

Markit CDX High Yield & Markit CDX Investment Grade Index Rules

February 2020

Contents

Index Overview	3
Markit CDX	3
Sub-Indices	3
Administrator	4
Roll Dates	4
Maturity	4
Weighting Relevant Rating	5 5
Markit CDX High Yield Index Roll Process Creation of the Liquidity List General Criteria Roll Exclusions Roll Inclusions Creation of the New HY Index Series Publication of Provisional HY Index Markit CDX Investment Grade	6 6 6 7 9 11 11
Index Roll Process Creation of the Liquidity List General Criteria Roll Exclusions Roll Inclusions Creation of the New IG Index Series Publication of Provisional IG Index	11 11 12 13 13 14 15
Final Review of Constituent List	15
Selection of Reference Obligation	15
Publication of Annex	16
Coupon	16
Rule Changes	16
Disclaimer	16
Appendix Markit CDX HVOL Sub-index Selection Criteria Roll Dates and Maturity	17 17 17 17
•	

Index Overview

Markit Credit Indices are indices that track different segments of the debt markets (corporate, municipal and sovereign debt bonds and/or loans) across different regions (Europe, Asia, North America and Emerging Markets) and are referenced in various tradable products such as credit default swaps ("CDS"), and exchange-listed products.

Markit Credit Indices are made up of some of the most liquid entities in the relevant singlename CDS market.

The indices roll on a semi-annual basis, and the composition of each new series (a new index) is established based on a transparent set of rules designed to enable the current series to track the most relevant instruments in the credit market.

Markit CDX

Markit's North American High Yield CDX Index, or the CDX.NA.HY Index (the "HY Index"), is composed of one hundred (100) liquid North American entities with high yield credit ratings that trade in the CDS market.

Markit's North American Investment Grade CDX Index, or the CDX.NA.IG Index (the "IG Index"), is composed of one hundred twenty five (125) of the most liquid North American entities with investment grade credit ratings that trade in the CDS market.

The CDX.NA.HY and CDX.NA.IG are tradable indices that allow market participants to take a view on the overall credit quality and direction of the underlying basket in one tradable instrument.

Sub-Indices

The HY and IG Indices can both be further divided into sub-indices ("Sub-Indices") to represent specific portions of the credit markets (for example, by sectors, ratings or credit spreads).

The HY Index is currently broken into:

Rating sub-indices:

CDX.NA.HY.B

CDX.NA.HY.BB

CDX.NA.HY.Ex-BB

The IG Index is currently broken into:

• Sector sub-indices:

Consumer Cyclical: CDX.NA.IG.CONS

Energy: CDX.NA.IG.ENRG Financials: CDX.NA.IG.FIN Industrial: CDX.NA.IG.INDU

Telecom, Media and Technology: CDX.NA.IG.TMT

- HiVolatility (CDX.NA.IG.HVOL) sub-index (see Appendix)
- Rating sub-indices:
 CDX.NA.IG.BBB

S

Administrator

All CDX Indices are owned, managed, compiled and published by Markit (the "Administrator"). The composition of the HY and IG Indices is determined by the Administrator in accordance with the rules and methodologies set forth in this document (the "Rules").

The Administrator has sole discretion when interpreting the Rules. The Administrator shall make determinations and perform all actions regarding the indices pursuant to the Rules; Notwithstanding this, if the Administrator determines that an event has had a material impact on the integrity of one or more HY or IG Index-related transactions, including but not limited to trading interruptions, market instability and/or force majeure events, the Administrator, acting in an independent and reasonable manner, may determine that it is appropriate to depart from the methodologies, timelines and/or procedures set forth in the Rules to obtain a result that preserves the economic intent of such HY or IG Indices.

Roll Dates

Each HY Index and related sub-indices will begin on September 27 (or the Business Day immediately thereafter in the event that September 27 is not a Business Day) and March 27 (or the Business Day immediately thereafter in the event that March 27 is not a Business Day) of each calendar year (each such date, a "Roll Date").

Each IG Index and related sub-indices will begin on September 20 (or the Business Day immediately thereafter in the event that September 20 is not a Business Day) and March 20 (or the Business Day immediately thereafter in the event that March 20 is not a Business Day) of each calendar year (each such date, a "Roll Date").

All references to "Business Days" in this document refer to business days on which the Securities Industry and Financial Markets Association declares the fixed income markets in New York to be open. All times referred to in the Rules are local time in New York, New York.

Maturity

The composition of the HY and IG Indices and Sub-Indices is the same for all maturities for which a fixed rate is published.

For CDX.NA.HY

- Each HY Index that has a Roll Date of September 27 shall be issued with the maturity date of December 20 occurring 3 years, 5 years, 7 years and 10 years following the Roll Date.
- Each HY Index that has a Roll Date of March 27 shall be issued with the maturity date of June 20 occurring 3 years, 5 years, 7 years and 10 years following the Roll Date.

