



IHS Markit™

# IHS Markit CMBX Index Rules

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## Introduction

The IHS Markit CMBX Indices are composed of reference obligations that are tranches of commercial mortgage-backed securities offerings. The reference obligations have to meet the eligibility criteria specified in these index rules.

## I. Administration of the Index

- 1.1. For the purpose of all CMBX Indices launched prior to January 1st 2011, there shall be eight CMBX Indices: CMBX.NA.AAA, CMBX.NA.AM, CMBX.NA.AJ, CMBX.NA.AA, CMBX.NA.A, CMBX.NA.BBB, CMBX.NA.BBB- and CMBX.NA.BB (collectively, the “CMBX Indices” and each, a “CMBX Index”). Each CMBX Index will be composed of twenty-five (25) reference obligations (“Reference Obligations”) that are tranches of commercial mortgage-backed securities offerings (each, a “CMBS Offering”) that meet the relevant eligibility criteria in Section 2 below.
- 1.2. For the purpose of all CMBX Indices launched after January 1st 2011, there shall be six CMBX Indices: CMBX.NA.AAA, CMBX.NA.AS, CMBX.NA.AA, CMBX.NA.A, CMBX.NA.BBB- and CMBX.NA.BB (collectively, the “CMBX Indices” and each, a “CMBX Index”). Each CMBX Index will be composed of twenty-five (25) reference obligations (“Reference Obligations”) that are tranches of commercial mortgage-backed securities offerings (each, a “CMBS Offering”) that meet the relevant eligibility criteria in Section 2 below.
- 1.3. CDS and/or the Administrator shall from time to time publish an updated list of Members participating in the determination of the CMBX Indices (the “CMBX Members”). Except for the initial CMBX Indices, each CMBX Index will begin on October 25 (or the next Business Day in the event that October 25 is not a Business Day) and April 25 (or the next Business Day in the event that April 25 is not a Business Day) of each calendar year (each such date, a “Roll Date”), beginning with October 25, 2006; provided that if at least seventy-five percent (75%) of the Eligible CMBX Members vote to change the Roll Date to another date, the Roll Date shall be the date approved by at least seventy-five percent (75%) of such Eligible CMBX Members.
- 1.4. Except as otherwise provided herein, these CMBX Rules will be subject to the General Rules Applicable to Voting and the Rules for Member Eligibility to Vote, each published with respect to the Dow Jones CDX Indices and for purposes of the Rules for Member Eligibility to Vote, each CMBX Index will be considered a Covered Index.
- 1.5. The determination of each CMBX Index will be administered by the Administrator based upon the rules and procedures provided herein. All information submitted by CMBX Members to the Administrator shall be received by the Administrator in confidence.
- 1.6. The Administrator has sole discretion to interpret the Rules.
- 1.7. Upon the occurrence of an event that the Administrator determines materially impacts the integrity of CMBX Index-related transactions, including but not limited to trading interruptions, market instability, and/or force majeure events, the Administrator, acting in a commercially reasonable manner, may at its sole discretion determine that it is appropriate to depart from the methodologies, timelines and/or procedures set forth in the Rules in order to obtain a result that preserves the economic intent of the CMBX Index. Where the best course of action is not clear the Administrator may consult the Eligible Members for views prior to making any such determination but will not be bound by the feedback received during such consultation. The determined course of action will be documented, communicated to all stakeholders and published on the Administrator website under the CMBX News page.
- 1.8. The Administrator will publish a single fixed rate for each CMBX Index, determined in accordance with Section 3.6.
- 1.9. Each CMBX Index shall be composed of twenty-five (25) equally weighted Reference Obligations.

- 1.10. Products based on the initial CMBX Indices will begin trading on March 7, 2006, or such other day approved by at least seventy-five percent (75%) of the Eligible CMBX Members.
- 1.11. All times referred to in these CMBX Rules refer to local time in New York, New York.

## II. Eligibility Rules

- 2.1. At any time, a CMBX Member shall be deemed not "Eligible" if any of the following criteria apply: (i) with respect to any vote under these CMBX Rules, if at such time the CMBX Member has been deemed to be Suspended with respect to the CMBX Index for certain failures to provide daily pricing, as provided in the Rules for Member Eligibility to Vote; or (ii) with respect to any vote to eliminate a particular Reference Obligation from the Proposed CMBS Offerings List (as defined below) conducted pursuant to Sections 3.2 or 3.3, where the CMBX Member has failed to respond to the polling to eliminate a CMBS Offering from the Proposed CMBS Offerings List. In the event that a CMBX Member becomes not Eligible for any of the foregoing reasons, the Administrator will provide the CMBX Member that has become not Eligible with a written notice informing it of the reason(s) it is not Eligible. Notwithstanding the foregoing, CDS shall at all times have the right to waive any or all of the foregoing criteria and to deem a CMBX Member to be Eligible.
- 2.2. For the purpose of all CMBX Indices launched prior to January 1st 2011 each Reference Obligation in each CMBX Index must meet the following criteria as of each Solicitation Date (as defined below):
- (a) Each Reference Obligation must be a single Qualified Tranche that is part of a CMBS Offering that includes tranches of securities that have Applicable Ratings of AAA, AA, A, BBB, BBB- and BB (such tranches, the "Required Tranches"). In addition, each CMBS Offering must include at least two tranches of securities with differing credit enhancement that are rated "AAA".

"Applicable Rating" means, for a tranche of securities, the rating thereof by any two of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's") or Standard & Poor's Rating Services ("S&P"); provided that if a tranche of securities has different ratings from Fitch, Moody's or S&P, the Applicable Rating for such tranche will be the applicable rating agency's equivalent of the lowest of such ratings.

"AAA" means a rating of AAA (if rated by Fitch or S&P) or Aaa (if rated by Moody's) by any two of Fitch, Moody's or S&P.

"AA" means a rating of AA (if rated by Fitch or S&P) or Aa2 (if rated by Moody's) by any two of Fitch, Moody's or S&P.

"A" means a rating of A (if rated by Fitch or S&P) or A2 (if rated by Moody's) by any two of Fitch, Moody's or S&P. "BBB" means a rating of BBB (if rated by Fitch or S&P) or Baa2 (if rated by Moody's) by any two of Fitch, Moody's or S&P.

"BBB-" means a rating of BBB- (if rated by Fitch or S&P) or Baa3 (if rated by Moody's) by any two of Fitch, Moody's or S&P.

"BB" means a rating of BB (if rated by Fitch or S&P) or Ba2 (if rated by Moody's) by any two of Fitch, Moody's or S&P.

"Qualified Tranche" means

- (i) with respect to the CMBX.NA.AAA Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the most

- credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.2(b));
- (ii) with respect to the CMBX.NA.AM Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the second least amount of credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life (and among tranches with equal weighted average lives, the tranche which had the largest aggregate principal amount at issuance, in each case that otherwise satisfies the eligibility criteria of Section 2.2(b))));
  - (iii) with respect to the CMBX.NA.AJ Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the least credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life (and among tranches with equal weighted average lives, the tranche which had the largest aggregate principal amount at issuance, in each case that otherwise satisfies the eligibility criteria of Section 2.2(b))));
  - (iv) with respect to the CMBX.NA.AA Index, the Required Tranche that is rated AA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life, in each case that otherwise satisfies the eligibility criteria of Section 2.2(b))));
  - (v) with respect to the CMBX.NA.A Index, the Required Tranche that is rated A (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.2(b))));
  - (vi) with respect to the CMBX.NA.BBB Index, the Required Tranche that is rated BBB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.2(b))));
  - (vii) with respect to the CMBX.NA.BBB- Index, the Required Tranche that is rated BBB- (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.2(b)))); and
  - (viii) with respect to the CMBX.NA.BB Index, the Required Tranche that is rated BB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.2(b))).
- (b) Each Required Tranche must be a USD-denominated, fixed-rate or floating-rate debt security or pass-through certificate or similar security entitling the holders thereof to receive payments that depend (except for rights or other assets designed to assure the servicing or timely distribution of proceeds to the holders) on the cash flow from a discrete pool of fixed rate mortgages, secured by security interests in commercial properties. For the avoidance of doubt, a Required Tranche cannot be secured by underlying assets that are credit-linked notes, synthetic CDOs or any similar synthetic obligations.
- (c) The aggregate principal amount of the securities issued in the CMBS Offering to which each Reference Obligation relates must have been greater than USD 700 million.
- (d) The securities issued in the CMBS Offering to which a Reference Obligation relates must be secured by at least fifty (50) separate mortgages that are obligations of at least ten (10)

borrowers which are not affiliates of each other or of the issuer of the CMBS Offering. The commercial properties that secure such mortgages must be sufficiently geographically diverse so that properties in one state in the United States do not represent more than forty percent (40%) of the aggregate value of the properties securing the CMBS Offering. No single real estate type (multi-family, office, etc.) can represent more than sixty percent (60%) of the aggregate value of the properties securing the CMBS Offering.

