Contents

Morningstar Credit Ratings Definitions and Other Related Opinions and Identifiers ......................................................... 3
Types of Rating Opinions ......................................................................................................................................................... 3
  Credit Rating ........................................................................................................................................................................ 3
  Rating Outlooks (Corporates and Financial Institutions Only) ............................................................................................ 5
  Rating Under Review ............................................................................................................................................................ 6
Certain Considerations in Assigning Rating Opinions ........................................................................................................ 7
Certain Factors Not Considered or Evaluated in Assigning Rating Opinions ................................................................. 8
Other Forms of Opinion .......................................................................................................................................................... 10
  Credit Estimates................................................................................................................................................................. 10
  Withdrawn Ratings............................................................................................................................................................... 10
**Morningstar Credit Ratings Definitions and Other Related Opinions and Identifiers**

This document sets forth Morningstar's credit definitions, ratings symbols and other related opinions and identifiers for evaluating the credit risk in structured finance transactions and corporate and financial institution obligations. Morningstar’s determination to review a structured finance transaction is performed on a case-by-case basis in accordance with Morningstar’s policies and procedures set forth on Morningstar’s website at [www.morningstarcreditratings.com](http://www.morningstarcreditratings.com). Once Morningstar elects to review a transaction, Morningstar generally evaluates the transaction either: (1) as a rating agency selected and paid by the issuer or arranger to rate certain transactions at issuance and post issuance, or (2) as an agency that provides surveillance to subscribers on an investor-paid subscription basis. In addition, Morningstar may review a transaction on an unsolicited basis. In all cases, Morningstar considers various deal specific factors in accordance with Morningstar’s policies and procedures when assigning credit rating(s) to certain securities.

**Types of Rating Opinions**

**Credit Rating**

A Morningstar credit rating is only an opinion on the ability of the collateral or obligor to support timely interest payments and to repay principal by the rated final distribution date according to the terms of the transaction and subject to the various qualifications, caveats and considerations enumerated in its respective ratings letters, ratings reports, and Morningstar’s website, [www.morningstarcreditratings.com](http://www.morningstarcreditratings.com).

Morningstar utilizes a set of letter ratings ranging from AAA to D to express its opinion on the credit quality of a security based on Morningstar’s policies and procedures. Morningstar also provides finer gradations of the ratings ranging from AA to CCC by adding a plus or minus sign to indicate relative strength within the rating categories. The definitions for Morningstar’s credit ratings are as follows:

**AAA**

A rating of AAA is the highest credit rating assigned by Morningstar. A rating of AAA indicates an extremely strong ability to make timely interest payments and ultimate principal payments on or prior to a rated final distribution or maturity date.

**AA**

A rating of AA indicates a very strong ability to make timely interest and ultimate principal payments on or prior to a rated final distribution or maturity date.

**A**

A rating of A indicates a strong ability to make timely interest and ultimate principal payments on or prior to a rated final distribution or maturity date, but that ability could be influenced by adverse changes in circumstances or conditions, such as adverse business or economic conditions.
BBB
A rating of BBB indicates the ability to make timely payments of interest and ultimate principal payments on or prior to a rated final distribution or maturity date, but that ability could be impacted by adverse changes in circumstances or conditions, such as adverse business or economic conditions.

BB
A rating of BB indicates the ability to make timely payments of interest and ultimate payment of principal on or prior to a rated final distribution or maturity date in the absence of various adverse circumstances or conditions such as adverse business or economic conditions. The vulnerability of securities rated BB to the previously mentioned conditions is greater than that of higher rated securities or issuers.

B
A rating of B indicates a default has not yet occurred but the issuer or securities are vulnerable to adverse changes in the business or economic environment. Securities rated B are more vulnerable to nonpayment of timely interest and ultimate payment of principal on or prior to a rated final distribution date than higher rated securities.

CCC
A rating of CCC indicates a material likelihood of default, and for corporate and financial institution obligations, significant dependence on favorable business conditions to avoid default or capital restructuring. For structured finance securities, forecasted or actual losses may have eroded but not yet eliminated available credit support.

CC
A rating of CC on a corporate or financial institution issuer or security indicates a default has not yet occurred but the issuer or security is extremely dependent on favorable business conditions to avoid default or significant capital restructuring. This rating does not apply to structured finance securities.

