ABS Research

Frequently Asked Questions About CLO Combination Notes

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Morningstar Perspective

Morningstar Credit Ratings, LLC has received inquiries from market participants about rating combination notes consisting of collateralized loan obligation components. Since rating our first CLO in 2016, we have provided over 70 public and private ratings on CLO transactions for more than 30 different portfolio managers, some of which included combination notes. In our commitment to transparency, we avoid "black-box" approaches and instead use INTEXcalc as the primary tool for our quantitative analysis, so market participants can follow our rating approach and tie out with our results. In addition, we plan to further inform arrangers, investors, and other market participants about our CLO methodology and the sector in general through our published research and FAQs such as this one.

General Questions

1. **What is a combination note?**
   Combination notes are repackaged securities that may consist of individual debt and equity tranches from CLOs and may include other securities, such as zero-coupon securities. These repackaged securities have been in the market for close to 20 years in one form or another, and the combination noteholders are typically entitled to all distributions of principal and interest on the components comprising the combination note.

2. **How many combination notes has Morningstar rated?**
   As of year-end 2018, Morningstar has rated over 60 combination notes.

3. **Does Morningstar have a rating cap for combination notes?**
No, Morningstar does not apply rating caps to combination notes. For Morningstar to assign higher ratings to combination notes, they must withstand more severe rating stresses, and Morningstar may subject these notes to additional sensitivity scenarios. This applies to both new issue transactions as well as upgrades that may occur during the ongoing surveillance process.

4. **How do they differ from investing in the underlying CLO components?**
Combination noteholders receive the same cash flow as if they held the underlying CLO components. The benefit to noteholders is that, depending on the underlying tranche composition of the combination note and, typically, by structuring it as principal-only, the combination note may achieve a higher rating than some of its individual components. Also, by combining different principal amounts and selected tranches of underlying CLO components, the noteholder is able to tailor the combination security to its desired risk exposure and return.

5. **Are combination notes in separate special-purpose vehicles or within the CLO?**
Morningstar has rated combination notes both as part of the primary CLO transaction and as a separate special-purpose vehicle. However, most combination notes we have reviewed have been issued by a separate special-purpose vehicle.

6. **Does Morningstar need to assign ratings on the underlying components of the combination notes?**
No, Morningstar does not have to assign a public or private rating on a combination note's underlying CLO components. Regardless, our U.S. CLO Ratings Methodology still requires that we analyze a combination note's underlying collateral in the CLO structure.

7. **What are some of the common structures Morningstar sees?**
The notes typically take the form of exchangeable secured notes, which may be converted into the underlying CLO components at the investor's direction. The assigned rating is typically based on a principal-only structure where all or a portion of interest and all principal cash flow from the underlying CLO components help pay down the principal balance of the combination notes and build overcollateralization. We rate these notes based on if noteholders receive ultimate repayment of principal.

   Combination notes may be structured with both components from an underlying CLO as well as zero-coupon securities that provide additional credit enhancement. Combination notes with interest components are less common, and they may receive a lesser ratings uplift, if any, because the rating doesn't benefit from interest proceeds paying down the balance.

8. **Are the ratings public or private?**
At the discretion of the issuer, the rating Morningstar assigns to combination notes can be either public or private. To date, the majority of ratings we have assigned to these notes have been private, but we recently assigned a public rating on a combination note and published the presale for Barings Middle Market CLO Ltd. 2018-1, which is available on our website.

9. **Who invests in combination notes?**
   Combination noteholders are typically institutional investors that may have internal investment guidelines that require specific ratings on their investments or capital charges tied to the ratings of their investments, as determined by the National Association of Insurance Commissioners.

10. **Can Morningstar rate combination notes that do not include equity components?**
    Yes, but we would look to see if the transaction documents include other structural safeguards that address the additional risks. These include risks from partial refinancings, repricings, and rated balances that are above the components' notional amount.

11. **Can Morningstar rate combination notes that incorporate components from multiple CLOs?**
    Yes, but we would need to review each CLO that contributes components to the combination note. This would include a complete legal, analytical, and manager review.

Questions on Our Rating Methodology and Rating Process

12. **What are the common ratings Morningstar has assigned on these notes so far?**
    To date, we have predominately assigned BBB- ratings to combination notes, but we have assigned new issue ratings as high as A.

