

MSCI ALL MARKET INDEXES

Index Methodology

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1 Introduction

The MSCI All Market Indexes are designed to represent the performance of the equity universe of individual country markets while including a minimum number of constituents. The indexes are constructed for individual countries and target a minimum of 25 securities and 20 issuers¹ at construction.

¹ Defined as Group Entities. Please refer to Section 3.1 of the MSCI 10/40 Index Methodology which can be found at the following link: <https://www.msci.com/index-methodology>

2 Constructing the MSCI All Market Indexes

Each MSCI All Market Index is constructed at the country level, and is designed to represent the investable equity universe of that country. The steps involved in the construction of the MSCI All Market Index for a particular country are described below.

2.1 DEFINE THE BROAD COUNTRY EQUITY UNIVERSE

The MSCI All Market Index only includes those securities that are a part of the Broad Country Equity Universe. The Broad Country Equity Universe includes:

- equity securities classified in that country according to the MSCI Global Investable Market Indexes Methodology²
- equity securities that are not classified in that country according to the MSCI Global Investable Market Indexes Methodology, but are either headquartered or listed in that country and have significant linkage to that country. In determining significant linkage, MSCI considers the geographic distribution of any of the following criteria:
 - company’s shareholder base;
 - revenues;
 - assets;
 - management;
 - employee base;
 - history; and
 - country of incorporation
- in cases where the above two criteria do not result in meeting the target number of securities and issuers, the Broad Country Equity Universe will also include

² As part of the MSCI Global Investable Market Indexes Methodology, the country classification of a security is generally determined by the country of incorporation of the issuing company and the primary listing of the security. Please refer to the MSCI Global Investable Market Indexes Methodology book for further details on the country classification process.

equity securities³ with economic exposure greater than 10% to that country, as defined in the MSCI Economic Exposure Data Methodology⁴

- Securities may be represented by either a local listing or a foreign listing (including a Depositary Receipt) in the Broad Country Equity Universe⁵.

2.2 DEFINE ELIGIBILITY CRITERIA

Minimum requirements based on the following parameters are applied to the Broad Country Equity Universe to determine the eligible equity universe of securities for inclusion in the MSCI All Market Index:

- Full market capitalization – this requirement is applied at the company level
- Free float-adjusted market capitalization – this requirement is applied at the security level
- Free float (foreign inclusion factor) – this requirement is applied at the security level
- Liquidity (12-month Annual Trade Value Ratio (ATVR), 3-month ATVR, and 3-month frequency of trading) – this requirement is applied at the security level

The exact values of the cut-offs used in the determination of the eligible equity universe for specific markets are detailed in Appendix I.

2.3 DEFINE INVESTABILITY CRITERIA

Within the eligible equity universe, higher values for each of the criteria mentioned above are used to define the investable equity universe. In the index construction process, preference is first given to securities that are included in the investable universe in order to enhance the investability and replicability of the index. The exact values of the cut-offs used in the determination of the investable equity universe are detailed in Appendix I.

³ Only securities from the MSCI ACWI IMI may be included for Developed Markets or Emerging Markets, while MSCI ACWI+FM IMI may be included for Frontier Markets

⁴ For further details of the MSCI Economic Exposure Data Methodology, please refer to the following link: <https://www.msci.com/index-methodology>

⁵ For the MSCI All Argentina Index, only foreign listed securities are eligible for inclusion due to market accessibility issues.

2.4 SELECT THE MSCI ALL MARKET INDEX CONSTITUENTS

Each MSCI All Market Index targets a minimum of 25 securities and 20 issuers. At initial construction, all securities belonging to the pro forma MSCI Country IMI⁶ are included in the MSCI All Market Index.

If the number of securities is below 25 or the number of issuers is below 20, securities that are part of the eligible equity universe are added in the following order till both these targets are reached:

- securities that are part of the investable equity universe in the order of decreasing free float-adjusted market capitalization, except those that are included on the basis of their economic exposure only
- securities that are not part of the investable equity universe in the order of decreasing liquidity (3-month ATVR), except those that are included on the basis of their economic exposure only
- securities with at least 20% economic exposure to the country in the order of decreasing free float-adjusted market capitalization
- securities with at least 10% economic exposure to the country in the order of decreasing economic exposure

2.5 INDEX WEIGHTING SCHEME

All securities are included in the MSCI All Market Index at their free float-adjusted market capitalization weight, except for securities that are included only on the basis of their economic exposure which are capped at a maximum weight of 1% each. Please refer to Appendix II for more details on the weighting scheme, and the construction of the capped versions of the MSCI All Market Indexes.

