research, includes CLO 1.0 and 2.0 broadly syndicated loans. Yields do not include return of principal. 2021 data thru 6/30/21. Does not represent total return experienced by investor.* ***Past Performance is not a guarantee of future performance.***

How are these high distributions generated with senior secured loans? Figure 3 shows the structure of a CLO in a hypothetical diagram. The difference between the average underlying SSL yields and the average tranche yields is paid to the CLO equity tranche. This excess spread is typically 100-200 basis points of the entire loan pool and is **fully received by the equity tranche**.

FIGURE 3 | **Hypothetical CLO Waterfall: All Residual Cashflow is Paid to Equity Tranche**



1 L=London Interbank Offered Rate (LIBOR); a benchmark interest rate at which major global banks lend to one another.

Equity Tranches: Lower Correlation to Broader Markets

In addition to the attractive yields paid to equity tranches of the CLO, there are other appealing attributes for investors. The equity in CLOs is not typically correlated to broader markets— its performance is in part driven by the timely and complete repayment of senior secured loans and not on revenue growth or earnings growth of the SSL issuer.

> *The unique combination of senior secured loans in an equity construct makes for a distinctive dynamic that has attractive income potential and lower correlation to broader markets.*

This results in equity tranches whose gains or losses are more tied to corporate credit spreads (and in effect, the CLO's excess spread) than to broader equity markets. As corporate credit spreads increase (or "widen"), CLO equity investors may stand to gain from a larger excess spread paid to them, given that debt tranche yields are fixed. Conversely, should credit spreads narrow (or defaults significantly increase), CLO equity yields may trend lower.

Distinguishing CLO Features and Benefits

Collateralized loan obligations offer significant benefits over other corporate fixed income instruments: mainly **structural safeguards, mandatory diversification, and active management.**

Structural Safeguards

CLOs have detailed protections that are above and beyond typical commingled pools or securitized products. For example, tests on the collateral's quality require that the principal value of the senior secured loan pool exceed the value of CLO's obligations to investors (called "over-collateralization.")

Additionally, the CLO debt tranches' cost of financing above the benchmark rate (in other words, the total weighted average tranche yields) is locked for the life of the loan. However, if the overall market environment experiences a substantial narrowing of corporate credit spreads, the excess spread to CLO equity investors may be reduced. To help protect against this, CLO equity holders have provisions that can renegotiate some or all the debt tranches after a certain period to lower yields (called a "reset" or "refinancing").

Mandatory Diversification

CLOs have a variety of stipulated diversification requirements that when layered together provide additional benefits to investors. Each individual CLO must meet diversification requirements for number of issuers (typically 150-200 distinct issuers), industry exposure (typically <10% to a single industry), credit quality (weighted average rating must exceed a certain minimum), and underlying loan characteristics (such as a maximum weighted average life of underlying loans). These requirements may help in preventing concentrated exposure and may reduce idiosyncratic risk.

Active Management

The third and possibly most differentiating feature of collateralized loan obligations is the active management afforded by the structure. Whereas other securitized products are passively created (a "set and forget" approach), CLOs have institutional managers that actively trade the underlying loans, similar to a mutual fund manager.

Investment managers often specialize exclusively in the senior secured loan investment category and may opportunistically buy underrated securities that pay attractive yields. The finite and closed-end structure of the CLOs gives managers the flexibility to opportunistically purchase SSLs during periods of market dislocation and higher loan mispricing. Loans may be excessively discounted during sentiment-driven selloffs, and managers may utilize cash flow generated from the CLO to take advantage of such opportunities.

These three characteristics are essential and effective tools in minimizing individual credit exposure and reducing default rates compared to directly investing in corporate loans. Figure 3 shows this numerically; CLOs have experienced significantly lower losses, as measured by loss rates,[3] compared to standalone corporate credit, particularly when comparing tranches further down the capital structure.

