MSCI Global Investable Market Indexes Methodology

Index Construction Objectives, Guiding Principles and Methodology for the MSCI Global Investable Market Indexes

November 2023

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Contents

Outline of the Methodology Book 13
1 Introduction to the MSCI Global Investable Market Indexes 14
2 Constructing the MSCI Global Investable Market Indexes 16
2.1 Defining the Equity Universe 16
2.1.1 Identifying Eligible Equity Securities 16
2.1.2 Country Classification of Eligible Securities 17
2.2 Determining the Market Investable Equity Universes 17
2.2.1 Identifying Eligible Listings 18
2.2.2 Applying Investability Screens 19
2.2.3 Equity Universe Minimum Size Requirement 19
2.2.4 Equity Universe Minimum Float-Adjusted Market Capitalization Requirement 21
2.2.5 DM and EM Minimum Liquidity Requirement 21
2.2.6 Global Minimum Foreign Inclusion Factor Requirement 24
2.2.7 Minimum Length of Trading Requirement 25
2.2.8 Minimum Foreign Room Requirement 25
2.2.9 Financial Reporting Requirement 26
2.3 Defining Market Capitalization Size-Segments for Each Market 26
2.3.1 Defining the Market Coverage Target Range for Each Size-Segment 28
2.3.2 Determining the Global Minimum Size Range for Each Size-Segment 29
2.3.2.1 Defining the Global Minimum Size Reference 29
2.3.3 Determining the Segment Number of Companies and Associated Market Size-Segment Cutoffs 30
2.3.4 Assigning Companies to the Size-Segments 31

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2.3.5 Determining Market Size-Segment Cutoffs and Assigning Companies to the Size-Segments: Example 32
2.3.6 Applying Final Size-Segment Investability Requirements 34
2.3.6.1 Minimum Free Float Market Capitalization Requirement 34
2.3.6.2 Minimum Foreign Room Requirement 35
2.3.6.3 Treatment of Securities that Exhibit Extreme Price Increase 36
2.4 Index Continuity Rules 37
2.5 Constructing and Calculating the Individual MSCI Global Investable Markets Indexes 38
2.5.1 Market Size-Segment Indexes 38
2.5.2 Composite Indexes 38
2.5.3 GICS-Based Indexes 39
2.5.4 Other Indexes 39
2.5.5 Calculating the MSCI Global Investable Markets Indexes 39
3 Maintaining the MSCI Global Investable Market Indexes 40
3.1 Quarterly Index Reviews 40
3.1.1 Updating the Equity Universe 41
3.1.2 Updating the Market Investable Equity Universes 41
3.1.2.1 Eligibility of Foreign Listings 41
3.1.2.2 Updating the Equity Universe Minimum Size Requirement 42
3.1.2.3 Updating the Equity Universe Minimum Free Float–Adjusted Market Capitalization 43
3.1.2.4 Minimum Liquidity Requirement for Existing Constituents 43
3.1.2.5 Global Minimum Foreign Inclusion Factor Requirement 44
3.1.2.6 Minimum Foreign Room Requirement 45
3.1.2.7 Minimum Length of Trading REquirement 45

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3.1.3 Recalculating the Global Minimum Size References and Global Minimum Size Ranges 45
3.1.4 Reassessing the Segment Number of Companies and the Market Size-Segment Cutoffs 45
3.1.4.1 Determining Initial Segment Number of Companies 45
3.1.4.2 Changes in the Segment Number of Companies 46
3.1.5 Assigning Companies to Appropriate Size-Segments 49
3.1.5.1 Using Buffer Zones to Manage the Migration of Companies between Size-Segment Indexes 49
3.1.6 Assessing Conformity with Final Size-Segment Investability Requirements 51
3.1.6.1 For New Constituents 51
3.1.6.2 For Existing Constituents 51
3.1.7 Index Review of Changes in Foreign Inclusion Factors (FIFs) 53
3.1.8 Index Review of Changes in Number of Shares (NOS) 54
3.1.9 Date of Data Used for Index Reviews 54
3.2 Ongoing Event-Related Changes 57
3.2.1 Determining the Interim Market Size-Segment Cutoffs for Daily Maintenance 57
3.2.2 Updating the Segment Number of Companies 58
3.2.3 Corporate Events Affecting Existing Index Constituents 58
3.2.3.1 Changes in FIF, Number of Shares or Industry Classification for Existing Constituents 58
3.2.3.2 Changes in Size segment, Style Segment or industry Classification as a Result of a Large Corporate Event 60
3.2.3.3 Early Inclusions of Non-Index Constituents 62
3.2.3.4 Early Deletions of Existing Constituents 63
3.2.4 Corporate Events Affecting Non-Index Constituents 65

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3.2.4.1 IPOs and Other Early Inclusions 65
3.2.5 Corporate Events Affecting the Index Review 67
3.3 Announcement Policy 67
3.3.1 Ongoing Event-Related Changes 68
3.3.1.1 Client Announcements 68
3.3.1.2 Public Announcements 69
3.3.2 IPOs and Other Early Inclusions 70
3.3.3 Global Industry Classification Standard (GICS) 70
4 MSCI All Cap Indexes 71
4.1 Constructing the MSCI All Cap Indexes 71
4.1.1 Micro Cap Maximum Size Requirement 71
4.1.2 Micro Cap Minimum Size Requirement 72
4.1.3 Micro Cap Minimum Liquidity Requirement 72
4.1.4 Global Minimum Foreign Inclusion Factor Requirement 72
4.1.5 Minimum Length of Trading Requirement 72
4.1.6 Financial Reporting Requirement 72
4.2 Maintaining the MSCI All Cap Indexes 73
4.2.1 Quarterly Index Reviews 73
4.2.1.1 Updating the Micro Cap Minimum Size Requirement 73
4.2.1.2 Assigning Companies to the Micro Cap Size-Segment 74
4.2.2 Ongoing Event-Related Changes 74
5 MSCI Frontier Markets Indexes 75
5.1 Frontier Markets Definition 75
5.1.1 Updating MSCI Frontier Markets Index Coverage 75
5.2 Methodology Used to Construct and Maintain the MSCI Frontier Markets Indexes 76

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5.2.1 Equity Universe Minimum Size Requirement 76
5.2.2 Global Minimum Size Reference 77
5.2.3 FM Minimum Liquidity Requirement 77
5.2.3.1 Categorization of Frontier Markets into very low, low or average liquidity markets 77
5.2.3.2 Minimum Liquidity REquirement for Existing Constituents 78
5.2.4 Index Continuity Rules 79
5.2.5 Implementation of Corporate Events 80
6 MSCI Standalone Market Indexes 81
6.1 Creation of Standalone Market Indexes for Newly Eligible Markets 81
6.2 Classification of Other Markets as Standalone 81
6.3 Maintaining Standalone Market Indexes 82
6.4 Inclusion of Standalone Market Indexes in the MSCI Composite Indexes 82
6.4.1 Inclusion of Newly Eligible Markets 82
6.4.2 Re-inclusion of Markets in the MSCI Composite Indexes 83
6.5 Treatment of Discontinued Standalone Market Indexes 83
APPENDICES 84
Appendix I: Equity Markets and Universe 85
Eligible Markets (Developed Markets) 85
Eligible Markets (Emerging Markets) 86
Eligible Markets (Frontier Markets) 87
Eligible Markets (Standalone Markets) 88
Eligible Classes of Securities for Stock Exchanges in Emerging Markets 90
Eligible Classes of Securities for Stock Exchanges in Frontier Markets 91

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Eligible Classes of Securities for Stock Exchanges in Standalone Markets 92
REITs 93
Canadian Income Trusts 94
Ineligible Alert Boards 94
Non-Index Constituents 95
Deletion of Existing Index Constituents 96
Appendix II: Market Classification Framework 97
Markets Under Index Continuity 100
Appendix III: Country Classification of Securities 101
General Framework 101
Other Cases 101
Country Specific Cases 102
Change in Country Classification 104
Appendix IV: Foreign Listing Materiality Requirement 105
Appendix V: Treatment of Investment Sanctions Related to U.S. Executive Order 13959 107
MSCI J-Series Indexes: 107
MSCI China A Onshore Indexes: 108
Appendix VI: Free Float Definition and Estimation Guidelines 109
Defining and Estimating Free Float 109
Calculation of Free Float 109
Assigning a Free Float-Adjustment Factor 110
Calculating the Free Float-Adjusted Market Capitalization 113
Treatment of Hong Kong Listed Securities With High Shareholding Concentration Issues 116

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Treatment of Non-Voting Depositary Receipts in Thailand 117
Appendix VII: Price Source for Securities 119
Markets open on Saturday and/or Sunday 119
Appendix VIII: Market Monitoring Framework and Potential Switch to a Light Rebalancing under Conditions of Market Stress 120
MSCI Market Monitoring Framework 120
Potential Switch to a Light Rebalancing during Index Reviews 120
"Light" Rebalancing 120
Market Monitoring Period and Criteria 121
Communication Date and Policy 121
Index Review of the MSCI GIMI under Light Rebalancing 122
Size-Segment Migrations during Light Rebalancings 122
Addition of Companies Currently not Constituents of the Investable Market Indexes during Light Rebalancings 125
Deletion of Companies Currently Constituents of the Investable Market Indexes during Light Rebalancings 126
Changes in FIF and NOS during Light Rebalancings 127
Date of Data Used for Light Rebalancings 127
Index Maintenance for the Micro Cap Size-Segment during Light Rebalancings 127
Appendix IX: Policy Regarding Trading Suspensions and Market Closures during Index Reviews 128
Policy Regarding Trading Suspensions for Individual Securities during Index Reviews 128
Policy Regarding Market Closures during Index Reviews 128
Market Closures Due to Scheduled Stock Market Holidays 129

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Unexpected Full Trading Day Market Closures 129
Unexpected Market Closures of Less Than a Full Trading Day 129
Market Outage during the Trading Day 129
Appendix X: Updating the Global Minimum Size References and Ranges 131
General Principles for Updating the Global Minimum Size References and Ranges 131
Appendix XI: Frontier Markets Country Classification 133
Appendix XII: MSCI DR Indexes 134
Constructing the MSCI DR Indexes 134
Maintaining the MSCI DR Indexes 134
Number of Shares (NOS) and Foreign Inclusion Factors (FIF) used for DRs in the MSCI DR Indexes 134
Quarterly Listing Reviews 134
Index Review of Changes in NOS and in FIF 135
Ongoing Event Related Changes 135
Additions and Deletions due to Corporate Events 135
IPOs 136
Dividend Reinvestment for DRs Indexes 136
Withholding tax 136
Dividend Fees Payable by DR Holders 136
Appendix XIII: MSCI Domestic Indexes 137
MSCI China A Onshore Indexes 137
Equity Universe: 137
Equity Universe Minimum Size: 138
Assigning a Free Float-Adjustment Factor: 138

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Investment Sanctions Related to U.S. Executive Order 13959 138
MSCI K-Series Indexes: 138
Appendix XIV: MSCI China Indexes 139
MSCI China Indexes Offering 139
Appendix XV: Index Maintenance of the MSCI China Indexes 141
Inclusion of China A Shares in the MSCI China Indexes 141
Index Maintenance of the MSCI China Indexes 141
Integrated MSCI China Equity Universe 142
Calculation of Market Capitalization 143
Impact of the Index Inclusion Factor for the Index Construction 143
Investability Requirements 143
Calculation of the Market Size-Segment Cutoffs and Assigning Companies to the Size-Segments 143
Foreign Ownership Limits and Foreign Room 144
Assessing Conformity with Final Size-Segment Investability Requirements 144
Additions of China A Shares during Light Rebalancings 145
Stock Connect Daily Limit Breach 145
Ongoing Event Related Changes 145
Appendix XVI: MSCI China A Inclusion Indexes 148
Index Construction 148
Index Maintenance 148
Index Calculation 148
Appendix XVII: MSCI China A Indexes 149
Index Construction 149
Index Maintenance 149

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Ongoing Event Related Changes 149
Index Calculation 150
Appendix XVIII: Transition to the MSCI GIMI Methodology 151
Provisional Indexes 151
Deriving the Size-Segment Indexes at Initial Construction of the Provisional Indexes 152
Publication of Provisional Indexes 152
Reflecting Constituent Changes in the Standard Indexes at the Transition Points 153
Index Reviews and Treatment of On-Going Market Events during the Transition Period 154
Ongoing Event Related Changes 155
May 2007 Annual Full Country Index Review of the Standard Indexes and Semi-Annual Index Review of the Small Cap Index 155
August 2007 Quarterly Index Review 156
November 2007 Semi-Annual Index Review 156
February 2008 Quarterly Index Review 156
May 2008 Semi-Annual Index Review 157
Transitioning Other Indexes 157
Global Value and Growth Indexes 157
Euro and Pan-Euro Indexes 157
Indexes Based on the Standard Indexes 158
GCC Countries Indexes 158
Summary Transition Timeline 158
Appendix XIX: Transition to a Quarterly Comprehensive Index Review 161

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Treatment of MSCI Derived Indexes with Different Index Review Schedules compared to Parent Indexes 161

Appendix XX: Changes to the MSCI Frontier Markets Indexes Methodology 162

Changes to the Methodology Book 163

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Outline of the Methodology Book

This methodology book outlines MSCI's index objectives and details the methodology employed to create and maintain the MSCI Global Investable Market Indexes.

Section 1 provides an introduction and background to the MSCI Global Investable Market Indexes including the objectives and design of the indexes.

Section 2 details the principles and the methodology used for index construction. This includes the investability requirements and the size-segmentation methodology used in constructing the indexes.

Section 3 describes the maintenance principles employed for reflecting the evolution of the markets in a timely fashion while providing index stability and controlling turnover.

Section 4 details the principles and the methodology used for MSCI All Cap Indexes construction.

Section 5 details the principles and the methodology used for MSCI Frontier Markets Indexes construction.

Section 6 details the principles and the methodology used for MSCI Standalone Market Indexes construction.

The Appendices contain details on equity market coverage, country classification of securities, free float definition and estimation, and other attributes.

For more information on the terms used throughout this methodology document please refer to the MSCI Index Glossary on MSCI's website: https://www.msci.com/index-methodology.

This book was last updated in November 2023.

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1 Introduction to the MSCI Global Investable Market Indexes

For over 50 years, MSCI has constructed the most widely used international equity indexes for institutional investors. The MSCI global equity indexes have maintained their leading position because they have evolved over time to continue to appropriately reflect the international investable opportunity set of equities while addressing the changing and expanding investment interests of cross-border investors.

Developments in international equity markets and investment management processes have led many investors to desire very broad coverage and size-segmentation of the international equity markets. To address these desires and continue to meet our index construction and maintenance objective, after a thorough consultation with members of the international investment community, MSCI enhanced its Standard Index methodology, by moving from a sampled multi-cap approach to an approach targeting exhaustive coverage with non-overlapping size and style segments. The MSCI Standard and MSCI Small Cap Indexes, along with the other MSCI equity indexes based on them, transitioned to the Global Investable Market Indexes methodology described in this methodology book. The transition was completed at the end of May 2008.

The MSCI Standard Indexes are composed of the MSCI Large Cap and Mid Cap Indexes. The MSCI Global Small Cap Index transitioned to the MSCI Small Cap Index resulting from the Global Investable Market Indexes methodology, and contains no overlap with constituents of the transitioned MSCI Standard Indexes. Together, the relevant MSCI Large Cap, Mid Cap and Small Cap Indexes make up the MSCI Investable Market Index for each country, composite, sector, and style index that MSCI offers.

Based on transparent and objective rules, the Global Investable Market Indexes are intended to provide:

- Exhaustive coverage of the investable opportunity set with non-overlapping size and style segmentation.
- A strong emphasis on investability and replicability of the indexes through the use of size and liquidity screens.
- Size segmentation designed to achieve an effective balance between the objectives of global size integrity and country diversification.

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- An innovative maintenance methodology that provides a superior balance between index stability and reflecting changes in the opportunity set in a timely way.
- A complete and consistent set of Size-Segment Indexes, with Standard, Large Cap, Mid Cap, Small Cap, and Investable Market Indexes.

In addition to the innovations listed above, the Global Investable Market Indexes methodology retained many of the features of the original methodology, such as:

- The use of a building block approach to permit the creation and calculation of meaningful composites.
- The creation of sector and industry indexes using the Global Industry Classification Standard (GICS®).
- Minimum free float requirements for eligibility and free float-adjusted capitalization weighting to appropriately reflect the size of each investment opportunity and facilitate the replicability of the Indexes.
- Timely and consistent treatment of corporate events and synchronized rebalancings, globally.

In November 2010, MSCI also introduced a Micro Cap Size-Segment for developed markets as well as the MSCI World All Cap Index consisting of the Large, Mid, Small and Micro Cap Size-Segments in order to further broaden the coverage of the international equity markets.

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2 Constructing the MSCI Global Investable Market Indexes

The MSCI Global Investable Markets Indexes are constructed and maintained at an individual Market[1] level.

Constructing the MSCI Global Investable Market Indexes involves the following steps:

- Defining the Equity Universe for each Market.
- Determining the Market Investable Equity Universe for each Market.
- Determining market capitalization size-segments for each Market.
- Applying Index Continuity Rules for the Standard Index.
- Classifying securities under the Global Industry Classification Standard (GICS).
- Using a building block approach, Regional and Composite Indexes can be created from the individual Market Indexes for each size-segment. GICS-based, share type-based and other more granular indexes may also be derived from the Market, Regional and Composite Indexes.

Each of these steps is described in detail below.

2.1 Defining the Equity Universe

The Equity Universe is defined by:

- Identifying eligible equity securities, and
- Classifying these eligible equity securities into the appropriate country.

2.1.1 Identifying Eligible Equity Securities

All listed equity securities, including Real Estate Investment Trusts (REITs)[2] and certain income trusts listed in Canada[3] are eligible for inclusion in the Equity

[1] Developed Markets Europe, Baltic States and WAEMU are treated as single markets for the purpose of index construction.

[2] Please refer to Appendix I for the list of REITs and REIT equivalent structures across different countries tracked by MSCI.

[3] Please refer to Appendix I for the eligibility criteria of Canada Income Trusts.

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Universe. Limited partnerships, limited liability companies, and business trusts, which are listed in the USA and are not structured to be taxed as limited partnerships, are likewise eligible for inclusion in the Equity Universe. Conversely, mutual funds, ETFs, equity derivatives, and most investment trusts are not eligible for inclusion in the Equity Universe.[4]

Preferred shares that exhibit characteristics of equity securities are eligible. As the definition of the preferred shares may vary from country to country or even from one company to another, MSCI analyses this type of security on a case by case basis. The key criterion for a preferred share to be eligible is that it should not have features that make it resemble – and behave like – a fixed income security, such as the entitlement to a fixed dividend and/or, in case of liquidation, an entitlement to a company's net assets which is limited to the par value of the preferred share. On the other hand, preferred shares whose only difference compared to common shares is a limited voting power are eligible for inclusion in the Equity Universe.

Stapled securities are considered eligible if each of the underlying components exhibit characteristics of equity securities.

2.1.2 Country Classification of Eligible Securities

Each company and its securities (i.e., share classes) is classified in one and only one country, which allows for a distinctive sorting of each company by its respective country.

All securities in the Equity Universe classified into a Developed Market (DM) make up the DM Equity Universe while all securities in the Equity Universe classified into an Emerging Market (EM) make up the EM Equity Universe. Additionally, all securities in the Equity Universe classified into a Frontier Market (FM) make up the FM Equity Universe.

Please refer to Appendix I: Equity Markets and Universe and Appendix III: Country Classification of Securities for further details.

2.2 Determining the Market Investable Equity Universes

A Market Investable Equity Universe for a market is derived by:

- Identifying eligible listings for each security in the Equity Universe, and

[4] In general, GICS may be considered in determining eligibility of mutual funds/ investment trusts in the MSCI equity universe.

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- Applying investability screens to individual companies and securities in the Equity Universe that are classified in that market.

A market is equivalent to a single country, except in DM Europe, where all DM countries in Europe are aggregated into a single market for index construction purposes. Subsequently, individual DM Europe country indexes within the MSCI Europe Index are derived from the constituents of the MSCI Europe Index under the Global Investable Market Indexes methodology.

The Global Investable Equity Universe is the aggregation of all Market Investable Equity Universes. The DM Investable Equity Universe is the aggregation of all the Market Investable Equity Universes for Developed Markets.

2.2.1 Identifying Eligible Listings

A security may have a listing in the country where it is classified (i.e. "local listing") and/or in a different country (i.e. "foreign listing").

Securities may be represented by either a local listing or a foreign listing (including a Depositary Receipt) in the Global Investable Equity Universe. A security may be represented by a foreign listing only if the following conditions are met:

- The security is classified in a country that meets the Foreign Listing Materiality Requirement, and
- The security's foreign listing is traded on an eligible stock exchange of:
  - A DM country if the security is classified in a DM country, or
  - A DM or an EM country if the security is classified in an EM country, or
  - A DM or an EM or a FM country if the security is classified in a FM country.

If a country does not meet the Foreign Listing Materiality Requirement, then securities in that country may not be represented by a foreign listing in the Global Investable Equity Universe.

Please refer to Appendix I: Equity Markets and Universe and

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Appendix IV: Foreign Listing Materiality Requirement for further details.

2.2.2 Applying Investability Screens

Some of the investability requirements are applied at the individual security level and some at the overall company level, represented by the aggregation of individual securities of the company. As such, the inclusion or exclusion of one security does not imply the automatic inclusion or exclusion of other securities of the same company.

The investability screens used to determine the Investable Equity Universe in each market are:

- Equity Universe Minimum Size Requirement.
- Equity Universe Minimum Free Float-Adjusted Market Capitalization Requirement.
- DM and EM Minimum Liquidity Requirement.
- Global Minimum Foreign Inclusion Factor Requirement.
- Minimum Length of Trading Requirement.
- Minimum Foreign Room Requirement.
- Financial Reporting Requirement.

2.2.3 Equity Universe Minimum Size Requirement

This investability screen is applied at the company level.

In order to be included in a Market Investable Equity Universe, a company must have the required minimum full market capitalization. This minimum full market capitalization is referred to as the Equity Universe Minimum Size Requirement. The Equity Universe Minimum Size Requirement applies to companies in all markets, Developed and Emerging, and is derived as follows:

- First, the companies in the DM Equity Universe are sorted in descending order of full market capitalization and the cumulative coverage of the free float-adjusted market capitalization[5] of the DM Equity Universe is calculated at each company. Each company's free float-adjusted market capitalization is represented by the

[5] Unless explicitly stated otherwise in this methodology book, the free float-adjusted market capitalization used by MSCI is post application of any relevant adjustment factors (e.g. adjustment factors applied due to low foreign room, Liquidity Adjustment Factors).

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aggregation of the free float-adjusted market capitalization of the securities of that company in the Equity Universe.

- Second, when the cumulative free float-adjusted market capitalization coverage of 99% of the sorted Equity Universe is achieved, the full market capitalization of the company at that point defines the Equity Universe Minimum Size Requirement.
- The rank of this company by descending order of full market capitalization within the DM Equity Universe is noted, and will be used in determining the Equity Universe Minimum Size Requirement at the next rebalance.

Example:

Using the steps mentioned above, in this example the full market capitalization of the 8008th company of USD 150 million will be chosen as the Equity Universe Minimum Size Requirement.

Company	Country	Full Market Capitalization (USD millions)	Free Float-Adjusted Market Capitalization (USD millions)	Cumulative Free Float-Adjusted Market Capitalization Coverage	Rank of Company
A	*a*	400,000	400,000	1.29%	1
B	*a*	360,000	360,000	2.45%	2
C	*a*	275,000	250,000	3.26%	3
AD	*a*	250,000	250,000	4.06%	4
AE	*b*	240,000	190,000	4.68%	5
AF	*c*	235,000	95,000	4.98%	6
GG	*a*	230,000	230,000	5.73%	7
AH	*a*	225,000	225,000	6.45%	8
AL	*d*	210,000	210,000	7.13%	9
…		…	…	…	…
…		…	…	…	…
..		..	..	..	..
WWW	*f*	1,000	250	98.99%	8,007
XYZ	*g*	150	130	99.00%	8,008
YYY	*f*	125	125	99.01%	8,009
ZZZZ	*f*	100	100	99.01%	8,010
…		…	…	…	…
Total			**31,000,000**	**100.00%**	

At the time of the November 2023 Index Review, the Equity Universe Minimum Size Requirement was USD 313 million for the Developed and Emerging Markets while it was USD 11 million for the Frontier Markets. Companies with full market capitalizations below this level are not included in any Market Investable Equity Universe. The Equity Universe Minimum Size Requirement is reviewed and, if necessary revised, at Index Reviews.

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2.2.4 Equity Universe Minimum Float-Adjusted Market Capitalization Requirement

This investability screen is applied at the individual security level. To be eligible for inclusion in a Market Investable Equity Universe, a security must have a free float-adjusted market capitalization equal to or higher than 50% of the Equity Universe Minimum Size Requirement.

2.2.5 DM and EM Minimum Liquidity Requirement

This investability screen is applied at the individual security level. To be eligible for inclusion in a Market Investable Equity Universe, a security must have at least one eligible listing (as defined in section 2.2.1) that meets the Minimum Liquidity Requirement defined below, measured by:

- Twelve month and 3-month Annual Traded Value Ratio (ATVR);
- Three month Frequency of Trading.

The ATVR mitigates the impact of extreme daily trading volumes and takes into account the free float-adjusted market capitalization of securities. The aim of the 12-month and 3-month ATVR together with 3-month Frequency of Trading is to select securities with a sound long and short-term liquidity.

A minimum liquidity level of 20% of 3-month ATVR and 90% of 3-month Frequency of Trading over the last 4 consecutive quarters, as well as 20% of 12-month ATVR are required for the inclusion of a security in a Market Investable Equity Universe of a Developed Market. This rule is referred to as the DM Minimum Liquidity Requirement.

A minimum liquidity level of 15% of 3-month ATVR and 80% of 3-month Frequency of Trading over the last 4 consecutive quarters, as well as 15% of 12-month ATVR are required for the inclusion of a security in a Market Investable Equity Universe of an Emerging Market. This rule is referred to as the EM Minimum Liquidity Requirement.

In addition to the ATVR and Frequency of Trading requirements, securities in the MSCI China Equity Universe will not be eligible for inclusion in the Market Investable Equity Universe if the securities:

- Are suspended on the Price Cutoff Date (as defined in section 3.1.9) of the Index Review

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- Have been suspended for 50 consecutive business days or more in the past 12 months[6]

Only one listing per security may be included in the Market Investable Equity Universe. In instances when a security has two or more eligible listings that meet the above liquidity requirements, then the following priority rules are used to determine which listing will be used for potential inclusion of the security in the Market Investable Equity Universe:

- Local listing[7]
- Foreign listing in the same geographical region[8]
- Foreign listing in a different geographical region[9].

