

CLO STRUCTURAL PROTECTIONS

Interest and principal payment waterfalls

- There are two quarterly payment waterfalls in a CLO: the interest and principal waterfalls; which are subject to overcollateralization ("OC") and interest coverage ("IC") tests.
- The quarterly interest and principal waterfall payment mechanism are outlined in the CLO indenture. The AAA debt tranche has first payment priority, followed by the AA debt tranche and so on. Any potential collateral losses are incurred in reverse order, with the CLO equity absorbing such losses first, and if such losses exceed the equity outstanding, followed by the junior debt tranches and so on.

Overcollateralization and interest coverage tests

- The OC test requires that the par value of collateral assets divided by the par value of CLO debt tranches exceeds a certain financial ratio set at the closing of the CLO.
- The IC test measures investment income of collateral assets divided by CLO debt interest.
- The OC and IC tests are determined after the AAA and AA payments are made per the CLO waterfall.
- The OC and IC tests have a tighter financial covenant ratio for the lower rated debt tranche, since it includes in the ratio the aggregate amount of debt senior to that tranche and is also structured with a smaller initial coverage cushion at closing.
- Should an OC or IC test fail, a "self-curing" mechanism per the CLO indenture either:
 - Partially or fully diverts interest payments ("interest diversion") from the junior tranche alongside any applicable diverted reinvestment principal proceeds to pay down the most senior debt tranche outstanding in order of priority (AAA, AA and so on); or purchases additional collateral, until the test(s) is in compliance.
- **The self-curing mechanism is an important protection measure for the debt tranches, especially the Senior Notes (the AAA and AA tranches) of the CLO.**

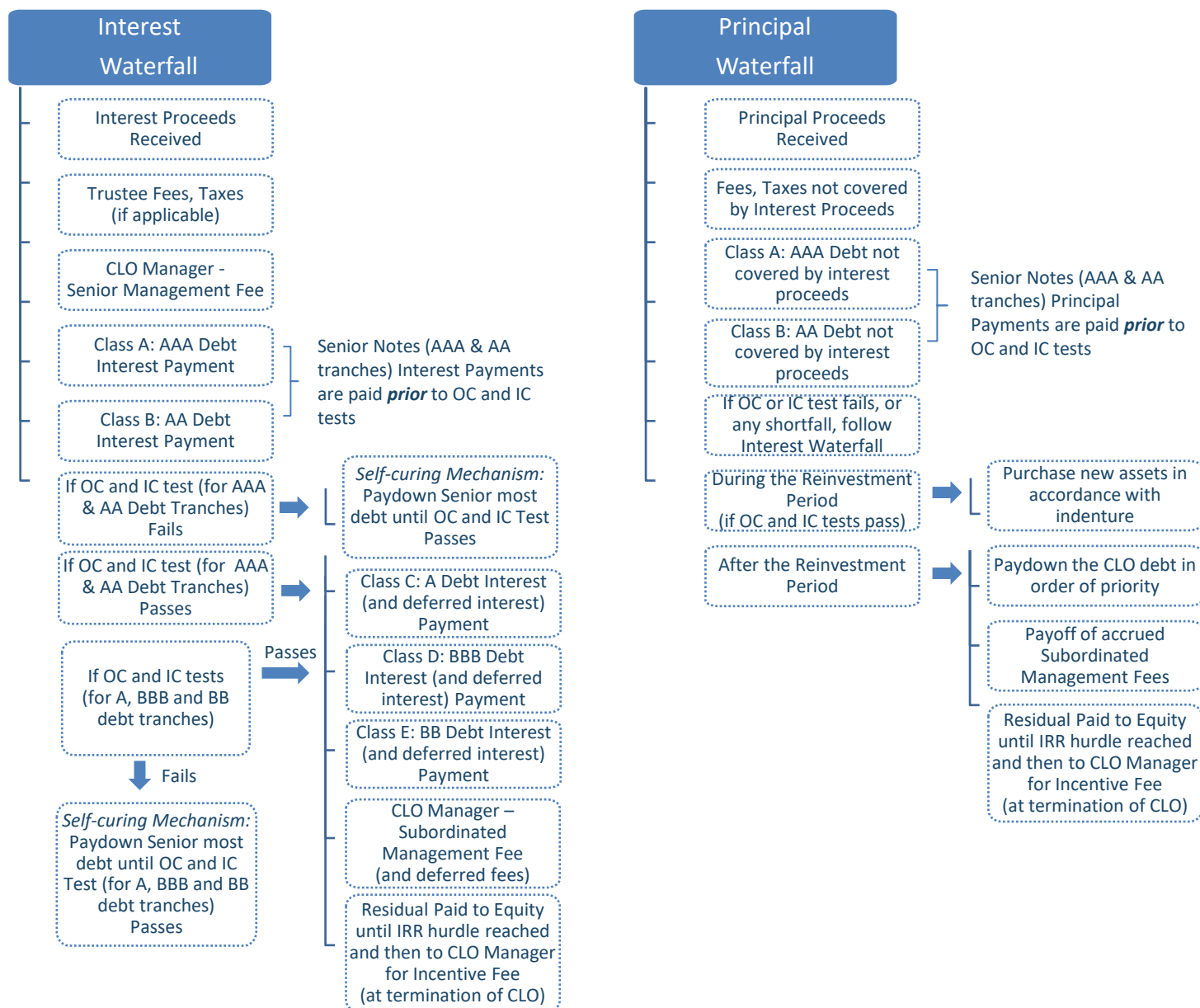
CLOs are structured as a cash flow transactions