[3] *See glossary for full definitions*

FIGURE 4 | **CLO Equity has lower loss rates than Investment Grade debt [AAA CMBS / AA ABS / BBB+ Corporates]**

Loss Rates (%) by Asset Type and Rating

	AAA	AA	A	BBB+	BBB	Below IG
CLO 1995-2019 (%)	0.00%	0.00%	0.00%	0.30%	0.70%	**0.80%**
IG Corp 1983-2019 (%)	0.04%	0.19%	0.47%	**0.88%**	4.84%	12.19%
ABS 1993-2019 (%)	0.26%	**2.31%**	2.56%	5.23%	10.92%	14.14%
CMBS 1993-2019 (%)	**1.12%**	6.20%	11.66%	18.37%	29.26%	30.89%

Source: *Citigroup, Moody's as of 12.31.19. Past performance is not indicative of future performance.*

For the reasons stated above, we believe that CLOs are an effective and compelling solution for investors seeking income while lowering exposure to market risk.

Key Differentiator for Access and Additional Benefits: The '40 Act Interval Fund

We believe the interval fund structure is a highly efficient vehicle for this type of investment. One of the principal advantages that an interval fund structure offers is an additional layer of diversification versus investing directly in a single CLO. An interval fund may hold multiple CLOs, which allows for potential exposure to thousands of senior secured loans.

Secondly and just as importantly, an interval fund can diversify by CLO launch year, also known as "vintage". This can greatly help in reducing concentration to a specific period of an economic cycle and reduces the market timing risk inherent in investments with multi-year time horizons. An interval fund can also diversify across different CLO managers and their styles, further benefiting mutual fund investors.

In structured credit investing, like private equity and fine wine, vintages matter. An interval fund that invests in loan obligations over time reduces "vintage risk" by reducing concentrationin any given part of an economic cycle.

The third advantage of an interval fund structure is the potential for quarterly liquidity compared to direct investments in a CLO. Interval funds are required to provide repurchase offers to shareholders (typically a minimum of 5% of their AUM per quarter). Furthermore, within the interval fund, a diverse pool of CLOs providing yield (or winding down and paying outstanding principal) generates an organic liquidity profile for investors.

The final advantage is the significant propensity for CLO investors (which are almost exclusively institutions) to hold these securities to maturity, which combined with the active management aspect allows the CLO manager to capitalize on investment opportunities during market dislocations. This advantage combined with the previously mentioned benefits, create the potential for attractive risk adjusted returns, attractive income, and lower correlations to broader markets.

Targeting Today's Investor Needs: Meaningful Income, Low Interest Rate Risk, and Potential Portfolio Diversification

CLOs offer distinctively attractive yields with a lower risk of default and loss when compared to direct investments in corporate credit. Furthermore, the distinctive combination of corporate senior secured loans and the CLO structure exposure results in potentially lower correlation to broader markets.

These are but a few of several reasons why institutions have been investing significantly in the investment class. Fortunately, access to CLOs is no longer limited to large institutions or ultra-high net worth investors; advisors and their clients now have access to these investments through more advantageous structures, including interval funds.

An interval fund structure offers diversified exposure to thousands of underlying loans and diversification by vintage year, along with opportunities for periodic liquidity, which are two features that even institutional investors may not have with direct investments.

We encourage you to reach out to the **Bluerock Research Team** to discuss this topic further.

About Bluerock

Bluerock is a leading institutional alternative asset manager based in New York with regional offices across the U.S. Bluerock principals have a collective 100+ years of investing experience with more than $48 billion real estate and capital markets experience, managing multiple well-recognized real estate private and public company platforms. Today Bluerock has more than $9.7 billion in acquired and managed assets, offering a complementary suite of public and private investment programs, with both short and long-term goals, to individual investors seeking solutions aimed at providing predictable income, capital growth, and tax benefits.

Glossary

Benchmark Rate: a reference interest rate that is used in CLO debt tranches as a baseline for their yield payments, plus a fixed spread. Historically, benchmark rates have used LIBOR though a transition to SOFR is occurring in 2022.