For CDX.NA.IG

- Each IG Index that has a Roll Date of September 20 shall be issued with the maturity date of December 20 occurring 1 year, 2 years, 3 years, 5 years, 7 years and 10 years following the Roll Date.
- Each IG Index that has a Roll Date of March 20 shall be issued with the maturity date of June 20 occurring 1 year, 2 years, 3 years, 5 years, 7 years and 10 years following the Roll Date.

Weighting

Each entity in the HY and IG Indices and all related Sub-indices will have equal or approximately equal weightings. The weighting of each entity will be equal to (i) one divided by (ii) the number of entities in such sub-index, expressed as a percentage with three decimal places (e.g., 3.226%). In the case where rounding is necessary to express the weightings in this manner, the entities shall be arranged in alphabetical order, with the weightings of the entities at the top of the list being rounded up to the nearest one-thousandth of a percent and the weightings of the entities at the bottom of the list being rounded down to the nearest one-thousandth of a percent until the weightings of all entities have been rounded and the aggregate of the weightings equals exactly 100%.

Relevant Rating

Determinations of constituents for both the HY and IG Indices, and all related Sub-Indices will be based, in part, on the "Relevant Rating" of each entity in consideration for inclusion or exclusion. For the purposes of these Rules, "Relevant Rating" means:

- The long-term credit rating assigned to such entity by S&P, Moody's or Fitch (the "Relevant Agencies")
- The long-term credit rating assigned by a Relevant Agency to the entity's associated reference obligation if the entity rating is not available. The associated reference obligation will be the obligation referenced in the indices if the entity is already included in the then-current HY index (a "Current HY Entity") or the then-current IG index (a "Current IG Entity"). If the entity is not a Current HY Entity or a Current IG Entity, or if the reference obligation is no longer outstanding, the RED preferred reference obligation will be used. If there is no RED preferred reference obligation available, the obligation most frequently selected as the reference obligation for the entity in the single-name CDS market will be used. The Administrator will determine the most frequently selected reference obligation used for the entity in the single-name CDS market through information in the DTCC Trade Information Warehouse.
- The long-term credit rating assigned by a Relevant Agency to any unsubordinated obligation of the entity if neither entity rating nor the associated reference obligation ratings are available.

For the avoidance of doubt, if none of the Relevant Agencies have assigned a long-term credit rating to an entity, the associated reference obligation or other unsubordinated obligation of such entity, then that entity shall be excluded from the new HY or IG Index, and all related Sub-Indices.

Markit CDX High Yield

Index Roll Process

As part of the Index Roll process, the Administrator will create a Liquidity List after each publication of the 6 month Analysis Top 1,000 Single Names report published by DTCC or any successor report thereto published by DTCC, or if such report is no longer available, an appropriate alternative report that measures liquidity within the CDS market (collectively, the "DTCC Report"). The most recent Liquidity List and the criteria detailed in this document will be used to determine Roll Exclusions and Roll Inclusions (as both terms are defined below) and create the new series of the HY Index.

Creation of the Liquidity List

Using the average weekly trading activity measured in the then-current DTCC Report, the Administrator will create a list by:

- determining all entities for which single-name CDS are traded under the Standard North American Corporate Transaction Type (as defined in the 2014 ISDA Credit Derivatives Definitions (including all supplements and annexes thereto as of the date thereof, the "Credit Definitions"));
- (b) including on such list the entities that have been assigned a Relevant Rating of below "BBB-" or "Baa3" (the "HY Relevant Rating"). To determine the Relevant Rating for the HY Index, the Administrator will assign a Relevant Rating to an entity as follows: if the entity or its obligations have been rated (i) by three Relevant Agencies and none of the ratings are the same or equivalent, the median rating shall be the Relevant Rating, (ii) by three Relevant Agencies and two or more of the ratings are equivalent, such equivalent rating shall be the Relevant Rating, (iii) by two Relevant Agencies and such ratings are not equivalent, the lower of such ratings shall be the Relevant Rating, (iv) by two Relevant Agencies and such ratings are equivalent, such equivalent ratings shall be the Relevant Rating and (v) by one Relevant Agency, such rating shall be the Relevant Rating; and
- (c) ranking the entities resulting from (a) and (b) above, from the most liquid to the least liquid, based on the notional market risk activity as listed in the relevant DTCC Report. For entities that have undergone a Succession Event (as defined in the Credit Definitions), the Administrator will distribute the notional market risk activity and trade numbers of the predecessor(s) to the successor(s) based on the number of successors decided by the relevant Credit Derivatives Determinations Committee (as defined in the Credit Definitions). To the extent that two or more entities are determined to be equally liquid based on notionals, the Administrator shall rank such entities from the most liquid to the least liquid based on (i) the number of trades specified in the relevant DTCC Report, or (ii) if an equal number of trades are specified, in alphabetical order (such overall completed rankings, the "HY Liquidity Rankings", and such overall completed list, the "Liquidity List").