Concerning the level of a stock price, there may be liquidity issues for securities trading at a very high stock price. Hence, a limit of USD 10,000 has been set and securities with stock prices above USD 10,000 fail the liquidity screening. This rule applies only for non-constituents of the MSCI Global Investable Market Indexes. Consequently, current constituents of the MSCI Global Investable Market Indexes would remain in the index if the stock price passes the USD 10,000 threshold.

The ATVR[10] of each security is calculated in a 3-step process:

[6] As of each day from the effective date of the Index Review one year prior to the price cutoff date of the current Index Review (for example: a non-Index constituent suspended for 50 days as of any day from June 1, 2017, the effective date of the May 2017 Index Review, to April 23, 2018, the price cutoff date of the May 2018 Index Review, would not have been eligible for the Investable Market Universe of the May 2018 Index Review).

[7] If the security has two or more local listings, then the listing with the highest 3-month ATVR would be used.

[8] MSCI classifies markets into three main geographical regions: EMEA, Asia Pacific and Americas. If the security has two or more foreign listings in the same geographical region, then the listing with the highest 3-month ATVR would be used.

[9] If the security has two or more foreign listings in a different geographical region, then the listing with the highest 3-month ATVR would be used.

[10] Notes on ATVR calculation:

- MSCI uses consolidated trading values for securities listed in the USA and Canada and single exchange trading values for listings in all other markets.
- Days with no trading volume are excluded when taking the median of the daily traded values.
- Trading volume and price for liquidity computation will only be captured from eligible exchange.
- In general, MSCI uses free float-adjusted security market capitalization after the application of any relevant adjustment factors (e.g. adjustment factors applied due to low foreign room, Liquidity Adjustment Factors).

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- First, monthly median traded values are computed using the median daily traded value, multiplied by the number of days in the month that the security traded. The daily traded value of a security is equal to the number of shares traded during the day, multiplied by the closing price of that security. The median daily traded value is the median of the daily traded values in a given month.
- Second, the monthly median traded value of a security is divided by its free float-adjusted security market capitalization at the end of the month for each month, giving the monthly median traded value ratio.
- Finally, the 12-month ATVR is obtained by taking the average of the monthly median traded value ratios of the previous 12 months – or the number of months for which this data is available (previous 6 months, 3 months or 1 month) – and annualizing it by multiplying it by 12. The 3-month ATVR is obtained by taking the average of the monthly median traded value ratios of the previous 3 months – or 1 month if 3 months of data are not available – and annualizing it by multiplying it by 12.

The 3-month Frequency of Trading is determined by dividing the number of days a security traded during a 3-month period by the maximum possible number of trading days within this period. If 3 months of data are not available, 1 month of data is used for the calculation of 3-month Frequency of Trading.

In some circumstances, MSCI may apply relevant adjustments to the liquidity values obtained in the above algorithm. For example,

- At the time of the regular Index Reviews, in those cases where the ATVR and/or Frequency of Trading are the decisive elements that cause the non-addition or deletion of a security from the Market Investable Universe, the ATVR and Frequency of Trading of securities that have been suspended during the relevant period are reviewed to adjust for the suspension days:
  - In the case of ATVRs, the suspended days are added back to the number of days in the month the security traded to derive the monthly median traded value.
  - In the case of Frequency of Trading, the suspended days are excluded from the maximum possible number of trading days in the period.
  - When a security is suspended for the entire period of the relevant ATVR or Frequency of Trading calculations, the respective values for the suspended period are not calculated and are generally not taken into consideration for the Index Review. However, non-constituents of the Investable Market Index are not eligible for the Market Investable Equity Universe if the latest 3-month ATVR is not calculated due to suspensions.

- ATVR values used in the regular Index Reviews as well as the relevant thresholds are not rounded.

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- During a month when IPO occurred, in those cases where the ATVR is the decisive element that causes the non-addition of a security, MSCI may adjust the relevant monthly median value of the IPO month by considering the market trading days prior to the listing of the security. Generally, in the month of IPO, the first three days of trading are not included in calculating the median of the daily traded value. Furthermore, there must be at least five trading days, exclusive of the first three days of trading, for the monthly median value to be calculated in the month when IPO occurred[11].
- In the cases of large public offerings that significantly increase a security's free float-adjusted market capitalization and liquidity, MSCI may use trading volumes after the public offering.
- When determining the potential re-addition of a security that was deleted in the prior 12-months, MSCI may adjust ATVR values by excluding the trading volumes of the month during which the deletion of the security was announced and implemented.
- In the cases of securities traded on Saturdays and/or Sundays, MSCI may adjust ATVR values by including the trading volumes on those days[12].
- In case of an increase in a security's FIF from zero to non-zero effective at an upcoming regular Index Review or during the relevant ATVR calculation period (e.g. due to an increase in FOL or in any adjustment factor), MSCI may adjust ATVR values by applying the updated FOL or adjustment factor during the ATVR calculation period where the FIF was zero.
- In some cases of FIF changes due to significant FIF corrections, regulatory changes in Foreign Ownership Limits or methodology changes, MSCI may adjust ATVR values by applying the updated FIF during the relevant ATVR calculation period.

2.2.6 Global Minimum Foreign Inclusion Factor Requirement

This investability screen is applied at the individual security level.

[11] In the cases of initial public offering of China A shares, MSCI may use trading volumes after the limit up period.

[12] Liquidity values published in the MSCI product files currently does not consider trading volumes on Saturdays and/or Sundays.

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To be eligible for inclusion in a Market Investable Equity Universe, a security's Foreign Inclusion Factor (FIF) must reach a certain threshold. The FIF of a security is defined as the proportion of shares outstanding that is available for purchase in the public equity markets by international investors. This proportion accounts for the available free float of and/or the foreign ownership limits applicable to a specific security (or company).

In general, a security must have a FIF equal to or larger than 0.15 to be eligible for inclusion in a Market Investable Equity Universe. This rule is referred to as the Global Minimum Foreign Inclusion Factor Requirement.

Exceptions to this general rule are made only in the limited cases where the exclusion of securities of a very large company would compromise the Standard Index's ability to fully and fairly represent the characteristics of the underlying market. Please refer to Sub-section 2.3.6 Applying Final Size-Segment Investability Requirements for more details.

2.2.7 Minimum Length of Trading Requirement

This investability screen is applied at the individual security level.

For an IPO to be eligible for inclusion in a Market Investable Equity Universe, the new issue must have started trading at least three months before the implementation of an Index Review. This rule is referred to as the Minimum Length of Trading Requirement. This requirement is applicable to small new issues in all markets.

Large IPOs and large primary / secondary offerings of non index-constituents are not subject to the Minimum Length of Trading Requirement and may be included in a Market Investable Equity Universe and the Standard Index outside of an Index Review. Please refer to Sub-section 3.2.4.1: IPOs and Other Early Inclusions for details.

2.2.8 Minimum Foreign Room Requirement[13]

This investability screen is applied at the individual security level.

[13] Indian securities included in the National Securities Depository Limited's (NSDL) & Central Depository Services Limited's (CDSL) official list of securities for which the Red flag or Breach limit has been reached would not be considered for the inclusion in Market Investable Equity Universe. More generally, based on information available from the country regulatory authority, for securities where further purchase are restricted due to foreign ownership restriction, the securities would not be considered for the inclusion in Market Investable Equity Universe.

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For a security that is subject to a Foreign Ownership Limit (FOL) to be eligible for inclusion in a Market Investable Equity Universe, the proportion of shares still available to foreign investors relative to the maximum allowed (referred to as "foreign room") must be at least 15%.

For more information on the adjustment applied to securities within the Market Investable Equity Universe that have foreign room less than 25%, please refer to Sub-section 2.3.6.2 for details.

2.2.9 Financial Reporting Requirement

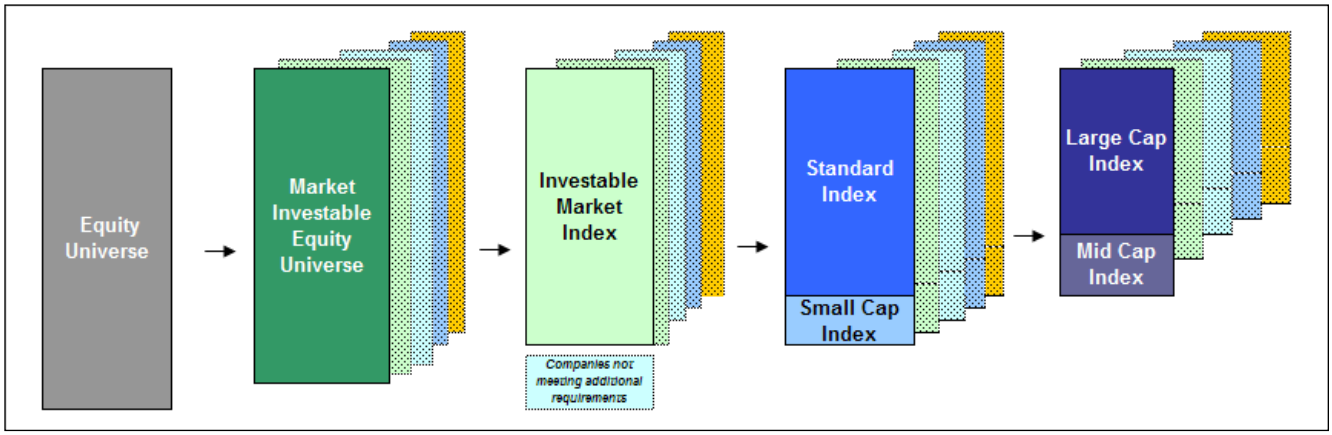
This investability screen is applied at the company level. Companies classified in the United States as per Appendix III: Country Classification of Securities, must file a Form 10-K/10-Q to be eligible for inclusion in the USA Investable Equity Universe.

2.3 Defining Market Capitalization Size-Segments for Each Market

Once a Market Investable Equity Universe is defined, it is segmented into the following size-based indexes:

- Investable Market Index (Large + Mid + Small).
- Standard Index (Large + Mid)
- Large Cap Index
- Mid Cap Index
- Small Cap Index

The structure of the MSCI Global Investable Market Indexes in each market is depicted below.



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The Investable Market Index, the Standard Index and the Large Cap Index are created first, while the Mid Cap Index is derived as the difference between the Standard Index and the Large Cap Index and the Small Cap Index is derived as the difference between the Investable Market Index and the Standard Index.

In order to create size-segments that can be meaningfully aggregated into composites, the individual Market Size-Segments need to balance the following two objectives:

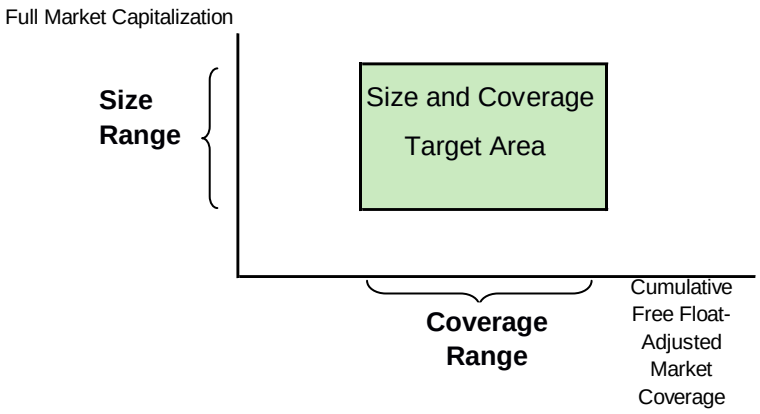
- *Achieving Global Size Integrity* by ensuring that, within a given size-segment of a composite index, only companies of comparable and relevant sizes are included across all markets. This can be measured by looking at a size-segment cutoff relative to a free float-adjusted market capitalization coverage target based on the Global Investable Equity Universe.
- *Achieving Consistent Market Coverage* by ensuring that each market's size-segment is represented in its proportional weight in the composite universe. This can be measured by looking at a size-segment cutoff relative to a consistent and comparable target size-segment coverage within each market.

It is not possible to achieve both of these objectives consistently and simultaneously across all markets. Therefore, to balance these objectives, the methodology sets a minimum size cutoff for each size-segment in each market using:

- A size range for all markets derived from a free float-adjusted target market capitalization of the Global Investable Equity Universe, together with
- A target free float-adjusted coverage range set within each individual Market Investable Equity Universe.

The intersection of these ranges specifies a Size and Coverage Target Area as depicted below. This is done for each of the three size-segment indexes, namely the Investable Market Index, the Standard Index, and the Large Cap Indexes.

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Creating the Size-Segment Indexes in each market involves the following steps:

- Defining the Market Coverage Target Range for each size-segment.
- Determining the Global Minimum Size Range for each size-segment.
- Determining the Market Size-Segment Cutoffs and associated Segment Number of Companies
- Assigning companies to the size-segments.
- Applying final size-segment investability requirements.

2.3.1 Defining the Market Coverage Target Range for Each Size-Segment

To define the Size-Segment Indexes for a market, the following free float-adjusted market capitalization Market Coverage Target Ranges are applied to the Market Investable Equity Universe:

- Large Cap Index: 70% ± 5%.
- Standard Index: 85% ± 5%.
- Investable Market Index: 99%+1% or -0.5%.

The Mid Cap Index market coverage in each market is derived as the difference between the market coverage of the Standard Index and the Large Cap Index in that market.

The Small Cap Index market coverage in each market is derived as the difference between the free float-adjusted market capitalization coverage of the Investable Market Index and the Standard Index in that market.

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2.3.2 Determining the Global Minimum Size Range for Each Size-Segment

The Global Minimum Size Range for each size-segment is determined by defining a Global Minimum Size Reference for Large Cap, Standard, and Investable Market Indexes, and specifying a range of 0.5 times to 1.15 times those References.

2.3.2.1 DEFINING THE GLOBAL MINIMUM SIZE REFERENCE

The Global Minimum Size Reference for the Large Cap, Standard, and Investable Market size-segments are derived in a similar manner to the derivation of the Equity Universe Minimum Size as follows:

- First, the companies in the DM Investable Equity Universe are sorted in descending order of full market capitalization and the cumulative free float-adjusted market capitalization coverage of the DM Investable Equity Universe is calculated at each company.
- Then, the respective full market capitalizations of the companies that provide the following cumulative free float-adjusted market capitalization coverage of the DM Investable Equity Universe are chosen:
  - DM Large Cap Index: 70% coverage.
  - DM Standard Index: 85% coverage.
  - DM Investable Market Index: 99% coverage.
- For Emerging Markets, the Global Minimum Size Reference is set at one-half the corresponding level of full market capitalization used for the Developed Markets for each size-segment.

The Global Minimum Size References for the Large Cap, Standard, and Investable Market segments, based on October 18, 2023 data, are set forth below.

> The full market capitalization of the company that provides at least an 85% cumulative free float-adjusted coverage of the DM Investable Equity Universe is USD 8.70 billion. This level, therefore, defines the Global Minimum Size Reference for DM Standard Indexes. Applying the range of 0.5 times to 1.15 times to this Global Minimum Size Reference gives the Global Minimum Size Range of USD 4.35 billion to USD 10.01 billion for the DM Standard Indexes. The EM range for the Standard Indexes, therefore, is USD 2.18 billion to USD 5.01 billion.

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		Global Minimum Size Reference		
Percent of Free Float Adjusted Market Coverage	Investable Equity Universe	Developed Markets Global Minimum Size Reference	Emerging Markets Global Minimum Size Reference (50% of DM)	Frontier Markets Global Minimum Size Reference
		Nov-23	Nov-23	Nov-23
	Universe			
70%	Large Cap	28,883	14,441	581
85%	Mid Cap	8,705	4,352	211
99%	Small Cap	679	340	18

All market caps are in USD millions. Data as of the close of October 18, 2023

The Developed Markets and Frontier Markets Global Minimum Size References are calculated based on the Developed Markets and Frontier Markets Investable Equity Universes, respectively.

2.3.3 Determining the Segment Number of Companies and Associated Market Size-Segment Cutoffs

The Market Size-Segment Cutoffs are derived by identifying a size cutoff which falls within, or as close as possible to, the Size and Coverage Target Area for that size-segment. For each size-segment, for each market, this is achieved as follows:

- The companies in the Market Investable Equity Universe are sorted in descending order of full market capitalization.
- The cumulative free float-adjusted capitalization coverage of the Market Investable Equity Universe is calculated at each company.
- MSCI notes the respective full market capitalization of the companies that provide the following free float-adjusted market capitalization coverage for the relevant size-segments:
  - Large Cap Index: 70%
  - Standard Index: 85%.
  - Investable Market Index: 99%.
- If the full market capitalization of the relevant company lies within the Global Minimum Size Range for the size-segment, then:

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  - The full market capitalization of the relevant company defines the Market Size-Segment Cutoff for that size-segment at that point in time.
  - The number of companies with full market capitalization greater than or equal to the relevant company provides the Segment Number of Companies, which will be used to maintain the indexes over time.

- If it is not, then:
  - The number of companies is decreased until the full market capitalization of the smallest company in the size-segment is equal or higher than the lower bound of the Global Minimum Size Range for that size-segment. Or,
  - The number of companies is increased to include all companies with a full market capitalization higher than the upper bound of the Global Minimum Size Range for that size-segment.
  - The full market capitalization of the last company defines the Market Size-Segment Cutoff for that segment and the Segment Number of Companies is set to this company's rank.

This process is designed to give priority to global size integrity over market coverage in situations where both objectives cannot be achieved simultaneously.

For the Investable Market Index, at initial construction, the above process is not followed in order to provide as broad a coverage as possible without sacrificing size integrity. At initial construction the Market Size-Segment Cutoffs and associated Segment Number of Companies of the Investable Market segment are derived by including all companies equal to or larger than the Global Minimum Size Reference for the Investable Market Indexes.

Since Size-Segment Indexes are based on company full market capitalization, all securities of a company are always classified in the same size-segment. As a result, there may be more securities than companies in a given size-segment.

The Market Size-Segment Cutoffs and Segment Number of Companies are maintained daily, and updated at Index Reviews, additionally taking into account index stability and continuity rules.

2.3.4 Assigning Companies to the Size-Segments

At initial construction, all companies with full market capitalization greater than or equal to that of the full market capitalization of the company that defines the Market Size-Segment Cutoff are assigned to that size-segment.

At Index Reviews, the company assignment rules additionally take into account, new additions, and index continuity and stability rules.

Between Index Reviews, the assignment of companies resulting from corporate events (e.g., mergers, IPOs, spin-offs) to the appropriate size-segments are based on

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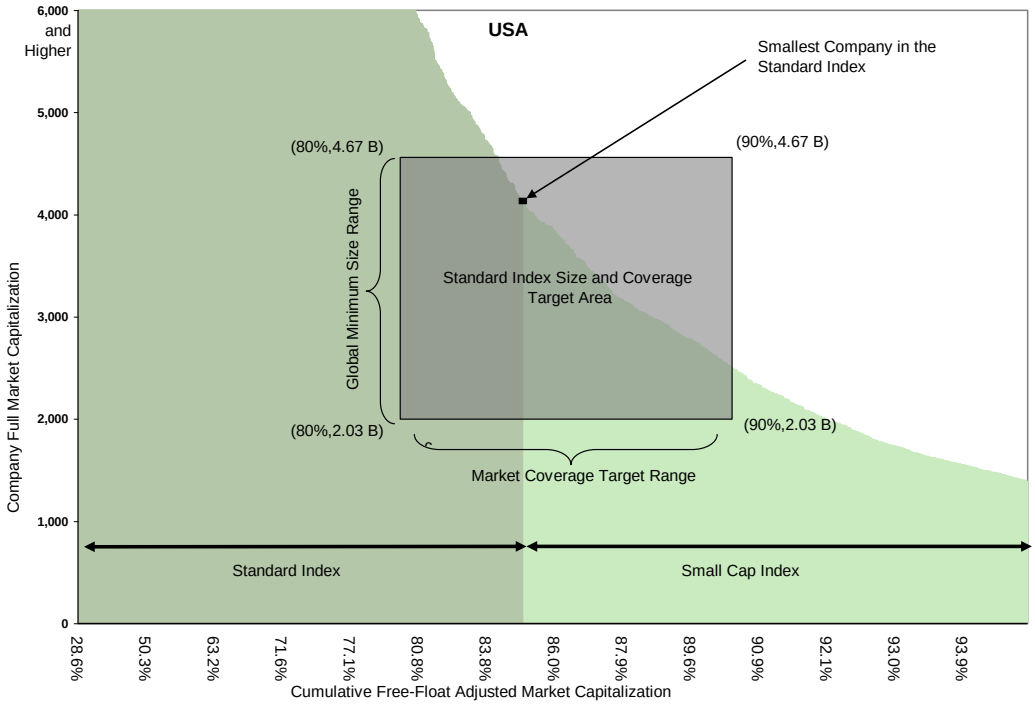
Market Size-Segment Cutoffs that are updated daily. This process is described in Sub-section 3.2: Ongoing Event-Related Changes.

2.3.5 Determining Market Size-Segment Cutoffs and Assigning Companies to the Size-Segments: Example

Example:

For the USA Standard segment, companies are counted in descending order of full market capitalization starting with the largest company. Companies continue to be counted until the cumulative free float-adjusted market capitalization of the companies reaches 85% of the free float-adjusted market capitalization of the US Market Investable Equity Universe. In this example, the full market capitalization of the last company counted is within the Global Minimum Size Range. The rank of this company in the US Market Investable Equity Universe (645) defines the Segment Number of Companies for the size-segment and its full market capitalization (USD 4.1 billion) defines the Market Size-Segment Cutoff between Standard and Small Cap segments in the US.

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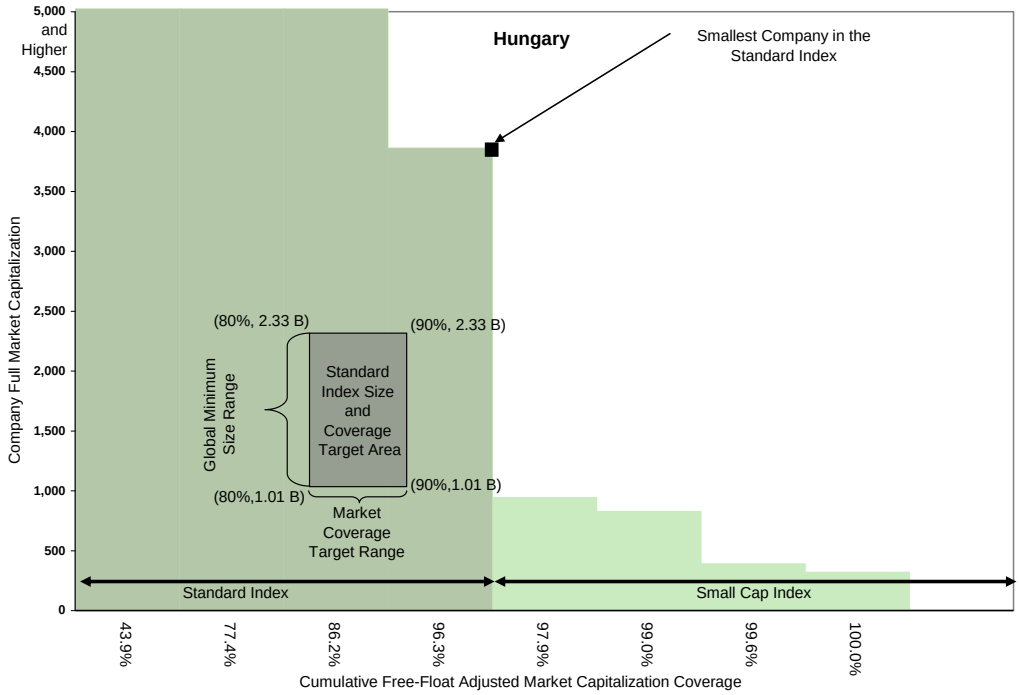


Example:

For the Hungary Standard segment, companies are counted in descending order of full market capitalization starting with the largest company. Companies continue to be counted until the cumulative free float-adjusted market capitalization of the companies reaches 85% of the free float-adjusted market capitalization of the Hungary Market Investable Equity Universe. In this example, the full market capitalization of the last company counted is significantly above the upper bound of the Global Minimum Size Range. All companies in Hungary, above the upper bound are added resulting in the cumulative free float-adjusted market capitalization coverage above 90%, the upper bound of the Market Coverage Target Range. The rank of the last company counted (4) defines the Segment Number of Companies and its full market capitalization (USD 3.8 billion) defines the Size-Segment Cutoff between the Hungary Standard and Small Cap Indexes. The next largest company has a full market

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capitalization of USD 941 million, below the lower bound of the Global Minimum Size Range.



2.3.6 Applying Final Size-Segment Investability Requirements

To enhance the replicability of Size-Segment Indexes, additional size-segment investability requirements are set for the Investable Market and the Standard Indexes.

2.3.6.1 MINIMUM FREE FLOAT MARKET CAPITALIZATION REQUIREMENT

If the Market Size-Segment Cutoff is within the Global Minimum Size Range for the Investable Market Index, a security can be included in the Investable Market Index only if its free float-adjusted market capitalization is at least 50% of the Market Size-Segment Cutoff for the Investable Market Index. In the case of the Market Size-Segment Cutoff being above the Global Minimum Size Range upper boundary for the Investable Market Index, the security's free float-adjusted market capitalization must be at least 50% of the upper boundary of the Global Minimum Size Range for the Investable Market Index. In the case of the Market Size-Segment Cutoff being below the Global Minimum Size Range lower boundary for the Investable Market Index, the

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security's free float-adjusted market capitalization must be at least 50% of the lower boundary of the Global Minimum Size Range for the Investable Market Index.

If the Market Size-Segment Cutoff is within the Global Minimum Size Range for the Standard Index, a security can be included in the Standard Index only if its free float-adjusted market capitalization is at least 50% of the Market Size-Segment Cutoff for the Standard Index. In the case of the Market Size-Segment Cutoff being above the Global Minimum Size Range upper boundary for the Standard Index, the security's free float-adjusted market capitalization must be at least 50% of the upper boundary of the Global Minimum Size Range for the Standard Index. In the case of the Market Size-Segment Cutoff being below the Global Minimum Size Range lower boundary for the Standard Index, the security's free float-adjusted market capitalization must be at least 50% of the lower boundary of the Global Minimum Size Range for the Standard Index. Any company excluded from the Standard Index based on this rule is also excluded from the Investable Market Index.

For a security with a Foreign Inclusion Factor (FIF) lower than 0.15 to be included in the Standard Market Index, its free float-adjusted market capitalization must be at least 1.8 times the minimum free float-adjusted market capitalization required for the Standard Index. Please refer to the Section 3.1.6.2 for details on assessing conformity with the Final Size-Segment Investability Requirements for existing constituents.

