Market Pricing of Recent CLO Deals – Primary and Secondary Market

Primary CLO market

- CLO debt tranches are priced at the Secured Overnight Financing Rate[1] ("SOFR") plus a credit spread.
  - In the primary market, CLO debt tranches are usually priced at par.

Rating	Credit Spread (bps)[2]	Price at Closing	Coupon Rate
AAA	~125	100	~5.55%
AA	~165	100	~5.95%
A	~190	100	~6.20%
BBB	~275	100	~7.05%
BB	~500	100	~9.30%

- When a CLO is purchased (pricing date) in the primary market, the settlement (closing date) is ~6 weeks after the pricing date.
- There are ~15 financial institutions which are lead arrangers and placement agents for most CLOs issued in the primary market.

Secondary CLO market

- In the current secondary market, CLO debt tranches can trade at a premium or discount to par.
- The amount of the premium or discount to par will be determined by several factors, including the specific indenture terms, collateral quality, maturity and call date and credit spread of the CLO debt tranche.
- In the secondary market, the total return will be generated through both the coupon rate and the purchase price discount/premium.
- CLO's secondary market settlement is T+1 business days.
- ~30 financial firms actively trade CLO debt and equity tranches in the secondary market.

1) 3-month SOFR was 4.31% as of December 31, 2024. The SOFR is a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities.
2) The credit spread is presented as a single number representing the approximate credit spreads for recently closed deals (as of December 31, 2024), in the primary market with 2-years of call protection and a 5-year reinvestment period. The credit spread for future primary deals may vary substantially based on the specific CLO terms and other factors including who is the CLO manager.

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.

Structural Benefits of CLO Investing

US Dollar Denominated Floating Rate Investments limit Interest Rate/Currency Risk

- CLO tranches are floating rate based on 3-month SOFR plus a credit spread.
- 3-month SOFR is reset every three months, which provides a hedge against duration/interest rate risk.
- The CLO tranches are US dollar denominated, eliminating any foreign currency exposure.

Secure Collateral Quality

- CLO collateral consists primarily of first lien loan (at least 90%).
- First lien leveraged loans are floating rate, senior secured debt issued by cash flow positive companies (public or private) with ~6 to ~7-year maturities and are typically rated from BB+ to B-[1].

Actively Managed around Diversification and Collateral Quality Requirements

- CLOs benefit from active management by the CLO manager of a diversified portfolio, subject to ongoing concentration limits and collateral quality test covenants per the CLO indenture.
- CLO managers have generally been able to maintain a lower default rate than the industry average within their CLO portfolios, due to the flexibility to buy or sell assets at any time, subject to CLO indenture terms.

CLO's Cash Flow Structure is Insulated from Marked to Market Variability

- CLOs are structured as cashflow (not market value) structures.
- Underlying investments (e.g., leveraged loans) inside the CLOs are generally carried at par, not fair value (with some exceptions), for calculation purposes for the various financial tests.
- The benefit of a non-mark-to-market structure is that the CLO manager will generally not be a forced seller of collateral assets during periods of temporary market weakness.

Transparency and Independent Trustee Oversight

- CLOs are subject to considerable documentation, comprehensive monthly and quarterly reporting requirements, and independent trustee oversight.
- Financial institutions participate in a daily secondary trading market on many leveraged loans held by CLOs, as well as CLO debt and equity tranches.
- CLO debt tranches are rated by a NRSRO at closing and are continuously monitored by a NRSRO post-closing. Almost all loans held by CLOs are rated by a NRSRO.

1) Based on the ratings issued by a nationally recognized statistical rating organization ("NRSRO")..

CLO Debt Tranches – Credit quality/Risk Profile

- **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 tranche[1].

- **Ratings upgrades and downgrades from 1996 through year-end 2023 [1]**

	Number of Ratings	Upgrades	Downgrades
AAA	5,357	N.A.	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 Debt and Equity - priority of payment**
  - The AAA and AA tranches (the "Senior Notes" of the CLO) have first and second payment priority to the CLO investors respectively, per the interest and principal payment waterfalls terms under the CLO indenture.
    - Any potential CLO 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.

- **Over-Collateralization and Interest Coverage Tests**
  - Over-Collateralization ("OC") and Interest Coverage ("IC") tests are determined after the AAA and AA quarterly interest payments are paid in full to the CLO investors per the payment waterfalls.
  - 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
    - Requires the purchase of additional collateral until the test is in compliance.
  - This self-curing mechanism is an important protection measure that benefits the debt tranches, especially the Senior Notes (the AAA and AA debt tranches) of the CLO.
  - The debt benefit from the overcollateralization of the CLO structure as there are more collateral assets held in the CLO than the total amount of debt outstanding at closing..

1) *Based on the ratings issued by a NRSRO.*

- **Diversification**
  - CLOs typically hold between ~150 and 300 assets, invested in approximately 20 to 30 different industries, subject to ongoing concentration limits and collateral quality tests.
- **CLO debt tranche price recovery during the Covid market dislocation**

	Date of Market Low	Market Low Price	Months to Recover/ (Price Level)
AAA	3/24/2020	92.26 of par	~5 months / (99+ of par)
AA	3/24/2020	86.02 of par	~6 months / (99+ of par)
A	3/25/2020	83.11 of par	~9 months / (99+ of par)
BBB	3/24/2020	70.83 of par	~11 months / (99+ of par)
BB	3/24/2020	60.20 of par	~13 months / (97+ of par)

OUTLOOK FOR THE CLO MARKET

- The CLO market is expected to continue to become more liquid, have better pricing information, and grow in dollar amount and number of outstanding deals.
- The anticipated continued growth of the leveraged loan market should result in a corresponding increase in CLOs.
  - CLOs represent the largest investor group (~70% market share) in the leveraged loan market.
  - The aggregate size of the leveraged loan market was ~$1.4 trillion, and the US CLO market was ~$1.0 trillion as of year-end 2023.
- Demand from Institutional and retail investors is expected to continue to grow given the risk adjusted returns and default rates of CLO debt tranches.
- In June 2022, an electronic trading platform was established (Octaura Holdings), to improve transparency in market execution and trading information.
  - Octaura was created by seven major CLO arranger banks as an independent company to create the first open market electronic trading platform for syndicated loans and CLOs.

CONTACT US: NEW YORK
470 Park Avenue South
New York, NY 10016
646-495-7333
info@horizonkinetics.com
www.horizonkinetics.com