General Criteria

To be eligible for inclusion in the HY Index, an entity on the Liquidity List must satisfy the following criteria:

The entity must not be a swap dealer in products referencing the HY Index, or an entity

that is guaranteed or controlled by (directly or indirectly) such a swap dealer or that guarantees or controls (directly or indirectly) such a swap dealer (in either case, an "Affiliate"), as determined by the Administrator. "Control" of any entity means ownership of a majority of the voting power of that entity.

- The entity must not be guaranteed or controlled by, or guarantee or control, an Affiliate
 that has a higher ranking on the Liquidity List and otherwise satisfies the criteria set forth
 above (the "Incumbent Affiliate"). Notwithstanding the immediately preceding sentence,
 if the Incumbent Affiliate is subject to any of the Roll Exclusions set forth below, the entity
 may be considered eligible for inclusion in the HY Index pursuant to these Rules.
- The entity must not be otherwise ineligible or disqualified from the HY Index due to the Roll Exclusions set forth below.
- The entity must have a "HY Relevant Rating."

Roll Exclusions

No later than eight (8) Business Days prior to a Roll Date, the Administrator will create a list of Current HY Entities that no longer satisfy the General Criteria set forth above or the exclusion criteria set forth below:

- <u>Corporate Events</u>. The Administrator may determine, in its sole discretion and based on publicly available information, that a corporate event has occurred or been announced in relation to any Current HY Entity that renders such Current HY Entity unsuitable for inclusion. For purposes of this paragraph (i) "corporate events" include mergers, acquisitions or other similar events and (ii) "publicly available information" includes, but is not limited to, information from public filings, financial reports, or information published in the main sources of business news in the country in which the corporate entity is organized and any other internationally recognized published or electronically displayed news services.
- <u>Credit Events.</u> The Administrator may determine that a Current HY Entity is no longer suitable for inclusion in the HY Index if one of the following occurs on or after the previous HY Index Roll Date with respect to such Current HY Entity:
 - (a) a notice is published on the ISDA Credit Derivatives Determinations Committee webpage (http://dc.isda.org/, or any successor webpage thereto) announcing that a request relating to a potential Credit Event (as defined in the Credit Definitions) in respect of such Current HY Entity has been accepted by the relevant Credit Derivatives Determinations Committee (as defined in the Credit Definitions, the "DC"); provided that as of 5:00 p.m. New York City time on the first business day following the day on which the relevant DC is required to convene to consider such request under the DC rules (such timeline to be determined without regard to any ability of the DC to amend the published timetables set forth in the DC rules immediately prior to such request), a DC No Credit Event Announcement (as defined in the Credit Definitions) has not occurred and no announcement to the effect that such request has been dismissed, withdrawn, or rejected by the relevant DC has been published on such webpage; or
 - (b) a DC Credit Event Announcement (as defined in the Credit Definitions) occurs with respect to such Current HY Entity.

As set forth in these Rules, the Administrator may consider any information and make

any determinations necessary under this Roll Exclusion to obtain a result that preserves the integrity of the HY Index.

- Debt Outstanding. A Current HY Entity is no longer suitable for inclusion in the HY Index if the Administrator determines, in its sole discretion, that the Current HY Entity has issued or guaranteed less than \$100,000,000 (or an equivalent amount in any other currency or combination of currencies) of outstanding publicly traded debt securities (which, for the avoidance of doubt, excludes other obligations including without limitation loans and equities and privately placed debt securities) that are denominated in a Standard Specified Currency (as defined in the Credit Definitions) and that have settled on or prior to the close of business in New York City prior to the Roll Date. The total debt issued or guaranteed will be obtained from sources such as, but not limited to, public filings and financial reports of the entity.
- CDS Liquidity Based Exclusion. A Current HY Entity is no longer suitable for inclusion in the HY Index if it has not appeared in the two most recent consecutive DTCC Reports since the inclusion of that entity in the HY Index. This Current HY Entity would therefore be missing from the two reports that cover the 12 months preceding the Roll Date. However, such entities shall only be excluded from the HY Index if the number of entities removed from the index under the exclusion criteria set forth above (i.e. Corporate Events, Credit Events and Debt Outstanding) or due to failure to satisfy the General Criteria is less than five (5). In such circumstances, CDS Liquidity Based Exclusions will be carried out until the total number of entities removed from the index reaches five (5) or until there are no entities remaining that are identified as CDS Liquidity Based Exclusions, whichever comes first. The entities will be removed based on the Sector Weight Comparison set forth below, with the entity that is in the sector with the highest excess weight of over 5% being removed first. If there are no sectors with an excess weight of over 5%, then CDS Liquidity Based Exclusions will be carried out as follows: entities eligible for exclusion, as set forth above, will be removed based on the amount of debt outstanding, with the entity with the least amount of debt outstanding removed first until entities removed from the index reaches five (5) or until there are no entities remaining that are identified as CDS Liquidity Based Exclusions, whichever comes first.