⁶ Country Investable Market Index is based on the MSCI Global Investable Market Indexes Methodology

3 Maintaining the MSCI All Market Indexes

The MSCI All Market Indexes are reviewed on a quarterly basis to coincide with the regular Index Reviews of the MSCI Global Investable Market Indexes. The November Index Review involves a full review of the composition of the MSCI All Market Indexes, including the update of the Broad Country Equity Universe, while the February, May and August Index Reviews only reflect the changes to the underlying MSCI Global Investable Market Indexes.

3.1 NOVEMBER ANNUAL INDEX REVIEW

The MSCI All Market Indexes are fully reviewed annually in November, and the changes are implemented coinciding with the November Semi-Annual Index Review of the MSCI Global Investable Market Indexes. The pro forma indexes are generally announced nine business days before the effective date.

3.1.1 UPDATING THE BROAD COUNTRY EQUITY UNIVERSE

During the Annual Index Review, the Broad Country Equity Universe is updated by identifying all eligible securities according to Section 2.1.

Securities added on the basis of being either headquartered or listed in that country and have significant linkage to that country are generally maintained unless it is no longer headquartered or listed in the country, or there has been a significant change in its geographic profile over time.

3.1.2 UPDATING THE ELIGIBLE AND INVESTABLE EQUITY UNIVERSE

During the Annual Index Review, each security in the updated Broad Country Equity Universe that is not a constituent of the MSCI All Market Index is evaluated for eligibility and investability using the same criteria described in Section 2.2.

Existing constituents of the MSCI All Market Index, on the other hand, are subject to buffers as described in Appendix I.

For existing constituents with more than one listing, changes in listing may be applied in the following cases:

For MSCI Country IMI constituents, changes follow the rules in listing changes as detailed in the MSCI Global Investable Market Indexes methodology book

For non-constituents of the MSCI Country IMI, changes are made if the existing constituent no longer meets the minimum eligibility requirements

3.1.3 SELECTING THE MSCI ALL MARKET INDEX CONSTITUENTS

All securities meeting the following criteria are included in the MSCI All Market Index:

- securities belonging to the pro forma MSCI Country IMI
- existing constituents of the MSCI All Market Index that meet the investability criteria.
 - existing constituents of the MSCI All Market Index added on the basis of economic exposure will be maintained if they remain a constituent of the MSCI ACWI IMI and have economic exposure of at least 10% to the country

If the number of securities is below 25 or the number of issuers is below 20, additional securities are included in the following order till both these targets are reached:

- securities that are part of the investable equity universe in the order of decreasing free float-adjusted market capitalization, except those that are included on the basis of their economic exposure only
- existing constituents that are not part of the investable equity universe in the order of decreasing liquidity (3-month ATVR), except those that are included on the basis of their economic exposure only
- non-constituent securities that are not part of the investable equity universe in the order of decreasing liquidity (3-month ATVR), except those that are included on the basis of their economic exposure only
- securities with at least 20% economic exposure to the country in the order of decreasing free float-adjusted market capitalization
- securities with at least 10% economic exposure to the country in the order of decreasing economic exposure

3.1.4 DELETING SECURITIES WITH LOW LIQUIDITY

Securities identified as deletions from the MSCI All Market Index as a result of not fulfilling the Minimum Liquidity Requirements for existing constituents described in section 3.1.2 are deleted in two phases. To do so, an inclusion factor of 0.5 is applied to the pro forma weight of the security at the time of the November Annual Index Review and up to the February Quarterly Index Review (QIR). The security is deleted from the Index at the time of the February QIR.

All other deletions are implemented fully at the time of the November Annual Index Review.

3.1.5 CONSTITUENT WEIGHTING

All securities are included in the pro-forma index at their free float-adjusted market capitalization weight; except securities that are included only on the basis of their economic exposure which are capped at a maximum weight of 1% each and securities that will be deleted in two phases due to low liquidity.