13. **What methodology does Morningstar use for rating combination notes?**
    Morningstar uses its U.S. CLO Ratings Methodology and U.S. ABS General Ratings Methodology as well as Morningstar Credit Ratings Definitions and Other Related Opinions. Morningstar's U.S. CLO Ratings Methodology typically applies a constant conditional default rate, or flat CDR curve, for the life of the transaction that is typically based on the historical leveraged loan performance across various sectors and industries, the CLO manager's historical performance and operational capabilities, and the pool's credit quality and diversity. However, Morningstar may analyze different front- or back-loaded default curves as necessary.

14. **How long does it take for Morningstar to review and rate combination notes?**
    Timing on specific transactions depends on many factors, including the amount of information available to the analyst, the complexities of the structure, and any deviation from standard legal documentation. The ability to analyze the transaction payment structure using the Intex cash flow modeling tool generally facilitates the analysis.

15. **What is the typical process for rating a combination note?**
    Once Morningstar is engaged and has assigned analysts to the transaction, the analysts will request information and the expected timeline from the arranger or related party. The process is typically iterative, and changes in the underling deal structure and collateral can affect any feedback provided before the preliminary ratings committee.

The analyst may need to schedule an operational risk evaluation of any collateral manager that Morningstar has not previously reviewed. The review determines our manager adjustment for the CLO manager, one of the key inputs to the applicable U.S. CLO Ratings Methodology.

Once the analytical team receives the final structure and completes an initial review of the transaction documents, the analysts will present the transaction to a preliminary ratings committee and provide feedback to the arranger or related party. Depending on the final review of the transaction documents and if any changes have occurred since the preliminary ratings committee, the analysts may convene a final ratings committee.

Once internal credit rating processes and procedures have been completed, the analysts will typically place the rating letter in escrow the night before the transaction closes. The rating letter will be released only after Morningstar has received appropriate legal signoff.

16. **Can Morningstar provide feedback before the preliminary ratings committee?**
    Yes, we may provide feedback on the quantitative analysis of a combination note before the ratings committee, based on our methodologies, if we receive an Intex CDI file. We may provide feedback before a complete review of the transaction documents based on working assumptions. In these instances, Morningstar will clearly communicate that the feedback is before the committee's approval and is subject to a complete review of the transaction documents and the committee's approval.

17. **Does Morningstar need to review the underlying CLO transaction documents when analyzing a combination note in a separate special-purpose vehicle?**
    Yes, the underlying CLO transaction documents undergo a detailed review before Morningstar assigns final ratings on combination notes.

18. **Do consent rights within the underlying CLO affect combination notes?**
    Yes, consent rights, particularly of any subordinated notes, such as those for refinancings, repricings, liquidations, and additional issuances, can affect the analysis of rating combination notes. Some of these features are discussed in more detail below.

19. **What kind of transaction documents does Morningstar typically see associated with combination notes?**
    In a manner similar to the legal review for a CLO transaction, Morningstar will review all documents that are conditions precedent to the closing of the combination note transaction as stated in its indenture. These documents generally include the combination note indenture, agreements for the administration of the issuing entity, account control agreements, fee letters, legal opinions, any side letters, and the officer's certificates (covering corporate matters and the assets).

20. What does Morningstar's legal review for a typical combination note entail?

The review process begins with both a comprehensive analysis of any initial draft of the documents listed above as well as all underlying CLO transaction documents and continues until Morningstar receives the executed versions of the same upon closing.

The analysis of the indenture includes verification that Morningstar will receive all notices necessary for its ongoing surveillance of the issuance and that standard provisions for the protection of the assets and for the payment of principal and interest are included. The review of legal opinions confirms that standard language is provided and that Morningstar can rely on such opinions. These opinions generally cover corporate, security interest, and local law (generally Delaware) matters. Morningstar's counsel provides comments to Morningstar on any items of note and any modifications to the drafts of any documents are confirmed before closing.

Structural Questions

21. What tools does Morningstar use to perform the quantitative analysis on combination notes?

Morningstar primarily uses INTEXcalc to perform its quantitative analysis, with a CDI file from the arranger or related party. Morningstar may use INTEX DealMaker, or in-house analytical tools, to perform its quantitative analysis on combination notes with unique features.

22. Does a separate CDI file need to be provided for the combination note?

No, if the arranger or related party provides a CDI file for the underlying CLO, Morningstar typically does not need a separate CDI file for the combination note. However, the arranger or related party will need to provide the combination note structure.

If the combination notes have a multitranche structure with their own waterfalls, Morningstar may need a separate spreadsheet that calculates the cash flow allocation among different tranches.

23. How do you build a combination note within INTEXcalc?

Within the program, you can go to Tools > Combine Bond Cash Flows. This method is applicable to a single-tranche combination note structure. As previously mentioned, you can use INTEX DealMaker to build a combination note with unique features, such as multiple tranches.