If less than five (5) exclusions occur due to the criteria specified above, the following additional exclusion criteria will be applied:

- <u>Sector Weight Comparison.</u> A Current HY Entity is no longer suitable for inclusion in the HY index if it is identified for exclusion as follows:
 - (a) The sector weights of the HY index will be determined by taking the total weighting of the remaining constituents in a particular industry sector and dividing that by the total weighting of remaining constituents of the index.
 - (b) The sector weights of the most recently rebalanced Markit iBoxx USD Liquid High Yield index (the "iBoxx index") will be calculated by taking the market weighted average of each issuer and dividing that by the total weight of the index. Only issuers domiciled in the US or Canada will be considered when calculating sector weights for the iBoxx index.
 - (c) The sector weights between the two indices will be compared. If there are any sectors with an excess weight of over 5% in the HY index when compared to the iBoxx index, the Current HY Entity listed lowest in the HY Liquidity Rankings from the sector with the highest excess will be excluded.
 - (d) If there are two sectors with the same excess weight, the entity that is lower in

the HY Liquidity Rankings will be excluded.

(e) The sector weights of the HY index will be recalculated after each exclusion. The comparison will be repeated until there are no sectors with an excess of over 5% or until 5 total exclusions have been identified for the roll, whichever comes first.

Notwithstanding the above, entities within the top 50 of the HY Liquidity Rankings will not be removed from the HY index due to this Sector Weight Comparison set forth above. Additionally, exclusions based on the Sector Weight Comparison will only be carried out until the total number of entities removed from the index reaches five (5) or until there have been two (2) exclusions carried out based on the Sector Weight Comparison, whichever comes first.

Current HY Entities that meet the criteria set forth above are "Roll Exclusions".

Roll Inclusions

The Liquidity Based Inclusions that meet the criteria set forth below are "Roll Inclusions." If there are no Roll Exclusions based on the process set forth above, there will be no Roll Inclusions. However, if there are any Roll Exclusions, the following process and criteria will be used to determine the Roll Inclusions. No later than eight (8) Business Days prior to a Roll Date, the Administrator will create a list of entities that are not Current HY Entities, and that are not subject to any Roll Exclusion criteria, and that satisfy the General Criteria as well as the inclusion criteria set forth below:

- CDS Top 50 Liquidity Based Inclusion. The Administrator will identify entities that are not Current HY Entities and rank within the top 50 of the HY Liquidity Rankings to replace the Roll Exclusions in order to reach the constituent level of 100 entities. If such a CDS Liquidity Based Inclusion is in a sector that has, or will have as a result of the inclusion, an excess weight of over 5% as per the Sector Weight Comparison process set forth above, the Current HY Entity with the lowest rank on the HY Liquidity Rankings from that sector will be removed and replaced by the higher ranked entity from the same sector. However, there will be no removal of the lowest ranking Current HY Entity if it is within the top 50 of the HY Liquidity Rankings or until either the total number of entities removed from the index reaches five (5) or there have been two (2) exclusions carried out based on the CDS Liquidity Based Inclusion, whichever comes first.
- <u>Cash-adjusted Liquidity Based Inclusion</u>. If there are less Roll Inclusions than Roll Exclusions identified after the CDS Liquidity Based Inclusion criteria has been applied, a list of entities will be identified from the iBoxx index that are domiciled in the US or Canada and are not Current HY Entities or Roll Exclusions. The following information will be sourced for these entities:
 - (a) Trace Volumes, aggregated for the prior six months at the issuer level by bonds that are included in the iBoxx index.
 - (b) Debt Outstanding, aggregated at the issuer level using the bond par outstanding amounts listed in the iBoxx index.
 - (c) DTCC average trade volumes for the prior six months, calculated using the weekly average trade volumes from the most recent DTCC Report.

Entities in the list will be ranked in order of the aggregate value of the three values listed above. The aggregate value will be calculated by summing the three values. Entities will then be added to the index in order of their ranking of highest aggregate value to lowest aggregate value.

A Sector Weight Comparison, as set forth above, will be conducted for the addition of each entity. If the addition of an entity would cause a HY index sector to be in excess of over 5% when compared to the iBoxx index, or if that entity is from a sector that is already in excess of over 5% when compared to the iBoxx index, that name will not be eligible for inclusion.