C
A rating of C on a corporate or financial institution issuer or security indicates a default is expected in the very near term. Corporate and financial institution issuers or securities will be rated C and placed on Under Review Negative during a cure period for payments of interest and principal. This rating does not apply to structured finance securities.

SD
A rating of SD indicates a selective default when an issuer has defaulted on one or more but not all of its debt obligations without entering bankruptcy. Selective Default is not applicable to individual issues and therefore is not applicable to structured finance securities.

D
A rating of ‘D’ indicates that a default has occurred; or, for structured finance securities, (1) actual losses have reduced the principal balance of the security; or (2) actual losses have eliminated available credit support. Additionally, forecasted losses that would reduce the
principal balance of the security or eliminate the available credit support, subject to our reasonable judgment, may be indicative of a D rating.

For purposes of the above, the following terms shall have the following meanings:

“Default” shall generally include one or more of the following:

(i) Failure to pay (1) timely interest and/or (2) principal.
(ii) Any bankruptcy, administration, receivership, winding up, liquidation or other termination of the business of the issuer.
(iii) Execution of a distressed debt exchange. A distressed debt exchange is the repayment of a debt instrument for any consideration other than the par value of the debt, in cash, at its contracted maturity date in order to avoid a payment default or bankruptcy. Execution of a distressed debt exchange for some, but not all, of an obligor’s debt obligations would result in a rating of SD.
(iv) Failure to meet non-debt obligations such as trade payables would not be considered a default or selective default.
(v) Under certain circumstances, subject to Morningstar’s reasonable judgment, an interest or principal shortfall on a structured finance security may not be deemed a default. Factors that would affect Morningstar’s decision include the magnitude of the shortfall, likelihood of recurrence, certainty and timing of a repayment, and the current rating of the security.

“Forecasted losses” generally include one or more of the following:
(i) Projected losses resulting from specially serviced loans, and/or
(ii) Projected losses due to a decline in current appraisal values, and/or
(iii) Projected losses due to anticipated payment defaults on any loans.

“Rated final distribution date” typically is the rated final distribution date or term of similar import used in the related offering documents for the respective transaction or otherwise enumerated in the related Morningstar ratings report for such transaction.

NR (non-rated)
In situations where Morningstar rates certain classes of securities from an issuer or a transaction but does not rate other classes, a NR designation is applied by Morningstar to those securities it does not rate.

Rating Outlooks (Corporates and Financial Institutions Only)
A Morningstar rating Outlook is an opinion regarding the future trends for the rated issuer or security over the next one to two years for corporates and financial institutions. Morningstar discontinued Outlooks for Structured Finance ratings as of September 2016. Outlooks are subject to the various qualifications, caveats and considerations enumerated in the respective ratings report and/or Morningstar’s website at www.morningstarcreditratings.com. Outlooks for corporates and financial institutions are provided at the time of the initial rating and are
Rating outlooks are not considered NRSRO ratings under Morningstar’s policies and procedures. A rating outlook also serves as a directional indicator of potential future ratings movement based upon the analysis completed within our ratings and research reports. Credit ratings can be changed at any time if warranted by events or changes in performance. A stable outlook does not preclude a change in ratings, and a positive or negative outlook does not mean that a rating is certain to change. It is also possible that a rating with a positive outlook could be downgraded if credit quality deteriorates suddenly.

Outlooks address the likely direction of changes in the rating and are not related to specific rating levels. For example, an issuer can have a credit rating of AA and a negative outlook, and an issuer with a rating of B can have a positive outlook. Furthermore, Outlooks are not assigned to credit ratings CCC and below.

The types of rating outlooks and related meanings are enumerated below and subject to Morningstar’s policies and procedures:

Outlooks are assigned to corporate and financial institution ratings as part of Morningstar’s forward-looking rating methodology. The outlook considers trends in the economy and the issuer’s industry as well as trends, if any, in the key credit components that drive the rating methodologies. The outlook definitions are as follows:

**Positive**: Upgrade is possible within one to two years if current credit trends persist.

**Negative**: Downgrade is possible within one to two years if current credit trends persist.

**Stable**: No change is likely within one to two years if current credit trends persist.

**Rating Under Review**

Ratings are placed Under Review when it is likely that the rating will change but either the extent or the direction of the change cannot be determined immediately. Ratings reviews are typically initiated under the following circumstances:

1) An event such as an acquisition, regulatory ruling, or court decision that could have a material impact on the credit rating is anticipated but has not occurred.
2) An event such as a marked deviation from expected performance has already occurred, but sufficient information is not available to determine the impact of the event.
3) A change in Morningstar’s rating criteria has been made, which will require a review of all the ratings in an industry sector or security class affected by the criteria change.