24. Within INTEXcalc, how does Morningstar stress the cash flow?

Under the scenario tab, you can input the appropriate interest rate, prepayment rate, and recovery rate stresses; incorporate a lag on recoveries; and solve for Defaults > CDR, by testing the combination note for a given yield or price. This is only a sample of how Morningstar stresses combination notes within the program. Please see our U.S. CLO Ratings Methodology and U.S. ABS General Ratings Methodology for further details.

25. What result does INTEXcalc provide for Morningstar's analysis?

The program provides the CDR that a given combination note can withstand. We then compare this constant CDR against the adjusted target break-even CDR, as outlined in the applicable U.S. CLO Ratings Methodology.

26. Do combination notes have separate waterfalls under the CLO indenture?

No, they typically do not have a separate waterfall of cash flow, regardless of whether the combination notes are structured within the underlying CLO or as a separate special-purpose vehicle. This is because, generally, the combination notes are entitled to all distributions of principal and interest on the underlying components.

However, if the combination notes have multiple tranches, they could have their own waterfall under the combination note indenture.

27. Are there additional expenses associated with combination notes?

Yes, there are typically additional fees/expenses associated with combination notes, with the amount depending on how the note is structured. Fees are typically higher if the combination note is issued out of a separate special-purpose vehicle because of the duplicate administration/trustee expenses. See below for details on how we address this.

28. How do combination notes pay down?

Most combination notes pay down using interest and principal proceeds generated by the underlying CLO components that serve as the collateral of the combination note. Some transactions may rely on proceeds from additional collateral that is outside of the underlying CLO in addition to the components' interest and principal proceeds. In such cases, the underlying CLO's principal and interest may not be enough to fully pay off the combination note's principal balance under stressed environments, and the notes will rely on the additional collateral to cover the shortfall.

29. What are the key risks involved?

Outside of the standard assumptions that Morningstar stresses at each rating category, refinancing, repricing, and call risk are primary concerns when analyzing combination notes. We further address these risks in question 31 below.

Depending on the combination note's structure and the components, we may test additional sensitivity scenarios for prepayments. Scenarios where prepayment stresses may be relevant include combination notes where the underlying CLO is static and/or if the senior notes are a component of the combination notes.

30. When are prepayment scenarios tested?

Depending on the combination note's structure and components, prepayments may hinder the interest proceeds that help pay down the note. Examples include when the senior notes and subordinated notes are components in the combination note as well as static transactions. Morningstar assumes the prepayment rate is approximately 10% under an A rating stress environment and the rate is approximately 30% under a B rating stress environment.

31. Are there mitigating factors?

The composition of the collateral making up the combination note can mitigate some of the risks identified in question 29 above. If the majority of the equity of the underlying CLO is a component of the combination note, then the combination noteholder generally has control of the refinancing, repricing, and call rights. For more information, please see [Refinancing Poses Limited Additional Credit Risk to CLO Combination Notes].

If a minority of the equity of the underlying CLO is a component of the combination note, then Morningstar would look to see other structural safeguards built into the transaction documents. Examples may include having split tranches, where a majority of the note's investors need to approve a refinance or requiring a supermajority of equity to approve refinancings, repricings, and calling the transaction.

32. What are the typical assumptions used for rating combination notes?

For transactions that incorporate standard CLO concentration and collateral limitations, Morningstar typically applies the following base-case assumptions for a BBB- rating:

- The base-case CDR assumption is 5.33%.
- The recovery rate assumption is 62.33% for 90% first-lien/10% second-lien concentration covenants.
- The recovery lag is typically 18 months.
- We run high-, mid-, and low-interest-rate sensitivities, based on updated curves every month.

Please note that our base-case assumptions reflect a typical CLO structure and covenants for a portfolio of leveraged loans. These assumptions can deviate depending on the transaction, and Morningstar may apply further stresses, including to the CDR and recovery rate, as outlined in the U.S. CLO Ratings Methodology.

33. How does Morningstar account for additional expenses associated with combination notes?

If the combination note is modeled through the combine bond cash flow feature in INTEXcalc, the additional expenses are accounted for by having the transaction withstand a higher constant CDR at the given rating stress. If the combination note is created through INTEX DealMaker, the fees can be accounted for in the program.