An entity will also not be eligible for inclusion if the average par weighted bid price for its bonds in the iBoxx index is 40 points or more below the par weighted bid price of the iBoxx index itself, taking into account only issuers domiciled in the US or Canada, as calculated by Markit on the day of the determination. Senior tier debt will be used to calculate the average par weighted bid price for the entity bonds. If there is no senior tier debt available, the available tier of debt will be used for the calculation.

In both such cases, the next eligible name will be selected for inclusion in the index. Names will be added until the index reaches a constituent level of 100 entities, taking into account both Roll Inclusions and Roll Exclusions.

Cash-adjusted Liquidity Based Inclusions will only be carried out until the total number of entities added to the index reaches five (5) or until there have been two (2) additions carried out based on the Cash-adjusted Liquidity Based Inclusion, whichever comes first.

If the Cash-adjusted Liquidity Based Inclusion results in an entity addition from a sector where an entity was already excluded due to the Sector Weight Comparison or CDS Top 50 Liquidity Based Inclusion, then that original entity that was removed from the sector will be added back to the index in place of the entity selected under the Cash-adjusted Liquidity Based Inclusion.

Additional CDS Liquidity Based Inclusion

If any further entities are required to reach the constituent level of 100 entities, the Administrator will select entities that are not Current HY Entities that rank highest on the HY Liquidity Rankings on the Liquidity List. If the addition of an entity would cause a HY index sector to be in excess of over 5% when compared to the iBoxx index, or if that entity is from a sector that is already in excess of over 5% when compared to the iBoxx index, that name will not be eligible for inclusion.

If the identified Roll Inclusions do not result in the index reaching a constituent level of 100 entities, the Additional CDS Liquidity Based Inclusion process will be repeated, this time also considering those entities for inclusion in the index that are from a sector that is already in excess as described above.

Note that in order for a CDS Liquidity Based Inclusion, a Cash-adjusted Liquidity Based Inclusion or an Additional CDS Liquidity Based Inclusion to be included in the new HY Index, it must also meet the following criteria:

Debt Outstanding. The entity must be one which the Administrator determines, in its sole discretion, has issued or guaranteed more than \$500,000,000 (or an equivalent amount in any other currency or combination of currencies) of outstanding publicly traded debt securities (which, for the avoidance of doubt, excludes other obligations including without limitation loans and equities and privately placed debt securities) that are denominated in a Standard Specified Currency (as defined in the Credit Definitions) and that have settled on or prior to the close of business in New York City prior to the Roll Date. The total debt issued or guaranteed will be obtained from sources such as, but not limited to, public filings and financial reports of the entity.

- <u>Liquidity Average</u>. If the entity has been identified as a CDS Liquidity Based Inclusion, as set forth above, it must be listed with 3 or more 'Average number of trades/week' as published on the DTCC Report.
- Affiliates and Liquidity. In the event that an affiliate of a Current HY Entity is ranked higher on the Liquidity List, and is not included in the index, the more liquid affiliate will only replace the Current HY Entity if its average volumes have exceeded that of the Current HY Entity by more than 30% for two consecutive DTCC Reports.

Creation of the New HY Index Series

After determining the Roll Exclusions and Roll Inclusions, the Administrator will create the new HY Index using the following steps:

Remove from the list of Current HY Entities the Roll Exclusions, if any, and add to the
list of Current Index Entities the Roll Inclusions, if any (the resulting list is referred to as
the "Initial Roll Entities").

Publication of Provisional HY Index

The resulting list of entities from the "Creation of the New HY Index Series" process set forth above (the "Provisional HY Index") will be published on Markit's public web site for comment no later than seven (7) Business Days prior to the Roll Date. The Administrator will review comments received and determine whether amendments are necessary. The Administrator welcomes comments from the public, but is not required to follow or otherwise address all comments received. Once the Administrator's determinations have been made, the Administrator will publish the expected name changes (if any) on its public website. The comment period will end three (3) Business Days prior to the Roll Date. The Draft Annex of the HY Index will be published after the end of the comment period, as detailed in the Publication of Annex section.

Markit CDX Investment Grade

Index Roll Process

As part of the Index Roll process, the Administrator will create a Liquidity List after each publication of the 6 month Analysis Top 1,000 Single Names report published by DTCC or any appropriate alternative report thereto published by DTCC (as applicable, the "DTCC Report"), or if the DTCC Report is no longer available, using a report published by a successor to DTCC that measures liquidity within the CDS market. The most recent Liquidity List and the criteria detailed in this document will be used to determine Roll Exclusions and Roll Inclusions (as both terms are defined below) and create the new series of the IG Index.