2.3.6.2 MINIMUM FOREIGN ROOM REQUIREMENT

For a security that is subject to a Foreign Ownership Limit (FOL) to be included in the Investable Market Index at its entire free-float adjusted market capitalization, the proportion of shares still available to foreign investors relative to the maximum allowed (referred to as "foreign room") must be at least 25%. If a security's foreign room is less than 25% and equal to or higher than 15%, MSCI will use an adjustment factor of 0.5 to reflect the actual level of foreign room to adjust the security's final foreign inclusion factor (FIF). As described in Sub-Section 2.2.8, securities will not be eligible for inclusion in a Market Investable Equity Universe if the foreign room is less than 15%.

The adjustment factor will be applied to the security actual FIF to arrive at the final FIF of the security. Conformity with the minimum free float-adjusted market capitalization requirements for Investable Market Index constituents will be assessed using the free float-adjusted market capitalization before the application of the adjustment factor.

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2.3.6.3 TREATMENT OF SECURITIES THAT EXHIBIT EXTREME PRICE INCREASE

Securities that exhibit extreme price increase will not be eligible for addition into the Standard Indexes but will continue to be considered as part of the market investable universe. Such securities would be re-evaluated for Standard Index inclusion in the subsequent Index Review using Standard Index inclusion criteria, including the return-based thresholds for extreme price increase.

MSCI will evaluate the 5-day to 60-day excess returns, in increments of 5 days, as of the price cutoff date of the Index Review, for additions to the Standard indexes. As shown in the table below, securities with excess returns above 100% for any of its 5-day to 20-day excess returns, or above 200% for any of its 25-day to 40-day excess returns or 400% for any of its 45-day to 60-day excess returns are considered to exhibit extreme price increase.

Thresholds for Extreme Price Increase

Period*	5D	10D	15D	20D	25D	30D	35D	40D	45D	50D	55D	60D
Excess Returns Threshold	100%	100%	100%	100%	200%	200%	200%	200%	400%	400%	400%	400%

* Number of days (Mon-Fri) prior to the price cutoff date of the Index Review

Excess return is calculated as the difference between the return of a security for the relevant period and the average return of IMI constituents belonging to the same country-sector where the security is classified (in terms of country of classification and GICS classification at the sector level). For country-sectors that have five or less IMI constituents, the relevant country IMI return is used instead.

IPOs that do not meet the minimum length of trading requirements, but meet all other criteria for Standard Index inclusion are not subject to this requirement.

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2.4 Index Continuity Rules

Index continuity is a desirable feature of an index as it avoids the temporary inclusion or exclusion of market indexes in composite indexes at different times. In order to achieve index continuity, as well as provide some basic level of diversification within a market index, notwithstanding the effect of other index construction rules contained herein, a minimum number of five constituents will be maintained for a DM Standard Index and a minimum number of three constituents will be maintained for an EM Standard Index. The application of this requirement involves the following steps.

- If after the application of the index construction methodology, a Standard Index contains less than five securities in a Developed Market or three securities in an Emerging Market, then the largest securities by free float-adjusted market capitalization among the securities included in the Market Investable Equity Universe are added to the Standard Index in order to reach five constituents in that Developed Market or three in that Emerging Market.
- At subsequent Index Reviews, if after the application of the index maintenance methodology a Standard Index contains less than five securities in a Developed Market or three securities in an Emerging Market, then the remaining securities are selected for inclusion in the Standard Index using the following process:
  - The securities included in the updated Market Investable Equity Universe are identified
  - These securities are ranked by descending free float-adjusted market capitalization, however in order to increase index stability the free float-adjusted market capitalization of the securities included in the Standard Index prior to the Index Review is multiplied by a factor of 1.5
  - The securities are added to the Standard Index in order to reach five constituents for a Developed Market or three for an Emerging Market in the ranking order determined in the step above

Please note that the index continuity rules are applicable only to the Standard Market Indexes. Other indexes, such as Large, Mid or Small Market Indexes or indexes based on the GICS segmentation may have as little as one constituent. Also such indexes may be discontinued if there are no constituents left in accordance with the MSCI GIMI methodology. Similarly, MSCI may resume calculation of such indexes if over time some companies become eligible for inclusion.

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2.5 Constructing and Calculating the Individual MSCI Global Investable Markets Indexes

2.5.1 Market Size-Segment Indexes

After companies are allocated to their respective Size-Segments (section 2.3.4) and securities are reviewed for complying with the Final Size-Segment Requirements (section 2.3.6), the final list of constituents for each of the Market Size-Segment Indexes is determined.

The MSCI Investable Market Indexes are composed of the MSCI Standard Indexes and the MSCI Small Cap Indexes. The MSCI Standard Indexes are further subdivided into the MSCI Large Cap and the MSCI Mid Cap Indexes.

For example, the MSCI USA IMI, MSCI USA Index, MSCI USA Large Cap Index, MSCI USA Mid Cap Index, MSCI USA Small Cap Index.

2.5.2 Composite Indexes[14]

Two or more Market Indexes can be combined to form Composite Indexes.

Market Indexes can be grouped either on the basis of Market Classification[15] definition, geographical regions, economic regions or other criteria. For example, by combining all Market Indexes from each Market Classification, i.e. Developed, Emerging and Frontier Markets, we obtain the MSCI World[16], the MSCI Emerging Markets and the MSCI Frontier Markets Indexes respectively for each size-segment.

Examples of regional or other types of indexes grouping multiple markets are the MSCI Asia Pacific Index, the MSCI North America Index or the MSCI GCC Index. Market Classification grouping can also be overlaid with regional grouping. Some examples would be the MSCI EM Asia Index or the MSCI All Countries[17] Americas Index. Some regional indexes may be formed by excluding specific markets, for instance, MSCI World ex USA Index or the MSCI Asia Pacific ex Japan Index. A list of standard defined Regions can be found in https://www.msci.com/index-country-membership-tool. MSCI may also create custom regions at client's request.

[14] Composite Indexes covered in this section refer to market capitalization weighted indexes created by combining individual Market Indexes.

[15] Please refer to Appendix II for the MSCI Market Classification Framework.

[16] The MSCI World Index is made up of all the Markets Indexes classified as Developed Markets.

[17] All Countries include both Developed Markets and Emerging Markets Indexes.

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2.5.3 GICS-Based Indexes

All securities in the Global Investable Equity Universe are assigned to the industry that best describes their business activities. To this end, MSCI has designed, in conjunction with S&P Dow Jones Indices, the Global Industry Classification Standard (GICS). The GICS currently consists of 11 Sectors, 24 Industry Groups, 69 Industries and 158 Sub-Industries. Under the GICS, each company is assigned uniquely to one Sub-Industry according to its principal business activity.

Narrower Indexes may be derived from each MSCI Market, Regional or Composite Indexes based on the industry classification of each company as defined by the Global Industry Classification Standard (GICS). The indexes may contain securities belonging to specific Sectors, Industry Groups, Industries, Sub-Industries or a combination of these. For example, MSCI Japan Energy Index, MSCI Japan Media Index, MSCI Japan Financials Index. Also, indexes can be created by combining the country grouping described in Sub-section 2.5.2 above with GICS classification. As an illustration, the MSCI EM Asia Utilities Index is a GICS-based Index carved out of a broader Composite Regional Index.

2.5.4 Other Indexes

Indexes can also be segregated based on security attributes such as share type or exchange of listing, among others. Some examples of Share Type-based Indexes include the MSCI China B, the MSCI China Red-Chip, the MSCI China P-Chip Indexes as well as the MSCI DR Indexes (see Appendix XI). The China All Shares ex Shenzhen Listed Shares Index is an example of an index that is based on the exchange of listing.

2.5.5 Calculating the MSCI Global Investable Markets Indexes

Once the constituents for each MSCI Market, Regional, Composite and/or GICS-based Indexes are determined, the Index Levels may then be calculated. The MSCI Index Calculation Methodology book describes MSCI's general Index calculation methodology for the MSCI Equity Indexes. For more information, please refer to the MSCI Index Calculation Methodology document, available at: https://www.msci.com/index-methodology.

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3 Maintaining the MSCI Global Investable Market Indexes

The MSCI Global Investable Market Indexes are maintained with the objective of reflecting the evolution of the underlying equity markets and segments on a timely basis, while seeking to achieve:

- Index continuity,
- Continuous investability of constituents and replicability of the indexes, and
- Index stability and low index turnover.

In particular, index maintenance involves:

- Quarterly Index Reviews (Index Reviews) in February, May, August and November of the Size-Segment Indexes which include:
  - Updating the indexes on the basis of a fully refreshed Equity Universe.
  - Taking buffer rules into consideration for migration of securities across size and style segments.
  - Updating Foreign Inclusion Factors (FIFs) and Number of Shares (NOS).
- Ongoing event-related changes. Changes of this type are generally implemented in the indexes as they occur. Significantly large IPOs are included in the indexes after the close of the company's tenth day of trading.

Any index constructed on the basis of the GIMI methodology may be subject to potential concentration and other limitations resulting from changes in the underlying markets. Any such potential limitations of an existing methodology may be assessed as part of the Index Review process.

3.1 Quarterly Index Reviews

The objective of the Index Reviews is to systematically reassess the various dimensions of the Equity Universe for all markets on a fixed quarterly timetable. An Index Review involves a comprehensive review of the Size-Segment Indexes.

During each Index Review, the Equity Universe is updated and the Global Minimum Size Range is recalculated for each size-segment. Then, the following index maintenance activities are undertaken for each market:

- Updating the Market Investable Equity Universe.
- Recalculating the Global Minimum Size References and Global Minimum Size Ranges

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- Reassessing the Segment Number of Companies and the Market Size-Segment Cutoffs.
- Assigning companies to the size-segments taking into account buffer zones.
- Assessing conformity with Final Size-Segment Investability Requirements.
- The MSCI Global Investable Market Indexes may follow light rebalancing rules (Light Rebalancing) at an Index Review if the criteria set in Appendix VIII: Market Monitoring Framework and Potential Switch to a Light Rebalancing under Conditions of Market Stress are met.

3.1.1 Updating the Equity Universe

During each Index Review, the Equity Universe is updated by identifying new equity securities that were not part of the Equity Universe at the previous Index Review and classifying them into countries.

Details on the determination of the Equity Universe are in Sub-section 2.1: Defining the Equity Universe.

3.1.2 Updating the Market Investable Equity Universes

During each Index Review, the Market Investable Equity Universes are updated by:

- Reviewing the list of countries in which securities may be represented by foreign listings
- Evaluating each security that is not a constituent of the Investable Market Indexes for investability using the same investability screens described in Sub-section 2.2: Determining the Market Investable Equity Universes. Existing constituents of the Investable Market Indexes, on the other hand, are evaluated using buffers around these investability requirements as explained below.

3.1.2.1 ELIGIBILITY OF FOREIGN LISTINGS

Foreign listings may become eligible to represent securities only from the countries that met the Foreign Listing Materiality Requirement at least two Index Reviews prior. This requirement is applied to the countries that do not yet include securities represented by foreign listings.

Please refer to Appendix IV: Foreign Listing Materiality Requirement for further details.

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3.1.2.2 UPDATING THE EQUITY UNIVERSE MINIMUM SIZE REQUIREMENT

The Equity Universe Minimum Size Requirement is updated at each Index Review in the following manner:

The cumulative free float-adjusted market capitalization coverage at the company rank that was used to define the Equity Universe Minimum Size Requirement at the previous rebalance is calculated.

If the coverage of the updated DM Equity Universe at that rank falls:

- Between 99% and 99.25%, the Equity Universe Minimum Size Requirement is set to the current full market capitalization of the company at that rank.
- Below 99%, the Equity Universe Minimum Size Requirement is reset to the full market capitalization of the company at 99% coverage and the rank of that company is noted for the next rebalance.
- Above 99.25%, Equity Universe Minimum Size Requirement and rank are reset based on the full market capitalization of the company at 99.25% coverage.

The same Equity Universe Minimum Size Requirement is used for both Developed and Emerging Markets.

Example:

Suppose that at the previous Index Review the Equity Universe Minimum Size Requirement was set at USD 145 million and reflected the full market capitalization of the company ranked as the 8008th largest company by full market capitalization in the DM Equity Universe. Say that in the current Index Review, the full market capitalization of the company at the 8008th rank is USD 151 million and the cumulative free float-adjusted market capitalization representation at that company's rank is 98.9%. In addition, suppose the top 8201 companies cover 99.0% of the free float-adjusted market capitalization and the full market capitalization of the company at the 8201st rank is USD 147 million. Then USD 147 million is set as the new Equity Universe Minimum Size Requirement. The full market capitalization of the company at the 8201st rank will be the initial reference for the next Index Review.

New companies are evaluated relative to this updated threshold, whereas all existing constituents will not be evaluated relative to this investability requirement.

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3.1.2.3 UPDATING THE EQUITY UNIVERSE MINIMUM FREE FLOAT–ADJUSTED MARKET CAPITALIZATION

The Equity Universe Minimum Free Float-Adjusted Market Capitalization Requirement is calculated as 50% of the updated Equity Universe Minimum Size Requirement.

Non constituents of the IMI are evaluated relative to this updated threshold, whereas all existing constituents will not be evaluated relative to this investability requirement.

3.1.2.4 MINIMUM LIQUIDITY REQUIREMENT FOR EXISTING CONSTITUENTS

Non constituents of the Investable Market Indexes are evaluated relative to the thresholds described in section 2.2.5.

An existing constituent of the Investable Market Indexes may remain in a Market Investable Equity Universe if its 12-month ATVR falls below the Minimum Liquidity Requirement as long as it is above 2/3rd of the minimum level requirement of 20% for Developed Markets and 15% for Emerging Markets, i.e., 13.3% and 10%, respectively. In addition, in order to remain in the Investable Market Indexes the existing constituent must have:

- The 3-month ATVR of at least 5%;
- The 3-month Frequency of Trading of at least 80% for Developed Markets and 70% for Emerging Markets.

If the listing used for an existing constituent no longer meets the above liquidity requirements, other eligible listings that do meet such liquidity requirements will be used to represent the security in the Market Investable Equity Universe. If the security has two or more other eligible listings, the following priority rules would be used to determine which of such listings will be used to represent the security in the Market Investable Equity Universe:

- Local listing[18]
- Foreign listing in the same geographical region[19]
- Foreign listing in a different geographical region[20].

[18] If the security has two or more local listings, then the listing with the highest 3-month ATVR would be used.

[19] MSCI classifies markets into three main geographical regions: EMEA, Asia Pacific and Americas. If the security has two or more foreign listings in the same geographical region, then the listing with the highest 3-month ATVR would be used.

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Changes in listing from a foreign listing to a local listing for existing constituents will be applied even if the foreign listing still meets the liquidity requirements, in cases where the local listing has a 12-month ATVR above two times the minimum level requirement of 20% for Developed Markets and 15% for Emerging Markets, i.e., 40% and 30%, respectively. Such changes from a foreign listing to a local listing for existing index constituents will only be considered when data from previous twelve months is available for calculation of the 12-month ATVR.

If an existing constituent of a Standard Index in Emerging Markets fails to meet the liquidity requirements, but has a weight of more than 10% in the respective country index and its float adjusted market capitalization is above 0.5 times the Global Minimum Size Reference for Emerging Markets, then such constituent will remain in the index. However, MSCI would apply a Liquidity Adjustment Factor of 0.5 to the weight of the security, and in the subsequent Index Review, MSCI:

- Would delete the security from the index if the security does not meet all liquidity requirements for existing constituents calculated after applying the Liquidity Adjustment Factor or
- Would maintain the security in the GIMI and remove the Liquidity Adjustment Factor if the security meets all the liquidity requirements for new constituents, calculated before applying the Liquidity Adjustment Factor for three consecutive Index Reviews or
- Would continue maintaining the security in the GIMI with the Liquidity Adjustment Factor of 0.5 if none of the above conditions are met

3.1.2.5 GLOBAL MINIMUM FOREIGN INCLUSION FACTOR REQUIREMENT

New securities with a FIF lower than 0.15 are included in the Market Investable Equity Universe if their free float-adjusted market capitalization meets 1.8 times half of the Standard Index Interim Market Size-Segment Cutoff. Interim Market Size-Segment Cutoffs are calculated daily in order to determine eligibility for early inclusion of securities. They are based on the current Market Investable Equity Universe (please refer to section 3.2.1: Determining the Interim Market Size-Segment Cutoffs for Daily Maintenance for more details).

All existing constituents will not be evaluated relative to this investability requirement.

[20] If the security has two or more foreign listings in a different geographical region, then the listing with the highest 3-month ATVR would be used.

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3.1.2.6 MINIMUM FOREIGN ROOM REQUIREMENT

New securities that are subject to a Foreign Ownership Limit (FOL) are eligible for inclusion in the Market Investable Equity Universe if foreign room of the securities is at least 15%. All existing constituents will not be evaluated relative to this investability requirement.

3.1.2.7 MINIMUM LENGTH OF TRADING REQUIREMENT

New securities that do not meet the minimum length of trading requirement as described in Section 2.2.7 are included in the Market Investable Equity Universe only if their full market capitalization and free float-adjusted market capitalization meet 1.8 times and 1.8 times half of the Standard Index Interim Market Size-Segment Cutoff respectively.

All existing constituents will not be evaluated relative to this investability requirement.

3.1.3 Recalculating the Global Minimum Size References and Global Minimum Size Ranges

The Global Minimum Size References and corresponding ranges are reset at the Index Reviews using a process similar to the one used to update the Equity Universe Minimum Size Requirement. More details may be found in

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Appendix X: Updating the Global Minimum Size References and Ranges.

3.1.4 Reassessing the Segment Number of Companies and the Market Size-Segment Cutoffs

The Segment Number of Companies and the corresponding Market Size-Segment Cutoffs are updated to account for changes in each Market Investable Equity Universe.

3.1.4.1 DETERMINING INITIAL SEGMENT NUMBER OF COMPANIES

If the Interim Market Size-Segment Cutoff[21] is equal to or above the lower bound of the Global Minimum Size Range, then the Initial Segment Number of Companies is equal to the number of companies in the updated Investable Equity Universe with the full company market capitalization equal to or above the Interim Market Size-Segment Cutoff. If the Interim Market Size-Segment Cutoff is below the lower bound of the Global Minimum Size Range, then the Initial Segment Number of Companies is equal to the sum of:

- The number of companies in the updated Investable Equity Universe with the full company market capitalization equal or above the lower bound of the Global Minimum Size Range and;
- The number of companies in the updated Investable Equity Universe that were also part of the corresponding Size-Segments prior to the Index Review with the full market capitalization below the Global Minimum Size Range, but equal to or above the Interim Market Size-Segment Cutoff.

This Initial Segment Number of Companies takes into account the newly eligible companies as well as deletions from the updated Investable Equity Universe.

3.1.4.2 CHANGES IN THE SEGMENT NUMBER OF COMPANIES

The full market capitalization of the company ranked in the updated Market Investable Equity Universe at the Initial Segment Number of Companies and the

[21] The Interim Market Size-Segment Cutoff during an Index Review is calculated the same way as the Interim Market Size-Segment Cutoffs, which are reported daily, however the Number of Shares and Foreign Inclusion factor post Index Review are used in the calculations and the value is not limited by the Global Minimum Size Range. Furthermore, if the Interim Market Size-Segment Cutoff is lower than the Equity Universe Minimum Size Requirement, then the Interim Market Size-Segment Cutoff is set to the Equity Universe Minimum Size Requirement.

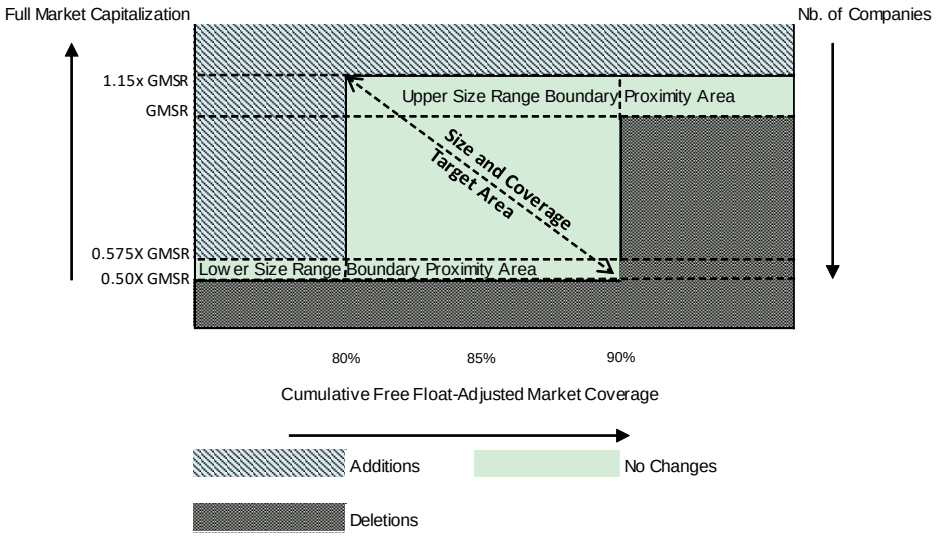
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cumulative free float-adjusted market capitalization coverage at this company rank are used to verify that the Initial Segment Number of Companies falls either:

- within the Size and Coverage Target Area for the Size-Segment Index or
- within the Lower or Upper Size Range Boundary Proximity Areas, which span from 0.5 times to 0.575 times and from one time to 1.15 times the Global Minimum Size Reference respectively (please refer to the diagram below for more details).

If it does, the Segment Number of Companies post Index Review becomes equal to this Initial Segment Number of Companies, and the full market capitalization corresponding to the smallest company in the Segment Number of Companies becomes the Market Size-Segment Cutoff for that market and is used in this Index Review. The Segment Number of Companies is also equal to the Initial Segment Number of Companies in the cases when the full company market capitalization of the company corresponding to the Initial Segment Number of Companies is above the Global Minimum Size Range and there are no investable companies between this company and the upper boundary of the Global Minimum Size Range.

Changing Segment Number of Companies



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If the Initial Segment Number of Companies falls outside of the size and coverage target area, the Initial Segment Number of Companies is changed to bring it closer to the area. In making this change, consideration is given to index stability and index turnover, which may impact the ability of Market Size-Segment Cutoffs to fall within the Size and Coverage Target range.

Depending on the location of the Market Size-Segment Cutoff derived from the Initial Segment Number of Companies relative to the Size and Coverage Target Area, an increase in, or a reduction of, the Segment Number of Companies may be required.

- When the Market Size-Segment Cutoff is above the upper boundary of the Global Minimum Size Range and there are investable companies between the company corresponding to the Initial Segment Number of Companies and the upper boundary of the Global Minimum Size Range, or the Market Size-Segment Cutoff is below the lower boundary of the Market Coverage Target Range, additions to the Size-Segment Index are needed.
- When the Market Size-Segment Cutoff is below the lower boundary of the Global Minimum Size Range, or above the Market Coverage Target Range, deletions from the Size-Segment Index are needed.

The process for adjusting the Segment Number of Companies is as follows:

- If additions to the Segment Number of Companies are required:
  - The number of companies is increased to include all companies with a full market capitalization higher than the upper boundary of the Global Minimum Size Range.
  - The number of companies is increased to include all companies with a full market capitalization higher than the upper limit of the Lower Size Range Boundary Proximity Area, if any, that are required to reach the lower boundary of the Market Coverage Target Range.[22]
  - The additions are made in descending order of full market capitalization. The full market capitalization of the last added company then becomes the Market Size-Segment Cutoff. If the full market capitalization of the last added company is above the upper boundary of the Global Minimum Size Range then the Market Size-Segment Cutoff is set at this upper boundary of the Global Minimum Size Range.
- If a reduction of the Segment Number of Companies is required to reach the Size and Coverage Target Area, limits are placed on the decrease in the number of companies, to further enhance index stability. These limits are implemented in the following steps:

[22] This step is implemented even if it brings the Market Size-Segment Cutoff from below the lower boundary of the Market Coverage Target Range to above the upper boundary of the Market Coverage Target Range.

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- First, a reduction of no more than 5% of the Initial Segment Number of Companies is made to bring the Market Size-Segment Cutoff into compliance with the Size and Coverage Target Area. Only the companies with full company market capitalization lower than the lower limit of the Upper Size Range Boundary Proximity Area can be removed.[23]
- If this reduction brings the Market Size-Segment Cutoff into compliance with the Global Minimum Size Range, or removes at least half the free float-adjusted market capitalization that lies between the smallest company before the adjustment of the Initial Segment Number of Companies and the lower bound of the Global Minimum Size Range, no further adjustment is necessary.
- If not, then a reduction of not more than 20% of the Initial Segment Number of Companies is made to remove at most half the free float-adjusted market capitalization that lies between the smallest company before adjusting the Initial Segment Number of Companies and the lower bound.
- In market segments with a small number of companies, the deletion of the first two companies is not subject to the limits described above. [23]
- When a limit is placed on the decrease in the number of companies, as explained above, the full market capitalization of the smallest company in the index will remain below the lower boundary of the Global Minimum Size Range. In this case, the Market Size-Segment Cutoff is set at this lower bound of 0.5 times the Global Minimum Size Reference instead of the size of the smallest company.

3.1.5 Assigning Companies to Appropriate Size-Segments

During an Index Review, companies are assigned with the following priority to the Size-Segments until the Segment Number of Companies is achieved:

- Current constituents of a given Size-Segment Index, as well as companies assigned to this Size-Segment during last Index Review that failed the Final Size-Segment Investability Requirements, greater than or equal to the Market Size-Segment Cutoff.
- Newly investable companies with a full market capitalization greater than or equal to the Market Size-Segment Cutoff.
- Companies greater than the upper buffer threshold[24] of the lower Size-Segment that are:
  - Currently in the lower Size-Segment Index or
  - Assigned to this Size-Segment during last Index Review and failed the Final Size-Segment Investability Requirement or
  - Investable companies during last Index Review that were not assigned to any Size-Segment.

[23] A company with full market capitalization within the Global Minimum Size Range is not removed if the removal would bring the Market Size-Segment Cutoff from above the upper boundary of the Market Coverage Target Range to below the lower boundary of the Market Coverage Target Range.

[24] Buffer zones for Size-Segments are explained in more detail in Section 3.1.5.1

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- Current constituents of a given Size-Segment Index, as well as companies assigned to this Size-Segment during the last Index Review that failed the Final Size-Segment Investability Requirements, in the lower buffer of the Size-Segment in descending capitalization order, until the threshold of the buffer is reached.
- The largest companies from the upper buffer of the next lower size-segment.

Once companies have been assigned to the Standard, Large and Investable Market Segments, companies are then assigned to the Mid and Small Cap Segments. The Mid Cap Segment comprises the companies that are in the Standard Segment but not the Large Cap Segment. The Small Cap Segment comprises the companies that are in the Investable Market Segment but not in the Standard Segment.

