

MSCI MarketAxess USD HY Tradable Corporate Bond Index Methodology

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1 Introduction

The MSCI MarketAxess USD HY Tradable Corporate Bond Index ('the Index') is market value-weighted Index designed to represent the performance of a selection of relatively liquid fixed income securities from the universe of bonds defined by the MSCI USD HY Corporate Bond Index.

The methodology uses the MarketAxess' Relative Liquidity Scores ("RLS") to identify and select liquid fixed income securities. In addition, the Index methodology incorporates appropriate buffers in Index construction and rebalancing to limit monthly turnover.

2 MarketAxess Data

The MSCI MarketAxess USD HY Tradable Corporate Bond Index uses the security-level Relative Liquidity Score product provided by MarketAxess Holdings Inc.

For details on MarketAxess' full suite of products, please refer to:

<https://www.marketaxess.com/>.

2.1 Relative Liquidity Score

The MarketAxess Relative Liquidity Score provides a defined measurement of the current liquidity for individual bonds and highlights the potential ease that a trader can expect to transact in that instrument. The score ranges from 10, meaning the highest level of liquidity, down to 1.

MarketAxess combines data points from multiple sources – Inventory data, MarketAxess platform data, TRACE¹ data, and Trax² data, to calculate multiple bond-specific factors on a relative basis over a 30-day look back period. The proprietary model then aggregates the individual factors to derive the final relative liquidity score.

For more details on Relative Liquidity score, please refer to:

<https://www.marketaxess.com/price/relative-liquidity-score>.

¹ TRACE, Trade Reporting and Compliance Engine, is the Financial Industry Regulatory Authority's (FINRA) fixed income market real-time price reporting and dissemination service.

² Trax, a wholly owned subsidiary of MarketAxess Holdings, Inc., provides capital market data, trade matching and regulatory reporting services to the global securities market.

3 Index Construction Rules

3.1 Selection Universe

The Selection Universe for the MSCI MarketAxess USD HY Tradable Corporate Bond Index is defined by the constituents of the MSCI USD HY Corporate Bond Index.

3.2 Eligibility Criteria

3.2.1 Liquidity Score Eligibility

The Monthly Relative Liquidity Score (“MRLS”) of a security is calculated as the simple average of MarketAxess Relative Liquidity Scores over a rolling 21-day window³. MRLS is calculated only if the security has at least 11 valid observations⁴ in the defined window.

If Index constituent is not in its “lock in” period, then each Index constituent must have a MRLS greater than or equal to 5. The “lock-in” period for an Index constituent is defined in Section 4.1.

New additions to the Index must have a MRLS greater than or equal to 6.

3.2.2 Size Eligibility

At a security level, size is defined by its notional amount outstanding, whereas at an issuer ticker level, it is defined by issuer ticker’s total amount outstanding⁵.

At rebalancing, each security included in the MSCI MarketAxess USD HY Tradable Corporate Bond Index will have security size greater than or equal to USD 500m and issuer size greater than or equal to USD 2bn.

³ 21-day window is defined by using weekdays.

⁴ The observation is considered valid if the bond is scored by MarketAxess and belongs to the USHY MarketAxess liquidity group (relative to which the RLS is computed).

⁵ Computed as sum of issuer amount outstanding of all the issuer ids mapped to a issuer ticker. Please refer to MSCI Fixed Income Data Methodology document (<https://www.msci.com/index-methodology>) for details on the calculation of Issuer amount outstanding.

3.2.3 Maturity Eligibility

Each Index constituent must have a remaining time to maturity greater than or equal to 3 years.

Each Index constituent at issuance must have had a time to maturity greater than or equal to 5 years.

3.3 Index Construction

3.3.1 Updating the Eligible Universe

The Eligible Universe for Index construction is derived from the pro-forma parent Index and is updated by applying the eligibility screens described in the Section 3.2.

3.3.2 Selection of Eligible Bonds

The two largest bonds by size are selected for each issuer ticker in the updated Eligible Universe. If there is only one bond for the issuer ticker in the universe, then only that one is included. Please refer to Appendix 1 for details on the selection rules.

3.4 Weighting Scheme

The Index constituents are weighted in proportion to their market values.

Additionally, constituent weights are capped at 3% at the issuer ticker level to mitigate concentration risk. The excess weight after capping is redistributed across the remaining Index constituent in proportion of their market value.

Note that the capping of the issuer ticker weight is calculated for the pro forma Index as of the effective date, based on the closing prices as of the Index review announcement date.

In cases where the pro-forma issuer ticker weight breaches the cap because of market price movements or corporate events between the announcement date and the effective date, the capping is not applied again. Similarly, even if any issuer ticker weight breaches the cap because of market price movements or corporate events between two monthly reviews, capping is not re-applied.

4 Index Maintenance

4.1 Monthly Index Review

The Index is reviewed monthly to coincide with the Monthly Index Review of the MSCI USD HY Corporate Bond Index.

In general, the pro forma Indexes are announced three business days before the effective date of rebalancing.

MSCI uses the latest available MarketAxess Relative Liquidity Score on the announcement date for the rebalancing of the MSCI MarketAxess USD HY Tradable Corporate Bond Index.

At each Monthly Index Review, the Eligible Universe is updated, and the composition of the Index is reassessed based on methodology described in Section 3. In addition to this for Index rebalancing a buffer rule is applied to control for rebalancing turnover.

Securities that are deleted from the Index are “locked out” and hence are not eligible to be re-added to the Index for a period of next 12 months. For example, if a bond is dropped from the Index as of rebalancing month T, it cannot re-enter the Index up until T+11 months and will be considered for inclusion for the T+12-month rebalancing.

Securities that enter the Index and continue to qualify on size and maturity eligibility criteria defined in Section 3.2.2 and 3.2.3 are “locked in” i.e., remain in the Index for at least a period of 6 months.

4.2 Pricing

The Index uses bid and offer prices from multiple data vendors with primary pricing source being Refinitiv. From February, 2023, onwards primary pricing source will transition from Refinitiv to MarketAxess Composite+™.

Appendix 1: Guidelines on bond selection algorithm

The Index selects up to two bonds for each issuer ticker in the Eligible Universe as defined by rules in Section 3.2. The underlying principle for the selection algorithm is to seek to select the most liquid subset, while aiming to mitigate high turnover.

The following rules are used in selecting at most two bonds for each issuer ticker. The preference order for selection is as follows:

1. Select bonds that entered the Index over the past 6 months and continue to qualify on size and maturity criteria as defined in Section 3.2.2 and Section 3.2.3.
2. In case we have less than two bonds for an issuer ticker, then select bonds with higher security size.
3. In case we have multiple bonds with same security size, then following parameters in the given order are used as tiebreakers for selection.
 - Higher Time to Maturity
 - Higher Coupon
 - Higher MRLS score

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* = toll free

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