Creation of the Liquidity List

Using the average weekly trading activity measured in the then-current DTCC Report, the Administrator will create a list by:

 a) determining all entities for which single-name CDS are traded under the Standard North American Corporate Transaction Type (as defined in the Credit Definitions);

- b) including on such list the entities that have been assigned a Relevant Rating of "BBB-" or "Baa3" or above (the "IG Relevant Rating"). To determine the Relevant Rating for the IG Index, the Administrator will assign a Relevant Rating to an entity as follows: if the entity or its obligations have been rated (i) by three Relevant Agencies and none of the ratings are the same or equivalent, the median rating shall be the Relevant Rating, (ii) by three Relevant Agencies and two or more of the ratings are equivalent, such equivalent rating shall be the Relevant Rating, (iii) by two Relevant Agencies and such ratings are not equivalent, the lower of such ratings shall be the Relevant Rating, (iv) by two Relevant Agencies and such ratings are equivalent, such equivalent ratings shall be the Relevant Rating and (v) by one Relevant Agency, such rating shall be the Relevant Rating; and
- c) ranking the entities resulting from (a) and (b) above, from the most liquid to the least liquid, based on the notional market risk activity as listed in the relevant DTCC Report. For entities that have undergone a Succession Event (as defined in the Credit Definitions), the Administrator will distribute the notional market risk activity and trade numbers of the predecessor(s) to the successor(s) based on the number of successors decided by the relevant Credit Derivatives Determinations Committee (as defined in the Credit Definitions). To the extent that two or more entities are determined to be equally liquid based on notionals, the Administrator shall rank such entities from the most liquid to the most illiquid based on (i) the number of trades specified in the relevant DTCC Report, or (ii) if an equal number of trades are specified, in alphabetical order (such overall completed rankings, the "IG Liquidity Rankings", and such overall completed list, the "Liquidity List").

General Criteria

To be eligible for inclusion in the IG Index, an entity on the Liquidity List must satisfy the following criteria:

- The entity must not be a swap dealer in products referencing the IG Index, or an entity that is guaranteed or controlled by (directly or indirectly) such a swap dealer or that guarantees or controls (directly or indirectly) such a swap dealer (in either case, an "Affiliate"), as determined by the Administrator. "Control" of any entity means ownership of a majority of the voting power of that entity.
- The entity must have issued or guaranteed an amount of outstanding publicly traded debt securities (which, for the avoidance of doubt, excludes other obligations (including without limitation loans, equities and privately placed debt securities)) equal to or in excess of \$100,000,000 (or an equivalent amount in any other Standard Specified Currency (as defined in the Credit Definitions). The total debt issued or guaranteed will be determined by the Administrator based on sources including, but not limited to, public filings and financial reports of the entity.
- The entity must not be guaranteed or controlled by, or guarantee or control, an Affiliate that has a higher ranking on the Liquidity List and otherwise satisfies the criteria set forth above (the "Incumbent Affiliate"). Notwithstanding the immediately preceding sentence, if the Incumbent Affiliate is subject to any of the Roll Exclusions set forth below, the entity may be considered eligible for inclusion in the IG Index pursuant to these Rules.
- The entity must not be otherwise ineligible or disqualified from the IG Index due to the Roll Exclusions set forth below.
- The entity must have an "IG Relevant Rating."

Roll Exclusions

No later than eight (8) Business Days prior to a Roll Date, the Administrator will create list of a Current IG Entities that no longer satisfy the General Criteria set forth above or the exclusion criteria set forth below:

- <u>Corporate Events</u>. The Administrator may determine, in its sole discretion and based on publicly available information, that a corporate event has occurred or been announced in relation to any Current IG Entity that renders such Current IG Entity unsuitable for inclusion. For purposes of this paragraph, (i) "corporate events" include mergers, acquisitions or other similar events and (ii) "publicly available information" includes, but is not limited to, information from public filings, financial reports, or information published in the main sources of business news in the country in which the corporate entity is organized and any other internationally recognized published or electronically displayed news services.
- <u>Credit Events.</u> The Administrator may determine that a Current IG Entity is no longer suitable for inclusion in the IG Index if one of the following occurs on or after the previous IG Index Roll Date with respect to any Current IG Entity:
 - a notice is published on the ISDA Credit Derivatives Determinations Committee webpage (http://dc.isda.org/, or any successor webpage thereto) announcing that a request relating to a potential Credit Event (as defined in the Credit Definitions) in respect of such Current HY Entity has been accepted by the relevant Credit Derivatives Determinations Committee (as defined in the Credit Definitions, the "DC"); provided that as of 5:00 p.m. New York City time on the first business day following the day on which the relevant DC is required to convene to consider such request under the DC rules (such timeline to be determined without regard to any ability of the DC to amend the published timetables set forth in the DC rules immediately prior to such request), a DC No Credit Event Announcement (as defined in the Credit Definitions) has not occurred and no announcement to the effect that such request has been dismissed, withdrawn, or rejected by the relevant DC has been published on such webpage; or
 - (b) a DC Credit Event Announcement (as defined in the Credit Definitions). occurs with respect to such Current IG Entity.