3.1.5.1 USING BUFFER ZONES TO MANAGE THE MIGRATION OF COMPANIES BETWEEN SIZE-SEGMENT INDEXES

In order to better reflect the investment processes of size managers, allow for timely representation of market developments when securities move far away from size-segment thresholds, and help control index turnover, buffer zones are used to control the migration of companies between Size-Segment Indexes.

An existing constituent is generally allowed to remain in its current size-segment even if its full market capitalization falls below (above) the Market Size-Segment Cutoff that defines the lower (upper) boundary of its segment, as long as its company full market capitalization falls within a buffer zone below (above) the Market Size-Segment Cutoff. The buffer zones at Index Reviews are defined with boundaries of 2/3rd of and 1.5 times the Market Size-Segment Cutoff between two size-segments[25].

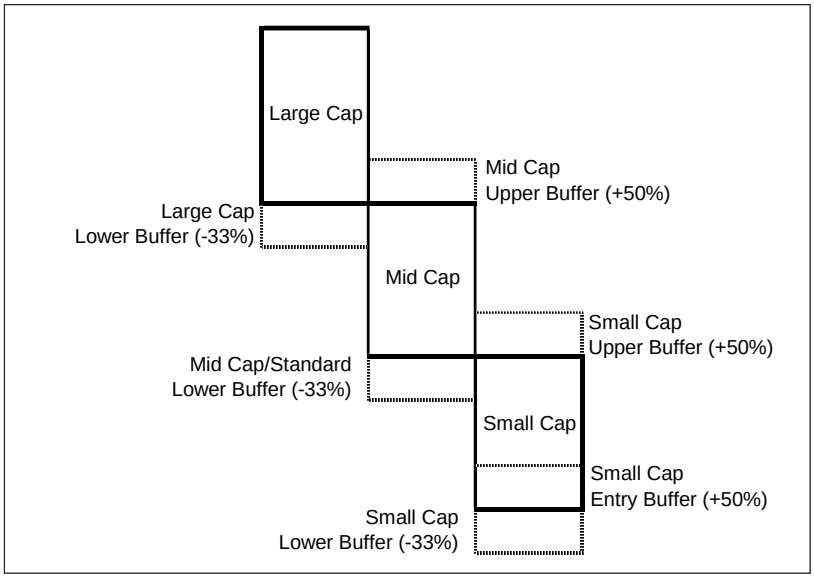
In addition, a Small Cap Entry Buffer Zone is used for the entry in the Small Cap Indexes of non-current constituents of the IMI. It is defined with a boundary of 1.5 times the Market Size-Segment Cutoff for the Investable Market Index. The inclusion in the Small Cap Indexes of all non-current constituents of the IMI above the Investable Market Size-Segment Cutoff could lead to an excessively large number of additions of small companies. Consequently, non-current constituents of the IMI within the Small Cap Entry Buffer Zone which are assigned to the Small Cap Segment are included in the Small Cap Indexes only to the extent that they replace current constituents which have fallen below the Small Cap Lower Buffer. The remaining

[25] At "light" rebalancings, the buffer zones are set at one half of and 1.8 times the Market Size-Segment Cutoff between two size-segments.

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companies are not included in the Investable Market Indexes, but are still taken into account to determine the Segment Number of Companies.

Index Review Buffers



3.1.6 Assessing Conformity with Final Size-Segment Investability Requirements

3.1.6.1 FOR NEW CONSTITUENTS

Once companies are assigned to each size-segment, the securities of companies in each segment are evaluated for conformity with the additional size-segment investability requirements for each size-segment. The securities of newly eligible companies and of companies migrating from the lower segment are required to meet the additional investability requirements as described in Sub-section 2.3.6: Applying Final Size-Segment Investability Requirements.

In addition, IPOs eligible for early inclusion according to Sub-section 3.2.4.1, and for which the effective date of inclusion is either 5 days before the effective date of the Index Review or 3 days after, will be made effective to coincide with the Index Review. For example, when the effective date of inclusion of the IPO is November 28 (3 business days before December 1), while the effective date of the Index Review is December 1, the IPO will be added effective December 1.

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For companies trading on a conditional basis (when-issued trading) prior to their listing and unconditional trading, MSCI assesses the inclusion of the company in the MSCI Indexes based on its first day of conditional trading.

3.1.6.2 FOR EXISTING CONSTITUENTS

Existing constituents may remain in the size-segment indexes if they would otherwise fail the additional investability requirements for Free Float Market Capitalization described in Section 2.3.6.1 but still meet 2/3rd of the threshold. Existing constituents of the Small Cap Index must have a FIF that is equal to or larger than 0.15 to remain in the index. Existing constituents of the Standard Index with FIF of less than 0.15 must meet 2/3rd of the 1.8 times of the minimum free float-adjusted market capitalization required for the Standard Index.

Existing Standard Index constituents in the lower buffer that fail the additional investability requirements of the Standard Index are moved to the Small Cap Index. However, if the company has other investable securities that meet the additional investability requirements of the Standard Index, the company is retained in the Standard Size-Segment and the securities failing the final size-segment investability requirements are not included in any of the indexes within the MSCI Global Investable Market Indexes.

Any other Standard Index constituent that fails these requirements is not included in any of the indexes within the MSCI Global Investable Market Indexes.

Existing IMI constituents that exhibit extreme price increase (as per section 2.3.6.3) will not be eligible for migration into the Standard Indexes. Existing IMI constituents migrating into the Standard Index and exhibiting extreme price increase will be retained as Small Cap constituents.

Current constituent securities for which there is less than 25% foreign room may have their weight adjusted by the application of an adjustment factor to reflect their actual level of foreign room.

The post-review adjustment factor depends on the current adjustment factor and the actual level of foreign room of the securities, as shown in the table below:

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Post-review adjustment factor					
	foreign room >= 25%	15% <= foreign room < 25%	7.5% <= foreign room < 15%	3.75% <= foreign room < 7.5%	foreign room <3.75%
Current adjustment factor = 1	1	1	0.5	0.25	0
Current adjustment factor = 0.5	1	0.5	0.5	0.25	0
Current adjustment factor = 0.25	1	0.5	0.25	0.25	0

If the foreign room of an existing constituent decreases below 3.75%, then the adjustment factor equals 0.[26]

In order to preserve index continuity, conformity with the minimum free float-adjusted market capitalization requirements for existing IMI Index constituents will be assessed using the free float-adjusted market capitalization before the application of the adjustment factor[27]. That is, existing constituents of the IMI Index with FIF (before the application of the adjustment factor) of greater than or equal to 0.15 must meet 2/3rd of the minimum free float-adjusted market capitalization required for the Standard or Small Cap Index to remain in the Standard or Small Cap Index, respectively. Existing constituents of the Standard Index with FIF (before the application of the adjustment factor) of less than 0.15 must meet 2/3rd of the 1.8 times of the minimum free float-adjusted market capitalization required for the Standard Index to remain in the Standard Index.

Conformity with the minimum free float-adjusted market capitalization requirements for non-current IMI constituents will be assessed using the free float-adjusted market capitalization after the application of the adjustment factor.

[26] Based on information available from the country regulatory authority, the adjustment factor equals 0 for securities where further purchases are restricted due to foreign ownership restriction. In case of India, MSCI monitors securities appearing on the National Securities Depository Limited's (NSDL) & Central Depository Services Limited's (CDSL) official list of securities for which the Red flag or Breach limit has been reached on a daily basis. MSCI deletes securities from the MSCI India Indexes that are (i) Appearing on the Breach list (ii) Appearing on the Red Flag/Caution list and have foreign room below 3.75% by giving 2 business days' notice. In the case of Mexico, MSCI monitors the foreign investments under the Neutral Trust Program (NTP). The NTP structure mandates foreign investors to acquire shares only through it. MSCI deletes securities from the MSCI Mexico Indexes having foreign room below 3.75% by giving 2 business days' notice.

[27] Please note that this treatment is also applicable in the cases when Liquidity Adjustment Factor is applied as described in the section 3.1.2.4 and 5.2.3.2

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Foreign room level will be reviewed on a quarterly basis coinciding with the regular MSCI Index Reviews. Generally, an upward movement of the adjustment factor for existing constituents following a previous reduction in foreign room or index re-inclusion of a security deleted as a result of having a foreign room lower than 3.75% will only be considered 12 months after the weight reduction or deletion; unless the upward movement of the adjustment factor is primarily driven by a change in FOL and provided that the increase in FOL[28] happened prior to the Price Cutoff Date of the previous Index Review described in Section 3.1.9.

For example, to be considered for the May Index Review, the potential increase in FOL must have happened before the Price Cutoff Date of the February Index Review.

During a regular Index Review, for any existing IMI constituents whose weight is decreased as a result of a change in the adjustment factor due to low foreign room, MSCI will continue to monitor any potential increased foreign room due to an increase in FOL[27] until five business days before the effective date of that Index Review.

3.1.7 Index Review of Changes in Foreign Inclusion Factors (FIFs)

During an Index Review, changes in FIFs can result from events that occurred or were not captured in the course of the previous quarter covering changes in all aspects of shareholder information used to estimate free float. Changes in free float estimates and corresponding FIFs are reflected in the indexes on a quarterly basis at the February, May, August and November Index Reviews. All FIF changes are reflected in the indexes provided the change in free float is more than 1% or in cases of corrections. In addition, all FIF changes are reflected for additions to the Standard/Small Cap Size-Segments, additions to the Micro Cap Index and deletions from the Standard Size-Segment as part of the Index Review.

FIF changes are implemented as part of a given Index Review if the changes take place prior to the Price Cutoff Date (as defined in Sub-Section 3.1.9) of that Index Review. In cases of changes effective after the Price Cutoff Date, the implementation would generally be postponed to the next closest Index Review.

[28] Applicable only for securities still subject to FOLs. For example, if the FOL increases to 100% (i.e., FOL is no longer applicable) prior to the Price Cutoff Date, it will be reflected in the upcoming Index Review. In the case of India, MSCI would consider potential increases in FOL based on data published by Central Depository Services Limited's (CDSL) and National Securities Depository Limited's (NSDL). For securities that are not covered by the list provided by the CDSL/NSDL, FOL will be determined based on publicly available data.

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MSCI may implement the changes as part of a given Index Review even if they are effective after the Price Cutoff Date. Such changes may be announced by MSCI until 3 business days before the Index Review effective date.

3.1.8 Index Review of Changes in Number of Shares (NOS)

During an Index Review, changes in NOS may result from events that occurred or were not captured in the course of the previous quarter. Changes in NOS are generally updated on a quarterly basis at the February, May, August and November Index Reviews rather than at the time of the event, provided the absolute NOS change is at least 1,000 shares or relative NOS change is at least 0.02%.

Changes in NOS, , are implemented as part of a given Index Review if they take place prior to the Price Cutoff Date (as defined in Sub-Section 3.1.9) of that Index Review. In cases of changes effective after that date, the implementation would generally be postponed to the next closest Index Review.

MSCI may implement the changes as part of a given Index Review even if they are effective after the Equity Universe Cutoff Date. Such changes may be announced by MSCI until 3 business days before the Index Review effective date.

3.1.9 Date of Data Used for Index Reviews

The standard data cutoff dates for the Index Reviews are as follows:

- Equity Universe Cutoff Date: the last business day of November for the February Index Review, the last business day of February for the May Index Review, the last business day of May for the August Index Review, and the last business day of August for the November Index Review. This is the relevant cutoff date for:
  - Data used to update the Equity Universe as per Sub-section 2.1: Defining the Equity Universe;
  - Data used for calculating the updated Equity Universe Minimum Size Requirement as per Sub-section 3.1.2.2: Updating the Equity Universe Minimum Size Requirement;
- Liquidity Cutoff Date: the last business day of December for the February Index Review, the last business day of March for the May Index Review, the last business day of June for the August Index Review, and the last business day of September for the November Index Review. This is the relevant cutoff date for data used for the liquidity calculations, such as ATVRs and frequency of trading.
- Price Cutoff Date: any one of the last 10 business days of January for the February Index Review, of April for the May Index Review, of July for the August Index Review and of October for the November Index Review. This is the relevant cutoff date for:

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  - Prices used for calculating market capitalization;
  - Data used to update FIFs as per Sub-section 3.1.7: Index Review of changes in Foreign Inclusion Factors (FIFs);
  - Data used to incorporate all foreign room changes.
  - Data used to update NOS as per Sub-section 3.1.8: Index Review of changes in Number of Shares (NOS).

- A business day is defined as a day from Monday to Friday where markets cumulatively constituting more than 80% of the MSCI All Countries World Index free float-adjusted market capitalization are expected to be open on the basis of a security's country of listing[29].

As a general rule, price movements after the Price Cutoff Date will not impact the results of the Index Review. However, in cases of extraordinary events or news related to a specific company identified as a migration between the size-segments or as an addition to the IMI based on the Index Review Price Cutoff Date MSCI may decide not to change the company's size-segment allocation. In such instances, the company would either be maintained in its current size-segment or not added to the IMI. Examples of such extraordinary events or news are allegations of fraud, falsification of accounting data or news on a takeover bid resulting in a significant reduction (or increase) in company's market capitalization between the Index Review Price Cutoff Date and the announcement date or/and in its suspension for an undetermined period. Market cap fluctuations or suspensions of trading after the Index Review announcement date typically would not result in the reversion of an already announced decision on the company's size-segment allocation. The policy on implementation of the Index Review changes for securities suspended around the Index Review implementation dates is stated in Appendix VII of this document.

MSCI monitors the full company market capitalization (issuer level) of companies in the Market Investable Equity Universes on a monthly basis as a part of its ongoing maintenance. The full company market capitalization is the aggregate security market capitalization of all listed securities of an issuer that are included in the MSCI Equity Universe, as well as all unlisted securities of such issuer that exhibit characteristics of equity securities.

[29] Currently, only Stock Connect eligible China A shares are included in the MSCI GIMI. Therefore, the China A share market will only be considered open if the Shanghai Stock Exchange, the Shenzhen Stock Exchange and the Stock Connect program are open.

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Full company market capitalization = Σ (Number of shares of listed security lines*Price) + Σ (Number of shares of unlisted security lines*Price of reference listed security line*Conversion factor).

The conversion factor is an estimate of the economic value of the unlisted shares relative to the economic value (i.e., price) of the reference listed shares. Generally, MSCI uses publicly available information such as the exchange ratio of unlisted shares to the listed shares, relative dividend rights or relative par value, among others, to derive this conversion factor. Unlisted securities with no economic rights are not included in the computation of full company level market capitalization.

Additional securities of existing index constituents identified by the tenth business day of a given month will be introduced on the third business day of the following month. Please note that Number of Shares (NOS), Foreign Inclusion Factors (FIF) and weights in the MSCI indexes are not affected by the updates.

Please note that updates due to ongoing maintenance of securities' share classes, share types and alternate listings are implemented on the third business day of the month.

Please refer to Appendix IX: Policies Regarding Trading Suspensions and Market Closures during Index Reviews for details on MSCI's policy regarding market closures during Index Reviews.

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3.2 Ongoing Event-Related Changes

Ongoing event-related changes to the indexes are the result of mergers, acquisitions, spin-offs, bankruptcies, reorganizations and other similar corporate events. They can also result from capital reorganizations in the form of rights issues, bonus issues, public placements and other similar corporate events that take place on a continuing basis. These changes generally are reflected in the indexes at the time of the event.

These corporate events affect many aspects of an index and its constituents, including inclusion or deletion of companies outside of the Index Reviews, weight changes due to changes in FOLs, FIFs, NOS, etc., and changes in size, style and/or industry classification.

To evaluate the impact of changes resulting from events on the assignment of companies into size-segments, it is necessary to maintain the Market Size-Segment Cutoffs and Segment Number of Companies on a daily basis as described below.

The handling of ongoing event-related changes can be classified in two broad categories:

- Corporate events affecting existing index constituents, described in Sub-section 3.2.3 below.
- Corporate events affecting non-index constituents, described in Sub-section 3.2.4 below.

The technical details relating to the handling of specific corporate event types can be found in the MSCI Corporate Events Methodology book available at: https://www.msci.com/index-methodology

3.2.1 Determining the Interim Market Size-Segment Cutoffs for Daily Maintenance

For the purpose of determining eligibility for early inclusion of securities, such as significant IPOs[30], and/or assigning a company and its securities post a corporate event, e.g., mergers and spin-offs, to the appropriate Size-Segment Index an Interim Size-Segment Cutoff is used. To derive this number the following steps are followed:

- The Global Minimum Size References and Global Minimum Size Ranges of the Large Cap, the Standard, and the Investable Market Indexes are updated daily as described in

[30] As described in section 3.2.4.1

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- Appendix X: Updating the Global Minimum Size References and Ranges
- On a daily basis, each Market Size-Segment Cutoff is set to be the full market capitalization of the company of the rank equal to the Segment Number of Companies for that Size-Segment in the Market Investable Equity Universe.
- The Interim Market Size-Segment Cutoff is set to:
  - The lower bound of the Global Minimum Size Range, if the Market Size-Segment Cutoff is below the lower bound.
  - The upper bound of the Global Minimum Size Range, if the Market Size-Segment Cutoff is above the upper bound.
  - The Market Size-Segment Cutoff, if it is within the Global Minimum Size Range.

The daily values for the Market Size-Segment Cutoffs, the Segment Number of Companies and the Global Minimum Size Range are based on data from the previous trading day.

3.2.2 Updating the Segment Number of Companies

If a company is added or deleted from a size-segment as a result of a corporate event, the Segment Number of Companies is correspondingly increased or decreased.

3.2.3 Corporate Events Affecting Existing Index Constituents

Corporate events can affect existing index constituents in various ways:

- Changes in Foreign Inclusion Factor (FIF), number of shares or industry classification for existing constituents.
- Changes in size or style segment classification as a result of a large corporate event.
- Early inclusions of non-index constituents.
- Early deletions of existing index constituents.

3.2.3.1 CHANGES IN FIF, NUMBER OF SHARES OR INDUSTRY CLASSIFICATION FOR EXISTING CONSTITUENTS

In order to ensure that the index accurately reflects the investability of the underlying securities, it is a general policy to coordinate changes in number of shares with changes in FIF.

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When two companies merge, or a company acquires or spins-off another company, the free float of the resulting entity is estimated on a pro forma basis, using the pro forma number of shares if applicable, and the corresponding FIF is applied simultaneously with the event. When there is a subsequent public disclosure regarding the new shareholder structure, which results in different free float estimation than that made at the time of the event, the FIF will be updated at the next Index Review. Other corporate events, which result in a change in shareholder structure or FOLs and FIFs, are reflected in the indexes simultaneously with the implementation of the event in the index. Pending NOS and/or float changes, if any, are implemented simultaneously with the event.

Decreases in FOLs or Foreign Room in which foreign investors are obliged to immediately sell shares in the market or when further purchases are no longer allowed will be reflected in the indexes as soon as possible. In cases where the FOL change results in a FIF decrease below 0.15, the security will be deleted unless it is a Standard Index constituent with free float-adjusted market capitalization meeting at least 2/3rds of the 1.8 times one half of the Standard Index Interim Size-Segment Cutoff.

Changes in NOS and FIF resulting from primary equity offerings representing at least 5%, 10% or 25% for Standard constituents (as well as securities assigned to Standard size segment but failed to be added to the Index), Small Cap constituents (as well as securities assigned to Small Cap size segment but failed to be added to the Index) and Micro Cap constituents (as well as listed securities not assigned to any size segment) respectively of the security's pre-event number of shares are implemented as of the close of the first trading day of the new shares, if all necessary information is available at that time. Otherwise, the event is implemented as soon as practicable after the relevant information is made available.

MSCI implements pending number of shares and/or free float updates simultaneously with the event. Note that if the number of shares update is smaller than +-1% on a post-event number of shares basis, it will be implemented at a subsequent Index Review.

Note that contrary to secondary offerings, primary equity offerings involve the issuance of new shares by a company.

Changes in the number of shares smaller than 5%, 10% and 25% are implemented at a subsequent Index Review. Such cases will be subject to the rules applicable for the Index Reviews in accordance with the section 3.1.8 of the MSCI GIMI methodology.

Secondary offerings/block sales with sizes representing at least 5%, 10% or 25% for Standard constituents (as well as securities assigned to Standard size segment but

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failed to be added to the Index), Small Cap constituents (as well as securities assigned to Small Cap size segment but failed to be added to the Index) and Micro Cap constituents (as well as listed securities not assigned to any size segment) respectively of the security's pre-event number of shares are implemented at the time of the event with two full business days advance notification provided that sufficient post-event information is publicly available.

Secondary offerings/block sales that do not meet the above conditions at the time of the event are considered for implementation at the subsequent Index Review. Such cases will be subject to the rules applicable for the Index Reviews in accordance with the section 3.1.7 of the MSCI GIMI methodology.

Changes in industry classification resulting from a large corporate event are implemented simultaneously with the event. Other changes in industry classifications are implemented at the end of the month.

3.2.3.2 CHANGES IN SIZE SEGMENT, STYLE SEGMENT OR INDUSTRY CLASSIFICATION AS A RESULT OF A LARGE CORPORATE EVENT

In order to reflect significant changes in the market capitalization of existing constituents in the Global Investable Market Indexes and in the World All Cap Indexes in a timely fashion while minimizing index turnover, the Size-Segment classification of a security is reviewed simultaneously with the event, if the market capitalization change implied by the event, including potential update in the number of shares for the security, is deemed significant.

A significant market capitalization change is defined as an increase of 50% or greater, or a decrease of 33% or more, relative to the company's full market capitalization before the event.

The company's post-event full market capitalization is then compared to the Interim Size-Segment Cutoffs in order to determine the classification of that security in the appropriate size-segment. The final decision is taken at the time of the completion of the event or, if the event is not effective yet, at the time of the confirmed announcement and is based on the latest market information available at the time of the analysis, including the latest NOS, FIF, and market prices.

In addition, the securities must pass the investability screens described in Sub-section 2.2 Determining the Market Investable Equity Universes.

Moreover, to be added to the Investable Market Index, the securities must meet the minimum foreign room requirement for the Investable Market Index described in Sub-section 2.3.6.2 Minimum Foreign Room Requirement.

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For a security to be added to the Standard Index, the free float-adjusted market capitalization must be at least 50% of the Standard Interim Size-Segment Cutoff.

For a security to be added to the Small Cap Index, the free float-adjusted market capitalization must be at least 50% of the Small Cap Interim Size-Segment Cutoff.

If a Small Cap constituent is considered for a size-segment migration to the Standard Index due to a significant market capitalization increase, and would qualify to be included in the Standard Index in terms of full company market capitalization but not in terms of security float-adjusted market capitalization, MSCI may decide to maintain the company in the Small Cap Index provided that its full company market capitalization remains below 1.5 times the Standard Interim Size-Segment Cutoff.

However, a World Micro Cap Index constituent is not considered for a size-segment migration to the Small Cap Index or Standard Index due to a significant market capitalization increase at the time of the event but at Index Reviews, unless there is a merger or acquisition of a Small Cap Index constituent or a Standard Index constituent with or by a World Micro Cap Index constituent.

If there is a significant market capitalization change due to any corporate event for a World Micro Cap Index constituent, MSCI deletes the constituent from World Micro Cap Index if its post-event full market capitalization is above the Small Cap Interim Size-Segment Cutoff and float-adjusted market capitalization is above (at least) half the Small Cap Index Interim Size-Segment Cutoff. However, MSCI may decide to maintain the company in the World Micro Cap Index provided that its post-event full market capitalization remains below 1.5 times the Small Cap Index Interim Size-Segment Cutoff and its float- adjusted market capitalization does not meet one half of the Small Cap Index Interim Size-Segment Cutoff.

If the company is added to, or removed from a size-segment, then it results in an increase or a decrease in the Segment Number of Companies for the size-segment.

For these significant events, if the post-event entity moves from being a non-constituent to a constituent of the Global Investable Market Indexes, the style characteristics and industry classification of the affected securities are reviewed. The same applies for the post-event entity that migrates from the World Micro Cap Index or the Small Cap Index to an upper Size-Segment Index. If the post-event entity moves from the Standard Index to the Small Cap Index or remains in the same Size-Segment Index (with the Large and Mid Cap Indexes being considered as one size index), the style characteristics and industry classification of the affected securities are not reviewed. If the post-event entity moves from the Standard Index or Small Cap Index to the World Micro Cap Index, the style characteristics of the affected

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securities are removed as there are no style characteristics for the World Micro Cap constituents.

The guidelines regarding significant market capitalization changes described above apply in most corporate events cases. For certain corporate events where the outcome is uncertain such as acquisitions for shares or non-renounceable rights issues, or combinations of different types of corporate events, or other exceptional cases, MSCI determines the most appropriate implementation method and announces it prior to the changes becoming effective in the indexes.

3.2.3.3 EARLY INCLUSIONS OF NON-INDEX CONSTITUENTS

When there is a corporate event affecting index constituents, non-index constituents that are involved in the event are considered for immediate inclusion in the MSCI Global Investable Market Indexes, as long as they meet all the index constituent eligibility rules and guidelines described in Sub-sections 2.2 and 2.4 with the exception of the length of trading and liquidity screens and minimum foreign room requirement. Such non-index constituents are treated as a continuation of index constituents and are subject to foreign room thresholds as defined in section 3.1.6.2 applicable for existing constituents.

For example, if a non-constituent company acquires a constituent company, the constituent company's securities may be replaced by the securities of the acquiring company. Similarly, if a constituent company merges with a non-constituent company, the merged company may replace the constituent company. In addition, if a constituent's share class is converted into another share class that is new or currently not in the index, this new share class can be included in the index to replace the current share class. However, when an index constituent is distributing rights to acquire a non-index constituent at a subscription price, MSCI does not include the non-index constituent at the time of the event, especially if the post-event information of the new entity is not complete and publicly available.

Such non-index constituents are generally included in the same size-segment and Value and Growth Indexes as the affected index constituents, since they are considered to be a continuation of the index constituents. However, if the difference between the post-event market capitalization of the non-index constituents and the respective index constituents is deemed significant, as discussed in Sub-section: 3.2.3.2, a size-segment review is conducted for the non-index constituents. A style review is conducted if the non-index constituents are included to different Size-Segment Indexes from the affected index constituents. Thereafter, the non-index constituents are included in the appropriate Size-Segment Indexes by comparing the company's post-event full market capitalization with the Interim Market Size-

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Segment Cutoff, and in the appropriate style indexes based on their style attribution within the relevant Size-Segment Indexes. In particular, the company post-event full market capitalization must be above at least 1 time the Interim Market Size-Segment Cutoff and the security free float-adjusted market capitalization must be above at least 50% of the Interim Market Size-Segment Cutoff.