(e) With respect to the CMBX.NA.AAA Index only, the Qualified Tranche must be registered pursuant to an effective registration statement under the U.S. Securities Act of 1933 (the "Securities Act").

(f) With respect to each CMBX Index other than the CMBX.NA.AAA Index, if the applicable Qualified Tranche is not registered pursuant to an effective registration statement under the Securities Act, such Qualified Tranche must have been offered pursuant to an exemption from registration under Rule 144A of the Securities Act.

(g) With respect to the CMBX.NA.AAA Index only, the principal amount at issuance of the applicable Qualified Tranche must have been greater than USD 100 million.

(h) With respect to the CMBX.NA.AAA Index only, the Reference Obligation must have an expected weighted average life of greater than eight (8) years and less than twelve (12) years, calculated using a zero percent (0%) CPY scenario as of the applicable Solicitation Date.

(i) With respect to the CMBX.NA.AAA Index only, the expected weighted average life for the Reference Obligation will not decrease by more than (i) one (1) year if calculated using a one hundred percent (100%) CPP scenario and (ii) two (2) years if calculated using a one hundred percent (100%) CPY scenario, each as of the applicable Solicitation Date.

(j) No single real estate type (multi-family, office, etc.) can represent one hundred percent (100%) of the aggregate value of the properties securing the Reference Obligation.

(k) Each Reference Obligation must have a current factor, as determined pursuant to the most recent servicer report applicable to such Reference Obligation, of one (1) as of the applicable Solicitation Date.

(l) Each Required Tranche must bear publicly disclosed ratings from any two of Fitch, Moody's or S&P.

(m) No Required Tranche may be insured or guaranteed pursuant to a financial guarantee insurance policy, guarantee or similar instrument issued by a third party.

(n) The identity and principal economic terms of each Required Tranche must be listed on Bloomberg Financial Markets ("Bloomberg") (provided that information as to cashflows under such Required Tranche need not be published on Bloomberg).

(o) The trustee report (or other similar periodic statement) related to each Required Tranche must be reasonably obtainable by the Administrator.

2.3 For the purpose of all CMBX Indices launched on or after January 1st, 2011 and on or prior to December 31, 2014, each Reference Obligation in each CMBX Index must meet the following criteria as of each Solicitation Date (as defined below):

(a) Each Reference Obligation must be a single Qualified Tranche that is part of a CMBS Offering that includes tranches of securities that have Applicable Ratings of AAA, AA, A, BBB-, and BB (such tranches, the "Required Tranches"). In addition, each CMBS Offering must include at least two tranches of securities with differing credit enhancement with Applicable Ratings of AAA.

"Applicable Rating" means, for a tranche of securities, the rating at issuance thereof by at least one of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), or Standard & Poor's Rating Services ("S&P") and at least two of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), DBRS ("DBRS"), Kroll Bond Rating Agency, Inc. ("Kroll") or Morningstar, Inc. ("Morningstar"); provided that if a tranche of securities has different ratings from Fitch, Moody's, S&P, DBRS, Kroll or Morningstar the Applicable Rating for such tranche will be the applicable rating agency's equivalent of the lowest of such ratings.

"AAA" means a rating at issuance of AAA (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aaa (if rated by Moody's).

"AA" means a rating of AA or AA- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa2 or Aa3 (if rated by Moody's).

"A" means a rating of A or A- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or A2 or A3 (if rated by Moody's).

"BBB-" means a rating of BBB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Baa3 (if rated by Moody's).

"BB" means a rating of BB or BB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Ba2 or Ba3 (if rated by Moody's).

"Qualified Tranche" means

- (i) with respect to the CMBX.NA.AAA Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.3(b)));
  - (ii) with respect to the CMBX.NA.AS Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the least amount of credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life (and among tranches with equal weighted average lives, the tranche which had the largest aggregate principal amount at issuance, in each case that otherwise satisfies the eligibility criteria of Section 2.3(b))));
  - (iii) with respect to the CMBX.NA.AA Index, the Required Tranche that is rated AA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life, in each case that otherwise satisfies the eligibility criteria of Section 2.3(b)));
  - (iv) with respect to the CMBX.NA.A Index, the Required Tranche that is rated A (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.3(b)));
  - (v) with respect to the CMBX.NA.BBB- Index, the Required Tranche that is rated BBB- (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.3(b))); and
  - (vi) with respect to the CMBX.NA.BB Index, the Required Tranche that is rated BB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.3(b))).
- (b) Each Required Tranche must be in the form of, or represented by, a USD denominated, fixed-rate or floating-rate debt security or pass-through certificate or similar security entitling the holders thereof to receive payments that depend (except for rights or other assets designed to assure the servicing or timely distribution of proceeds to the holders) on the cash flow from a discrete pool of fixed rate mortgages, secured by security interests in commercial properties. For the avoidance of doubt, a Qualified Tranche cannot be secured by underlying assets that are credit-linked notes, synthetic CDOs or any similar synthetic obligations.
- (c) The Qualified Tranche must (i) contain at least ten (10) mortgages and at least 95 per cent of such mortgages must be in respect of commercial properties located in the United States of America and (ii) must be secured by at least two (2) mortgages that are

obligations of different borrowers, which are not affiliates of each other or of the issuer of the CMBS Offering.

- (d) With respect to the CMBX.NA.AAA Index only, the Qualified Tranche must be registered pursuant to an effective registration statement under the U.S. Securities Act of 1933 (the "Securities Act").
- (e) With respect to the CMBX.NA.AAA Index only, the principal amount at issuance of the applicable Qualified Tranche must have been greater than USD 100 million.
- (f) With respect to the CMBX.NA.AAA Index only, the Reference Obligation must have an expected weighted average life of greater than eight (8) years and less than twelve (12) years, calculated using a zero percent (0%) CPY scenario as of the applicable Solicitation Date.
- (g) With respect to the CMBX.NA.AAA Index only, the expected weighted average life for the Reference Obligation will not decrease by more than (i) one (1) year if calculated using a one hundred percent (100%) CPP scenario and (ii) two (2) years if calculated using a one hundred percent (100%) CPY scenario, each as of the applicable Solicitation Date.
- (h) No single real estate type (multi-family, office, etc.) can represent one hundred percent (100%) of the aggregate value of the properties securing the Reference Obligation.
- (i) Each Reference Obligation must have a current factor, as determined pursuant to the most recent servicer report applicable to such Reference Obligation, of one (1) as of the applicable Solicitation Date.
- (j) Each Required Tranche must bear publicly disclosed ratings from any two of Fitch, Moody's, S&P, DBRS, Kroll or Morningstar.
- (k) No Qualified Tranche may be insured or guaranteed pursuant to a financial guarantee insurance policy, guarantee or similar instrument issued by a third party.
- (l) The identity and principal economic terms of each Required Tranche must be listed on Bloomberg Financial Markets ("Bloomberg") (provided that information as to cashflows under such Required Tranche need not be published on Bloomberg).
- (m) The trustee report (or other similar periodic statement) and offering documentation (prospectus supplement or offering circular) related to each Qualified Tranche must be reasonably obtainable by the Administrator.
- (n) The CMBS Offering must have a date of issuance on or after January 1st, 2011 and on or prior to December 31, 2013.

2.4 For the purpose of all CMBX Indices launched on or after January 1st, 2015, and on or prior to December 31, 2015, each Reference Obligation in each CMBX Index must meet the following criteria as of each Solicitation Date (as defined below):

- (a) Each Reference Obligation must be a single Qualified Tranche that is part of a CMBS Offering that includes tranches of securities that have Applicable Ratings of AAA, AA+, AA, A, BBB-, and BB (such tranches, the "Required Tranches"). In addition, each CMBS Offering must include at least two tranches of securities with differing credit enhancement with Applicable Ratings of AAA.

"Applicable Rating" means, for a tranche of securities, the rating at issuance thereof by at least one of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), or DBRS ("DBRS") and at least two of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), DBRS ("DBRS"), Kroll Bond Rating Agency, Inc. ("Kroll") or Morningstar, Inc. ("Morningstar"); provided that if a tranche of securities has different ratings from Fitch, Moody's, S&P, DBRS, Kroll or Morningstar the Applicable Rating for such tranche will be the applicable rating agency's equivalent of the lowest of such ratings.

"AAA" means a rating at issuance of AAA (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aaa (if rated by Moody's).

"AA+" means a rating of AA+ (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa1 (if rated by Moody's).



“AA” means a rating of AA or AA- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa2 or Aa3 (if rated by Moody’s).