As set forth in these Rules, the Administrator may consider any information and make any determinations necessary under this Roll Exclusion to obtain a result that preserves the integrity of the IG Index.

• <u>Liquidity Based Exclusion</u>. A Current IG Entity is no longer suitable for inclusion in the IG Index if it is included in the lowest 30% in ranking in the IG Liquidity Rankings.

Current IG Entities that meet the criteria set forth above are "Roll Exclusions."

Roll Inclusions

No later than eight (8) Business Days prior to a Roll Date, the Administrator will create a list of entities that are not Current IG Entities, and that are not subject to any Roll Exclusion criteria, and that satisfy the General Criteria as well as the inclusion criteria set forth below:

<u>Liquidity Based Inclusion</u>. The entities that are in the highest 20% of the IG Liquidity Rankings and are not already included in the IG Index (the "Liquidity Based Inclusions").

Note that in order for a Liquidity Based Inclusion to be included in the new IG Index, it must also meet the following criteria:

- Average CDS Spread. The entity should have an Average CDS Spread over the preceding ninety (90) day period (from the date when the Roll Inclusion process is carried out) that is less than five times the Average CDS Spread of the current series of the IG Index over the same preceding ninety (90) day period. This "Average CDS Spread" will be calculated by reference to the Markit End of Day composite spread on transactions with a 5 year maturity. If such spreads are not available for any entity for the preceding ninety (90) day period, the average CDS spread for such entity shall be determined in relation to those days during the preceding ninety (90) day period for which such information is available.
- Affiliates and Liquidity. In the event that an affiliate of a Current IG Entity is ranked higher
 on the Liquidity List, and is not included in the index, the more liquid affiliate will only
 replace the Current IG Entity if its average volumes have exceeded that of the Current IG
 Entity by more than 30% for two consecutive DTCC Reports.
- Negative Watch. The entity should not have an IG Relevant Rating of BBB- or Baa3 and be on a negative watch.

In the event that there are not enough eligible entities on the Liquidity List to meet the number of Roll Inclusions required, a supplementary list will be used to source new IG entities, as described below.

- A list will be created based on entities included in the then-current Markit iBoxx USD Liquid Investment Grade index that are domiciled in North America.
- All such entities that meet the criteria set forth above relating to outstanding debt, credit ratings, and Affiliation with swap dealers, will be considered in the Supplementary List.
- The entities on the Supplementary List will be listed in descending order of total issued or guaranteed publicly traded debt securities (which, for the avoidance of doubt, excludes other obligations (including without limitation loans, equities and privately placed debt securities).
- The highest ranking entities on the Supplementary List will be added to the list of Initial Roll Entities until the list of Initial Roll Entities reaches 125 names.
- For the avoidance of doubt, if any of the entities on the Supplementary List are Current IG Entities that are subject to a Liquidity Based Exclusion, such entities will be ranked in the Supplementary List and, if ranked sufficiently highly, added to the list of Roll Inclusions (as defined below) in accordance with the preceding paragraph.

The Liquidity Based Inclusions that meet the criteria set forth above are "Roll Inclusions."

Creation of the New IG Index Series

After determining the Roll Exclusions and Roll Inclusions, the Administrator will create the new IG Index using the following steps:

Remove from the list of Current IG Entities the Roll Exclusions, if any, and add to the list
of Current Index Entities the Initial Roll Inclusions, if any (the resulting list is referred to
as the "Initial Roll Entities").

- If the list of Initial Roll Entities exceeds 125, the Administrator will remove from the Initial Roll Entities the number of entities on the list exceeding 125 and that have the lowest ranking in the IG Liquidity Rankings.
- If the list of Initial Roll Entities is less than 125, the Administrator will add to the Initial Roll Entities the number of entities necessary to increase the list to 125, which entities were not already on the original list of Initial Roll Entities and that have both the highest ranking in the IG Liquidity Rankings and otherwise satisfy the Selection Criteria.

Publication of Provisional IG Index

The resulting list of entities from the "Creation of the IG Index Series" process set forth above (the "Provisional IG Index") will be published on Markit's public web site for comment no later than seven (7) Business Days prior to the Roll Date. The Administrator will review comments received and determine whether amendments are necessary. The Administrator welcomes comments from the public, but is not required to follow or otherwise address all comment received. Once the Administrator's determinations have been made, the Administrator will publish the expected name changes (if any) on its public website. The comment period will end three (3) Business Days prior to the Roll Date. The Draft Annex of the IG Index will be published after the end of the comment period, as detailed in the Publication of Annex section.