Securities spun-off from existing constituents are also considered for inclusion at the time of the event. Size-segment review and industry classification review are systematically conducted for all spun-off securities from existing Global Investable Market Index constituents provided that they pass all the investability screens described in Sub-section 2.2 with the exception of the length of trading and liquidity screens. In addition, the free float-adjusted market capitalization of securities added to the Standard Index must be at least 50% of the Standard Index Interim Size-Segment Cutoff. For a security to be added to the Small Cap Index, the free float-adjusted market capitalization must be at least 50% of the Small Cap Interim Size-Segment Cutoff. Securities spun-off from the World Micro Cap Index are also considered for inclusion at time of the event, but only for the World Micro Cap Index size-segment. For a security to be added to the World Micro Cap Index, the free float-adjusted market capitalization must be at least 50% of the Micro Cap Minimum Size Requirement for Existing Constituents as described in Sub-section 4.1.2 A style review is performed for spun-off securities if they are included in different Size-Segment Indexes from the spinning-off securities and/or the spinning-off securities move to other Size-Segment Indexes at the time of the event. No style reviews are performed for spun-off securities that are considered to be included in the World Micro Cap Index, as there are no style characteristics for the World Micro Cap constituents. Thereafter, the spun-off securities are included in the appropriate Size-Segment Indexes by comparing the company's post-event full market capitalization with the Interim Market Size-Segment Cutoff, and in the appropriate style indexes based on their style attribution within the relevant Size-Segment Indexes.

3.2.3.4 EARLY DELETIONS OF EXISTING CONSTITUENTS

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 are removed from the MSCI Global Investable Market Indexes as soon as practicable. Companies that fail stock exchange's listing requirements with announcements of delisting from the stock exchanges are treated in the same way. When the primary exchange price is not available, the securities are deleted at an over-the-counter or equivalent market price when such a price is available and deemed relevant. If no over-the-counter or

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equivalent price is available, the company is deleted at the lowest system price (0.00001) in the security's price currency.

Securities may also be considered for early deletion in other cases, such as decreases in free float and FOLs, securities under prolonged suspension or when a constituent company acquires or merges with a non-constituent company or spins-off another company.

In practice, when a constituent company is involved in a corporate event which decreases by more than 33% the company's full market capitalization, the securities of the constituent company are considered for early deletion from the indexes simultaneously with the event. Securities are also considered for early deletion in cases of corporate events where the Foreign Inclusion Factor (FIF) of the security decreases or is expected to decrease below 0.15.

Moreover, existing constituents of the Standard Index with a FIF already lower than 0.15 may be considered for early deletion simultaneously with an event if the FIF further decreases due to the event.

In cases of securities that are considered for early deletion, a security is removed from the indexes if due to the event the security falls under one of the following scenarios:

- The security no longer passes the investability screens described in Sub-sections 2.2 and 4.1 (the security will be allocated to the World Micro Cap Index if it no longer passes the screens described in Sub-section 2.2 but still passes the screens described in Sub-section 4.1).
- The security is a constituent of the Standard Index and would be maintained in the Standard Index based on its company's full market capitalization after the event, however its float-adjusted market capitalization does not meet 2/3rd of one half of the Standard Index Interim Size-Segment Cutoff.[31]
- The security is a constituent of the Standard Index and would be migrated to the Small Cap Index based on its company's full market capitalization after the event, however its float-adjusted market capitalization does not meet one half of the Small Cap Index Interim Size-Segment Cutoff.

[31] If the Standard Index constituent has a FIF lower than 0.15 after the event, the minimum float-adjusted market capitalization requirement is 2/3rds of the 1.8 times one half of the Standard Index Interim Size-Segment Cutoff.

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- The security is a constituent of the Small Cap Index and its float-adjusted market capitalization does not meet 2/3rd of one half of the Small Cap Index Interim Size-Segment Cutoff following the event.
- The security is a constituent of the Small Cap Index and would be migrated to the Standard Index based on its company's full market capitalization after the event, however its float-adjusted market capitalization does not meet one half of the Standard Index Interim Size-Segment Cutoff, while the company's full market capitalization after the event is at least 1.5 times the Standard Interim Size-Segment Cutoff.
- The security is a constituent of the World Micro Cap Index and post-event full market capitalization is at least 1 time Small Cap Index Interim Size-Segment Cutoff and the free float-adjusted market capitalization is at least one half of the Small Cap Index Interim Size-Segment Cutoff
- The security is a constituent of the World Micro Cap Index and post-event full market capitalization is at least 1.5 times the Small Cap Index Interim Size-Segment Cutoff

Conversions of a constituent's share class into another share class may also result in the deletion of one or more share classes from the indexes.

For securities that are suspended, the market price immediately prior to the suspension is carried forward during the suspension period.

3.2.4 Corporate Events Affecting Non-Index Constituents

3.2.4.1 IPOS AND OTHER EARLY INCLUSIONS

In many cases, newly listed equity securities available to foreign investors are considered for inclusion in the MSCI Global Investable Market Indexes, according to MSCI's Global Investable Market Indexes methodology rules and guidelines, at the time of the Index Reviews. However, for IPOs, which are significant in size and meet all the MSCI inclusion criteria, an early inclusion, outside of the Index Reviews, may be considered for inclusion in the Standard Index. If the decision is made to include an IPO early, the inclusion is effective after the close of the security's tenth day of trading. However, in certain cases, another date may be chosen for the inclusion to reduce turnover, for example, where the normal inclusion date is close to the effective date of the next Index Review, as described in Sub-section 3.1.6.1.

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For companies trading on a conditional basis (when-issued trading) prior to their unconditional trading, MSCI intends to assess the inclusion of the company in the MSCI Indexes on its first day of conditional trading.

In order for an IPO and other newly eligible securities to qualify for an early inclusion to the Standard Index, a security must meet the index constituent eligibility rules and guidelines described in Sub-section 2.2 with the exception of the length of trading and liquidity screens, meet the size-segment investability requirements described in Sub-section 2.3.6.1 and have a company full market capitalization of at least 1.8 times the Interim Market Size-Segment Cutoff and free float-adjusted market capitalization of at least 1.8 times one-half of the Interim Market Size-Segment Cutoff as of the close of its first or second trading day.[32]

Any over-allotment (also called green shoe) publicly announced as exercised prior to MSCI's announcement on the first or second trading day is included in the IPO's market capitalizations calculations.

Securities may also be considered for early inclusion in other significant cases, including but not limited to those resulting from mergers and acquisitions giving rise to a large new company or a large primary or secondary public offering of an already listed security if the size of the offering exceeds the IPO threshold of 1.8 times one-half of the Interim Market Size-Segment Cutoff. In the case of a large public offering (primary or secondary), the size of the offering is calculated by multiplying the issue price applicable to institutional shareholders with the number of shares from the offer. Such cases will be treated in the same way as IPOs of significant size. MSCI's decision will be based on information regarding the results of the offering and overallotment (exercised partially or fully), if any, made publicly available within up to 2 business days after the close of the subscription period. If the decision is made to early include a security, MSCI will include the security by giving 10 business days' notice.

However, securities becoming eligible following among others, for example, a pure change in the legal form, a conversion of share class, or a secondary listing in a new exchange, and for which there is no offering or no corporate events that could meet one of the conditions mentioned above, are not considered for early inclusion. Similarly, securities spun off from non-index constituent or initial listings without public offerings are not considered for early inclusion. Such cases are considered for inclusion in the MSCI Global Investable Market Indexes, according to MSCI's Global

[32] IPOs with a FIF of less than 0.15 would have to meet the same criteria for early inclusion as IPOs with a FIF of 0.15 or higher.

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Investable Market Indexes methodology rules and guidelines, at the time of the Index Reviews.

3.2.5 Corporate Events Affecting the Index Review

Changes in Number of Shares (NOS) and Foreign Inclusion Factors (FIFs) due to corporate events for which the completion date is effective on or before the Index Review Price Cutoff Date (as defined in Sub-section 3.1.9) are taken into account when undertaking the index maintenance activities as part of Index Reviews (as described in Sub-section 3.1).

For pro forma index constituents that are currently non-index constituents, changes in NOS and FIF due to corporate events for which the completion date is effective after the Index Review Price Cutoff Date (as defined in Sub-sections 3.1.9) will be implemented as per the methodology applicable to the relevant pro-forma size segment.

Some corporate events, such as, but not limited to, additions to or deletions from the Indexes or corporate events that trigger a significant market capitalization change relative to the company's full market capitalization before the event (increase of 50% or greater, or decrease of 33% or more), or corporate events that trigger a significant change in the float of the security, may have an impact on the index changes announced at the time of the Index Reviews, such as migration, addition and deletion. In such situation and if the completion date of the corporate event is effective between the Index Review Price Cutoff Date and one month after the Index Review effective date, MSCI may amend the Index Review result and announcement to consider the impact of the corporate event, in order to avoid potential reverse turnover. MSCI may amend the Index Review changes until five business days before the Index Review effective date.

To communicate these amendments, a separate announcement will be sent to the clients either with the Index Review announcement or with the corporate event announcement depending on the announcement date of the event.

MSCI reserves the right to handle specific cases differently if more appropriate.

3.3 Announcement Policy

The results of the Index Reviews are announced at least two weeks in advance of their effective implementation dates, which are generally set at the close of the last business day of February, May, August and November.

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3.3.1 Ongoing Event-Related Changes

3.3.1.1 CLIENT ANNOUNCEMENTS

All changes resulting from corporate events are announced to clients prior to their implementation in the MSCI Global Investable Market Indexes.

The changes are typically announced at least ten business days prior to these changes becoming effective in the indexes as “expected” announcements, or as “undetermined” announcements, when the effective dates are not known yet or when aspects of the event are uncertain. MSCI sends “confirmed” announcements at least two business days prior to events becoming effective in the indexes provided that all necessary public information concerning the event is available. In case a “confirmed” announcement needs to be amended, MSCI sends a “correction” announcement with a descriptive text announcement to provide details about the changes made. MSCI also sends announcements in "Acknowledged" status within five business days following the public announcement by the company of the acquisition, if the impact is above one time the constituent's underlying country index Large Cap Cutoff.

For certain events, MSCI only sends “confirmed” announcements, especially due to insufficient or lack of publicly available information or late company disclosure. For the MSCI World Micro Cap Index and the MSCI Frontier Markets Small Cap Index, MSCI only sends “confirmed” announcements at least two business days prior to events becoming effective in the index, provided that all necessary public information concerning the event is available.

The full list of all new and pending changes is delivered to clients on a daily basis, between 5:30 PM and 6:00 PM US Eastern Time (EST) through the Advance Corporate Events (ACE) File.

In exceptional cases, events are announced during market hours for same or next day implementation. Announcements made by MSCI during market hours are usually linked to late company disclosure of corporate events or unexpected changes to previously announced corporate events. A descriptive text announcement is sent for all corporate events effective on the same day or on the next day.

MSCI also sends text announcement for corporate events effective within the next 48 hours, except for market neutral events such as split, reverse split or stock dividend.

Early deletions of constituents due to events such as bankruptcy are announced as soon as practicable prior to their implementation in the MSCI indexes.

For MSCI Global Standard Index constituents, a more descriptive text announcement is sent to clients for significant events that meet any of the following criteria:

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- Additions and deletions of constituents.
- Changes in free float-adjusted market capitalization equal to or larger than USD 5 billion, or with an impact of at least 1% of the constituent's underlying country index.

No descriptive text announcement will be sent for the MSCI World Micro Cap Index constituents and Frontier Markets Small Cap Index constituents.

However, if warranted, MSCI may make descriptive text announcements for events that are complex in nature and for which additional clarification could be beneficial for any Standard, Small Cap and Micro Cap Indexes.

3.3.1.2 PUBLIC ANNOUNCEMENTS

All additions and deletions of constituents of the MSCI Global Investable Market Indexes resulting from corporate events are publicly announced prior to their implementation.

Other changes resulting from corporate events that affect constituents of the MSCI Global Investable Market Indexes, such as changes in the Foreign Inclusion Factor (FIF) and/or in the number of shares of a constituent, are not publicly announced but are announced only to clients.

If warranted, MSCI reserves the right to make public announcements related to corporate events for special cases, such as the ineligibility of a security in the MSCI Global Investable Market Indexes.

The changes are announced at least two business days prior to events becoming effective in the indexes. Public announcements are a summary of the “confirmed” announcements that are made to clients. Public announcements are made shortly before a “confirmed” client announcement is made.

MSCI posts the announcements on its web site, www.msci.com, and on Bloomberg page MSCN. In addition, announcements are posted on Reuters public pages MSCIA for MSCI Global Standard Index constituents and MSCI Domestic Standard Index constituents.

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3.3.2 IPOs and Other Early Inclusions

Early inclusions of large IPOs in the MSCI Standard Index Series are announced no earlier than the first day of trading and no later than before the opening of the third day of trading in the market where the company has its primary listing[33].

Early inclusions of already listed securities following large secondary offerings of new and/or existing shares are announced no earlier than shortly after the end of the offer period.

It is MSCI policy not to comment on the potential inclusion of equity securities to be listed in the future, including their industry classification under the Global Industry Classification Standard (GICS), their country classification and their potential inclusion in an MSCI index. The same applies to non-index constituents that are already listed which have pending large events.

3.3.3 Global Industry Classification Standard (GICS)

Non-event related changes in industry classification at the Sub-Industry level are announced at least two weeks prior to their implementation in MSCI indexes as of the close of the last US business day of each month. MSCI announces GICS changes twice a month, the first announcement being made on the first US business day of the month and the second one being made at least ten US business days prior to the last US business day of the month. All GICS changes announced in a given month will be implemented in MSCI indexes as of the close of the last US business day of the month.

[33] Following the November 2019 Index Review, securities on the STAR Market of the Shanghai Stock Exchange may be early included in the MSCI China All Shares and the MSCI China A Onshore Indexes outside of an Index Review as per Section 6 of the MSCI Corporate Events Methodology. Early inclusion of STAR Market securities in these MSCI Indexes will be announced no earlier than the second day of trading and no later than before the opening of the third day of trading after listing, provided the security meets the market capitalization thresholds as of the close of either first or second trading day.

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4 MSCI All Cap Indexes

This section should be read in conjunction with the earlier Section 2 'Constructing the MSCI Global Investable Market Indexes' and Section 3 'Maintaining the MSCI Global Investable Market Indexes'.

The calculation of the MSCI All Cap Indexes is currently limited to Developed Markets.

4.1 Constructing the MSCI All Cap Indexes

The MSCI All Cap Indexes encompass all constituents of the MSCI Global Investable Market Indexes as well as securities allocated to the MSCI Micro Cap Indexes. The construction of the MSCI Global Investable Market Indexes is described in detail in previous sections.

Constructing the MSCI All Cap Indexes involves the following steps:

- Constructing Global Investable Market Indexes as described in earlier sections.
- Constructing a Micro Cap Index for each market as described below.
- Aggregating the Global Investable Market Indexes with the Micro Cap Indexes.

The Micro Cap Size-Segment is constructed by including all securities which are not part of the Global Investable Market Indexes and meet the following requirements:

- Micro Cap Maximum Size Requirement.
- Micro Cap Minimum Size Requirement.
- Micro Cap Minimum Liquidity Requirement.
- Global Minimum Foreign Inclusion Factor Requirement.
- Minimum Length of Trading Requirement.
- Financial Reporting Requirement.

Each of these screens is described in detail below.

4.1.1 Micro Cap Maximum Size Requirement

This screen is applied at the company level.

A company with a full company market capitalization exceeding the Small Cap Entry Buffer (as defined in Sub-section 3.1.5.1) may not be allocated to the Micro Cap Size-Segment.

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4.1.2 Micro Cap Minimum Size Requirement

This screen is applied at the company level.

In order to be allocated to the Micro Cap Size-Segment, a company must have the required minimum full market capitalization and full security market capitalization. This minimum full market capitalization is referred to as the Micro Cap Minimum Size Requirement and is applied to both full company market capitalization (issuer level) and full security market capitalization. This requirement applies to companies in all Developed Markets.

The Micro Cap Minimum Size Requirement is derived using the same process as described in the Sub-section 2.2.3 targeting cumulative free float-adjusted market capitalization coverage of 99.8% of the Developed Markets Equity Universe (as defined in Sub-section 2.1).

4.1.3 Micro Cap Minimum Liquidity Requirement

In order to be eligible for inclusion in the Micro Cap Size-Segment a security must have a 12-month ATVR of at least 5% and a 12-month frequency of trading of at least 50%.

4.1.4 Global Minimum Foreign Inclusion Factor Requirement

This screen is applied at the individual security level.

A security must have Foreign Inclusion Factors (FIFs) equal to or larger than 0.15 to be eligible for inclusion in the Micro Cap Size-Segment.

Securities with a FIF equal to 0.15 or above will also be excluded if their free float-adjusted market capitalization is less than Micro Cap Minimum Size Requirement for Existing Constituents threshold defined in the sub-section 4.2.1.2

4.1.5 Minimum Length of Trading Requirement

This screen is applied at the individual security level.

For an IPO to be eligible for inclusion in the Micro Cap Size-Segment, the new issue must have started trading at least three months before the implementation date of an Index Review.

4.1.6 Financial Reporting Requirement

This screen is applied at the company level.

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Companies classified in the United States as per Appendix III: Country Classification of Securities, must file a Form 10-K/10-Q to be eligible for inclusion in the Micro Cap Size-Segment.

4.2 Maintaining the MSCI All Cap Indexes

Similar to the Large, Mid and Small Cap Size-Segments, Micro Cap Size-Segment index maintenance involves:

- Quarterly Index Reviews in February, May, August and November which include:
  - Updating the indexes on the basis of a fully refreshed Equity Universe.
  - Taking buffer rules (as defined in Sub-section 3.1.5.1) into consideration for migration of securities across size segments.
  - Updating (FIFs) and Number of Shares (NOS).
- Ongoing event-related changes. Changes of this type are implemented in the indexes as they occur. More information on the event-related changes can be found in the Corporate Events Methodology book

4.2.1 Quarterly Index Reviews

As described in Section 3, during each Index Review, the Equity Universe is updated and all size-segments of the Global Investable Market Indexes are reviewed. The following index maintenance activities are undertaken as part of the Index Review for the Micro Cap Size-Segment:

- Updating the Micro Cap Minimum Size Requirement.
- Assigning companies to the Micro Cap Size-Segment taking into account size and liquidity buffer zones.

4.2.1.1 UPDATING THE MICRO CAP MINIMUM SIZE REQUIREMENT

The Micro Cap Minimum Size Requirement is updated at each Index Review in the following manner:

The cumulative free float-adjusted market capitalization coverage at the rank of the company that was used to define the Micro Cap Minimum Size Requirement at the previous rebalance is calculated.

If the coverage of the updated Developed Market Equity Universe at that rank falls:

- Between 99.7% and 99.8%, the Micro Cap Minimum Size Requirement is set to the current full market capitalization of the company at that rank.

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- Below 99.7%, the Micro Cap Minimum Size Requirement is reset to the full market capitalization of the company at 99.7% coverage and the rank of that company is noted for the next rebalance.
- Above 99.8%, the Micro Cap Minimum Size Requirement and rank are reset based on the full market capitalization of the company at 99.8% coverage and the rank of that company is noted for the next rebalance.

4.2.1.2 ASSIGNING COMPANIES TO THE MICRO CAP SIZE-SEGMENT

All companies meeting the requirements outlined in Sub-sections 4.1.1 through 4.1.5 which are not part of the Investable Market Size-Segments are assigned to the Micro Cap Size-Segment.

Existing constituents of the Micro Cap Size-Segment may remain in the segment under the following conditions:

- Company full market capitalization is not above the Small Cap Entry Buffer.
- Company full market capitalization and security full market capitalization is greater than or equal to the lower of USD 10 million or the full market capitalization of the company at 99.95% coverage (Micro Cap Minimum Size Requirement for Existing Constituents).
- FIF remains above or equal to 0.15.
- 12-month frequency of trading is above or equal 10%.

4.2.2 Ongoing Event-Related Changes

Ongoing event-related changes to the indexes are the result of mergers, acquisitions, spin-offs, bankruptcies, reorganizations and other similar corporate events. They can also result from capital reorganizations in the form of rights issues, bonus issues, public placements and other similar corporate actions that take place on a continuing basis. These changes are reflected in the indexes at the time of the event.

The ongoing maintenance of the Micro Cap Size-Segment follows the process outlined in Sub-section 3.2.

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5 MSCI Frontier Markets Indexes

5.1 Frontier Markets Definition

MSCI starts by considering all equity markets not included in the MSCI Emerging Markets Index, that:

- demonstrate a relative openness to and accessibility for foreign investors
- are generally not considered as part of the developed markets universe[34]
- do not belong to countries undergoing a period of extreme economic (e.g., hyperinflation) or political instability (e.g., civil war)

5.1.1 Updating MSCI Frontier Markets Index Coverage

MSCI will on a regular basis monitor potential new markets that may qualify or current markets that may not qualify anymore for the MSCI Frontier Markets Index. Potential additions and deletions will be considered during the May Index Review.

A Standalone Market Standard Index may be added to the MSCI Frontier Markets Index at the earliest as part of the May Index Review that follows the creation of the Standalone Market Standard Index for that market. Markets that meet the minimum requirements for inclusion in the MSCI Frontier Markets Indexes may be added to the review list of markets for potential reclassification as part of the regular MSCI Market Classification Review. MSCI will announce the markets that will be included in Frontier Markets at least six months before the upcoming May Index Review.

Please refer to Appendix II for more information on the Market Classification Framework.

[34] E.g. Luxembourg or Cyprus. These countries are part of the developed markets universe. Given their modest size these markets are not included in the MSCI World Index.

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5.2 Methodology Used to Construct and Maintain the MSCI Frontier Markets Indexes

This section should be read in conjunction with the earlier Section 2 'Constructing the MSCI Global Investable Market Indexes' and Section 3 'Maintaining the MSCI Global Investable Market Indexes'.

The methodology used to construct the MSCI Frontier Markets Indexes is similar, but not identical, to the construction of the indexes for Developed and Emerging Markets. One of the prime differences is in the calculation of size requirements including the Equity Universe Minimum Size Requirement and Global Minimum Size References. Further, there are three levels of minimum liquidity requirements – very low, low, and average – to accommodate the divergent liquidity levels in Frontier Markets. See Appendix X for the countries that fall under each classification.

More specifically, the methodological differences between the index construction for Frontier Markets countries and for countries constituting the MSCI ACWI Index are found in the following:

- Calculation of the Equity Universe Minimum Size Requirement
- Calculation of the Global Minimum Size Reference
- Liquidity requirements resulting from categorization of Frontier Markets into very low, low or average liquidity markets
- Index Continuity Rules
- Implementation of Corporate Events

In addition, the size segmentation into Large Cap and Mid Cap of the Standard Index is not offered for Frontier Markets with the exception of the MSCI Gulf Cooperation Council (GCC) Countries Indexes.

More details on the methodological differences are described below.

5.2.1 Equity Universe Minimum Size Requirement

The Equity Universe Minimum Size Requirement for Frontier Markets is derived using the same steps described in sections 2.2.3 Equity Universe Minimum Size Requirement and 3.1.2.2 Updating the Equity Universe Minimum Size Requirement, but is based on the FM Equity Universe.

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5.2.2 Global Minimum Size Reference

The Global Minimum Size References for Frontier Markets are derived using the steps described in sections 2.3.2.1 Defining the Global Minimum Size Reference and 3.1.3 Recalculating the Global Minimum Size References and Global Minimum Size Ranges, but are based on the FM Investable Equity Universe.

The Global Minimum Size References for the Large Cap, Standard, and Investable Market segments based on the most recent index review are available in section 2.3.2.1 Defining the Global Minimum Size Reference.

5.2.3 FM Minimum Liquidity Requirement

5.2.3.1 CATEGORIZATION OF FRONTIER MARKETS INTO VERY LOW, LOW OR AVERAGE LIQUIDITY MARKETS

In order to account for the differences in liquidity patterns across Frontier Markets, each Frontier Market is categorized as a very low, low or average liquidity market. The corresponding minimum liquidity requirement levels are set at 2.5%, 5% or 15% 12-month ATVR, respectively. In addition, a minimum level of 50% of 12-month Frequency of Trading is required for the inclusion of a security in an Investable Market Equity Universe of a Frontier Market for all liquidity categories. This rule is referred to as the Frontier Markets Minimum Liquidity Requirement.

The categorization of each country is reviewed during the Index Reviews.

For each Frontier Market MSCI considers the following factors:

- The proportion of the country's IMI (in terms of number of constituents and weight) deleted from the index due to failing the liquidity requirements
- The proportion of the country's Equity Universe (in terms of number of constituents and weight) not included in the IMI due to failing the liquidity requirements, and how it compares to other Frontier Markets
- The average liquidity level for the country's Equity Universe, and how it compares to other Frontier Markets
- The country's historical liquidity level trends and how they compare to other Frontier Markets
- The size and number of constituents in the country IMI Index relative to other Frontier Markets

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5.2.3.2 MINIMUM LIQUIDITY REQUIREMENT FOR EXISTING CONSTITUENTS

During Index Reviews, existing constituents of the IMI in average and low liquidity markets may remain in a Market Investable Universe if their 12-month ATVR stays above 2/3rd of the minimum level requirement of 15% for average liquidity markets and 5% for low liquidity markets. Existing constituents of the IMI in very low liquidity markets may remain in a Market Investable Universe if their 12-month ATVR stays above 1%. Furthermore, in order to remain in the Investable Market Indexes (IMI), a constituent of the MSCI Frontier Markets IMI will need to have a 12-month Frequency of Trading of at least 10%, applicable to all liquidity categories.

If the listing used for an existing constituent no longer meets the above liquidity requirements, other eligible listings that do meet such liquidity requirements will be used to represent the security in the Market Investable Equity Universe. If the security has two or more other eligible listings, the following priority rules would be used to determine which of such listings will be used to represent the security in the Market Investable Equity Universe:

- Local listing[35]
- Foreign listing in the same geographical region[36]
- Foreign listing in a different geographical region[37].

Changes in listing from a foreign listing to a local listing for existing constituents will be applied even if the foreign listing still meets the liquidity requirements, in cases where the local listing has a 12-month ATVR above 30% for average liquidity markets or 15% for low liquidity and very low liquidity markets, respectively. In addition, the local listing needs to have a 12-month Frequency of Trading of at least 50%.

If an existing constituent of a Standard Index in Frontier Markets fails to meet the liquidity requirements, but its float adjusted market capitalization is above 0.5 times the Global Minimum Size Reference for Frontier Markets and its weight is either:

- More than 10% in the respective country index or

[35] If the security has two or more local listings, then the listing with the highest 3-month ATVR would be used.