34. Which interest rate stress is generally the most stressful for combination notes?

Depending on the rating stress, the low-interest-rate stress is typically the most stressful because both the structural features of principal-only ratings and the debt tranches are based on Libor plus a spread. Principal-only combination notes rely on both the interest and principal proceeds to pay down the principal balance of the combination note, and stressing a lower Libor rate reduces the interest proceeds available to pay down the combination note. While a lower interest paid to the CLO notes may increase the cash flow to the subordinated notes, thus somewhat helping the combination note (which usually contains a portion of the subordinated notes), the impact is mitigated by the fact that the cash flow from the underlying loans is also linked to Libor.

35. Are there any structural features within the underlying CLO that affect combination notes?

Yes, specific CLO features that can affect the analysis of combination notes include:

- The ability to leak excess par to the equity investors.
- CLO coverage test levels.
- Increased concentration limitations, such as higher limits for current pay obligations and CCC rated obligors.
- Senior repayment of deferred management fees in the waterfall.
- Contribution accounts.

36. How does the excess par leak feature affect combination notes?

The impact of this feature, and others mentioned above, depends on many factors, including the structure as well as the individual components that comprise the combination note. For example, leaking excess par may be beneficial if the combination note consists of all or a majority of the subordinated notes. While the transaction loses overcollateralization through the excess par being designated as interest proceeds, the combination note benefits from additional payments to its principal balance that would otherwise be senior in the waterfall because of the equity component. Please refer to Push for Higher Equity Returns Leads to Weaker Structural Features for more information on leaking excess par.

37. What kind of sensitivity runs does Morningstar run on combination notes?

Because of deterioration in the leveraged loan market, which we discuss further in Weakened Loan Documents Leave Non-Investment-Grade CLO Debt on Potentially Shaky Ground in 2019, we conduct a sensitivity analysis to determine how sensitive our ratings on CLOs and combination notes are to lower leveraged loan recoveries. Other deal-specific stresses can include prepayment stresses, downward ratings migration stress, or additional adjustments, as discussed in the U.S. CLO Ratings Methodology, for transactions with higher concentration limits or other structural features.

38. Does Morningstar give credit to pledges of management fees within combination notes?

Yes, depending how the management fees are pledged to the combination note, Morningstar may give full or partial credit to such fees. The primary concern is under what circumstances the manager or replacement manager can renegotiate or cancel its obligations under the side letter. If the management fees are pledged through a private side-letter agreement between the manager and combination note issuer, and the pledge of such fees would be voided if the manager were removed for cause, we do not provide full credit to any such pledged management fees. If a portion of the management fees are effectively stripped and reclassified in the form of a separate note, we may be able to provide full credit for such fees.

39. How do Class X Notes affect combination notes?

Depending on the structure of the combination note and if there is an equity component, the Class X notes reduce the interest proceeds available to pay down the principal balance of the combination notes.

Surveillance and Ratings Volatility

40. How does Morningstar surveil these transactions?

Morningstar performs surveillance on combination notes by conducting an analysis similar to when the transaction was initially rated. Instead of relying on a CDI file from the arranger or a related party, we use the CDI and CDU files Intex creates. Actual performance trends for defaults, realized recoveries, tripping of triggers, and so on may determine updated stresses and affect any rating actions.

41. What kind of ratings volatility has Morningstar experienced with ratings on combination notes?

To date, the combination notes Morningstar has rated have experienced minimal ratings volatility, and there have been no performance-related downgrades. This is due to both the rating stresses and sensitivity scenarios Morningstar applies along with the benign economic conditions experienced. Another factor is that most combination notes are structured as having all principal and interest proceeds paying down principal, which creates additional credit enhancement over time (so long as the transaction's actual defaults are lower than tested).

42. How frequently do the combination notes get upgraded?
Morningstar upgrades combination notes on a case by case basis, and they typically do not occur until after the first year for transactions rated to principal only. All upgrades are subject to the combination note passing the appropriate adjusted target break-even CDR for a higher rating stress. As mentioned earlier, as the performance of combination notes improves and they become eligible for upgrades, we may apply additional rating stresses and sensitivities.

43. What happens if the combination note is exchanged before it has been repaid?
A typical feature for combination notes is that the combination noteholder can request either a pro rata portion or the entire combination note is exchanged for its components. Once exchanged, in part or in whole, the rating on the exchanged portion will be considered as having paid down the combination notes' principal balance.

44. Does Morningstar provide a weighted average rating factor matrix to the CLO manager?
Yes, Morningstar typically provides a maximum WARF matrix with the initial rating letter, but this is not a requirement of the U.S. CLO Ratings Methodology. For more information, please see Dynamic Matrix Provides Increased Transparency to CLO Market Participants.