3.2 QUARTERLY INDEX REVIEWS

Additions to the MSCI Country IMI as part of the May Semi-Annual Index Review (SAIR) and February and August Quarterly Index Reviews (QIRs) of the MSCI Global Investable Market Indexes are simultaneously reflected in the MSCI All Market Index. Deletions from the MSCI Country IMI as part of the May SAIR and February and August QIRs are not reflected in the MSCI All Market Index and are reviewed for continued inclusion as part of the following November Annual Index Review.

If the number of securities falls below 23 and/or the number of issuers fall below 18 at the May Semi-Annual, or the February or August Quarterly Index Reviews, additions are made to the index as described in Section 3.1.3 in order to restore the number to 23 securities and/or 18 issuers.

In addition, significant changes in free float estimates and corresponding FIFs are reflected at the Quarterly Index Reviews. Small changes in Number Of Shares (NOS), typically less than 5% of the shares outstanding, are updated at the Index Reviews rather than at the time of the change, to minimize index turnover.

Securities that are included in the pro-forma index on the basis of their economic exposure are capped at a maximum weight of 1% at the Quarterly Index Review.

3.3 CUTOFF DATES USED FOR THE REBALANCING

The cutoff date for market capitalization and prices used for the rebalancing of the MSCI All Market Indexes is nine business days before the end of February, May, August and November.

The Equity Universe is updated as of the last business day of November, February, May, and August for the February, May, August, and November index reviews, respectively.

3.4 ANNOUNCEMENT POLICY

The pro forma results of the rebalancing of the MSCI All Market Indexes are announced nine business days before the effective date of each Annual Index Review and Quarterly Index Review.

3.5 ONGOING EVENT RELATED CHANGES

Corporate events are handled according to the MSCI Global Investable Market Indexes Methodology. With the exception of the treatment as described below, the MSCI All Markets Indexes follow the event maintenance of the Parent Index. Details regarding the treatment of corporate events not covered below can be found in the MSCI Corporate Events Methodology Book, available at: <http://www.msci.com/index-methodology>.

Any security deleted from the MSCI ACWI IMI as a result of a corporate event will be simultaneously deleted from the MSCI All Market Index. In addition, securities of companies that file for bankruptcy, companies that file for protection from their creditors and/or are suspended and for which a return to normal business activity and trading is unlikely in the near future will be removed from the MSCI All Market Index as soon as practicable. Companies that fail stock exchange listing requirements with announcements of delisting from the respective stock exchanges will be treated in the same way.

Constituents of the MSCI All Market Indexes that are under prolonged suspension are deleted from the MSCI All Market Indexes. If the suspended security is also a constituent of the MSCI Global Investable Market Indexes, the security will be deleted from the MSCI All Market Indexes two business days following 50 business days of continuous suspension. Otherwise, the deletion of the suspended security will be implemented two business days following 100 days of continuous suspension. Securities under prolonged suspension are deleted using the lowest system unit (0.00001 of the security's price currency), also known as the lowest system price.

Any security added to the MSCI Country IMI as a result of a corporate event will be simultaneously added to the MSCI All Market Index. No other security will be added to the MSCI All Market Index outside the Index Reviews, except for "detached"⁷ securities of existing constituents.

⁷When a spun-off security does not trade on the ex-date, a Price Adjustment Factor (PAF) is applied to the price of the parent entity and a detached security is created to avoid a drop in the free float-adjusted market capitalization of the

Appendix I – Determination of the Eligible and Investable Equity Universe

The specific parameters used for defining the eligibility and investability criteria for the Broad Country Equity Universe in the construction of the following MSCI All Market Indexes are listed below:

- MSCI All Colombia Index
- MSCI All Greece Index
- MSCI All Pakistan Index
- MSCI All Peru Index
- MSCI All Qatar Index
- MSCI All United Arab Emirates Index
- MSCI All Argentina Index