[36] MSCI classifies markets into three main geographical regions: EMEA, Asia Pacific and Americas. If the security has two or more foreign listings in the same geographical region, then the listing with the highest 3-month ATVR would be used.

[37] If the security has two or more foreign listings in a different geographical region, then the listing with the highest 3-month ATVR would be used.

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- More than 1% in the Frontier Markets Composite Index,

then such constituent will remain in the index. However, MSCI would apply a Liquidity Adjustment Factor of 0.5 to the weight of the security, and in the subsequent Index Review, MSCI:

- Would delete the security from the index if the security does not meet at least half of the liquidity requirements for existing constituents calculated after applying the Liquidity Adjustment Factor or
- Would maintain the security in the GIMI and remove the Liquidity Adjustment Factor if the security meets all the liquidity requirements for new constituents, calculated before applying the Liquidity Adjustment Factor for three consecutive Index Reviews or
- Would continue maintaining the security in the GIMI with the Liquidity Adjustment Factor of 0.5 if none of the above conditions are met

5.2.4 Index Continuity Rules

If after the application of the index construction methodology, a Standard Index does not contain any security, then the largest security by free float-adjusted market capitalization among the securities included in the Market Investable Equity Universe is added to the Standard Index.

At subsequent Index Reviews, if after the application of the index maintenance methodology a Standard Index does not contain any security, then the following process is applied:

- The securities included in the updated Market Investable Equity Universe are identified,
- These securities are ranked by descending free float-adjusted market capitalization, however in order to increase index stability the free float-adjusted market capitalization of the securities included in the Standard Index prior to the Index Review is multiplied by a factor of 1.5,
- The first security in the ranking order determined in the step above is added to the Standard Index.

Please note that the index continuity rules are applicable only to the Standard Market Indexes. Other indexes, such as Large, Mid or Small Market Indexes or indexes based on the GICS segmentation may be discontinued if there are no constituents left in accordance with the MSCI GIMI methodology. Similarly, MSCI may resume

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calculation of such indexes if over time some companies become eligible for inclusion.

5.2.5 Implementation of Corporate Events

The ongoing maintenance of the Frontier Markets Indexes follows the same process as Developed and Emerging Markets, outlined in Sub-section 3.2.

As a general policy, changes resulting from corporate events are implemented in the MSCI Equity Indexes as they occur simultaneously with the event, provided that all necessary public information concerning the event is available. However, changes resulting from corporate events in the Frontiers Market countries that could not be implemented on or near the effective dates – especially due to insufficient or lack of publicly available information – and where no price adjustment factor (PAF) is necessary, are implemented at the following regularly scheduled Index Reviews. Examples of such corporate events may include amongst others share placements and offerings.

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6 MSCI Standalone Market Indexes

MSCI Standalone Market Indexes are broadly classified into two groups: newly eligible markets and markets previously classified under Developed, Emerging or Frontier Markets categories, reclassified to Standalone status. Newly eligible markets may either be new markets, previously not covered by MSCI or markets that were closed to a specific group(s) of investors.

6.1 Creation of Standalone Market Indexes for Newly Eligible Markets

MSCI will consider the creation of Standalone Market Indexes for countries not currently covered by MSCI during the May Index Review. These markets must demonstrate a relative openness and accessibility for foreign investors and are not undergoing a period of extreme economic or political instability.

A Standalone Market Standard Index may be created for countries having a minimum of two companies with securities meeting the requirements for the Frontier Markets Standard Index.

A Standalone Market Investable Market Index (IMI) may be created for a market having a minimum of one company with securities meeting the requirements for the Frontier Markets Standard Index, and a minimum of two companies with securities meeting the requirements for the Frontier Markets Small Cap Index.

MSCI also considers the availability and accuracy of market data when deciding on the potential creation of Standalone Market Indexes for countries not currently covered by MSCI.

The creation of such MSCI Standalone Market Indexes would generally not require a client consultation.

6.2 Classification of Other Markets as Standalone

MSCI may also temporarily reclassify markets that are currently part of the Developed Markets, Emerging Markets or Frontier Markets as a Standalone Market in the case of severe deterioration in market accessibility or size and liquidity for that market.

Reclassification of such markets may take place within or outside any regular Index Review cycles. The timing of such reclassification would generally be determined

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through client consultations and communicated with sufficient lead-time before implementation.

6.3 Maintaining Standalone Market Indexes

MSCI Standalone Market Indexes are governed by the methodology applicable to the MSCI Country Indexes classified as Developed, Emerging or Frontier Markets.

While newly eligible markets are generally maintained using criteria used for Frontier Markets, rules applicable to other market categories may apply depending on the size and liquidity of a particular market at the time of the creation of the Standalone Market Index.

For markets reclassified from Developed, Emerging or Frontier Markets, MSCI would generally apply the methodology that was applicable to the market prior to the reclassification to Standalone status. In any event, MSCI would clarify the maintenance rules for the MSCI Country Indexes which are subject to reclassification.

6.4 Inclusion of Standalone Market Indexes in the MSCI Composite Indexes

6.4.1 Inclusion of Newly Eligible Markets

In general, Standalone Market Indexes covering newly eligible markets may be added to the MSCI Frontier Markets Indexes at the earliest as part of the May Index Review that follows the creation of the Standalone Market Standard Index for that market. Please refer to section 5.1.1 for more details on Updating Frontier Markets Coverage. Markets that meet the minimum requirements for inclusion in the MSCI Frontier Markets Indexes may be added to the review list of markets for potential reclassification as part of the regular MSCI Market Classification Review. MSCI will announce the markets that will be included in Frontier Markets at least six months before the upcoming May Index Review.

Some Standalone Markets may nevertheless exhibit higher level of market accessibility and economic development than Frontier Markets. In addition, these markets may meet the size and liquidity requirements of Developed or Emerging Markets. In such instances, MSCI may include the Standalone Market Indexes in the MSCI Developed Markets or Emerging Markets Indexes. MSCI will review the market classification of such Standalone Markets at the regular MSCI Market Classification Review and determine whether such markets may be classified in the Developed Markets or Emerging Markets Indexes only following a client consultation.

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6.4.2 Re-inclusion of Markets in the MSCI Composite Indexes

MSCI generally reviews the Market Classification of Standalone Markets previously included in the MSCI Composite Indexes as part of the MSCI Annual Market Classification Review. Their potential re-inclusion in the MSCI Developed Markets, Emerging Markets or Frontier Markets Indexes will be considered only following client consultation.

Please refer to Appendix II for more information on the Market Classification Framework.

6.5 Treatment of Discontinued Standalone Market Indexes

Standalone Market Indexes may be discontinued if fewer than the required minimum number of securities are eligible for inclusion when applying a given methodology to a market (including index continuity rules).

MSCI may resume calculation of the Large, Mid, or Small Cap Standalone Indexes if over time a security becomes eligible and as long as the Standard and IMI Standalone Indexes are not discontinued.

If the Standard and IMI Standalone Indexes are discontinued, all of the other size-segment indexes are also discontinued. MSCI may resume calculation once the market meets the requirements described in section 6.1: Creation of Standalone Market Indexes for Newly Eligible Markets.

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APPENDICES

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Appendix I: Equity Markets and Universe

The tables below provide a list of Stock Exchanges, Market Segments and Eligible Security Classes that MSCI uses as the basis of the construction of the MSCI Global Investable Market Indexes.

Eligible Markets (Developed Markets)

Country Name	Stock Exchange	Market Segment	Eligibility of Foreign Listings
AUSTRALIA	Australian Securities Exchange		-
AUSTRIA	Vienna Stock Exchange	Prime Market Standard Market	-
BELGIUM	Euronext	Euronext	-
CANADA	Toronto Stock Exchange CBOE Canada (2)		-
DENMARK	Copenhagen Stock Exchange	Large Cap Mid Cap Small Cap	-
	First North	First North Growth First North Premier Growth	
FINLAND	Helsinki Stock Exchange	Large Cap Mid Cap Small Cap	-
	First North	First North Growth First North Premier Growth	
FRANCE	Euronext	Euronext Euronext Growth	-
GERMANY	Deutsche Börse Xetra	EU Regulated market Open Market	-
HONG KONG	Stock Exchange of Hong Kong	Main Board (4) Growth Enterprise Market	Yes
IRELAND	Euronext	Euronext Euronext Growth	-
ISRAEL	Tel Aviv Stock Exchange		Yes
ITALY	Borsa Italiana	Euronext Milan Euronext Growth Milan Global Equity Market (1) Market for Investment Vehicle (2)	-
JAPAN	Tokyo Stock Exchange (TSE) (3)	Prime Market Standard Market Growth Market Tokyo Pro (2)	-
	Nagoya Stock Exchange	First Section Second Section Centrex	
NETHERLANDS	Euronext	Euronext	Yes
NEW ZEALAND	New Zealand Stock Exchange New Zealand Alternative Exchange		-
NORWAY	Euronext	Euronext Euronext Expand Euronext Growth (2)	-
PORTUGAL	Euronext	Euronext	-
SINGAPORE	Singapore Exchange	Main Board Catalist	Yes
SPAIN	Madrid Stock Exchange Mercado Alternativo Bursatil (MAB)	Mercado Continuo Growth Companies (GC) SOCIMI	-
SWEDEN	Stockholm Stock Exchange	Large Cap Mid Cap Small Cap	-
	Nordic Growth Market		
	First North	First North Growth First North Premier Growth Norwegian Listed Shares (1)	
	AktieTorget		
SWITZERLAND	SIX Swiss Exchange	Swiss Blue Chip shares Mid and Small Caps Swiss shares Foreign Shares Sponsored Foreign Shares (1)	-
	BX Swiss		
UNITED KINGDOM	London Stock Exchange	Main Market - Premium Listing (5) Main Market - Standard Listing AIM Admision to Trading Only (ATT) (1)	-
USA	New York Stock Exchange		-
	NASDAQ	Global Select Market Global Market Capital Market	
	NYSE American		
	NYSE Arca		
	BATS Exchange (BZX)		

(1) Listings on this market segment are eligible only for securities that also have a listing on another eligible stock exchange / market segment.
(2) Listings on this market segment are eligible for the MSCI Indexes as part of the May 2021 Index Review.
(3) Prime, Standard, and Growth Markets replaced the previous eligible market segments in TSE as part of their restructure effective April 4, 2022.
(4) Hong Kong Chapter 21 Investment Companies are not eligible for inclusion for the MSCI Global Investable Market Indexes as part of August 2022 Index Review.
(5) Listings on this market segment are evaluated on a case-by-case basis in accordance with Section 2.1.1: Identifying Eligible Equity Securities.

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Eligible Markets (Emerging Markets)

Country Name	Stock Exchange	Market Segment	Eligibility of Foreign Listings
BRAZIL	Bolsa de Valores de Sao Paulo	Traditional Level 1 Level 2 Novo Mercado	-
CHILE	Santiago Stock Exchange		-
CHINA (1)	Shenzhen Stock Exchange	Main Board ChiNext	Yes
	Shenzhen Stock Exchange - Hong Kong Stock Connect		
	Shanghai Stock Exchange	Main Board STAR Market	
	Shanghai Stock Exchange - Hong Kong Stock Connect		
	Stock Exchange of Hong Kong	Main Board Growth Enterprise Market	
COLOMBIA	Colombian Stock Exchange	Local Market Global Market (2)	-
CZECH REPUBLIC	Prague Stock Exchange	Prime Market Standard Market Free Market (2)	-
EGYPT	Cairo & Alexandria Stock Exchanges		-
GREECE	Athens Exchange	Big Capitalization Medium and Small Capitalization	-
HUNGARY	Budapest Stock Exchange	Prime Market Standard Market Beta Market (5)	-
INDIA	National Stock Exchange Mumbai Stock Exchange		-
INDONESIA	Jakarta Stock Exchange	Main Board Development Board New Economy Board (6)	-
KOREA	Korea Exchange	KOSPI KOSDAQ	-
KUWAIT(4)	Kuwait Stock Exchange	Premier Market Main Market	-
MALAYSIA	Malaysia Stock Exchange	Main Market ACE Market	-
MEXICO	Mexican Stock Exchange	Equity Segment Global Market Segment (2)	-
PERU	Lima Stock Exchange		Yes
PHILIPPINES	Philippine Stock Exchange	Main Board	-
POLAND	Warsaw Stock Exchange	Main Market Parallel Market New Connect	-
QATAR	Doha Securities Market		-
SAUDI ARABIA (3)	Saudi Stock Exchange (Tadawul)	Main Market Nomu - Parallel Market (5)	-
SOUTH AFRICA	Johannesburg Stock Exchange	Main Board AltX	-
		ZAR X	
TAIWAN	Taiwan Stock Exchange Taipei Exchange	General Stock	-
THAILAND	Stock Exchange of Thailand	Stock Exchange of Thailand Market for Alternative Investment	-
TURKEY	Istanbul Stock Exchange	BIST STARS BIST MAIN BIST SubMarket (5) Collective And Structured Products	-
UNITED ARAB EMIRATES	Abu Dhabi Securities Exchange Dubai Financial Market NASDAQ Dubai		-

(1) For a more detailed description of the MSCI universe, please refer to Appendix III
(2) Listings on this market segment are eligible only for securities that also have a listing on another eligible stock exchange / market segment.
(3) Reclassified from Standalone Markets to Emerging markets at the May 2019 Index Review
(4) Reclassified from Frontier Markets to Emerging markets at the November 2020 Index Review
(5) Listings on this market segment are eligible for the MSCI Indexes as part of the May 2021 Index Review
(6) Listings on this market segment are eligible for the MSCI Indexes as part of the Feb 2023 Index Review

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Eligible Markets (Frontier Markets)

Country Name	Stock Exchange	Market Segment	Eligibility of Foreign Listings
BAHRAIN	Bahrain Stock Exchange		Yes
BANGLADESH	Dhaka Stock Exchange		-
BENIN (1)	Bourse Regionale des Valeurs Mobilieres		-
BURKINA FASO (1)	Bourse Regionale des Valeurs Mobilieres		-
CROATIA	Zagreb Stock Echange	Prime Market Official Market Regular Market	-
ESTONIA	Tallinn Stock Exchange	Main List Secondary List	-
GUINEA-BISSAU (1)	Bourse Regionale des Valeurs Mobilieres		-
ICELAND (2)	Iceland Stock Exchange	Large Cap Mid Cap Small Cap	Yes
	First North	First North First North Premier	
IVORY COAST (1)	Bourse Regionale des Valeurs Mobilieres		-
JORDAN	Amman Stock Exchange		-
KAZAKHSTAN			Yes
KENYA	Nairobi Stock Exchange	MIMS AIMS	-
LATVIA	Riga Stock Exchange		
LITHUANIA	Vilnius Stock Exchange	Main List Secondary List	-
MALI (1)	Bourse Regionale des Valeurs Mobilieres		-
MAURITIUS	Stock Exchange of Mauritius	Official Market	Yes
MOROCCO	Casablanca Stock Exchange		-
NIGER (1)	Bourse Regionale des Valeurs Mobilieres		-
NIGERIA	Nigeria Stock Exchange		-
OMAN	Muscat Stock Exchange		-
PAKISTAN (3)	Pakistan Stock Exchange		-
ROMANIA	Bucharest Stock Exchange	Premium Tier Standard Tier International Shares Tier Alternative Market	Yes
SENEGAL (1)	Bourse Regionale des Valeurs Mobilieres		-
SERBIA	Belgrade Stock Exchange	Listing A Listing B Unregulated Market	-
SLOVENIA	Ljubljana Stock Exchange	Prime Market Standard Market	Yes
SRI LANKA	Colombo Stock Exchange	Main Board Diri Savi Board	-
TOGO (1)	Bourse Regionale des Valeurs Mobilieres		-
TUNISIA	Bourse de Tunis	Primary Market	-
VIETNAM	Hanoi Stock Exchange Ho Chi Minh Stock Exchange		-

(1) Member of the West African Economic and Monetary Union (WAEMU)
(2) Reclassified from Standalone to Frontier markets at the May 2021 Index Review
(3) Reclassified from Emerging Markets to Frontier market at the November 2021 Index Review

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Eligible Markets (Standalone Markets)

Country Name	Stock Exchange	Market Segment	Eligibility of Foreign Listings
ARGENTINA (10)			Yes
BOSNIA HERZEGOVINA (1)	Banja Luka Stock Exchange Sarajevo Stock Exchange		-
BOTSWANA (2)	Botswana Stock Exchange	BSE Domestic Equity Market Venture Capital Market	Yes
BULGARIA (7)	Bulgarian Stock Exchange	Official Market	-
JAMAICA (2)	Jamaica Stock Exchange	Main Market Junior Market USD Market	-
LEBANON	Beirut Stock Exchange	Official Market	Yes
MALTA (9)	Malta Stock Exchange		-
PALESTINE (3)	Palestine Exchange		-
PANAMA (8)			Yes
TRINIDAD AND TOBAGO (4)	Trinidad and Tobago Stock Exchange	First Tier Second Tier	-
UKRAINE (6)	PFTS Stock Exchange Ukrainian Exchange		Yes
ZIMBABWE (5)	Zimbabwe Stock Exchange (Harare)		-

(1) Added as standalone market at the May 2010 Index Review
(2) Added as standalone markets at the November 2008 Index Review
(3) Added as standalone market at the May 2013 Index Review
(4) Reclassified from Frontier Markets to standalone market at the May 2011 Index Review
(5) Added as standalone markets at the November 2010 Index Review
(6) Reclassified from Frontier Markets to standalone market at the August 2015 Index Review
(7) Reclassified from Frontier Markets to standalone market at the August 2016 Index Review
(8) Added as standalone market at the May 2017 Index Review, currently only US listed securities eligible
(9) Added as standalone market at the May 2019 Index Review
(10) Reclassified from Emerging Markets to standalone market at the November 2021 Index Review

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Eligible Classes of Securities for Stock Exchanges in Developed Markets

Country of Listing*	Classes of Securities
AUSTRALIA	Ordinary shares Preferred shares (1) Stapled securities CDIs Units
AUSTRIA	Ordinary shares Preferred shares (1) Participation certificates
BELGIUM	Ordinary shares Preferred shares (1)
CANADA	Ordinary shares Units of Income Trusts Stapled securities
DENMARK	Ordinary shares
FINLAND	Ordinary shares
FRANCE	Ordinary shares Preferred shares (1) Certificats d'Investissement Certificats Coopératif d'Investissement Stapled securities
GERMANY	Ordinary shares Preferred shares (1)
HONG KONG	Ordinary shares Preferred shares (1) Business trusts Stapled securities
IRELAND	Ordinary shares Units
ISRAEL	Common shares Preferred shares (1)
ITALY	Ordinary shares Preferred shares (1) Savings shares
JAPAN	Ordinary shares Preferred shares (1)
NETHERLANDS	Ordinary shares Preferred shares (1) Certificates
NEW ZEALAND	Ordinary shares Preferred shares (1) Units Stapled securities
NORWAY	Ordinary shares Primary Capital Certificates
PORTUGAL	Ordinary shares
SINGAPORE	Ordinary shares Preferred shares (1) Business trusts Stapled securities
SPAIN	Ordinary shares Preferred shares (1)
SWEDEN	Ordinary shares Swedish Depositary Receipts
SWITZERLAND	Registered shares Bearer shares Participation certificates Dividend-right certificates
UNITED KINGDOM	Ordinary shares Preferred shares (1) Units CDIs Depositary Receipts
USA	Common shares Preferred shares (1) Tracking Stock Depositary Receipts

*The table shows the eligible classes of securities by country of listing. Please note that different countries of listing and their associated share classes may be eligible for country equity universes which may include foreign listings.

(1) Preferred shares that exhibit characteristics of equity securities are generally eligible

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Eligible Classes of Securities for Stock Exchanges in Emerging Markets

Country of Listing*	Classes of Securities
BRAZIL	Ordinary shares Preferred shares (2) Units
CHILE	Common shares Preferred shares (2)
CHINA (1)	"A" shares "B" shares Stapled securities China Depository Receipts (CDRs) (5)
COLOMBIA	Ordinary shares Preferred shares (2)
CZECH REPUBLIC	Common shares
EGYPT	Ordinary shares Preferred shares (2)
GREECE	Ordinary shares Preferred shares (2)
HUNGARY	Common shares Preferred shares (2)
INDIA	Ordinary shares
INDONESIA	Ordinary shares
KOREA	Common shares Preferred shares (2)
KUWAIT (4)	Ordinary shares
MALAYSIA	Common shares Preferred shares (2) Stapled securities
MEXICO	Ordinary shares Certificates of Participation Units
PERU	Common shares Preferred shares (2) Investment shares
PHILIPPINES	Common shares Philippine Depositary Receipts
POLAND	Common shares
QATAR	Ordinary shares
SAUDI ARABIA (3)	Common shares
SOUTH AFRICA	Common shares Preferred shares (2) Units
TAIWAN	Ordinary shares Preferred shares (2)
THAILAND	Common shares Preferred shares (2)
TURKEY	Common shares
UNITED ARAB EMIRATES	Ordinary shares

*The table shows the eligible classes of securities by country of listing. Please note that different countries of listing and their associated share classes may be eligible for country equity universes which may include foreign listings.

(1) For a more detailed description of the MSCI universe, please refer to Appendix III

(2) Preferred shares that exhibit characteristics of equity securities are generally eligible

(3) Reclassified from Standalone Markets to Emerging markets at the May 2019 Index Review

(4) Reclassified from Frontier Markets to Emerging markets at the November 2020 Index Review

(5) Listings of this class of security are eligible for the MSCI Indexes as part of the May 2021 Index Review

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Eligible Classes of Securities for Stock Exchanges in Frontier Markets

Country of Listing*	Classes of Securities
BAHRAIN	Ordinary shares
BANGLADESH	Ordinary shares
BENIN (2)	Ordinary shares
BURKINA FASO (2)	Common shares
CROATIA	Common shares
	Preferred shares (1)
ESTONIA	Common shares
GUINEA-BISSAU (2)	Common shares
ICELAND (3)	Common shares
IVORY COAST (2)	Common shares
JORDAN	Common shares
KAZAKHSTAN	None
KENYA	Common shares
	Preferred shares (1)
LATVIA	Common shares
LITHUANIA	Common shares
MALI (2)	Common shares
MAURITIUS	Common shares
	Preferred shares (1)
MOROCCO	Ordinary shares
NIGER (2)	Common shares
NIGERIA	Common shares
OMAN	Ordinary shares
PAKISTAN (4)	Ordinary shares
	Preferred shares (1)
ROMANIA	Common shares
SENEGAL (2)	Common shares
SERBIA	Common shares
	Preferred shares (1)
SLOVENIA	Common shares
	Preferred shares (1)
SRI LANKA	Ordinary shares
TOGO (2)	Common shares
TUNISIA	Common shares
VIETNAM	Common shares

*The table shows the eligible classes of securities by country of listing. Please note that different countries of listing and their associated share classes may be eligible for country equity universes which may include foreign listings.

(1) Preferred shares that exhibit characteristics of equity securities are generally eligible

(2) Member of the West African Economic and Monetary Union (WAEMU)

(3) Reclassified from Standalone to Frontier markets at the May 2021 Index Review

(4) Reclassified from Emerging Market to Frontier markets at the November 2021 Index Review

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Eligible Classes of Securities for Stock Exchanges in Standalone Markets

Country of Listing*	Classes of Securities
ARGENTINA (11)	None
BOSNIA-HERZEGOVINA (2)	Ordinary shares
BOTSWANA (3)	Common shares
BULGARIA (8)	Common shares
JAMAICA (3)	Common shares Preferred shares (1)
LEBANON	Common shares Preferred shares (1)
MALTA (10)	Common shares
PALESTINE (4)	Common shares
PANAMA (9)	None
TRINIDAD AND TOBAGO (5)	Common shares
UKRAINE (7)	Common shares Preferred shares (1)
ZIMBABWE (6)	Common shares

*The table shows the eligible classes of securities by country of listing. Please note that different countries of listing and their associated share classes may be eligible for country equity universes which may include foreign listings.

(1) Preferred shares that exhibit characteristics of equity securities are generally eligible

(2) Added as standalone market at the May 2010 Index Review

(3) Added as standalone markets at the November 2008 Index Review

(4) Added as standalone market at the May 2013 Index Review

(5) Reclassified from Frontier Markets to standalone market at the May 2011 Index Review

(6) Added as standalone markets at the November 2010 Index Review

(7) Reclassified from Frontier Markets to standalone market at the August 2015 Index Review

(8) Reclassified from Frontier Markets to standalone market at the August 2016 Index Review

(9) Added as standalone market at the May 2017 Index Review

(10) Added as standalone market at the May 2019 Index Review

(11) Added as standalone market at the November 2021 Index Review

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REITs

Companies that have adopted the following REITs or REIT equivalent structures in the countries mentioned below qualify to be classified in one of the REIT Sub-Industries of the GICS.

- Australia: LPT (Australian Listed Property Trust), A-REIT
- Belgium: SICAFI (Société d'Investissement à Capital Fixe Immobilière)
- Bulgaria, Canada, Germany, Ireland, Israel, Finland, Hong Kong, China, Korea, Taiwan, the UK and the U.S.: REIT (Real Estate Investment Trust)
- Colombia: REIT (Real Estate Investment Trust)[38]
- France: SIIC (Sociétés d'Investissements Immobiliers Cotées)
- Greece: REIC (Real Estate Investment Company)
- India: REIT (Real Estate Investment Trust)
- Italy: SIIQ (Societa di investimento immobiliare quotata)
- Japan: J-REIT (Japanese Real Estate Investment Trust)
- Malaysia: REIT (Real Estate Investment Trust/Property Trust Funds)
- Saudi Arabia: REIT (Real Estate Investment Traded Fund)
- Spain: SOCIMI (Sociedades Anonimas Cotizadas de Inversion en el Mercado Inmobiliario)
- Mexico: FIBRAS (Fideicomiso de Infraestructura y Bienes Raíces)
- Netherlands: FBI (Fiscal investment institution/Fiscale Beleggingsinstelling)
- New Zealand: Listed Property Vehicles (LPVs)
- Singapore: S-REIT (Singapore Real Estate Investment Trust)
- South Africa: REIT
- Turkey: Gayrimenkul Yatirim Ortakligi
- United Arab Emirates: REIT
- Pakistan: REIT

[38] Effective at February 2024 Index Review

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- Philippines: REIT

MSCI closely monitors the potential emergence of REIT equivalent structures in other countries and updates the above list when appropriate.

Canadian Income Trusts

Income trusts in Canada formed under the laws of provinces which have passed limited liability legislation and are not designed to invest in a diversified portfolio of income trusts, securities, and/or funds; and which pay or intend to pay non-refundable SIFT (Specified Investment flow-through) taxes, will be included in the MSCI Equity Universe and will be subject to the same index eligibility rules applicable to other equity (and equity-like) securities.