“A” means a rating of A or A- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or A2 or A3 (if rated by Moody’s).

“BBB-” means a rating of BBB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Baa3 (if rated by Moody’s).

“BB” means a rating of BB or BB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Ba2 or Ba3 (if rated by Moody’s).

“Qualified Tranche” means

- (i) with respect to the CMBX.NA.AAA Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.4(b)));
  - (ii) with respect to the CMBX.NA.AS Index, the Required Tranche that is rated AA+ or AAA (and if there is more than one such tranche, the tranche with the least amount of credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life (and among tranches with equal weighted average lives, the tranche which had the largest aggregate principal amount at issuance, in each case that otherwise satisfies the eligibility criteria of Section 2.4(b))));
  - (iii) with respect to the CMBX.NA.AA Index, the Required Tranche that is rated AA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life, in each case that otherwise satisfies the eligibility criteria of Section 2.4(b)));
  - (iv) with respect to the CMBX.NA.A Index, the Required Tranche that is rated A (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.4(b)));
  - (v) with respect to the CMBX.NA.BBB- Index, the Required Tranche that is rated BBB- (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.4(b))); and
  - (vi) with respect to the CMBX.NA.BB Index, the Required Tranche that is rated BB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.4(b))).
- (b) Each Required Tranche must be in the form of, or represented by, a USD denominated, fixed-rate or floating-rate debt security or pass-through certificate or similar security entitling the holders thereof to receive payments that depend (except for rights or other assets designed to assure the servicing or timely distribution of proceeds to the holders) on the cash flow from a discrete pool of fixed rate mortgages, secured by security interests in commercial properties. For the avoidance of doubt, a Qualified Tranche cannot be secured by underlying assets that are credit-linked notes, synthetic CDOs or any similar synthetic obligations.
- (c) The Qualified Tranche must (i) contain at least ten (10) mortgages and at least 95 per cent of such mortgages must be in respect of commercial properties located in the United States of America and (ii) must be secured by at least two (2) mortgages that are obligations of different borrowers, which are not affiliates of each other or of the issuer of the CMBS Offering.

- (d) With respect to the CMBX.NA.AAA Index only, the Qualified Tranche must be registered pursuant to an effective registration statement under the U.S. Securities Act of 1933 (the "Securities Act").
- (e) With respect to the CMBX.NA.AAA Index only, the principal amount at issuance of the applicable Qualified Tranche must have been greater than USD 100 million.
- (f) With respect to the CMBX.NA.AAA Index only, the Reference Obligation must have an expected weighted average life of greater than eight (8) years and less than twelve (12) years, calculated using a zero percent (0%) CPY scenario as of the applicable Solicitation Date.
- (g) With respect to the CMBX.NA.AAA Index only, the expected weighted average life for the Reference Obligation will not decrease by more than (i) one (1) year if calculated using a one hundred percent (100%) CPP scenario and (ii) two (2) years if calculated using a one hundred percent (100%) CPY scenario, each as of the applicable Solicitation Date.
- (h) No single real estate type (multi-family, office, etc.) can represent one hundred percent (100%) of the aggregate value of the properties securing the Reference Obligation.
- (i) Each Reference Obligation must have a current factor, as determined pursuant to the most recent servicer report applicable to such Reference Obligation, of one (1) as of the applicable Solicitation Date.
- (j) Each Required Tranche must bear publicly disclosed ratings from any two of Fitch, Moody's, S&P, DBRS, Kroll or Morningstar.
- (k) No Qualified Tranche may be insured or guaranteed pursuant to a financial guarantee insurance policy, guarantee or similar instrument issued by a third party.
- (l) The identity and principal economic terms of each Required Tranche must be listed on Bloomberg Financial Markets ("Bloomberg") (provided that information as to cashflows under such Required Tranche need not be published on Bloomberg).
- (m) The trustee report (or other similar periodic statement) and offering documentation (prospectus supplement or offering circular) related to each Qualified Tranche must be reasonably obtainable by the Administrator.
- (n) The CMBS Offering must have a date of issuance on or after January 1st, 2014.

2.5 For the purpose of all CMBX Indices launched on or after January 1st, 2016, and on or prior to December 31, 2016, each Reference Obligation in each CMBX Index must meet the following criteria as of each Solicitation Date (as defined below):

- (a) Each Reference Obligation must be a single Qualified Tranche that is part of a CMBS Offering that includes tranches of securities that have Applicable Ratings of AAA, AA+, AA, A, BBB-, and BB (such tranches, the "Required Tranches"). In addition, each CMBS Offering must include at least two tranches of securities with differing credit enhancement with Applicable Ratings of AAA.

"Applicable Rating" means, for a tranche of securities, the rating at issuance thereof by at least one of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), or DBRS ("DBRS") and at least two of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), DBRS ("DBRS"), Kroll Bond Rating Agency, Inc. ("Kroll") or Morningstar, Inc. ("Morningstar"); provided that if a tranche of securities has different ratings from Fitch, Moody's, S&P, DBRS, Kroll or Morningstar the Applicable Rating for such tranche will be the rating determined by calculating an average of available ratings, as detailed below.

For the purpose of calculating the average rating, a numerical score is attached to each rating provided by a considered rating agency. The following table provides the numerical translation for the six agencies currently considered. Any numerical score that falls between two whole numbers will get rounded to the nearest score. For example, 3.2 and 3.4 will both get rounded to 3, while 6.5 and 6.7 will both get rounded to 7.

Fitch	Moody's	Standard & Poor's	DBRS	Morningstar	Kroll	Score	Applicable Rating
AAA	Aaa	AAA	AAA	AAA	AAA	1	AAA
AA+	Aa1	AA+	AAH	AA+	AA+	2	AA+
AA	Aa2	AA	AA	AA	AA	3	AA
AA-	Aa3	AA-	AAL	AA-	AA-	4	AA-
A+	A1	A+	AH	A+	A+	5	A+
A	A2	A	A	A	A	6	A
A-	A3	A-	AL	A-	A-	7	A-
BBB+	Baa1	BBB+	BBBH	BBB+	BBB+	8	BBB+
BBB	Baa2	BBB	BBB	BBB	BBB	9	BBB
BBB-	Baa3	BBB-	BBBL	BBB-	BBB-	10	BBB-
BB+	Ba1	BB+	BBH	BB+	BB+	11	BB+
BB	Ba2	BB	BB	BB	BB	12	BB
BB-	Ba3	BB-	BBL	BB-	BB-	13	BB-
B+	B1	B+	BH	B+	B+	14	B+
B	B2	B	B	B	B	15	B
B-	B3	B-	BL	B-	B-	16	B-
CCC+	Caa1	CCC+	CCCH			17	CCC+
CCC	Caa2	CCC				18	CCC
CCC-	Caa3	CCC-				19	CCC-
CC	Ca	CC				20	CC
C	C	C				21	C
D/RD		D				22	D

"AAA" means a rating at issuance of AAA (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aaa (if rated by Moody's).

"AA+" means a rating of AA+ (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa1 (if rated by Moody's).

"AA" means a rating of AA or AA- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa2 or Aa3 (if rated by Moody's).

"A" means a rating of A or A- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or A2 or A3 (if rated by Moody's).

"BBB-" means a rating of BBB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Baa3 (if rated by Moody's).

"BB" means a rating of BB or BB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Ba2 or Ba3 (if rated by Moody's).

"Qualified Tranche" means

- (iv) with respect to the CMBX.NA.AAA Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.5(b)));
  - (v) with respect to the CMBX.NA.AS Index, the Required Tranche that is rated AA or above and has a tranche name of AS or AM (or variants such as "A-S," "A-M" or similar, as specified in the relevant prospectus or relevant data files used by the Administrator) and that otherwise satisfies the eligibility criteria of Section 2.5(b);
  - (vi) with respect to the CMBX.NA.AA Index, the Required Tranche that is rated AA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life, in each case that otherwise satisfies the eligibility criteria of Section 2.5(b)));
  - (iv) with respect to the CMBX.NA.A Index, the Required Tranche that is rated A (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.5(b)));
  - (v) with respect to the CMBX.NA.BBB- Index, the Required Tranche that is rated BBB- (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.5(b))); and
  - (vi) with respect to the CMBX.NA.BB Index, the Required Tranche that is rated BB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.5(b))).
- (b) Each Required Tranche must be in the form of, or represented by, a USD denominated, fixed-rate or floating-rate debt security or pass-through certificate or similar security entitling the holders thereof to receive payments that depend (except for rights or other assets designed to assure the servicing or timely distribution of proceeds to the holders) on the cash flow from a discrete pool of fixed rate mortgages, secured by security interests in commercial properties. For the avoidance of doubt, a Qualified Tranche cannot be secured by underlying assets that are credit-linked notes, synthetic CDOs or any similar synthetic obligations.
  - (c) The Qualified Tranche must (i) contain at least ten (10) mortgages and at least 95 per cent of such mortgages must be in respect of commercial properties located in the United States of America and (ii) must be secured by at least two (2) mortgages that are obligations of different borrowers, which are not affiliates of each other or of the issuer of the CMBS Offering.
  - (d) With respect to the CMBX.NA.AAA Index only, the Qualified Tranche must be registered pursuant to an effective registration statement under the U.S. Securities Act of 1933 (the "Securities Act").
  - (e) With respect to the CMBX.NA.AAA Index only, the principal amount at issuance of the applicable Qualified Tranche must have been greater than USD 100 million.
  - (f) With respect to the CMBX.NA.AAA Index only, the Reference Obligation must have an expected weighted average life of greater than eight (8) years and less than twelve (12) years, calculated using a zero percent (0%) CPY scenario as of the applicable Solicitation Date.
  - (g) With respect to the CMBX.NA.AAA Index only, the expected weighted average life for the Reference Obligation will not decrease by more than (i) one (1) year if calculated using a one hundred percent (100%) CPP scenario and (ii) two (2) years if calculated using a one hundred percent (100%) CPY scenario, each as of the applicable Solicitation Date.