	Eligibility		Investability	
	New Securities	Existing Constituents	New Securities	Existing Constituents
Full Market Capitalization	25% of IMI Market Size-Segment cut-off	12.5% of IMI Market Size-Segment cut-off	50% of IMI Market Size-Segment cut-off	25% of IMI Market Size-Segment cut-off
Free Float Adjusted Market Capitalization	12.5% of IMI Market Size-Segment cut-off	6.25% of IMI Market Size-Segment cut-off	25% of IMI Market Size-Segment cut-off	12.5% of IMI Market Size-Segment cut-off
3-month ATVR	2.5%	1%	7.5%	2.5%
12-month ATVR	2.5%	1%	7.5%	2.5%
3-month Frequency of trading	20%	10%	40%	20%
Foreign Inclusion Factor	>= 0.15, except if free float adjusted market capitalization > 1.8 times the free float adjusted market capitalization cut-off			

parent entity, regardless of whether the spun-off security is added or not. The detached security is included in the MSCI Indexes as of the close of the ex-date and is maintained until the spun-off security starts trading.

The specific parameters used for defining the eligibility and investability criteria for the Broad Country Equity Universe in the construction of the MSCI All Ireland Index are as follows:

	Eligibility		Investability	
	New Securities	Existing Constituents	New Securities	Existing Constituents
Full Market Capitalization	25% of IMI Market Size-Segment Cutoff	12.5% of IMI Market Size-Segment Cutoff	50% of IMI Market Size-Segment Cutoff	25% of IMI Market Size-Segment Cutoff
Free Float Adjusted Market Capitalization	12.5% of IMI Market Size-Segment Cutoff	6.25% of IMI Market Size-Segment Cutoff	25% of IMI Market Size-Segment Cutoff	12.5% of IMI Market Size-Segment Cutoff
3-month ATVR	2.5%	1%	10%	2.5%
12-month ATVR	2.5%	1%	10%	2.5%
3-month Frequency of trading	20%	10%	40%	20%
Foreign Inclusion Factor	>= 0.15, except if free float adjusted market capitalization > 1.8 times the free float adjusted market capitalization cut-off			

The specific parameters used for defining the eligibility and investability criteria for the Broad Country Equity Universe in the construction of the MSCI All Market Indexes are as follows:

- MSCI All Nigeria Index

	Eligibility		Investability	
	New Securities	Existing Constituents	New Securities	Existing Constituents
Full Market Capitalization	25% of IMI Market Size-Segment Cutoff	12.5% of IMI Market Size-Segment Cutoff	50% of IMI Market Size-Segment Cutoff	25% of IMI Market Size-Segment Cutoff
Free Float Adjusted Market Capitalization	12.5% of IMI Market Size-Segment Cutoff	6.25% of IMI Market Size-Segment Cutoff	25% of IMI Market Size-Segment Cutoff	12.5% of IMI Market Size-Segment Cutoff
12-month ATVR	1%	1%	2.5%	1%
3-month Frequency of trading	10%	10%	25%	10%
Foreign Inclusion Factor	>= 0.15, except if full market capitalization > 1.8 Market size segment cut-off and free float adjusted market capitalization > 1.8 times the free float adjusted market capitalization cut-off			

For a description of the IMI Market Size-Segment Cutoff, please refer to the MSCI Global Investable Market Indexes methodology.

Appendix II – Capped Versions of the MSCI All Market Indexes

All securities are included in the MSCI All Market Index at their free float-adjusted market capitalization weight, except for securities that are included only on the basis of their economic exposure which are capped at a maximum weight of 1% each⁸.

In addition to the MSCI All Market Index, MSCI also constructs the following capped versions:

- The MSCI All Market 10/40 Index takes into account the UCITS III guidelines, and is constructed by applying the standard MSCI 10/40 methodology on the MSCI All Market Index.
- The MSCI All Market 25/50 Index takes into account the Regulated Investment Company (RIC) guidelines, and is constructed by applying the standard MSCI 25/50 methodology on the MSCI All Market Index.

Please refer to the following link for further details on the MSCI 10/40 and the MSCI 25/50 Index methodologies:

<https://www.msci.com/index-methodology>

MSCI also constructs the MSCI All Market Capped Indexes for specific countries as described below:

- The MSCI All Colombia Capped Index is constructed by applying the MSCI 25/50 methodology on the MSCI All Colombia Index.
- The MSCI All Peru Capped Index is constructed by applying the MSCI 25/50 methodology on the MSCI All Peru Index.
- The MSCI All Qatar Capped Index is constructed by applying the MSCI 25/50 methodology on the MSCI All Qatar Index.
- The MSCI All United Arab Emirates Capped Index is constructed by applying the MSCI 25/50 methodology on the MSCI All United Arab Emirates Index.
- The MSCI All Pakistan 25/50 is constructed by applying the MSCI 25/50 methodology on the MSCI All Pakistan Index.