Final Review of Constituent List

On any day prior to the date of publication of a final index annex, should the Administrator determine that any entity that is intended to be included in the relevant index fails any of the criteria specified in the General Criteria and Roll Exclusions section, that entity shall be excluded from the HY or IG Index.

If the Administrator determines that any entity shall be excluded from the HY or IG Index in accordance with this Final Review of Constituent List, then the highest ranked entity in the HY or IG Liquidity Rankings (or Supplementary List, as applicable) that has not already been included in the HY or IG Index shall be added to the new HY or IG Index, respectively, as a replacement entity.

Note that if the entity being excluded from the new IG Index was to be a constituent of the HVOL sub-index then the entity in the new IG Index (which may include the replacement entity determined in the preceding sentence) with the largest Average CDS Spread that has not previously been added to the HVOL sub-index shall be included in the HVOL sub-index as a replacement.

Selection of Reference Obligation

After the composition of the HY and IG Indices for a Roll Date has been finalized, the Administrator will identify a single reference obligation for each entity in the HY and IG Indices (other than entities identified as monoline insurers by the Administrator), senior in priority of payment, based on the Reference Entity Database ("RED").

In the event that no reference obligation that is senior in priority of payment is listed in RED for an entity in the HY or IG Index, the Administrator will select in its sole discretion the most liquid of the senior in priority of payment debt obligations of such entity based on the market risk activity in relation to such entity and such obligations during the six month period prior to the

last Friday of (i) the February preceding the new Roll Date if such Roll Date is due to occur in March or (ii) the August preceding the new Roll Date if such Roll Date is due to occur in September, in each case as published in the DTCC Report. If the most liquid single-name CDS referencing the relevant entity does not specify a reference obligation in respect of such entity, then no reference obligation shall be associated with such entity. Once the Administrator has identified a single reference obligation for each non-monoline entity in the HY or IG Index (or determined that no reference obligation will be associated with any such non-monoline entity), it will undertake all reasonable efforts to procure the review of the documentation relating to any such reference obligation on the same basis as if such reference obligation were in RED.

The list of reference obligations for the HY and IG Indices will be published as set forth below.

Publication of Annex

No later than two (2) Business Days prior to the Roll Date of an HY or IG Index, the Administrator will publish a draft of the annex for such HY and IG Index and each sub-index along with the weighting and final reference obligations (if applicable) for each entity. The final annex for the HY and IG Indices and each sub-index will be published after 5:00 p.m. on the Business Day immediately preceding the Roll Date of such new HY and IG Indices.

Coupon

Fixed rates will be determined by the Administrator in its sole discretion based on industry rates posted on cdsmodel.com and/or industry-standard trading conventions, in each case as updated from time to time.

Rule Changes

From time to time, the Administrator may determine that revisions to the Rules are necessary to address market changes, including derivatives industry, regulatory, legal and other changes, or otherwise. In such event, the Administrator may, but is not obliged to, consult with the Indices Advisory Committee (as detailed in the applicable Advisory Committee Terms of Reference) and publish any such final amendments prior to their effective date. Amendments will not be retroactive. Where possible, Administrator will consult with relevant Advisory Committee members regarding timing of rule changes that may have a material impact on HY or IG Index related transactions. All recommendations by the Advisory Committee will be carefully considered but are not binding on the Administrator.

Disclaimer

The Administrator does not accept any duty of care to users of the HY and IG Indices and will not be liable to any party to a transaction referencing a HY or IG 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.

Appendix

Markit CDX HVOL Sub-index

Selection Criteria

- The Markit CDX HVOL is a sub-index of the IG Index. The criteria for selection of constituents of the sub-index is as follows:
- CDX HVol comprises the 30 entities in the IG Index with the widest 5-year Average CDS Spreads over the last 90 days prior to the date the HVol index composition is determined (which is approximately one week prior to the Roll Date of the IG Index). The Average CDS Spreads will be calculated by reference to the Markit End of Day composite spread on transactions with a 5 year maturity. If such spreads are not available for any entity for the preceding ninety (90) day period, the average CDS spread for such entity shall be determined in relation to those days during the preceding ninety (90) day period for which such information is available.
- In the event that two or more entities are determined to have the same Average CDS Spread and, as a result, it is not possible to determine which entity is the thirtieth (30th) entity among the entities with the largest Average CDS Spread, then each entity with such Average CDS Spread, shall be included in the HVOL sub-index of the new IG Index based on their ranking amongst such entities in the IG Liquidity Rankings starting with the highest first, until the thirtieth (30th) entity is included.

Roll Dates and Maturity

- Each IG Index sub-index that has a Roll Date of September 20 shall be issued with the maturity date of December 20 occurring 5 years following the Roll Date.
- Each IG Index sub-index that has a Roll Date of March 20 shall be issued with the maturity date of June 20 occurring 5 years following the Roll Date.