- (h) No single real estate type (multi-family, office, etc.) can represent one hundred percent (100%) of the aggregate value of the properties securing the Reference Obligation.
- (i) Each Reference Obligation must have a current factor, as determined pursuant to the most recent servicer report applicable to such Reference Obligation, of one (1) as of the applicable Solicitation Date.
- (j) Each Required Tranche must bear publicly disclosed ratings from any two of Fitch, Moody's, S&P, DBRS, Kroll or Morningstar.
- (k) No Qualified Tranche may be insured or guaranteed pursuant to a financial guarantee insurance policy, guarantee or similar instrument issued by a third party.
- (l) The identity and principal economic terms of each Required Tranche must be listed on Bloomberg Financial Markets ("Bloomberg") (provided that information as to cashflows under such Required Tranche need not be published on Bloomberg).
- (m) The trustee report (or other similar periodic statement) and offering documentation (prospectus supplement or offering circular) related to each Qualified Tranche must be reasonably obtainable by the Administrator.
- (n) The CMBS Offering must have a date of issuance on or after January 1st, 2015.

2.6 For the purpose of all CMBX Indices launched on or after January 1st, 2017, and on or prior to December 31, 2017, each Reference Obligation in each CMBX Index must meet the following criteria as of each Solicitation Date (as defined below):

- (a) Each Reference Obligation must be a single Qualified Tranche that is part of a CMBS Offering that includes tranches of securities that have Applicable Ratings of AAA, AA+, AA, A, BBB-, and BB (such tranches, the "Required Tranches"). In addition, each CMBS Offering must include at least two tranches of securities with differing credit enhancement with Applicable Ratings of AAA.

"Applicable Rating" means, for a tranche of securities, the rating at issuance thereof by at least one of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), or DBRS ("DBRS") and at least two of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), DBRS ("DBRS"), Kroll Bond Rating Agency, Inc. ("Kroll") or Morningstar, Inc. ("Morningstar"); provided that if a tranche of securities has different ratings from Fitch, Moody's, S&P, DBRS, Kroll or Morningstar the Applicable Rating for such tranche will be the rating determined by calculating an average of available ratings, as detailed below.

For the purpose of calculating the average rating, a numerical score is attached to each rating provided by a considered rating agency. The following table provides the numerical translation for the six agencies currently considered. Any numerical score that falls between two whole numbers will get rounded to the nearest score. For example, 3.2 and 3.4 will both get rounded to 3, while 6.5 and 6.7 will both get rounded to 7.

Fitch	Moody's	Standard & Poor's	DBRS	Morningstar	Kroll	Score	Applicable Rating
AAA	Aaa	AAA	AAA	AAA	AAA	1	AAA
AA+	Aa1	AA+	AAH	AA+	AA+	2	AA+
AA	Aa2	AA	AA	AA	AA	3	AA
AA-	Aa3	AA-	AAL	AA-	AA-	4	AA-
A+	A1	A+	AH	A+	A+	5	A+
A	A2	A	A	A	A	6	A

A-	A3	A-	AL	A-	A-	7	A-
BBB+	Baa1	BBB+	BBBH	BBB+	BBB+	8	BBB+
BBB	Baa2	BBB	BBB	BBB	BBB	9	BBB
BBB-	Baa3	BBB-	BBBL	BBB-	BBB-	10	BBB-
BB+	Ba1	BB+	BBH	BB+	BB+	11	BB+
BB	Ba2	BB	BB	BB	BB	12	BB
BB-	Ba3	BB-	BBL	BB-	BB-	13	BB-
B+	B1	B+	BH	B+	B+	14	B+
B	B2	B	B	B	B	15	B
B-	B3	B-	BL	B-	B-	16	B-
CCC+	Caa1	CCC+	CCCH			17	CCC+
CCC	Caa2	CCC				18	CCC
CCC-	Caa3	CCC-				19	CCC-
CC	Ca	CC				20	CC
C	C	C				21	C
D/RD		D				22	D

"AAA" means a rating at issuance of AAA (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aaa (if rated by Moody's).

"AA+" means a rating of AA+ (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa1 (if rated by Moody's).

"AA" means a rating of AA or AA- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa2 or Aa3 (if rated by Moody's).

"A" means a rating of A or A- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or A2 or A3 (if rated by Moody's).

"BBB-" means a rating of BBB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Baa3 (if rated by Moody's).

"BB" means a rating of BB or BB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Ba2 or Ba3 (if rated by Moody's).

"Qualified Tranche" means

(vii) with respect to the CMBX.NA.AAA Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b)));

(viii) with respect to the CMBX.NA.AS Index, the Required Tranche that is rated AA or above and has a tranche name of AS or AM (or variants such as "A-S," "A-M" or similar, as specified in the relevant prospectus or relevant data files used by the Administrator) and that otherwise satisfies the eligibility criteria of Section 2.6(b);

(ix) with respect to the CMBX.NA.AA Index, the Required Tranche that is rated AA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life, in each case that otherwise satisfies the eligibility criteria of Section 2.6(b)));

- (iv) with respect to the CMBX.NA.A Index, the Required Tranche that is rated A (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b)));
  - (v) with respect to the CMBX.NA.BBB- Index, the Required Tranche that is rated BBB- (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))); and
  - (vi) with respect to the CMBX.NA.BB Index, the Required Tranche that is rated BB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))).
- (b) Each Required Tranche must be in the form of, or represented by, a USD denominated, fixed-rate or floating-rate debt security or pass-through certificate or similar security entitling the holders thereof to receive payments that depend (except for rights or other assets designed to assure the servicing or timely distribution of proceeds to the holders) on the cash flow from a discrete pool of fixed rate mortgages, secured by security interests in commercial properties. For the avoidance of doubt, a Qualified Tranche cannot be secured by underlying assets that are credit-linked notes, synthetic CDOs or any similar synthetic obligations.
  - (c) The Qualified Tranche must (i) contain at least ten (10) mortgages and at least 95 per cent of such mortgages must be in respect of commercial properties located in the United States of America and (ii) must be secured by at least two (2) mortgages that are obligations of different borrowers, which are not affiliates of each other or of the issuer of the CMBS Offering.
  - (d) With respect to the CMBX.NA.AAA Index only, the Qualified Tranche must be registered pursuant to an effective registration statement under the U.S. Securities Act of 1933 (the "Securities Act").
  - (e) With respect to the CMBX.NA.AAA Index only, the principal amount at issuance of the applicable Qualified Tranche must have been greater than USD 100 million.
  - (f) With respect to the CMBX.NA.AAA Index only, the Reference Obligation must have an expected weighted average life of greater than eight (8) years and less than twelve (12) years, calculated using a zero percent (0%) CPY scenario as of the applicable Solicitation Date.
  - (g) With respect to the CMBX.NA.AAA Index only, the expected weighted average life for the Reference Obligation will not decrease by more than (i) one (1) year if calculated using a one hundred percent (100%) CPP scenario and (ii) two (2) years if calculated using a one hundred percent (100%) CPY scenario, each as of the applicable Solicitation Date.
  - (h) No single real estate type (multi-family, office, etc.) can represent one hundred percent (100%) of the aggregate value of the properties securing the Reference Obligation.
  - (i) Each Reference Obligation must have a current factor, as determined pursuant to the most recent servicer report applicable to such Reference Obligation, of one (1) as of the applicable Solicitation Date.
  - (j) Each Required Tranche must bear publicly disclosed ratings from any two of Fitch, Moody's, S&P, DBRS, Kroll or Morningstar.
  - (k) No Qualified Tranche may be insured or guaranteed pursuant to a financial guarantee insurance policy, guarantee or similar instrument issued by a third party.
  - (l) The identity and principal economic terms of each Required Tranche must be listed on Bloomberg Financial Markets ("Bloomberg") (provided that information as to cashflows under such Required Tranche need not be published on Bloomberg).
  - (m) The trustee report (or other similar periodic statement) and offering documentation (prospectus supplement or offering circular) related to each Qualified Tranche must be reasonably obtainable by the Administrator.