Additionally, corporations in Canada that qualify as 'Mutual Fund Corporations' under the Income Tax Act (Canada) and are not designed to invest in a diversified portfolio of income trusts, securities, and/or funds; and which pay or intend to pay non-refundable corporate taxes, will be included in the MSCI Equity Universe and will be subject to the same index eligibility rules applicable to other equity (and equity-like) securities.

Ineligible Alert Boards

Securities of companies included in the alert boards listed in the table below are not eligible for inclusion in the MSCI Equity Universe.

Country Name	Stock Exchange	Alert Board
Developed Markets		
Denmark	Copenhagen Stock Exchange	Observation Status (1)
Finland	Helsinki Stock Exchange	Observation Status (1)
Sweden	Stockholm Stock Exchange	Observation Status (1)
Singapore	Singapore Exchange	Watch List
Japan	Tokyo Stock Exchange	Securities Under Supervision & Securities to Be Delisted (2)
Emerging Markets		
China	Shanghai Stock Exchange Shenzhen Stock Exchange	Special Treatment (ST / *ST)
Greece	Athens Exchange	Under Surveillance Special Segment (4)

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Country Name	Stock Exchange	Alert Board
India	Mumbai Stock Exchange National Stock Exchange	Z Group S+ Framework Graded Surveillance Measure (4) Graded Surveillance Measure (4)
Indonesia	Jakarta Stock Exchange	Watch List Board (3)
Korea	Korea Exchange	Administrative Issues
Malaysia	Bursa Malaysia	PN17 Companies
Taiwan (5)	Taiwan Stock Exchange Taipei Stock Exchange	Altered Trading Method (ATM)
Thailand	Stock Exchange of Thailand	Companies Facing Delisting
Turkey	Istanbul Stock Exchange	Watch List Companies
Frontier Markets		
Estonia	Tallinn Stock Exchange	Observation Status (1)
Iceland	Iceland Stock Exchange	Observation Status (1)
Latvia	Riga Stock Exchange	Observation Status (1)
Lithuania	Vilnius Stock Exchange	Observation Status (1)
Sri Lanka	Colombo Stock Exchange	Watch List Board Second Board
Vietnam	Ho Chi Minh Stock Exchange	Controlled Securities
Standalone Markets		
Bulgaria	Bulgarian Stock Exchange	Alternative Market Segment

(1) Not applicable to securities under Observation Status due to public takeover offers
(2) Not applicable to securities under Securities Under Supervision & Securities to Be Delisted due to public takeover offers
(3) Not applicable to existing constituents under Watch List Board due to Criteria 10 effective February 2024 Index Review
(4) Effective at February 2024 Index Review
(5) Not applicable to existing constituents under Disposition board effective February 2024 Index Review

Non-Index Constituents

Non-index constituents included in the alert boards listed in the table above are not eligible for inclusion in the MSCI Equity Universe.

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In order to minimize potential reverse turnover, securities deleted due to inclusion on such boards (see deletion of existing index constituents below) may only be added back to the MSCI GIMI after 12 months from their deletion from the index provided that they have been removed from the ineligible alert board before the relevant equity universe cutoff date. For example, securities that are deleted due to becoming part of an ineligible alert board as part of the May 2014 Index Review will only be eligible for inclusion in the MSCI GIMI as part of the May 2015 Index Review if they have been removed from the ineligible alert board by the end of February 2015.

Deletion of Existing Index Constituents

Constituents of the MSCI GIMI that enter the alert boards listed in the table above will be deleted on the last business day of each month at market price with a notice period of at least two full business days. During an Index Review, the deletion of a security that enters an ineligible alert board will be made to coincide with the effective date of the Index Review. In addition, MSCI may reverse the addition of any company that may enter the alert boards in order to avoid potential reverse turnover.

In the event the securities do not trade on the implementation date of the deletion, MSCI would amend the deletion price from market price to lowest system price.

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Appendix II: Market Classification Framework

The classification of markets is a key input in the process of index construction as it drives the composition of the investment opportunity sets to be represented. The approach used by MSCI aims to reflect the views and practices of the international investment community by striking a balance between a country's economic development and the accessibility of its market while preserving index stability.

The MSCI Market Classification Framework consists of following three criteria: economic development, size and liquidity as well as market accessibility.

In order to be classified in a given investment universe, a country must meet the requirements of all three criteria as described in the table below.

Criteria		Frontier	Emerging	Developed
A	Economic Development			
A.1	Sustainability of economic development	No requirement	No requirement	Country GNI per capita 25% above the World Bank high income threshold* for 3 consecutive years
B	Size and Liquidity Requirements			
B.1	Number of companies meeting the following Standard Index criteria	1	3	5
	Company size (full market cap) **	USD 105 mm	USD 2,176 mm	USD 4,352 mm
	Security size (float market cap) **	USD 53 mm	USD 1,088 mm	USD 2,176 mm
	Security liquidity	2.5% ATVR	15% ATVR	20% ATVR
C	Market Accessibility Criteria			
C.1	Openness to foreign ownership	At least some	Significant	Very high
C.2	Ease of capital inflows / outflows	At least partial	Significant	Very high
C.3	Efficiency of operational framework	Modest	Good and tested	Very high
C.4	Availability of Investment Instrument	High	High	Unrestricted
C.5	Stability of the institutional framework	Modest	Modest	Very high

* High income threshold: 2022 GNI per capita of USD 13,845 (World Bank, Atlas method)

** Minimum in use for the November 2023 Index Review, updated on a quarterly basis

The economic development criterion is only used in determining the classification of Developed Markets while that distinction is not relevant between Emerging and Frontier Markets given the very wide variety of development levels within each of these two universes.

The size and liquidity requirements are based on the minimum investability requirements for the MSCI Global Standard Indexes.

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Market accessibility aims to reflect international investors' experience in investing in a given market and as a result, this criterion includes several sub-criteria. These criteria are generally based on qualitative measures that are reviewed for all markets at least once a year during the MSCI Global Market Accessibility Review.

MSCI regularly reviews the market classification of all countries included in the MSCI Indexes to ensure that they remain reflective of the evolution of the different markets. In particular, changes in the assessments under the classification framework serve as the basis for determining the markets that will be reviewed for potential market reclassification as part of the Annual Market Classification Review. MSCI will only consider these markets for reclassification for which a change in classification status can be viewed as irreversible. Every June, MSCI will communicate its conclusions from the discussions with the investment community on the list of countries under review and announce the new list of countries, if any, under review for potential market reclassification in the upcoming cycle.

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Market Accessibility Criteria

	Definition
Openness to foreign ownership	
Investor qualification requirement	Existence of qualifying conditions for international investors. Existence of a level playing field for all international investors.
Foreign ownership limit (FOL) level	Proportion of the market being accessible to non-domestic investors.
Foreign room level	Proportion of shares still available for non-domestic investors. Existence of a foreign board where non-domestic investors could trade with each other.
Equal rights to foreign investors	Equal economic and voting rights as well as availability of information in English. Equal rights for minority shareholders.
Ease of capital inflows / outflows	
Capital flow restriction level	Existence of restriction on inflows and outflows of foreign capital to/from the local stock market (excluding foreign currency exchange restrictions).
Foreign exchange market liberalization level	Existence of a developed onshore and offshore foreign exchange market.
Efficiency of the operational framework	
Market entry	
Investor registration & account set up	Existence/level of complexity of registration requirements for international investors such as Tax IDs as well as ease/complexity for setting up local accounts (e.g., documents to be provided, approvals required). The time to complete the process includes the preparation of the documents.
Market organization	
Market regulations	Level of advancement of he legal and regulatory framework governing the financial market, the stock exchange and the various other entities involved in the financial markets, an important weight is assigned to: ease of access (including in English), lack of ambiguity and prompt enforcement of laws and regulations, as well as consistency over time.
Information flow	Timely disclosure of complete stock market information items (e.g., stock exchange alerts, corporate news, float information, dividend information) in English and under reasonable commercial terms, as well as the robustness and enforcement of accounting standards.
Market infrastructure	
Clearing and Settlement	Well functioning clearing and settlement system based on the broad framework published by the Bank for International Settlements including delivery versus payment (DVP), the absence of pre-funding requirements/practices and the possibility to use overdrafts. Availability of real omnibus structures.
Custody	Level of competition amongst local custodian banks as well as the presence of global custodian banks. Existence of an efficient mechanism that prevents brokers to have unlimited access to the investor's accounts and guarantees the safekeeping of its assets.
Registry / Depository	A well functioning central registry or independent registrars and a central depository.
Trading	Level of competition amongst brokers ensuring high quality services (e.g., cost efficient trading, ability to execute grouped trades at the same price for the various accounts of a fund manager).
Transferability	Possibility of off-exchange transactions and "in-kind" transfers.
Stock lending	Existence of a regulatory framework as well as an efficient mechanism allowing extensive use of stock lending.
Short selling	Existence of a regulatory and practical framework allowing short selling.
Availability of Investment Instruments	Existence of restrictions on access to derived stock exchange information, data and products that prevents the creation of investment instruments.
Stability of institutional framework	Basic institutional principles such as the rule of law and its enforcement as well as the stability of the "free-market" economic system. Track record of government intervention with regards to foreign investors.

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Markets Under Index Continuity

In order to achieve index continuity, as well as provide some basic level of diversification within a market index, notwithstanding the effect of other index construction rules contained herein, a minimum number of five constituents will be maintained for a DM Standard Index, three constituents for an EM Standard Index, and one constituent for an FM Standard Index.

The following table below shows those markets where after the application of the index maintenance methodology, the Standard Index contains less than the minimum number of constituents, and hence the index continuity rules have been applied to achieve the minimum number of constituents as part of the November 2023 Index Review.

Developed Markets	Emerging Markets	Frontier Markets
	Colombia	
	Czech Republic	
	Egypt	
	Peru	

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Appendix III: Country Classification of Securities

This appendix outlines the guidelines MSCI uses to determine the country classification of companies and their equity securities.

General Framework

Each company and its securities followed in the MSCI Equity Universe are classified in one and only one country.

The country classification of a company is generally determined by the company's country of incorporation and the primary listing of its securities. MSCI will classify a company in the country of incorporation if its securities have a primary listing in this country. This approach determines the country classification of the vast majority of companies.

Other Cases

In some cases, a company's securities may be incorporated in one country while its securities have a primary listing in a different country. For example, companies may choose to incorporate in a different country than the country of primary listing to benefit from tax, legal, and/or regulatory advantages. These companies often incorporate in countries with limited, if any, public domestic equity markets, such as the Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Channel Islands, Luxembourg, Marshall Islands, Netherlands Antilles, and Panama.

In such cases where a company's securities have a primary listing outside of the country of incorporation, an additional analysis is performed to determine the company's country classification. In addition to the company's country of incorporation and the location of the primary listing, MSCI considers a set of criteria, including:

- The security's secondary listings if any;
- The geographic distribution of the company's shareholder base;
- The geographic distribution of the company's management;
- The location of its headquarters;
- The geographic distribution of its operations (in terms of assets and revenues);
- The company's history, and
- The country in which investors consider the company to be most appropriately classified.

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In the cases where the analysis cannot establish a significant link of a company with a single country, MSCI will generally classify the company in the country of the primary listing of its securities.

Country Specific Cases

United States (US): Companies listed in the US that file a Form 10-K/10-Q may be classified in the US provided that four of the following five variables do not point to another single country: operations, revenues, headquarters, management and shareholder base. Companies incorporated in Puerto Rico and listed in the US are generally included in the US Equity Universe.

Companies listed in the US that do not file a Form 10-K/10-Q are assessed as per the rules highlighted in the above "Other Cases" sub-section.

Europe: Companies incorporated in a European DM country (including Luxembourg) which have their securities' most liquid listing in a different European DM country are generally classified in the country of the most liquid listing.

China: The MSCI China universe includes companies incorporated in Mainland China and listed in the form of A shares[39], CDRs or B shares on the Shanghai Stock Exchange (in US$) or Shenzhen Stock Exchange (in HK$), or H shares on the Hong Kong Stock Exchange (in HK$). The MSCI China universe may include companies not incorporated in Mainland China, but are listed on the Shanghai Stock Exchange or Shenzhen Stock Exchange. Securities with "ST" or "*ST" status are excluded from the Equity Universe (see Appendix I for more details).

In addition, the MSCI China universe includes companies not incorporated in Mainland China but listed on the Hong Kong Stock Exchange provided that they meet the following definitions:

Red-Chip: company whose largest shareholder is an organization or enterprise that is owned by the state, provinces, or municipalities of Mainland China.

P-Chip: the company satisfies following conditions:

- For a company with headquarters in Mainland China: It derives more than 50% of its revenue from Mainland China (40% for existing securities in China universe) or it allocates more than 50% of its non-current assets in Mainland China (40% for existing securities in China universe)

[39] Currently Stock Connect eligible Large Cap and Mid Cap China A shares/CDRs are eligible for inclusion in the MSCI China Index.

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- For a company with headquarters in Hong Kong, Macau or elsewhere: It derives more than 80% of its revenue from Mainland China (70% for existing securities in China universe) and it allocates more than 60% of its non-current assets in Mainland China (50% for existing securities in China universe)

Companies which exhibit strong linkage to China but do not satisfy the H Shares, Red Chip or P Chip conditions above are included in MSCI Hong Kong universe, if they satisfy two out of three of the following conditions:

- The company's headquarter is located in either Mainland China or Hong Kong or Macau
- The company derives more than 50% of its revenues from Mainland China, Hong Kong and Macau combined
- The company has more than 50% of its non-current assets in Mainland China, Hong Kong and Macau combined

The MSCI China universe excludes companies which satisfy the above conditions but derive more than 80% of their revenues from the Hong Kong Special Administrative Region (HKSAR). These companies will be included in the MSCI Hong Kong universe. However existing securities may remain in the MSCI Hong Kong universe if they meet the threshold of 70%. Also, the companies which derive a majority of revenues and assets from Macau are included in the MSCI Hong Kong universe.

Companies that do not satisfy the H Shares, Red Chip, P Chip or HKSAR conditions, but are incorporated in Hong Kong, are included in MSCI Hong Kong universe.

Securities classified in China may be represented by a foreign listing (i.e. a listing outside China or Hong Kong) in the MSCI China Indexes. However, such securities listed in the US and resulting from reverse mergers[40] are not eligible for index inclusion.

Australia: The MSCI Australia universe includes companies incorporated in Papua New Guinea that are listed on the Australian Securities Exchange. [41]

Greece: The MSCI Greece universe includes companies incorporated in Cyprus that are listed on the Athens Exchange.[42]

Countries subject to economic sanctions: MSCI does not cover certain countries for which significant economic sanctions are applied. Examples of such countries as of

[40] Companies resulting from reverse merger but are later listed through a formal IPO will be considered eligible.

[41] Effective since the November 2015 Index Review.

[42] Effective since the May 2009 Index Review.

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February 2018 are Cuba, Democratic Republic of the Congo, Libya, North Korea, Iran, Iraq, Somalia, Sudan and Syria.

Companies that are classified to and/or incorporated in such countries are not eligible for inclusion in the MSCI Global Investable Market Indexes. MSCI regularly assesses eligibility of new markets and communicates their potential inclusion in the MSCI GIMI in advance of implementation.

Change in Country Classification

In general, country classification review for all securities in the MSCI Equity Universe is conducted annually and changes, if any, are implemented at November Index Reviews.

When MSCI changes a company's country classification, the company's equity securities are not automatically included in the index of the new country classification even if the company was a constituent of its original country's index. The company and its securities would have to be eligible in all respects in the index of the new country.

In case an index constituent changes its incorporation as part of a corporate event, the country classification in such cases is reviewed in accordance with the section 5.5 of the MSCI Corporate Events methodology book. In that case, the company may be reclassified simultaneously with the change in country of incorporation or at an Index Review following the corporate event. If a decision is made to re-classify the company after the change in country of incorporation, an announcement will be sent out as per the MSCI announcement policy. No announcement will be sent if the company will not be re-classified.

For cases with change in incorporation outside of a corporate event, the country classification is generally reviewed and implemented at the Index Review following the incorporation change, based on the country classification framework as mentioned above.

For cases listed in the US with change in the filing type, the country classification is generally reviewed and implemented at the Index Review following the change in filing type, based on the country classification framework as mentioned above.

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Appendix IV: Foreign Listing Materiality Requirement

Securities may be represented in the MSCI Global Investable Market Indexes by a listing in the country where they are classified (i.e. "local listing"). In addition, securities may also be represented by a listing in a different country (i.e. "foreign listing") in certain MSCI Country Investable Market Indexes (IMI) within the MSCI Global Investable Market Indexes.

Foreign listings may become eligible to represent securities only from the countries that meet the Foreign Listing Materiality Requirement. This requirement is applied at the time of Index Reviews to the countries that do not yet include securities represented by foreign listings.

In order to assess whether a country meets the Foreign Listing Materiality Requirement, the following steps are undertaken:

- Apply Index Review index maintenance rules described in Sub-section 3.1 to determine which securities represented by a foreign listing would be included in the MSCI Country IMI if foreign listings were eligible from that country.
- Calculate the aggregate free float-adjusted market capitalization of all such securities
- This aggregate market capitalization of securities represented by foreign listings should represent at least:
  - 5% of the free float-adjusted market capitalization of the relevant MSCI Country IMI[43] , and
  - 0.05% of the free float-adjusted market capitalization of the MSCI ACWI IMI.

The second condition is not applied to Frontier Markets countries.

Once a country meets the Foreign Listing Materiality Requirement at a given Index Review, foreign listings will become eligible from this country after two Index Reviews. For example, foreign listings will become eligible for a country at the May 2024 Index Review once that country meets the Foreign Listing Materiality Requirement at the November 2023 Index Review. Then, foreign listings will remain eligible even if the aggregate market capitalization of securities represented by foreign listings decreases over time below the materiality thresholds.

The following table provides the list of countries for which securities may be represented by foreign listings:

[43] Securities represented by foreign listings are included in the free float-adjusted market capitalization of the MSCI Country IMI for the purpose of this calculation.

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Countries for which foreign listings are eligible		
Argentina	Israel	Panama (*)
Bahrain	Jordan	Peru
Botswana	Kazakhstan	Romania
China	Lebanon	Singapore
Hong Kong	Mauritius	Slovenia
Iceland	Netherlands	Ukraine

(*) The MSCI Panama Index was launched as a Standalone Market Index as part of the May 2017 Index Review and currently includes only foreign listings.

At the November 2023 Index Review, Jordan met the Foreign Listing Materiality Requirement. Hence, foreign listings will become eligible for the MSCI Jordan Indexes as part of the May 2024 Index Review.

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Appendix V: Treatment of Investment Sanctions Related to U.S. Executive Order 13959

The U.S. Executive Order 13959 dated November 12, 2020 which Prohibits Transactions by U.S. Persons in Certain Chinese Companies (the Order), along with clarification from the Office of Foreign Assets Control (OFAC), results in the deletion from / non-inclusion in the MSCI GIMI of relevant impacted securities.

On January 5, 8 and 26, 2021, MSCI deleted securities impacted by the Order from the MSCI GIMI. Following the amendment of the Order on June 3, 2021, OFAC has published the Non-SDN Chinese Military-Industrial Complex Companies List (NS-CMIC List) and related security tickers. MSCI deleted the securities included in OFAC's NS-CMIC List from the MSCI GIMI as of the close of July 26, 2021.

- MSCI continues to monitor for updates to the NS-CMIC List of securities and related security tickers impacted by the Order. Furthermore, securities which are not included in the NS-CMIC List but belong to the same issuer as a security already included in the NS-CMIC List will also be considered as impacted by the Order.
- Securities impacted by the Order are considered to be ineligible for inclusion in the MSCI GIMI. At the time of the Index Reviews, MSCI will apply the MSCI GIMI Methodology on the MSCI Equity Universe, which includes securities impacted by the Order to derive the constituents of the MSCI J-Series Indexes. For the investability requirements, size-segmentation assignment, and conformity with final investability requirements, companies and securities will be assessed based on their current status in the MSCI J-Series Indexes, subject to the relevant buffer rules. Securities that are impacted by the Order that are assigned to a Size-Segment will have an adjustment factor of 0 applied and hence will not be included in the relevant MSCI GIMI size-segment indexes.
- Existing index constituents impacted by the Order will be deleted from the MSCI GIMI. At the time of their deletion from the MSCI GIMI, the securities will be retained in their existing Size-Segment and will continue to be included in the Market Investable Equity Universe.

MSCI J-Series Indexes:

The MSCI J-Series Indexes follow the MSCI GIMI Methodology but do not apply the treatment of investment sanctions related to the Order. Therefore, the MSCI J-Series Indexes will retain the securities deleted from the MSCI GIMI due to the investment sanctions related to the Order.

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MSCI J-Series Indexes are available upon request for clients subscribing to standard and custom indexes impacted by the Order.

MSCI China A Onshore Indexes:

The MSCI China A Onshore Indexes will not take into account investment sanctions related to the Order. However, parallel versions of the MSCI China A Onshore Indexes ("MSCI K-Series Indexes") that exclude relevant impacted securities are available upon request, as further described in Appendix XII: MSCI Domestic Indexes.

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Appendix VI: Free Float Definition and Estimation Guidelines

MSCI calculates the free float-adjusted market capitalization of each security in the equity index universe. The process of free float-adjusting market capitalization involves:

- Defining and estimating the free float available to foreign investors for each security, using MSCI's definition of free float
- Assigning a free float-adjustment factor to each security (Foreign Inclusion Factor or FIF).
- Calculating the free float-adjusted market capitalization of each security.

The free float-adjusted market capitalization is used to calculate the weights of the securities in the indexes.

Defining and Estimating Free Float

MSCI's estimation of free float is based solely on publicly available shareholder information. For each security, all available shareholdings are considered where public data is available, regardless of the size of the shareholding.

MSCI defines the free float of a security as the proportion of shares outstanding that is deemed to be available for purchase in the public equity markets by international investors. Therefore, MSCI primarily classifies shareholdings as free float or non-free float based on a categorization of investor types into non-strategic and strategic respectively.

Details of the shareholding classification and the ongoing maintenance of free-float related changes are detailed in the MSCI Free Float Data Methodology at www.msci.com/index-methodology.

Calculation of Free Float

Securities Not Subject to Foreign Ownership Limits (FOLs)

For securities not subject to FOLs, the free float of a security is estimated as its total number of shares outstanding less shareholdings classified as non-free float.

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Non-Free Float Shareholdings (%) =	Number of Shares Classified as Non-Free Float divided by the Total Number of Shares

Free Float (%)	=	100% minus Non-Free Float Shareholdings (%)

Securities Subject to FOLs

For securities subject to FOLs, the estimated free float available to foreign investors is equal to the lesser of:

- Estimate of free float, as defined above.
- FOL adjusted for non-free float stakes held by foreign investors*.
- * It is applicable only to companies classified in countries for which foreign room is not monitored

Free Float for Foreign Investors (%)	=	Lower of:
• 100% minus Non-Free Float Shareholdings, including Domestic and Foreign Shareholdings		
• FOL minus Foreign Non-Free Float Shareholdings		

Assigning a Free Float-Adjustment Factor

MSCI free float-adjusts the market capitalization of each security using an adjustment factor referred to as the Foreign Inclusion Factor (FIF).

Securities with Free Float Greater Than 15% and Not Subject to FOLs

For securities with free float greater than 15%, the FIF is equal to the estimated free float, rounded up to the closest 5%.

Securities with Free Float Less than 15% and Not Subject to FOLs

For securities with free float less than 15%, the FIF is equal to the estimated free float, rounded to the closest 1%.

Securities Subject to FOLs

For securities subject to FOLs, the FIF is equal to the lesser of:

- Estimated free float available to foreign investors,
  - Rounded up to the closest 5%, if the free float is greater than 15%.
  - Rounded to the closest 1%, if the free float is less than 15%.

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- FOL rounded to the closest 1%.

Securities Affected by Other Foreign Investment Restrictions

In the case where other foreign investment restrictions exist, which materially limit the ability of international investors to freely invest in a particular equity market, sector or security, a Limited Investability Factor (LIF) may be applied to insure that the investability objectives of the MSCI Indexes can be achieved.

There is typically no simple way to account for these types of investability limitations in a benchmark, as they tend to be subtle and complex, and may affect different market participants in different ways.

For example, such restrictions may involve a complex process of investor validation and qualification, restrictions on funds transfer, individual investment quota limits and various complex administrative requirements. While instituted at a country level these restrictions may have different consequences depending on the characteristics of the investor, including legal status, size of assets under management or date of application.

In the case of individual companies with Foreign Ownership Limits, it may happen that the maximum ownership by non-national investors is reached while depositary receipts may continue to be available to foreign investors. In such cases, the depositary receipts typically trade at a persistent premium relative to the domestic shares, highlighting the difficulties for international investors to replicate the security's weight in the index.

Therefore, where deemed necessary, a LIF will be determined and applied based on an extensive, case-by-case analysis. The application of this LIF permits a more accurate comparison of constituent markets and securities that have more complex and subtle restrictions on the investment process to markets and securities where investment limitations can be appropriately reflected in their standard FIFs.

In cases where MSCI applies a LIF, the free float adjusted for limited investability is defined as the product of the available free float for foreign investors and the LIF.

Free Float-Adjusted for Limited Investability = Free Float for Foreign Investors times the LIF

Therefore, for securities subject to other foreign investment restrictions, the Foreign Inclusion Factor is equal to the lesser of:

- Estimated free float-adjusted for limited investability,
  - Rounded up to the closest 5%, if the free float-adjusted for limited investability is greater than 15%.
  - Rounded to the closest 1%, if the free float-adjusted for limited investability is less than 15%.

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- FOL rounded to the closest 1%.

Foreign Room

For a security that is subject to a Foreign Ownership Limit (FOL), in determining eligibility for index inclusion and in determining an affected constituent's weight in an index, MSCI will additionally take into consideration the proportion of shares still available to foreign investors relative to the maximum allowed (referred to as "foreign room"). In general, securities with low foreign room may be in some instances not eligible for index inclusion or subject to a weight reduction through the application of an adjustment factor. For more details, please refer to Sub-sections 2.3.6.2 and 3.1.6.

The table below provides a list of countries for which MSCI monitors foreign room on a quarterly basis.

Eligible Markets	Country Name
Developed Markets (DM)	AUSTRALIA JAPAN
Emerging Markets (EM)	CHINA INDIA INDONESIA KOREA PHILIPPINES QATAR SAUDI ARABIA TAIWAN THAILAND* UNITED ARAB EMIRATES
Frontier Markets (FM)	TUNISIA VIETNAM
Standalone Markets	ZIMBABWE

*Refer Treatment of Non-Voting Depository Receipts in Thailand

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Other than countries mentioned above, MSCI also monitors foreign room for telecommunication companies in Canada, airlines companies in Europe and USA for which the foreign room information is available on public sources.