Capital structure: the particular distribution of debt and equity that makes up the finances of a company or securitized product.

CLO Equity (or CLO equity tranche): The tranche within a CLO that is paid any excess spread. The equity tranche historically receives the highest payment, and its payment is prioritized after all the debt and subordinated tranches.

Collateralized loan obligation (CLO): a form of securitization where payments from multiple business loans (most typically senior secured corporate loans) are pooled together and passed on to different classes of owners in various tranches.

Default rate: the percentage of all outstanding loans that a lender or creditor has written off after a prolonged period of missed payments.

Excess spread: (also called "residual spread" or "equity arbitrage") the difference between the senior secured loans' average yield and the debt tranches' average yield. This spread is accretive to a CLO's equity tranche.

Loss rate: default rate multiplied by the recovery rate.

Par value: the original face value (nominal value) of a bond, as indicated in the issuing documents, and which determines its value at maturity.

Recovery rate: for a defaulted loan where collateral is seized, the amount that is collected relative to the loan’s initial par value. Typically express as cents on the dollar or percentage (e.g., 70% or $0.70 of par value).

Senior secured loan (SSL): debt obligations issued by corporations that are typically backed (“secured”) by a company’s assets. SSLs have the greatest seniority of a company’s capital structure and have a priority claim on the borrower’s assets.

Tranche: one of several different classes of ownership within a CLO. Each tranche will have different yield targets and payment priority (relative to other tranches).

CLO Risks and Mitigation Strategies
Appendix A:

Risk Item	Description	Mitigation Strategy
Credit Risk	Rise in senior loan defaults may negatively impact performance	▪ Portfolios are managed by institutional investment managers with long track records and disciplined processes. ▪ Portfolios are diversified with low concentration on individual borrowers and across industries. ▪ Senior Secured Loan recovery rates are high at 60+% due to seniority / security which mitigates credit loss rates. ▪ Historically, CLO Equity has performed in high credit risk environment because of re-investment benefits, and non-recourse debt tranche structure—no forced selling of collateral.
Interest Rate Risk	Significant rising or falling interest rates can potentially hurt returns	▪ The majority CLO equity investor can direct a refinance of some or all of CLO debt tranches to lower CLO debt service costs and potentially increase CLO equity returns. ▪ Rising interest rates may benefit the portfolio by increasing interest income received. ▪ Senior loans frequently have an interest rate floor which may protect the risk of declining interest rates.
Re-Investment Risk	Continued senior loan spread tightening can reduce re-investment yield which can affect performance	▪ Currently credit spreads are particularly tight and the likelihood of sustaining these levels for extended periods is low. ▪ In case credit spreads continue to drop over longer periods, financing costs can also drop over time to preserve the portfolio's net interest income.
Leverage Risk	High leverage may lead to loss of equity	▪ Leverage is long term (12 Year + tenor) and not mark to market, which protects both equity and lender from mark to market risks. ▪ In case of a breach of lender covenant, income will be used to pay down principal in debt tranches until the covenant is corrected. Distribution of equity will restart after correction. ▪ Debt investors cannot force liquidation of CLO collateral for their recovery of principal. ▪ Impairment rates on CLO leverage are lowest compared to other levered investments.
Liquidity Risk	Funds holdings in CLO securities may be difficult to sell	▪ Investments in multiple CLO securities may increase likelihood of a potential transaction. ▪ CLO equity tranche yields have historically outperformed the Fund's target distribution rate, increasing the potential for raising sufficient capital for repurchases.
Market Value Risk	Market value of CLO holdings can have large swings	▪ Investments in CLO Equity are long term and performance is dependent on ongoing income distributions and par value of the loan portfolio. ▪ Periodic swings in the market value of CLO Equity may not reflect the actual performance of the CLO investments over the entire hold period.

Disclosures

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