- (n) The CMBS Offering must have a date of issuance on or after January 1st, 2016.
- (o) Limit the number of deals per issuer in the index at five.

2.7 For the purpose of all CMBX Indices launched on or after January 1st, 2018, each Reference Obligation in each CMBX Index must meet the following criteria as of each Solicitation Date (as defined below):

- (a) Each Reference Obligation must be a single Qualified Tranche that is part of a CMBS Offering that includes tranches of securities that have Applicable Ratings of AAA, AA+, AA, A, BBB-, and BB (such tranches, the “Required Tranches”). In addition, each CMBS Offering must include at least two tranches of securities with differing credit enhancement with Applicable Ratings of AAA.

"Applicable Rating" means, for a tranche of securities, the rating at issuance thereof by at least one of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), or DBRS ("DBRS") and at least two of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), DBRS ("DBRS"), Kroll Bond Rating Agency, Inc. ("Kroll") or Morningstar, Inc. ("Morningstar"); provided that if a tranche of securities has different ratings from Fitch, Moody's, S&P, DBRS, Kroll or Morningstar the Applicable Rating for such tranche will be the rating determined by calculating an average of available ratings, as detailed below.

For the purpose of calculating the average rating, a numerical score is attached to each rating provided by a considered rating agency. The following table provides the numerical translation for the six agencies currently considered. Any numerical score that falls between two whole numbers will get rounded to the nearest score. For example, 3.2 and 3.4 will both get rounded to 3, while 6.5 and 6.7 will both get rounded to 7.

Fitch	Moody's	Standard & Poor's	DBRS	Morningstar	Kroll	Score	Applicable Rating
AAA	Aaa	AAA	AAA	AAA	AAA	1	AAA
AA+	Aa1	AA+	AAH	AA+	AA+	2	AA+
AA	Aa2	AA	AA	AA	AA	3	AA
AA-	Aa3	AA-	AAL	AA-	AA-	4	AA-
A+	A1	A+	AH	A+	A+	5	A+
A	A2	A	A	A	A	6	A
A-	A3	A-	AL	A-	A-	7	A-
BBB+	Baa1	BBB+	BBBH	BBB+	BBB+	8	BBB+
BBB	Baa2	BBB	BBB	BBB	BBB	9	BBB
BBB-	Baa3	BBB-	BBBL	BBB-	BBB-	10	BBB-
BB+	Ba1	BB+	BBH	BB+	BB+	11	BB+
BB	Ba2	BB	BB	BB	BB	12	BB
BB-	Ba3	BB-	BBL	BB-	BB-	13	BB-
B+	B1	B+	BH	B+	B+	14	B+
B	B2	B	B	B	B	15	B
B-	B3	B-	BL	B-	B-	16	B-



CCC+	Caa1	CCC+	CCCH			17	CCC+
CCC	Caa2	CCC				18	CCC
CCC-	Caa3	CCC-				19	CCC-
CC	Ca	CC				20	CC
C	C	C				21	C
D/RD		D				22	D

"AAA" means a rating at issuance of AAA (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aaa (if rated by Moody's).

"AA+" means a rating of AA+ (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa1 (if rated by Moody's).

"AA" means a rating of AA or AA- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa2 or Aa3 (if rated by Moody's).

"A" means a rating of A or A- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or A2 or A3 (if rated by Moody's).

"BBB-" means a rating of BBB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Baa3 (if rated by Moody's).

"BB" means a rating of BB or BB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Ba2 or Ba3 (if rated by Moody's).

"Qualified Tranche" means

- (i) with respect to the CMBX.NA.AAA Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b)));
- (ii) with respect to the CMBX.NA.AS Index, the Required Tranche that is rated AA or above and has a tranche name of AS or AM (or variants such as "A-S," "A-M" or similar, as specified in the relevant prospectus or relevant data files used by the Administrator) and that otherwise satisfies the eligibility criteria of Section 2.6(b);
- (iii) with respect to the CMBX.NA.AA Index, the Required Tranche that is rated AA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life, in each case that otherwise satisfies the eligibility criteria of Section 2.6(b)));
- (iv) with respect to the CMBX.NA.A Index, the Required Tranche that is rated A (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b)));
- (v) with respect to the CMBX.NA.BBB- Index, the Required Tranche that is rated BBB- (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))); and
- (vi) with respect to the CMBX.NA.BB Index, the Required Tranche that is rated BB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))).

- (b) Each Required Tranche must be in the form of, or represented by, a USD denominated, fixed-rate or floating-rate debt security or pass-through certificate or similar security entitling the holders thereof to receive payments that depend (except for rights or other assets designed to assure the servicing or timely distribution of proceeds to the holders) on the cash flow from a discrete pool of fixed rate mortgages, secured by security interests in commercial properties. For the avoidance of doubt, a Qualified Tranche cannot be secured by underlying assets that are credit-linked notes, synthetic CDOs or any similar synthetic obligations.
- (c) The Qualified Tranche must (i) contain at least ten (10) mortgages and at least 95 per cent of such mortgages must be in respect of commercial properties located in the United States of America and (ii) must be secured by at least two (2) mortgages that are obligations of different borrowers, which are not affiliates of each other or of the issuer of the CMBS Offering.
- (d) With respect to the CMBX.NA.AAA Index only, the Qualified Tranche must be registered pursuant to an effective registration statement under the U.S. Securities Act of 1933 (the "Securities Act").
- (e) With respect to the CMBX.NA.AAA Index only, the principal amount at issuance of the applicable Qualified Tranche must have been greater than USD 100 million.
- (f) With respect to the CMBX.NA.AAA Index only, the Reference Obligation must have an expected weighted average life of greater than eight (8) years and less than twelve (12) years, calculated using a zero percent (0%) CPY scenario as of the applicable Solicitation Date.
- (g) With respect to the CMBX.NA.AAA Index only, the expected weighted average life for the Reference Obligation will not decrease by more than (i) one (1) year if calculated using a one hundred percent (100%) CPP scenario and (ii) two (2) years if calculated using a one hundred percent (100%) CPY scenario, each as of the applicable Solicitation Date.
- (h) No single real estate type (multi-family, office, etc.) can represent one hundred percent (100%) of the aggregate value of the properties securing the Reference Obligation.
- (i) Each Reference Obligation must have a current factor, as determined pursuant to the most recent servicer report applicable to such Reference Obligation, of one (1) as of the applicable Solicitation Date.
- (j) Each Required Tranche must bear publicly disclosed ratings from any two of Fitch, Moody's, S&P, DBRS, Kroll or Morningstar.
- (k) No Qualified Tranche may be insured or guaranteed pursuant to a financial guarantee insurance policy, guarantee or similar instrument issued by a third party.
- (l) The identity and principal economic terms of each Required Tranche must be listed on Bloomberg Financial Markets ("Bloomberg") (provided that information as to cashflows under such Required Tranche need not be published on Bloomberg).
- (m) The trustee report (or other similar periodic statement) and offering documentation (prospectus supplement or offering circular) related to each Qualified Tranche must be reasonably obtainable by the Administrator.
- (n) The CMBS Offering must have a date of issuance on or after January 1st, 2017.
- (o) There can be a maximum of four deals per risk retention holding CMBX market participant. The deals that firms maintain risk exposure to are based on the self-disclosure of CMBX industry participants to IHS Markit prior to a new index series launch.
- (p) Exclude deals with a Risk Retention Type equal to Horizontal. If after including all qualifying deals where Risk Retention Type is not equal Horizontal there are still less than 25, then add Horizontal deals to the index until a total of 25 are selected.

2.8 For the purpose of all CMBX Indices launched on or after January 1st, 2019, each Reference Obligation in each CMBX Index must meet the following criteria as of each Solicitation Date (as defined below):

- (a) Each Reference Obligation must be a single Qualified Tranche that is part of a CMBS Offering that includes tranches of securities that have Applicable Ratings of AAA, AA+, AA,

A, BBB-, and BB (such tranches, the “Required Tranches”). In addition, each CMBS Offering must include at least two tranches of securities with differing credit enhancement with Applicable Ratings of AAA.