Credit ratings Under Review designations are as follows:

**Under Review Positive**: The rating is likely to be raised. Rating symbol: UR+
**Under Review Negative:** The rating is likely to be lowered. Rating symbol: UR-

**Under Review Developing:** The rating may be raised or lowered. Rating symbol: UR

It is typically easier to determine the directional impact of an unexpected event than it is to determine its magnitude, so most Under Reviews will be positive or negative. The credit impact of an event such as a failed merger may be unclear even as to its direction, thus necessitating a developing review.

**Resolving Ratings Under Review Status**

Reviews initiated in response to an anticipated event will typically be resolved when the event occurs. If there is a prolonged period of uncertainty—for example, the length of time between the announcement and subsequent closing of a merger—Morningstar will issue periodic updates as needed to record the underlying credit trend of the issuer and the status of the event that led to the review.

Ratings Under Review initiated in response to an unanticipated event that has already occurred, such as an adverse legal ruling or an unanticipated decline in performance will typically be resolved within 90 days of the impact on future credit strength and operating performance becoming reasonably quantifiable.

Ratings Under Review initiated because of prospective changes in criteria will be resolved as soon as possible after publication of any revised criteria, typically within 60 days.

**Certain Considerations in Assigning Rating Opinions**

A credit rating and/or a rating outlook is only an opinion as to certain items enumerated herein in the description of credit ratings and rating outlook respectively, in either case, based solely on certain information and subject to various qualifications, caveats and considerations enumerated in the respective ratings letters, ratings report, and/or Morningstar’s website at [www.morningstarcreditratings.com](http://www.morningstarcreditratings.com).

The credit ratings address the likelihood of the timely payment interest and the ultimate repayment of principal by the rated final distribution or maturity date. When Morningstar is selected by an issuer or arranger to rate a structured finance transaction at issuance, a credit rating takes into account the credit quality of the asset pool, structural and legal aspects associated with the securities and the extent to which the payment stream from the mortgage pool is adequate to make payments required to the security holders. When rating a transaction on an investor-paid and/or unsolicited basis, Morningstar’s access to information, various parties and collateral may be reduced, and thereby, limit the scope of review. Therefore, credit ratings at any time Morningstar is providing such ratings solely reflect an analysis of the information enumerated in the respective ratings report. Investors should consider this distinction in the scope of the review and analysis.
Certain Factors Not Considered or Evaluated in Assigning Rating Opinions

Credit ratings, rating outlooks and any surveillance of such ratings at no time and in no event take into account or address the following: (a) the possibility that a security holder might suffer a lower than anticipated yield, (b) the likelihood of receipt of prepayment charges, assumption fees, prepayment premiums, prepayment fees or penalties, default interest or post-anticipated repayment date additional interest, (c) the likelihood of experiencing prepayment interest shortfalls, an assessment of whether or to what extent the interest payable on any class of securities may be reduced in connection with any prepayment interest shortfalls, or of receiving compensating interest payments, (d) the tax treatment of the securities or effect of taxes on the payments received, (e) the likelihood or willingness of the parties to the respective documents to meet their contractual obligations or the likelihood or willingness of any party or court to enforce, or hold enforceable, the documents in whole or in part, (f) an assessment of the yield to maturity that investors may experience, (g) other deal specific factors that may be enumerated in the respective ratings letters or deal reports from time to time, or (h) other non-credit risks, including, without limitation, market risks or liquidity. The likelihood, timing, or frequency of prepayments (both voluntary and involuntary) and its impact on interest payments or the degree to which such prepayments might differ from those originally anticipated is also not considered in the determination of credit ratings.

