BVAL Pricing Overview for Cash Collateralized Loan Obligations (CLOs)
KANERAI’s CLO pricing methodology provides highly defensible valuations for CLOs backed by corporate loans and bonds. KANERAI’s approach makes use of its capabilities as an industry leader in delivering innovative structured finance analytics and market data. The foundation of KANERAI’s methodology and approach is its comprehensive data set of market color for CLOs. The market observations serve as the basis for an innovative approach that leverages KANERAI’s superior collateral-mapping technology and scalable computing infrastructure to derive prices for substantially the entire universe of CLOs. KANERAI’s systematic methodology combines real-time market data with sophisticated CLO analytics to deliver robust CLO valuations.

Figure 1 – KANERAI Evaluated Pricing Screen – BVAL <GO> is available via the Bloomberg Professional® service to KANERAI subscribers via Bloomberg’s Data License.
CLO MARKET OVERVIEW

CLO tranches are securities issued by special-purpose vehicles that are collateralized by a portfolio of assets that includes loans, bonds and other structured finance securities. Interest and principal payments collected from the assets are used to pay interest and principal on tranches usually in order of relative seniority following specific “waterfall” payment rules set forth in a CLO’s indenture. In managed CLOs, the payments collected from the assets may be used by the collateral manager to purchase new assets during a designated reinvestment period. Losses are generally applied in reverse order of tranche seniority. Payment rules are designed such that “senior” tranches have a lower risk of loss relative to “junior” tranches. The most subordinated tranches within the capital structure of the CLO, called “equity tranches,” receive the residual cash flows.

CLO tranches generally trade over the counter (OTC) in the secondary market. Investors frequently sell securities through auctions (“BWICs” or Bids Wanted In Competition), which solicit bids on a group of securities through the broker-dealer community. Broker dealers also make markets on their own behalf, often maintaining an inventory for this purpose. Unlike the equity and corporate bond markets, actual transacted prices are not currently disclosed broadly to market participants. In the context of BWICs, the current market practice is to disclose the second-best bid, called the “cover” bid. Covers are broadly considered to be the closest proxy to actual transacted prices. In addition, when broker dealers quote markets by providing both a bid and offer for a security, this provides a reasonable indication of the fair market price for the security. With a lesser degree of confidence, the price indications offered by broker dealers can also be useful proxies of market levels in the most illiquid segments of the market.

The value of a CLO tranche depends on numerous tranche-level and deal-level characteristics. Some tranche-level characteristics that investors may take into account are subordination, relative tranche liquidity and tranche ratings. At the deal level, investors may evaluate the composition of the underlying portfolio, including past and projected asset- and portfolio-level performance, the relative liquidity of the collateral, the risk of liquidation and the quality of the collateral manager. The value of CLOs is also affected by the relative value of CLO tranches compared with other asset classes as well as general market sentiment.

VALUATION MODEL STRUCTURE

Based on insight from KANERAI’s specialized team of experienced CLO professionals (former traders, quantitative strategists and financial engineers), KANERAI has identified the most important factors that explain CLO price movements over extended periods. KANERAI’s model components account for the various tranche- and deal-level characteristics that market participants report evaluating.

KANERAI’s model components are calculated daily for substantially the entire universe of CLOs. Once the components are calculated, KANERAI uses a multi-factor statistical model to explain observed tranche prices. KANERAI’s consistent, systematic methodology for valuing all securities reduces or eliminates ad hoc subjectivity from the valuation process.

STEP 1: DYNAMIC IDENTIFICATION OF COLLATERAL ASSETS

Unlike typical single-security derivatives where price is sensitive to changes in the price of a single security, the value of a CLO tranche is much more difficult to determine because of its sensitivity to changes...
in the value of any of its underlying assets. Identifying the underlying assets is further complicated by active trading by managers, with the composition of the collateral portfolio constantly changing. However, by utilizing a proprietary mapping algorithm to identify and value CLO collateral daily, KANERAI is able to evaluate the underlying collateral portfolios of substantially the entire universe of CLOs. By reliably mapping the underlying collateral, KANERAI is able to track day-to-day changes in the net asset value of each deal within the valued universe.

**STEP 2: GENERATION OF TRANCHE CASH FLOW PROJECTIONS**

The distribution of cash flows from the underlying pool of assets beginning with the most senior tranche and flowing down to the most junior tranche is referred to as the “waterfall.” To calculate many of the subcomponents of KANERAI’s CLO model, KANERAI leverages its scalable computing infrastructure to generate cash flows for each individual deal tranche across substantially the entire universe of CLOs. KANERAI’s cash flows are simulated using a series of market-implied scenarios that capture the behavior of the underlying collateral across the life cycle of a deal.

**STEP 3: GROUPING OF CLO TRANCHEs**

Consistent with market practice, KANERAI groups tranches by normalized ratings, clustering tranches with similar characteristics as part of its model calibration. To increase the stability and consistency of its models across ratings buckets, model calibrations are run on a set of observations that also includes observations on tranches rated above and below the ratings bucket being priced. Models for the most junior and senior ratings buckets, however, are fitted only to observations within their respective clusters to avoid systemic skewing of results.

**STEP 4: CALCULATION OF MODEL COMPONENTS**

When deriving prices for tranches, KANERAI’s pricing model takes into account both tranche-level and deal-level factors calculated daily across substantially the entire universe of CLOs. KANERAI’s pricing models account for relevant (i) tranche-level characteristics such as par-value and market-value enhancement, weighted average life, tranche thickness (relative tranche detachment and attachment points), return profile across a series of simulated scenarios and break-even constant default rates and (ii) deal-level characteristics such as collateral country of issue, currency, collateral liquidity, weighted average price and spread, and manager quality.

KANERAI periodically surveys the market to ensure that its model is representative of what market participants examine when evaluating CLO tranches. Using ongoing feedback from market participants, model components are adjusted or removed and additional components introduced.

To account for market-wide trends, KANERAI’s pricing models also adjust for perceived trends in market observations.

**STEP 5: CALIBRATION OF MODEL COMPONENTS AGAINST MARKET OBSERVATIONS**

After calculating values for model components across CLO tranches, KANERAI utilizes a multi-factor statistical model to calibrate the model components against recent market observations. KANERAI’s pricing methodology recognizes the relative value of market data across time and appropriately weights market observations by recency and relevance.

**SUMMARY**

KANERAI’s evaluated prices for CLOs are derived using a robust quantitative methodology. KANERAI’s methodology is distinct from standard matrix-based approaches to price CLOs—which often sacrifice precision and accuracy for computational simplicity. The methodology combines KANERAI’s innovative structured finance analytics capabilities with its access to real-time market data that differentiate its prices and methodology. Distinct from the simplified static approaches often employed elsewhere in pricing, KANERAI’s prices incorporate relevant cash flow scenarios and the structural and collateral characteristics of each individual tranche across substantially the entire universe of CLOs. KANERAI’s approach also ensures that market observations are weighted by recency and relevance as part of the calibration of its models. KANERAI’s highly defensible prices are updated at least weekly, which allows clients to track migration of marks. This additional transparency, along with KANERAI’s systematic methodology, establishes its CLO prices as the highest standard in the evaluated pricing industry.

KANERAI prices are available on the Bloomberg Professional service via the BVAL <GO> function upon request and are also available via BVAL’s FTP/Data License feeds, allowing clients to integrate KANERAI prices into their infrastructure.
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