"Applicable Rating" means, for a tranche of securities, the rating at issuance thereof by at least one of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), or DBRS ("DBRS") and at least two of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), DBRS ("DBRS"), Kroll Bond Rating Agency, Inc. ("Kroll") or Morningstar, Inc. ("Morningstar"); provided that if a tranche of securities has different ratings from Fitch, Moody's, S&P, DBRS, Kroll or Morningstar the Applicable Rating for such tranche will be the rating determined by calculating an average of available ratings, as detailed below.

For the purpose of calculating the average rating, a numerical score is attached to each rating provided by a considered rating agency. The following table provides the numerical translation for the six agencies currently considered. Any numerical score that falls between two whole numbers will get rounded to the nearest score. For example, 3.2 and 3.4 will both get rounded to 3, while 6.5 and 6.7 will both get rounded to 7.

Fitch	Moody's	Standard & Poor's	DBRS	Morningstar	Kroll	Score	Applicable Rating
AAA	Aaa	AAA	AAA	AAA	AAA	1	AAA
AA+	Aa1	AA+	AAH	AA+	AA+	2	AA+
AA	Aa2	AA	AA	AA	AA	3	AA
AA-	Aa3	AA-	AAL	AA-	AA-	4	AA-
A+	A1	A+	AH	A+	A+	5	A+
A	A2	A	A	A	A	6	A
A-	A3	A-	AL	A-	A-	7	A-
BBB+	Baa1	BBB+	BBBH	BBB+	BBB+	8	BBB+
BBB	Baa2	BBB	BBB	BBB	BBB	9	BBB
BBB-	Baa3	BBB-	BBBL	BBB-	BBB-	10	BBB-
BB+	Ba1	BB+	BBH	BB+	BB+	11	BB+
BB	Ba2	BB	BB	BB	BB	12	BB
BB-	Ba3	BB-	BBL	BB-	BB-	13	BB-
B+	B1	B+	BH	B+	B+	14	B+
B	B2	B	B	B	B	15	B
B-	B3	B-	BL	B-	B-	16	B-
CCC+	Caa1	CCC+	CCCH			17	CCC+
CCC	Caa2	CCC				18	CCC
CCC-	Caa3	CCC-				19	CCC-
CC	Ca	CC				20	CC
C	C	C				21	C
D/RD		D				22	D

"AAA" means a rating at issuance of AAA (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aaa (if rated by Moody's).

"AA+" means a rating of AA+ (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa1 (if rated by Moody's).

"AA" means a rating of AA or AA- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa2 or Aa3 (if rated by Moody's).

"A" means a rating of A or A- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or A2 or A3 (if rated by Moody's).

"BBB-" means a rating of BBB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Baa3 (if rated by Moody's).

"BB" means a rating of BB or BB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Ba2 or Ba3 (if rated by Moody's).

"Qualified Tranche" means

- (iv) with respect to the CMBX.NA.AAA Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b)));
  - (v) with respect to the CMBX.NA.AS Index, the Required Tranche that is rated AA or above and has a tranche name of AS or AM (or variants such as "A-S," "A-M" or similar, as specified in the relevant prospectus or relevant data files used by the Administrator) and that otherwise satisfies the eligibility criteria of Section 2.6(b);
  - (vi) with respect to the CMBX.NA.AA Index, the Required Tranche that is rated AA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life, in each case that otherwise satisfies the eligibility criteria of Section 2.6(b)));
  - (iv) with respect to the CMBX.NA.A Index, the Required Tranche that is rated A (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b)));
  - (v) with respect to the CMBX.NA.BBB- Index, the Required Tranche that is rated BBB- (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))); and
  - (vi) with respect to the CMBX.NA.BB Index, the Required Tranche that is rated BB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))).
- (b) Each Required Tranche must be in the form of, or represented by, a USD denominated, fixed-rate or floating-rate debt security or pass-through certificate or similar security entitling the holders thereof to receive payments that depend (except for rights or other assets designed to assure the servicing or timely distribution of proceeds to the holders) on the cash flow from a discrete pool of fixed rate mortgages, secured by security interests in commercial properties. For the avoidance of doubt, a Qualified Tranche cannot be secured by underlying assets that are credit-linked notes, synthetic CDOs or any similar synthetic obligations.
- (c) The Qualified Tranche must (i) contain at least ten (10) mortgages and at least 95 per cent of such mortgages must be in respect of commercial properties located in the United States of America and (ii) must be secured by at least two (2) mortgages that are obligations of different borrowers, which are not affiliates of each other or of the issuer of the CMBS Offering.

- (d) With respect to the CMBX.NA.AAA Index only, the Qualified Tranche must be registered pursuant to an effective registration statement under the U.S. Securities Act of 1933 (the "Securities Act").
  - (e) With respect to the CMBX.NA.AAA Index only, the principal amount at issuance of the applicable Qualified Tranche must have been greater than USD 100 million.
  - (f) With respect to the CMBX.NA.AAA Index only, the Reference Obligation must have an expected weighted average life of greater than eight (8) years and less than twelve (12) years, calculated using a zero percent (0%) CPY scenario as of the applicable Solicitation Date.
  - (g) With respect to the CMBX.NA.AAA Index only, the expected weighted average life for the Reference Obligation will not decrease by more than (i) one (1) year if calculated using a one hundred percent (100%) CPP scenario and (ii) two (2) years if calculated using a one hundred percent (100%) CPY scenario, each as of the applicable Solicitation Date.
  - (h) No single real estate type (multi-family, office, etc.) can represent one hundred percent (100%) of the aggregate value of the properties securing the Reference Obligation.
  - (i) Each Reference Obligation must have a current factor, as determined pursuant to the most recent servicer report applicable to such Reference Obligation, of one (1) as of the applicable Solicitation Date.
  - (j) Each Required Tranche must bear publicly disclosed ratings from any two of Fitch, Moody's, S&P, DBRS, Kroll or Morningstar.
  - (k) No Qualified Tranche may be insured or guaranteed pursuant to a financial guarantee insurance policy, guarantee or similar instrument issued by a third party.
  - (l) The identity and principal economic terms of each Required Tranche must be listed on Bloomberg Financial Markets ("Bloomberg") (provided that information as to cashflows under such Required Tranche need not be published on Bloomberg).
  - (m) The trustee report (or other similar periodic statement) and offering documentation (prospectus supplement or offering circular) related to each Qualified Tranche must be reasonably obtainable by the Administrator.
  - (n) The CMBS Offering must have a date of issuance on or after January 1st, 2018.
  - (o) There can be a maximum of four deals per risk retention holding CMBX market participant. The deals that firms maintain risk exposure to are based on the self-disclosure of CMBX industry participants to IHS Markit prior to a new index series launch.
  - (p) Exclude deals with a Risk Retention Type equal to Horizontal. If after including all qualifying deals where Risk Retention Type is not equal Horizontal there are still less than 25, then add Horizontal deals to the index until a total of 25 are selected.
- 2.9 For the purpose of all CMBX Indices launched on or after January 1st, 2021, each Reference Obligation in each CMBX Index must meet the following criteria as of each Solicitation Date (as defined below):

- (a) Each Reference Obligation must be a single Qualified Tranche that is part of a CMBS Offering that includes tranches of securities that have Applicable Ratings of AAA, AA+, AA, A, BBB-, BBB and BB (such tranches, the "Required Tranches"). In addition, each CMBS Offering must include at least two tranches of securities with differing credit enhancement with Applicable Ratings of AAA.

"Applicable Rating" means, for a tranche of securities, the rating at issuance thereof by at least one of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), or DBRS ("DBRS") and at least two of Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's"), Standard & Poor's Rating Services ("S&P"), DBRS ("DBRS"), Kroll Bond Rating Agency, Inc. ("Kroll") or Morningstar, Inc. ("Morningstar"); provided that if a tranche of securities has different ratings from Fitch, Moody's, S&P, DBRS, Kroll or Morningstar the Applicable Rating for such tranche will be the rating determined by calculating an average of available ratings, as detailed below.

For the purpose of calculating the average rating, a numerical score is attached to each rating provided by a considered rating agency. The following table provides the numerical translation

for the six agencies currently considered. Any numerical score that falls between two whole numbers will get rounded to the nearest score. For example, 3.2 and 3.4 will both get rounded to 3, while 6.5 and 6.7 will both get rounded to 7.