⁸ The capped versions of the MSCI All Market Indexes apply the capping methodology on top of the MSCI All Market Index, which may result in weights higher than the maximum of 1% for securities included only on the basis of their economic exposure.

- The MSCI All Nigeria 25/50 Index is constructed by applying the MSCI 25/50 methodology on the MSCI All Nigeria Index.
- The MSCI All Argentina 25/50 Index is constructed by applying the MSCI 25/50 methodology on the MSCI All Argentina Index.
- The MSCI All Ireland Capped Index is constructed by applying the MSCI 25/50 methodology on that portion of the MSCI All Ireland Index which includes all securities that are part of the MSCI ACWI IMI and other securities that meet the MSCI Ireland IMI size-segment cut off and have a 3-Month ATVR greater than 20%. The remaining securities in the MSCI All Ireland Index are included at their free float-adjusted market capitalization weight in the MSCI All Ireland Capped Index.

Methodology Book Tracked Changes

The following sections have been modified since March 2014:

Appendix I: Determination of the Eligible and Investable Equity Universe

- Included MSCI All Pakistan

The following sections have been modified since May 2014:

Appendix I: Determination of the Eligible and Investable Equity Universe

- Included eligibility and investability criteria for MSCI All Argentina Index and MSCI All Nigeria Index

The following sections have been modified since July 2014:

Section 3.2: Quarterly Index Reviews

- Updates to the process for adjustment of index constituents during QIRs

The following sections have been modified since September 2014:

Appendix I: Determination of the Eligible and Investable Equity Universe

- Included MSCI All Greece

The following sections have been modified since December 2015:

Section 2.1: Define the Broad Country Equity Universe

- Expanded the Broad Country Equity Universe to include securities with 10% economic exposure to the country
- Clarified the requirements in including securities that are headquartered or listed in that country
- Clarified that securities may be represented by either a local listing or a foreign listing

Section 2.4: Select the MSCI All Market Index Constituents

- Updated the selection rules

- Section 3.1.1: Updating the Broad Country Equity Universe
- Clarified the rules on maintaining existing constituents added on the basis of being headquartered or listed and having significant linkage to that country

Section 3.1.2: Updating the Eligible and Investable Equity Universe

- Clarified the rules on changes in listing for securities with more than one listing

Section 3.1.3: Selecting the MSCI All Market Index Constituents

- Clarified the rules on maintaining current constituents added on the basis of economic exposure

Appendix II: Capped Versions of the MSCI All Market Indexes

- Clarified the possible effect of the capping methodology to the weight of securities

The following sections have been modified since September 2017:

Section 3.2 Cutoff Date for Market Capitalization and Prices Used for the Rebalancing

- Added new section

Section 3.4 Announcement Policy

- Added new section

The following sections have been modified since April 2018:

Section 3.1.4 Deleting Securities with Low Liquidity

- Clarified application of the inclusion factor

Section 3.1.5 Constituent Weighting

- Clarified the weight of low liquidity deletions

Appendix III Selection Rules Enhancements

- Added new section to reflect changes for November 2018 Annual Index Review

The following sections have been modified since October 2018:

Section 2.4 Select the MSCI All Market Index Constituents

- Updated section to reflect the enhancements to the selection rules effective starting the November 2018 Annual Index Review

Section 3.1.3 Selecting the MSCI All Market Index Constituents

- Updated section to reflect the enhancements to the selection rules effective starting the November 2018 Annual Index Review

Section 3.3 Cutoff Dates Used for the Rebalancing

- Clarified equity universe cutoff dates used

Section 3.5 Ongoing Event Related Changes

- Updated treatment for detached securities and securities under prolonged suspension

Appendix III Selection Rules Enhancements

- Removed Appendix

The following section has been modified since May 2019:

Appendix I Determination of the Eligible and Investable Equity Universe

- Updated the requirements for the MSCI All Argentina Index

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