Morningstar generally does not rate interest-only securities or rake securities in a structured finance transaction unless requested to by the issuer or arranger for the transaction or by an investor. Any credit ratings and surveillance related to an interest-only security do not address: (a) the possibility that the holder of the interest-only security may not fully recover its initial investment in the event of delinquencies or defaults or rapid prepayments on the mortgage assets (including both voluntary and involuntary prepayments) or the application of any realized losses under the transaction documents or (b) the timing or magnitude of reductions of such notional amount. Therefore, ratings on an interest-only security solely address the obligation to pay interest timely on the notional amount as it may be reduced from time to time. For example, if the loans in a pool were to prepay in the initial month of the transaction, with the result that the holder of the interest-only security received only a single month’s interest and therefore, suffered a nearly complete loss of its investment, all amounts “due” to such holder will nevertheless have been paid, and such result is consistent with the rating on such interest-only security. Therefore, ratings on interest-only securities should be evaluated independently from similar ratings on other types of securities. For the purposes hereof, “interest-only security” shall mean a security based on a notional amount derived from the principal balance of other securities (which may be rated lower than such interest-only securities) and a “rake security” shall mean a security tied to the performance of a particular loan or portion of a loan. Any
analysis and considerations related to raze securities are reflected in the respective ratings report for the transaction.

Morningstar does not (i) issue short-term ratings, or (ii) rate, assess or review all corporate entities, credit support providers, seller(s), guarantors, trustees, certain accounts or investments, insurers, liquidity providers, hedge providers or other similar entities or items. Therefore, Morningstar’s structured finance ratings and analysis do may not take into consideration such characteristics of the transaction referenced in (i) and (ii) of the preceding sentence. Morningstar, in accordance with Morningstar’s policies and procedures, may consider a ranking and assessment of a master servicer, primary servicer, or special servicer performed by Morningstar’s Operational Risk Assessment Services group, if Morningstar’s methodology for that type of structured finance security or the applicable ratings report references any such consideration. Information regarding Morningstar’s Operational Risk Assessment Services group is available at www.morningstarcreditratings.com.

In addition, the ratings and analysis do not take into consideration (i) an assessment of the arranger(s), and/or prior holder(s) of the loan(s) included in the respective transaction and/or (ii) any potential or actual risk of repudiation, receivership or other ramifications related to FDIC administration and/or enforcement of FDIC rights and remedies with respect to any entity involved in the transaction.

A credit rating, a rating outlook or any related surveillance is (i) not a recommendation to purchase, sell or hold a security nor may it be relied upon for any such purpose and (ii) may be subject to revision or withdrawal at any time by Morningstar.

Morningstar is not an investment advisor. Morningstar does not provide investment, financial or other advice. No credit rating, rating outlook or surveillance shall constitute or be construed or represented as: (i) financial, investment, tax, legal or other advice, or (ii) a solicitation, recommendation, endorsement or offer to buy, hold or sell any security, other investment or other financial instrument, or to make any investment, financial or other decision. Morningstar does not consent to, (i) being named an “expert” under the federal securities laws including, without limitation, Section 7 of the Securities Act of 1933, or (ii) unless consistent with Morningstar’s policies and procedures and agreed to by Morningstar for a particular transaction, the integration, publication, inclusion or reference of any ratings, analysis or other information pertaining to Morningstar and/or the ratings contemplated hereunder in any prospectuses or registration statements or otherwise integrated or used in a manner that could impede (i) or (ii) of this sentence, in either case, unless and until Morningstar, in its sole discretion, may elect to change its policies and procedures with regard to the foregoing in writing.

While the above provides a general description of the definitions of Morningstar’s credit ratings and surveillance, for a particular transaction, the related ratings letters, ratings reports, and/or other information posted to Morningstar’s website at www.morningstarcreditratings.com, should be considered and reviewed in conjunction with your review of any credit rating.
Other Forms of Opinion

Credit Estimates
Credit estimates are point-in-time estimates of the consolidated corporate credit rating of an entity. Credit estimates are typically estimates of counterparty or guarantor credit risk made to support ratings of structured finance transactions. Credit estimates are not credit ratings and may be assigned with a lower level of information or analysis than credit ratings. Credit estimates use the same rating scale as credit ratings but are notated in lower case to indicate the lesser degree of reliance to be placed on credit estimates. Credit estimates are not assigned Outlooks. Credit estimates are typically not monitored unless they are made to directly or indirectly support a structured finance rating.

Withdrawn Ratings
Credit ratings may be withdrawn at Morningstar’s discretion or if the rated security or issue is paid in full. The symbol for withdrawn, paid in full, is ‘WE’. The symbol for ratings withdrawn due to default is ‘WD’. Ratings withdrawn for all other reasons are designated ‘WO’ and the reason for such withdrawal is disclosed when the withdrawal is published.