Fitch	Moody's	Standard & Poor's	DBRS	Morningstar	Kroll	Score	Applicable Rating
AAA	Aaa	AAA	AAA	AAA	AAA	1	AAA
AA+	Aa1	AA+	AAH	AA+	AA+	2	AA+
AA	Aa2	AA	AA	AA	AA	3	AA
AA-	Aa3	AA-	AAL	AA-	AA-	4	AA-
A+	A1	A+	AH	A+	A+	5	A+
A	A2	A	A	A	A	6	A
A-	A3	A-	AL	A-	A-	7	A-
BBB+	Baa1	BBB+	BBBH	BBB+	BBB+	8	BBB+
BBB	Baa2	BBB	BBB	BBB	BBB	9	BBB
BBB-	Baa3	BBB-	BBBL	BBB-	BBB-	10	BBB-
BB+	Ba1	BB+	BBH	BB+	BB+	11	BB+
BB	Ba2	BB	BB	BB	BB	12	BB
BB-	Ba3	BB-	BBL	BB-	BB-	13	BB-
B+	B1	B+	BH	B+	B+	14	B+
B	B2	B	B	B	B	15	B
B-	B3	B-	BL	B-	B-	16	B-
CCC+	Caa1	CCC+	CCCH			17	CCC+
CCC	Caa2	CCC				18	CCC
CCC-	Caa3	CCC-				19	CCC-
CC	Ca	CC				20	CC
C	C	C				21	C
D/RD		D				22	D

"AAA" means a rating at issuance of AAA (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aaa (if rated by Moody's).

"AA+" means a rating of AA+ (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa1 (if rated by Moody's).

"AA" means a rating of AA or AA- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Aa2 or Aa3 (if rated by Moody's).

"A" means a rating of A or A- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or A2 or A3 (if rated by Moody's).

"BBB-" means a rating of BBB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Baa3 (if rated by Moody's).

“BBB” means a rating of BBB (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Baa2 (if rated by Moody’s).

“BB” means a rating of BB or BB- (if rated by Fitch, S&P, DBRS, Kroll or Morningstar) or Ba2 or Ba3 (if rated by Moody’s).

“Qualified Tranche” means

- (vii) with respect to the CMBX.NA.AAA Index, the Required Tranche that is rated AAA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b)));
  - (viii) with respect to the CMBX.NA.AS Index, the Required Tranche that is rated AA or above and has a tranche name of AS or AM (or variants such as “A-S,” “A-M” or similar, as specified in the relevant prospectus or relevant data files used by the Administrator) and that otherwise satisfies the eligibility criteria of Section 2.6(b);
  - (ix) with respect to the CMBX.NA.AA Index, the Required Tranche that is rated AA (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life, in each case that otherwise satisfies the eligibility criteria of Section 2.6(b)));
  - (iv) with respect to the CMBX.NA.A Index, the Required Tranche that is rated A (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b)));
  - (v) with respect to the CMBX.NA.BBB- Index, the Required Tranche that is rated BBB- (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))), or if there is no tranche rated BBB- within a given deal, the Required Tranche that is rated BBB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))); and
  - (vi) with respect to the CMBX.NA.BB Index, the Required Tranche that is rated BB (and if there is more than one such tranche, the tranche with the most credit enhancement (and among tranches with equal credit enhancement, the tranche which has the longest weighted average life that otherwise satisfies the eligibility criteria of Section 2.6(b))).
- (b) Each Required Tranche must be in the form of, or represented by, a USD denominated, fixed-rate or floating-rate debt security or pass-through certificate or similar security entitling the holders thereof to receive payments that depend (except for rights or other assets designed to assure the servicing or timely distribution of proceeds to the holders) on the cash flow from a discrete pool of fixed rate mortgages, secured by security interests in commercial properties. For the avoidance of doubt, a Qualified Tranche cannot be secured by underlying assets that are credit-linked notes, synthetic CDOs or any similar synthetic obligations.
  - (c) The Qualified Tranche must (i) contain at least ten (10) mortgages and at least 95 per cent of such mortgages must be in respect of commercial properties located in the United States of America and (ii) must be secured by at least two (2) mortgages that are obligations of different borrowers, which are not affiliates of each other or of the issuer of the CMBS Offering.
  - (d) With respect to the CMBX.NA.AAA Index only, the Qualified Tranche must be registered pursuant to an effective registration statement under the U.S. Securities Act of 1933 (the “Securities Act”).
  - (e) With respect to the CMBX.NA.AAA Index only, the principal amount at issuance of the applicable Qualified Tranche must have been greater than USD 100 million.

- (f) With respect to the CMBX.NA.AAA Index only, the Reference Obligation must have an expected weighted average life of greater than eight (8) years and less than twelve (12) years, calculated using a zero percent (0%) CPY scenario as of the applicable Solicitation Date.
- (g) With respect to the CMBX.NA.AAA Index only, the expected weighted average life for the Reference Obligation will not decrease by more than (i) one (1) year if calculated using a one hundred percent (100%) CPP scenario and (ii) two (2) years if calculated using a one hundred percent (100%) CPY scenario, each as of the applicable Solicitation Date.
- (h) No single real estate type (multi-family, office, etc.) can represent one hundred percent (100%) of the aggregate value of the properties securing the Reference Obligation.
- (i) Each Reference Obligation must have a current factor, as determined pursuant to the most recent servicer report applicable to such Reference Obligation, of one (1) as of the applicable Solicitation Date.
- (j) Each Required Tranche must bear publicly disclosed ratings from any two of Fitch, Moody's, S&P, DBRS, Kroll or Morningstar.
- (k) No Qualified Tranche may be insured or guaranteed pursuant to a financial guarantee insurance policy, guarantee or similar instrument issued by a third party.
- (l) The identity and principal economic terms of each Required Tranche must be listed on Bloomberg Financial Markets ("Bloomberg") (provided that information as to cashflows under such Required Tranche need not be published on Bloomberg).
- (m) The trustee report (or other similar periodic statement) and offering documentation (prospectus supplement or offering circular) related to each Qualified Tranche must be reasonably obtainable by the Administrator.
- (n) The CMBS Offering must have a date of issuance on or after September 30th, 2019.
- (o) There can be a maximum of four deals per risk retention holding CMBX market participant. The deals that firms maintain risk exposure to are based on the self-disclosure of CMBX industry participants to IHS Markit prior to a new index series launch.
- (p) Exclude deals with a Risk Retention Type equal to Horizontal. If after including all qualifying deals where Risk Retention Type is not equal Horizontal there are still less than 25, then add Horizontal deals to the index until a total of 25 are selected.

### III. Polling Process in Connection with a Roll

- 3.1. No later than ten days prior to the Roll Date of a new CMBX Index (a "Solicitation Date"), the Administrator will determine an initial list of twenty-five (25) CMBS Offerings. The twenty-five (25) CMBS Offerings will be composed of the tranches selected for the CMBX.NA.BBB- index with the greatest "Thickness," with Thickness defined as the difference between their Detachment and Attachment Points, (the "Proposed CMBS Offerings List") and that each contain Required Tranches that satisfy the relevant eligibility criteria in Section 2. In the event that two or more CMBS Offerings have the same Thickness and the inclusion of each such CMBS Offering would cause the Proposed CMBS Offerings List to contain more than twenty-five (25) CMBS Offerings, the Administrator will select from such CMBS Offerings the CMBS Offerings with the largest principal amount at issuance so that the Proposed CMBS Offerings List totals twenty-five (25) CMBS Offerings. For the avoidance of doubt, the Proposed CMBS Offerings List may contain CMBS Offerings with Qualified Tranches that were included in previous CMBX Indices. The Administrator will then circulate the Proposed CMBS Offerings List (which shall specify each of the proposed Qualified Tranches related to the CMBS Offerings listed therein) to each Eligible CMBX Member and publish such Proposed CMBS Offerings List to the public.
- 3.2. The Administrator will solicit from each Eligible CMBX Member a vote as to which CMBS Offerings and Qualified Tranches thereof, if any, in the Proposed CMBS Offerings List in such Eligible CMBX Member's judgment should be removed from such list and the Administrator will



eliminate those CMBS Offerings and Qualified Tranches receiving votes for removal from at least seventy-five percent (75%) of the Eligible CMBX Members. The Administrator will inform the Eligible CMBX Members of the CMBS Offerings and Qualified Tranches that have been eliminated and publish to the public a list of such eliminated CMBS Offerings and Qualified Tranches.