- CLO investments are generally carried at par (with some exceptions) for calculation purposes of the various financial tests.
- The benefit of a non-mark-to-market structure is that the CLO will generally not be a forced seller of collateral assets during market volatility.
 - In some cases, mark-to-market valuations are required for certain collateral assets. Typically, if the asset is in default, the purchase price of an asset is generally 85% of par or lower, or the total amount of CCC rated assets in the CLO portfolio exceeds a certain covenant limit (typically 7.5%).

- *All references to CLOs in this presentation are intended to be with respect to CLOs which invest in broadly syndicated leveraged loan. CLOs which invest in middle market loans are excluded in this primer.*

PRIORITY OF PAYMENTS – PRINCIPAL AND INTEREST WATERFALLS¹**Priority of payment**

- The AAA and AA tranches (the “Senior Notes” of the CLO) are not subject to the OC or IC tests and therefore are not subject to any interest diversion.
- OC and IC tests are determined after the AAA and AA debt payments in the waterfall.



1) The term “waterfall” is used to describe how the cash from an investment flows down to the different parties involved. The top-down nature of the cash flow distributions indicates the relative priority of the investors at different levels. The Interest and Principal waterfalls are for illustrative purposes only. They do not include every expense or payment in an actual CLO waterfall. They do not present every situation which can lead to diversion of payments to the CLO equity or debt tranche investors. OC is the Overcollateralization Test and IC is the Interest Coverage Test. During the reinvestment period only, if the interest diversion test (highest threshold OC test) is not in compliance, the lesser amount of up to 50% (of the available interest proceeds) or the amount needed to cure the interest diversion test is diverted and used to purchase additional collateral, rather than all available interest proceeds being used to paydown debt (per the other OC tests). The IRR hurdle rate is the internal rate of return that must be achieved before the Incentive Fee distributions can be made.

CLO COVENANT PROTECTIONS AND REPORTING REQUIREMENTS

Concentration limit and collateral quality tests

- Min/max % of senior secured/unsecured debt, floating/fixed, among concentration limits.
- CLOs also have credit quality tests.
 - Limit on covenant life loans and the amount of CCC rated loans.

Diversification requirements

- To avoid concentration of investments, CLOs limit the amount of each asset owned and industry concentrations. This usually results in the CLO holding between ~150 and 300 unique collateral assets among ~20 to 30 different industries.

Covenant protections

- Certain portfolio criteria include weighted average spread (WAS), weighted average life (WAL) and weighted average risk factor (WARF).

These tests are “maintain or improve”. If the CLO is not in compliance with any of these tests, the collateral manager’s ability to buy and sell assets on a going forward basis is limited. Any purchase or sale of an asset must maintain or improve the financial ratio that was in non-compliance until the ratio is back in compliance.

Reporting requirements and transparency of the CLO market

- CLO collateral consist primarily of first lien loans (at least 90%) which benefit from a secondary trading market and multiple loan pricing services. Almost all loans held by CLOs, are individually rated by a nationally recognized statistical rating organization (“NRSRO”).
- CLOs are governed by a series of underlying documents, the most prominent being the indenture. The indenture provides the provisions the CLO manager must follow.
- Each CLO has a trustee who oversees compliance for the benefit of the CLO investors.
- A monthly trustee report is prepared for the investors which discloses all the assets held by the CLO and confirms compliance with all terms and conditions of the indenture.
- A quarterly payment report is prepared by the trustee for the investors which lists all cash disbursements per the interest and principal “waterfalls”, and the amount of the interest and principal payable to the CLO investors.
- Almost every CLO debt tranche is rated by a NRSRO at the time of closing. Throughout the life of the CLO, the CLO debt tranche ratings are continuously monitored by the NRSRO.

RISK PROFILE OF DEBT TRANCHES AND CLO COLLATERAL

Minimal default rates for CLO debt

- Since the establishment of the CLO market in the 1990's no U.S. AAA CLO tranche has defaulted and there has been one technical default of an AA tranche (with no loss of principal or interest due to the AA investors)¹.
- As of September 30, 2024, there have been five defaults of an A tranche, nine defaults of a BBB tranche and thirty-two defaults of a BB tranche¹.

Ratings upgrades and downgrades of CLO debt from 1996 through year-end 2023¹:

	Number of Ratings	Upgrades (%)	Downgrades (%)
AAA	5,357	0.0	2.4
AA	3,713	22.8	0.9
A	3,358	26.3	1.5
BBB	3,126	21.6	6.6
BB	2,474	14.3	16.0
B	424	3.5	20.0

CLO collateral consists primarily of first lien loans (at least 90%).

- First lien loans are floating rate, senior secured debt with ~6 to ~7-year maturities, typically rated from BB+ to B-, and may have covenants which include incurrence and/or maintenance tests¹.
- Borrowers are cash flow positive companies that can be either publicly or privately owned.
- CLO managers generally experience a lower default rate than the overall market due to active management.
- Financial institutions participate in a daily secondary trading market (bids/offers) on many leveraged loans held by CLOs.
- The aggregate size of leveraged loan market was ~\$1.4 trillion, and the US CLO market was ~\$1.0 trillion as of year-end 2023.

¹⁾ Based on the ratings issued by a NRSRO.

IMPORTANT RISK DISCLOSURES

Horizon Kinetics LLC is parent company to, among others, Horizon Kinetics Asset Management LLC (the "Adviser"), an investment adviser registered with the U.S. Securities and Exchange Commission ("SEC").

Past performance is not a guarantee of future returns and you may lose money. Opinions and estimates offered constitute our judgment as of the date made and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions. The information on this site should not be used as a general guide to investing or as a source of any specific investment recommendations. This material makes no implied or expressed recommendations concerning the way an account or fund should or would be handled. The Adviser manages separately managed accounts, mutual funds and private funds. Prior to investing in any product offered by the Adviser you should receive written information about the investment. It is important you review such material carefully so that you understand the risks, fees and other important characteristics.

While the statements made here are based on publicly available information and are believed to be accurate as of the date given, no representation is made with regard to their accuracy or completeness.

Additional information about the Adviser is also available on the SEC's website at www.adviserinfo.sec.gov.

©2024 Horizon Kinetics LLC ®

CONTACT US: **NEW YORK**
470 Park Avenue South
New York, NY 10016

646-495-7333
info@horizonkinetics.com
www.horizonkinetics.com