- 3.3. After such CMBS Offerings or Qualified Tranches thereof have been eliminated from the Proposed CMBS Offerings List pursuant to the above and no later than six (6) days prior to the Roll Date, the Administrator will determine the number of additional CMBS Offerings and Qualified Tranches required to add to those CMBS Offerings and Qualified Tranches remaining in the Proposed CMBS Offerings List so that such list includes twenty-five (25) CMBS Offerings and with respect to each such CMBS Offering there is specified a single Qualified Tranche meeting the relevant eligibility criteria in Section 2 for each of the CMBX Indices. The Administrator will propose additional CMBS Offerings that contain Required Tranches and are composed of the tranches selected for the CMBX.NA.BBB- index with the greatest Thickness, or additional Qualified Tranches of CMBS Offerings remaining in the Proposed CMBS Offerings List (in either case, other than the CMBS Offerings or Qualified Tranches that have been eliminated pursuant to Section 3.2) to add to the Proposed CMBS Offerings List. The Administrator will inform the Eligible CMBX Members of the additional CMBS Offerings and additional Qualified Tranches of CMBS Offerings remaining in the Proposed CMBS Offerings List proposed by the Administrator and publish to the public a list of such additional CMBS Offerings and Qualified Tranches. The Administrator will solicit from each Eligible CMBX Member a vote as to which additional CMBS Offerings and additional Qualified Tranches should be eliminated from the Proposed CMBS Offerings List and will eliminate those CMBS Offerings and Qualified Tranches receiving votes in each case from at least seventy-five percent (75%) of the Eligible CMBX Members. The foregoing process shall be repeated until the Proposed CMBS Offerings List totals twenty-five (25) CMBS Offerings and with respect to each such CMBS Offering there is specified a single Qualified Tranche meeting the relevant eligibility criteria in Section 2 for each of the CMBX Indices and no CMBS Offering or Qualified Tranche received votes in favor of its elimination from such Proposed CMBS Offerings List from at least seventy-five (75%) of the Eligible CMBX Members. The Reference Obligations in each CMBX Index for the next six-month period will be the Qualified Tranches set forth in such final Proposed CMBS Offerings List.
- 3.4. No later than four (4) days prior to the Roll Date the Administrator will inform the Eligible CMBX Members of the composition of each new CMBX Index for that next six-month period and publish to the public the composition each such CMBX Index.
- 3.5. No later than three (3) days prior to the Roll Date, the Administrator will publish to the Eligible CMBX Members and to the public a draft of the annex for each CMBX Index.
- 3.6. At or about 1:00 p.m. on the Business Day immediately prior to the Roll Date (the "Fixed Rate Determination Date"), the fixed rate for each new CMBX Index will be determined by the Administrator by soliciting each Eligible CMBX Member to submit a spread for each such CMBX Index (in increments of 1 basis point) provided that if at least seventy-five percent (75%) of the Eligible CMBX Members vote to change the Fixed Rate Determination Date to another date, the Fixed Rate Determination Date shall be the date approved by at least seventy-five percent (75%) of such Eligible CMBX Members. The Administrator will re-solicit Eligible CMBX Members until at least seventy-five percent (75%) of the Eligible CMBX Members have submitted such spreads. The Administrator shall rank such submissions for each CMBX Index from lowest to highest spread and discard the top and bottom quartiles thereof (the number of submissions  $q$  in each discarded quartile will be given by  $q = \text{int}(N_s/4)$  where  $N_s$  is the total number of submissions). The fixed rate for each CMBX Index shall be the lesser of (i) the average, as determined by the Administrator, of the remaining submissions for such CMBX Index (rounded up to the nearest basis point) and (ii) 500 basis points. The Administrator will not notify any CMBX Member of, or otherwise publicize, the fixed rates for the new CMBX Indices until after 5:00 p.m. on the Fixed Rate Determination Date, at which time the Administrator will promptly notify the Eligible CMBX Members and publicly disseminate (through its website or as otherwise agreed between CDS and the Administrator) such fixed rates. The final annex for each new CMBX Index will be publicly disseminated by the Administrator on its website (or as otherwise agreed between CDS and the Administrator) after 5:00 p.m. on the Fixed Rate Determination Date but not later than 8:00 a.m. on the next Business Day.

3.7. Products based on the new CMBX Indices will begin trading on the Roll Date.

## IV. Issuance of CMBX Indices for Prior Roll Dates

4.1. CDS and/or the Administrator may publish CMBX Indices corresponding to prior Roll Dates on which other CMBX Indices were published and otherwise in accordance with these CMBX Rules; provided that in no event will existing CMBX Indices be republished or amended without approval of seventy-five percent (75%) of the Eligible CMBX Members, and provided that for purposes of determining the application of the relevant sub-section of Section 2 (Eligibility Rules), the launch date of such CMBX Index will be deemed to be the prior Roll Date.

## V. Fixing Process and Calculation Rules

5.1. For each CMBX Index, the Administrator will solicit closing mid-market prices for transactions under the CMBX Standard Terms Supplement quoted as a positive percentage, in increments of two decimal places (excluding any accrued fixed amount) from all CMBX Members. Such prices will be submitted either by spreadsheet (or any other electronic delivery format designated as acceptable by the Administrator) or, later, via the Administrator’s automated mechanism between 3:00 p.m. and 4:00 p.m. each day other than Saturday, Sunday, and United States Federal Holidays; provided that on any day that the Securities Industry and Financial Markets Association (“SIFMA”) recommends closing the fixed income markets early, prices will be submitted within thirty (30) minutes after the time set by SIFMA for the closing of the fixed income markets.

On all Fridays that fall between the Memorial Day and Labor Day Holidays, the Administrator will observe early close “Summer Fridays”, and prices will be submitted as of 1:00 p.m.

The Administrator will employ a filtering process which entails taking the received quotes, discarding the top and bottom quartiles and taking the arithmetic mean of what remains. The quoted fixing value will be a percentage reported to two decimal places. The number of points  $q$  in each discarded quartile will be given by  $q = \text{int}(N_c/4)$  where  $N_c$  is the total number of contributors. Examples are shown in the table below:

Number of Contributors	Upper Quartile Discards	Lower Quartile Discards	Number of Quotes used in Fixing
1	0	0	No fixing calculated
3	0	0	3
4	1	1	2
5	1	1	3
7	1	1	5
8	2	2	4
11	2	2	7
12	3	3	6
15	3	3	9
16	4	4	8
19	4	4	11
20	5	5	10

## VI. Additional Pricing Considerations

- 6.1. Liquidity in the CMBX Index has declined over time, with trading no longer occurring on a regular basis for all Current and Prior CMBX Sub-Indexes. As a result, the closing mid-market prices submitted by CMBX Participants may be estimated values for transactions under the CMBX Standard Terms Supplement, rather than actual transacted prices.

In order to calculate the official fixing value for a particular CMBX Index, the Administrator must receive closing mid prices from three (3) CMBX Members. If, on any date, the Administrator receives fewer than three (3) closing mid prices for a CMBX Index, the Administrator will not publish a fixing value for such CMBX Index on such date. The methodology for calculating an official fixing value for a CMBX Index will be subject to change upon an affirmative vote of at least seventy-five percent (75%) of Eligible CMBX Members.

- 6.2. On all dates, the Administrator will seek to receive mid-market price contributions from all CMBX Members. This may delay the publication of index levels but will mean a consistent number of contributions to avoid artificial index level movements.

- 6.2.1 For high-importance dates such as year-end and month-end, the Administrator will not publish the index level until it receives contributions from all contributing CMBX Members.

In case the Administrator cannot contact a CMBX Member by 6 pm ET, and the Administrator has received contributions from at least 3 CMBX members, the Administrator reserves the right to publish the index level without contributions from all CMBX Members.

- 6.2.2 For all other dates, the Administrator will make every effort to receive prices from all contributing CMBX members.

In case the Administrator cannot contact a CMBX member by 5 pm ET, and the Administrator has received contributions from at least 3 CMBX members, the Administrator reserves the right to publish the index level without contributions from all CMBX members.

In case the Administrator can contact a CMBX member, but that CMBX member does not provide a contribution by 6 pm ET, the Administrator reserves the right to publish the index level if it has received contributions from at least 3 CMBX members.

- 6.2.3 For Summer Fridays, the Administrator will make every effort to receive prices from all contributing members.

In case the Administrator cannot contact a CMBX member by 2 pm ET, and the Administrator has received contributions from at least 3 CMBX members, the Administrator reserves the right to publish the index levels without contributions from all CMBX members.

In case the Administrator can contact a CMBX member, but the CMBX member does not provide a contribution by 3 pm ET, the Administrator reserves the right to publish the index level if it has received contributions from at least 3 CMBX members.

In case the Administrator receives feedback from a CMBX member majority the market is experiencing unusually high trading volume, or any other event that requires regular market hours, the Administrator will forego an early close and extend the submission window to 4 pm ET.

## Disclaimer

The Administrator does not undertake any duty of care and will not be liable to any party to a transaction referencing an IHS Markit CMBX Index, or related Sub-Index, for any form of damages, whether direct, indirect, special, consequential or otherwise, that might arise in connection with the Administrator's performance of its duties under the Rules, except in the case of the Administrator's gross negligence, fraud or wilful misconduct.

The CMBX composites calculated by IHS Markit, in accordance with this methodology, are strictly indicative and intended for internal use (for example price discovery and verification; NAV calculations, risk analysis etc). Any external use of these indicative levels, including but not limited to use in transactions or to determine financial products, is not the intended use of the composites and is outside the scope of any licence granted by IHS Markit.