Example:

Calculating Foreign Room	
Foreign ownership Limit (FOL) applied to the company	=40%
Foreign shareholdings	=20%
Foreign room	=(40%-20%)/40% =50%

Calculating the Free Float-Adjusted Market Capitalization

The free float-adjusted market capitalization of a security is calculated as the product of the FIF and the security's full market capitalization.

Free Float-Adjusted Market Capitalization =	FIF times the Security's Full Market Capitalization

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The following examples illustrate the calculation of the free float-adjusted market capitalization of securities with and without FOLs.

Example:

Calculating Free Float-Adjusted Market Capitalization:

Securities Not Subject to FOLs

	Company A	Company B
Total number of shares outstanding	10,000,000	10,000,000
Number of shares classified as non-free float	4,300,000	8,760,000
Non-free float shareholding (%)	43.0%	87.6%
Free float (%)	57.0%	12.4%
Foreign Inclusion Factor (FIF)	0.60	0.12
Market price ($)	500	500
Full market capitalization ($ mm)	5,000	5,000
Free float-adjusted market capitalization ($ mm)	3,000	600

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Example:

Calculating Free Float-Adjusted Market Capitalization:

Securities Subject to FOLs

	Company C	Company D*	Company E
Total number of shares outstanding	10,000,000	10,000,000	10,000,000
All shares classified as non-free float	8,760,000	4,000,000	4,000,000
– those held by foreign investors as strategic	1,000,000	1,000,000	–
Total non-free float shareholdings (%)	87.6	40.0	40.0
Free float (%)	12.4	60.0	60.0
Foreign ownership limit (%)	33.3	33.3	33.3
Foreign strategic shareholding (%)	10.0	10.0	0.0
Foreign ownership limit less the foreign strategic shareholding (%)	23.3	23.3	33.3
Foreign Inclusion Factor (FIF)	0.12	0.25	0.33
Market price ($)	500	500	500
Full market capitalization ($ mm)	5,000	5,000	5,000
Free float-adjusted market capitalization ($ mm)	600	1,250	1,650

*This example is applicable only to companies classified in countries for which foreign room cannot be monitored

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Treatment of Hong Kong Listed Securities With High Shareholding Concentration Issues

Securities of companies included on the Hong Kong Securities and Futures Commission (SFC) high shareholding concentration notices are not eligible for inclusion in the MSCI GIMI. Such securities will remain ineligible until sufficient public disclosure is made by the issuing companies confirming an increase in free float that results in a Foreign Inclusion Factor equal to or larger than 0.15, following the SFC high shareholding concentration notice.

Constituents of the MSCI GIMI included on the SFC high shareholding concentration notices will be deleted on a quarterly basis coinciding with the regular Index Reviews.

At each regular Index Review MSCI will reflect the SFC high shareholding concentration notices until the Price Cutoff Date (as defined in section 3.1.9). Constituents of the MSCI GIMI added to the SFC high shareholding concentration notices after the Price Cutoff Date will be deleted from the IMI at the next Index Review, unless such deletion is warranted as part of the ongoing Index Review based on other index inclusion criteria, such as size or liquidity. Index Review changes, including increasing free float-adjusted market capitalization or migration of such security will be cancelled.

Additions of newly eligible securities to the MSCI GIMI as part of a regular Index Reviews may be revised until five business days before the Index Review effective date if such newly eligible companies were added to the SFC high shareholding concentration notices after the Index Review Price Cutoff Date.

In order to avoid potential reverse turnover, MSCI may review eligibility of companies included on the SFC high shareholding concentration notice until five business days before the Index Review effective date if sufficient public disclosure is made available by the company that confirms an increase in free float resulting in a Foreign Inclusion Factor equal to or larger than 0.15.

Securities deleted as a result of inclusion on the SFC high shareholding concentration notice would not be added back to the MSCI GIMI for a period of 12 months after sufficient public disclosure becomes available that confirms an increase in free float resulting in a Foreign Inclusion Factor equal to or larger than 0.15.

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Treatment of Non-Voting Depositary Receipts in Thailand

As part of the Capital Market Development Plan, the Securities and Exchange Commission of Thailand set up Non-Voting Depositary Receipts (NVDRs) to improve the investability of the Thai capital market. NVDRs are depositary receipts issued by the Thai NVDR Company Limited, a subsidiary of the Stock Exchange of Thailand (SET) and backed by shares listed on the SET. NVDRs entitle their holders to all financial benefits of the underlying shares, except voting rights.

Foreign ownership limits that apply to common shares do not apply to NVDRs, and therefore the NVDR scheme may allow foreign investors to own a greater percentage of shares than the foreign ownership limit of Thai companies. However, there is a limit on the amount of NVDRs that may be issued for financial institutions[44] (generally set at 25%). NVDRs are traded through the Local Line and as such, investors can buy and sell them at the price of the Local Line.

Aside from NVDRs, foreign investors may purchase the Foreign Line, where they are entitled to all economic rights as well as voting rights. Foreign Lines are subject to Foreign Ownership Limits, and investors can buy and sell them at the price of the Foreign Line.

Treatment for companies without NVDR issuance limits

Companies with no limits on NVDR issuance are not subject to FOL and will be represented in the MSCI Indexes using their respective Local Lines.

Treatment for companies with NVDR issuance limits

Companies with limits on NVDR issuance, may be represented in the MSCI Indexes using both Foreign Lines and Local Lines. Each line is evaluated independently for potential inclusion or exclusion from the MSCI Thailand Indexes as per the index maintenance rules.

> ***Company Full Market Capitalization***. The company full market capitalization is calculated based on the price[45] of the Local Line.
>
> ***Foreign Inclusion Factor***. The free float distribution between the Foreign Line and the Local Line is determined as follows:

[44] Financial institutions including banks and finance companies that accept deposits from the public

[45] This will result in changes to the company full market capitalization of BANGKOK BANK and KASIKORNBANK. The changes in the company full market capitalization were reflected in the MSCI product files effective April 16, 2019.

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If Foreign Line is not included in Index	If Foreign Line is included in Index
FIF $_{(Local\ Line)}$ = Minimum (DIF, NVDR limit – NVDR strategic holdings)	FIF $_{(Foreign\ Line)}$ = Minimum (DIF, FOL - FOREIGN strategic shareholding) FIF $_{(Local\ Line)}$ = Minimum (DIF – FIF $_{(Foreign\ Line)}$, NVDR limit – NVDR strategic holdings)

***Foreign Room*.** Foreign room is assessed for the Local Line relative to the NVDR issuance limits in line with the quarterly review of foreign room described in section 3.1.6.2.

Foreign Lines are not monitored for low foreign room since Foreign Lines have secondary market trading.

Early Inclusions. MSCI will not include the Foreign Line in the MSCI Indexes at the time of IPOs or other early inclusions. This is to provide sufficient time to evaluate liquidity of Foreign Lines in the secondary market. Only the Local Line may be considered for early inclusion if it meets all the necessary requirements.

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Appendix VII: Price Source for Securities

For a full updated list of prices used in MSCI's end of day index calculations by country, please refer to the MSCI Index Calculation Methodology that can be found at:

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

In certain countries significant foreign ownership limits exist for certain companies and/or industries. When the FOL is reached in these countries, foreign investors may trade with each other in an organized local market, frequently at a price higher than that available to domestic investors. As a result, there may be separate domestic and foreign board quotations.

MSCI regularly monitors the relative liquidity and foreign ownership availability of constituents with separate domestic and foreign board quotations to determine whether prices for these constituents should reflect the domestic or foreign board quotations. This review occurs on a quarterly basis to coincide with the Index Review.

Markets open on Saturday and/or Sunday

In the event that a security is not traded on a Monday but was traded on the previous Saturday and/or Sunday, the security will have the latter price carried forward to the Monday.

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Appendix VIII: Market Monitoring Framework and Potential Switch to a Light Rebalancing under Conditions of Market Stress

MSCI Market Monitoring Framework

The MSCI Market Monitoring Framework aims to continually assess the potential impact of market conditions on regular Index Reviews along three key dimensions: Market Functioning, Market Liquidity and Data Availability.

– Market Liquidity: monitoring of security liquidity which is based on liquidity screening criteria required by relevant index methodologies and market liquidity based on MSCI ACWI bid-ask spreads and MSCI ACWI volatility

– Market Functioning: monitoring of unexpected market closures or market disruptions

– Data Availability: monitoring of company and market data required to conduct Index Reviews

Potential Switch to a Light Rebalancing during Index Reviews

MSCI may switch to a "light rebalancing" under conditions of market stress. MSCI will consider switching to a "light rebalancing" only if the criteria described below are met. The final decision of whether or not to switch to a "light rebalancing" will be taken by relevant MSCI Index Committee(s), including the MSCI Equity Index Committee (EIC) and the MSCI Index Policy Committee (IPC).

"Light" Rebalancing

In the context of the MSCI GIMI**,** "light" rebalance refers to implementing the index maintenance methodology as described further in this section in place of the usual Index Review index maintenance rules described in Section 3.2.

For the other MSCI index methodologies, MSCI would implement Quarterly Index Review (QIR) index maintenance methodology if such are defined in the respective index methodology books.

For methodologies which rebalance annually or where QIRs are not defined, MSCI would proceed as per the normal rebalancing schedule.

If the upcoming scheduled rebalance is already a QIR, then no change to the process would occur.

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Market Monitoring Period and Criteria

MSCI sets the last ten business days of the month prior to the announcement date of an Index Review as the "market monitoring period." If within the "market monitoring period", one of the following two conditions related to the Market Liquidity and Market Functioning pillars of the Market Monitoring Framework is met, a review by the relevant MSCI Index Committee(s) whether or not to switch to a "light rebalancing" would be triggered:

- Market Liquidity, for any 3 days within the "market monitoring period"
    - MSCI ACWI-weighted bid-ask spread, measured as index market capitalization-weighted bid-ask spread ([ask-bid] / ask), breaching 0.19%
    - AND
    - MSCI ACWI volatility, measured as the standard deviation of the daily returns of the MSCI ACWI over the past 10 days, breaching 0.55
- OR
- Market Functioning
    - Unexpected full day or partial stock exchange closures impacting 20% of MSCI ACWI constituents cumulatively over the "market monitoring period"

Communication Date and Policy

If the criteria for the evaluation of a switch to a "light" rebalancing are met, MSCI would send a communication on its decision to switch to a "light" rebalancing or not, on or before the first business day after the "market monitoring period", also known as the "communication date". There would be no change to the decision to switch or not to switch to a "light" rebalancing following the "communication date". No communication would be sent if the thresholds for the evaluation of a switch to a "light" rebalancing are not breached during the "market monitoring period". MSCI would no longer consider a potential switch to a "light" rebalancing after the "market monitoring period" and would proceed with the scheduled Index Review.

Over time, MSCI may review the thresholds used in the MSCI Market Monitoring Framework. Any resulting changes would be made public in the relevant index methodology documentation well in advance of the "market monitoring period".

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Index Review of the MSCI GIMI under Light Rebalancing

Light rebalancings aim to ensure that the indexes continue to be an accurate reflection of the evolving equity marketplace during conditions of market stress. This is achieved by a timely reflection of significant market driven changes that were not captured in the index at the time of their actual occurrence but are significant enough to be reflected before the next Index Review.

Light rebalancings may result in:

- Additions or deletions due to migration to another Size-Segment Index
- Addition of significant new investable companies to the Standard Index
- Deletion of companies from the Investable Market Indexes due to low liquidity
- Changes in FIFs and in NOS.

The buffer zones used to manage the migration of companies from one segment to another are wider than those used in the Index Reviews.

Size-Segment Migrations during Light Rebalancings

During a light rebalancing, the following index maintenance activities are performed to identify migrations from one Size-Segment to another:

- Updating the Global Minimum Size References and Global Minimum Size Ranges.
- Reassessing the Market Size-Segment Cutoffs.
- Assigning companies to the Size-Segment Indexes.
- Assessing conformity with Final Size-Segment Investability Requirements.

Updating the Global Minimum Size References and Global Minimum Size Ranges

The Global Minimum Size Range is reset at the light rebalance by recalculating the Global Minimum Size Reference based on the existing DM Investable Equity Universe, excluding any newly eligible companies, as described in

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Appendix X: Updating the Global Minimum Size References and Ranges.

Reassessing the Market Size-Segment Cutoffs

The Market Size-Segment Cutoff is determined as the full market capitalization of the company ranked in the Market Investable Equity Universe, excluding any newly eligible companies, at the Segment Number of Companies for the relevant segment.

The buffer ranges at light rebalancings are set up to +80% above and down to -50% below the Market Size-Segment Cutoff between two size-segments.

Assigning Companies to Appropriate Size-Segments

During a light rebalancing, companies in the Market Investable Equity Universe are preliminarily assigned to the Size-Segment Indexes until the Segment Number of Companies is achieved with the following priority:

- Current constituents of a given Size-Segment Index, as well as companies assigned to this Size-Segment during last Index Review that failed the Final Size-Segment Investability Requirements, greater than or equal to the Market Size-Segment Cutoff.
- Companies in the lower Size-Segment Index, as well as companies assigned to this Size-Segment during last Index Review and failed the Final Size-Segment Investability Requirements, greater than the upper buffer threshold of the lower size-segment.
- Current constituents of a given Size-Segment Index, as well as companies assigned to this Size-Segment during the last Index Review that failed the Final Size-Segment Investability Requirements, in the lower buffer of the Size-Segment in descending capitalization order, until the threshold of the buffer is reached.
- The largest companies from the upper buffer of the next lower size-segment.

However, companies that would migrate from the lower Size-Segment Index but are below the lower bound of the Global Minimum Size Range, as well as companies that would migrate from upper Size-Segment but are above the upper bound of the Global Minimum Size Range, are retained in their current Size-Segment. The Segment Number of Companies is increased or decreased accordingly.

Once companies have been assigned to the Standard, Large and Investable Market Indexes, companies are then assigned to the Mid and Small Cap Indexes. The Mid Cap Index comprises the companies that are in the Standard Index but not the Large Cap Index. The Small Cap Index comprises the companies that are in the Investable Market Index but not in the Standard Index.

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Assessing Conformity with Final Size-Segment Investability Requirements

Once the securities are assigned to the appropriate Size-Segment Indexes, the securities that migrate from the Small Cap Indexes to the Standard Indexes are evaluated for compliance with the additional investability requirements for the Standard Index. Please refer to Sub-section 2.3.6: Applying Final Size-Segment Investability Requirements.

Existing IMI constituents that exhibit extreme price increase (as per section 2.3.6.3) will not be eligible for migration into the Standard Indexes. Existing IMI constituents migrating into the Standard Index and exhibiting extreme price increase will be retained as Small Cap constituents.

Similar to the foreign room treatment during Index Reviews, current constituent securities for which there is less than 25% foreign room may have their weight adjusted by the application of an adjustment factor to reflect their actual level of foreign room.

The post-review adjustment factor depends on the current adjustment factor and the actual level of foreign room of the securities, as shown in the table below:

Post-review adjustment factor					
	foreign room >= 25%	15% <= foreign room < 25%	7.5% <= foreign room < 15%	3.75% <= foreign room < 7.5%	foreign room <3.75%
Current adjustment factor = 1	1	1	0.5	0.25	0
Current adjustment factor = 0.5	1	0.5	0.5	0.25	0
Current adjustment factor = 0.25	1	0.5	0.25	0.25	0

If the foreign room of an existing constituent decreases below 3.75%, then the adjustment factor equals 0[46].

Foreign room level will be reviewed on a quarterly basis coinciding with the regular MSCI Index Reviews. Generally, an upward movement of the adjustment factor for

[46] Based on information available from the country regulatory authority, the adjustment factor equals 0 for securities where further purchases are restricted due to foreign ownership restriction. In case of India, MSCI monitors securities appearing on the National Securities Depository Limited's (NSDL) & Central Depository Services Limited's (CDSL) official list of securities for which the Red flag or Breach limit has been reached on a daily basis. MSCI deletes securities from the MSCI India Indexes that are (i) Appearing on the Breach list (ii) Appearing on the Red Flag/Caution list and have foreign room below 3.75% by giving 2 business days' notice. In the case of Mexico, MSCI monitors the foreign investments under the Neutral Trust Program (NTP). The NTP structure mandates foreign investors to acquire shares only through it. MSCI deletes securities from the MSCI Mexico Indexes having foreign room below 3.75% by giving 2 business days' notice.

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existing constituents following a previous reduction in foreign room or index re-inclusion of a security deleted as a result of having a foreign room lower than 3.75% will only be considered 12 months after the weight reduction or deletion; unless the upward movement of the adjustment factor is primarily driven by a change in FOL and provided that the increase in FOL[51] happened prior to the Price Cutoff Date of the previous Index Review described in Sections 3.1.9: Date of Data Used for Index Review.

For example, to be considered for the February Index Review, the potential increase in FOL must have happened before the Price Cutoff Date of the November Index Review.

During the Index Review, for any existing IMI constituents whose weight is decreased as a result of a change in the adjustment factor due to low foreign room, MSCI will continue to monitor any potential increased foreign room due to an increase in FOL[47] until five business days before the effective date of that Index Review.

Securities that are part of the Market Investable Equity Universe, but did not meet additional investability requirements at the previous Index Review are not added to the Investable Market Indexes as part of the light rebalancing, unless they meet the criteria outlined in Addition of Companies Currently not Constituents of the Investable Market Indexes during Light Rebalancings.

Addition of Companies Currently not Constituents of the Investable Market Indexes during Light Rebalancings

Securities that are currently not constituents of the Investable Market Indexes and that meet the investability screens described in Sub-section 2.2 (with the exception of the Minimum Length of Trading Requirement), including large IPOs that were not added earlier, and in addition meet the requirements listed below, are added to the Standard Index:

- A full market capitalization that exceeds 1.8 times the Interim Market Size-Segment Cutoff for the Standard Size-Segment
- A free float-adjusted market capitalization that exceeds 1.8 times one-half the Interim Market Size-Segment Cutoff for the Standard Size-Segment
- Securities that exhibit extreme price increase are not eligible for inclusion into the Standard Indexes. Please refer to section 2.3.6.3 for more details.

[47] Applicable only for securities still subject to FOLs. For example, if the FOL increases to 100% (i.e., FOL is no longer applicable) prior to the Price Cutoff Date, it will be reflected in the upcoming Index Review. In the case of India, MSCI would consider potential increases in FOL based on data published by Central Depository Services Limited's (CDSL) and National Securities Depository Limited's (NSDL). For securities that are not covered by the list provided by the CDSL/NSDL, FOL will be determined based on publicly available data.

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These companies are assigned to the Large Cap Index if their full market capitalization exceeds the Interim Market Size-Segment Cutoff for the Large Cap Size-Segment; they are assigned to the Mid Cap Index otherwise.

In addition, IPOs eligible for early inclusion according to Sub-section 3.2.4.1, and for which the effective date of inclusion is either 5 days before the effective date of the Index Review or 3 days after, will be made effective to coincide with the Index Review. For example, when the effective date of inclusion of the IPO is August 29 (3 business days before September 1), while the effective date of the Index Review is September 1, the IPO will be added effective September 1.

For companies trading on a conditional basis (when-issued trading) prior to their listing and unconditional trading, MSCI assesses the inclusion of the company in the MSCI Indexes based on its first day of conditional trading.

Deletion of Companies Currently Constituents of the Investable Market Indexes during Light Rebalancings

Existing constituents of the Investable Market Indexes can remain in the Investable Market Indexes only if:

- The 3-month ATVR and Frequency of Trading are at least 5% and 80% respectively for Developed Markets
- The 3-month ATVR and Frequency of Trading are at least 5% and 70% respectively for Emerging Markets

If the listing used for an existing constituent no longer meets the above liquidity requirements, other eligible listings that do meet such liquidity requirements will be used to represent the security in the Market Investable Equity Universe. If the security has two or more other eligible listings, the following priority rules would be used to determine which of such listings will be used to represent the security in the Market Investable Equity Universe:

- Local listing[48]
- Foreign listing in the same geographical region[49]
- Foreign listing in a different geographical region[50]

[48] If the security has two or more local listings, then the listing with the highest 3-month ATVR would be used.

[49] MSCI classifies markets into three main geographical regions: EMEA, Asia Pacific and Americas. If the security has two or more foreign listings in the same geographical region, then the listing with the highest 3-month ATVR would be used.

[50] If the security has two or more foreign listings in a different geographical region, then the listing with the highest 3-month ATVR would be used.

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If an existing constituent of a Standard Index in Emerging Markets fails to meet the liquidity requirements, but has a weight of more than 10% in the respective country index and its free float adjusted market capitalization is above 0.5 times the Global Minimum Size Reference for Emerging Markets, then such constituent will remain in the index. However, MSCI would apply a Liquidity Adjustment Factor of 0.5 to the weight of the security, and in the subsequent Index Review, MSCI:

- Would delete the security from the index if the security does not meet all liquidity requirements for existing constituents calculated after applying the Liquidity Adjustment Factor; or
- Would maintain the security in the GIMI and remove the Liquidity Adjustment Factor if the security meets all the liquidity requirements for new constituents, calculated before applying the Liquidity Adjustment Factor for three consecutive Index Reviews; or
- Would continue maintaining the security in the GIMI with the Liquidity Adjustment Factor of 0.5 if none of the above conditions are met.

Changes in FIF and NOS during Light Rebalancings

Foreign Inclusion Factors (FIF) and Number of Shares (NOS) will be reviewed as per Sub-Section 3.1.7 Index Review of Changes in Foreign Inclusion Factors (FIFs) and 3.1.8 Index Review of Changes in Number of Shares (NOS).

Date of Data Used for Light Rebalancings

The standard data cutoff dates are stated in Sub-Section 3.1.9: Date of Data Used for Index Review.

Index Maintenance for the Micro Cap Size-Segment during Light Rebalancings

Light rebalancings are only aimed at reflecting the impact of significant market events on FIFs and updating NOS. Typically no change in the constituents of the Micro Cap Size-Segment may take place at the time of light rebalancings.

At the time of light rebalancing a company may enter the Micro Cap Size-Segment only if it is deleted from the Small Cap Size-Segment due to a low liquidity and it satisfies the conditions specified in Sub-section 4.2.1.2.

During a light rebalancing, a security will be deleted from the Micro Cap Size-Segment if an FOL change results in a FIF of 0.

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Appendix IX: Policy Regarding Trading Suspensions and Market Closures during Index Reviews

Policy Regarding Trading Suspensions for Individual Securities during Index Reviews

MSCI will postpone the implementation of Index Review changes for IMI constituents, as well as Micro Cap constituents, when the affected securities are suspended[51] on the day prior to the effective implementation date[52] of the Index Review. The postponed Index Review changes will be implemented by giving two full business days (excluding the trading resumption day) after the securities starts trading.

Index Review changes include:

- Additions to, deletions from or migrations between the MSCI Large Cap, MSCI Mid Cap, MSCI Small Cap and MSCI Micro Cap Indexes
- Changes in Foreign Inclusion Factor (FIF), Domestic Inclusion Factor (DIF), Number of Shares (NOS) or style for the relevant current and pro forma IMI and Micro Cap constituents
- All Index Review changes that are postponed due to suspension will be cancelled two months after the effective date of the Index Review if the securities are still suspended and will be implemented at the Index Review following the securities' resumption of trading if still warranted.
- Additions of Chinese securities to all MSCI Indexes[53] (including pro forma MSCI China Indexes, MSCI China A Inclusion Indexes, MSCI China All Shares Indexes and MSCI China A Onshore Indexes) will be cancelled instead of postponed if the securities are suspended on the day prior to the effective implementation of the Index Review. The inclusion of the security will be re-evaluated at the next Index Review.

Policy Regarding Market Closures during Index Reviews

During Index Reviews, the following principles apply in case of market closures on the day of implementation. As a reminder, the effective implementation date for each

[51] The suspension status is taken as per the close of the regular trading time of the relevant stock exchange.

[52] In cases where the Index Review effective date falls on a Tuesday, the postponement for suspended securities in indexes calculated from Sunday to Thursday will be reviewed on Sunday. For details on the Sunday – Thursday Index Calculation Methodology, refer to Appendix XII of the MSCI Index Calculation Methodology.

[53] Non-current IMI constituent

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Index Reviews is as of the close of the last business day of February, May, August and November.

Market Closures Due to Scheduled Stock Market Holidays

When a given stock market is closed on the scheduled implementation date due to stock market holiday, the change will be effective on the next business day, using the price of the previous business day's close.

MSCI will change the implementation date for Index Reviews if markets cumulatively constituting more than 20% of the MSCI All Country World Index market capitalization are expected to be either closed or experience low liquidity on that day.

Unexpected Full Trading Day Market Closures

In the event that the primary stock market in a country fails to open for trading and remains closed for the entire trading day on the implementation date of the review due to an unexpected market closure, MSCI will postpone the implementation of the additions to and deletions from the MSCI All Countries World Index (ACWI), as well as the changes in FIF and NOS with a combined impact on the country index of at least 50bp, resulting from the Index Review of the MSCI Global Investable Market Indexes for that specific country index. MSCI will implement the above changes as a result of the Index Review for that country as of the close of the first business day (Monday to Friday) that the specific market reopens for trading and closing prices are available. In the event of unexpected closures of stock markets in more than one country, MSCI will evaluate the situation and may apply a different policy.

For smaller countries, however, in the event of unexpected market closures, MSCI reserves the right to implement the Index Review changes using the closing price of the last day the market was open.

Unexpected Market Closures of Less Than a Full Trading Day

The trading suspensions of less than one full trading day will not trigger any postponement of the implementation of the Index Review of the MSCI Global Investable Market Indexes.

Market Outage during the Trading Day

In the event that a market is affected by an outage during the trading day on the effective implementation date, MSCI will determine its pricing policy for the relevant country on a case-by-case basis. In making its decision, MSCI will take into consideration a number of factors, including the time and duration of the outage, information on the outage provided by the specific stock exchange, and other relevant market information.

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MSCI will communicate all decisions taken with respect to market outages during the day through the regular client communication channels as well as via Reuters (Pages MSCIA and following) and Bloomberg (MSCN).

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Appendix X: Updating the Global Minimum Size References and Ranges

As markets evolve due to events and price performance, the Global Minimum Size Reference and ranges are calculated on a daily basis using the following general principles.

General Principles for Updating the Global Minimum Size References and Ranges

- **The Investable Market Index Global Minimum Size Reference** for Developed Markets is the full company market capitalization of the company at the same rank that determined the Investable Market Index Global Minimum Size Reference at the previous Index Review (that is not a light rebalancing) as long as the cumulative free float-adjusted market capitalization coverage of the existing DM Investable Equity Universe at that rank is between 99% and 99.25%. If the coverage at that rank is not between 99% and 99.25%, the rank is reset to the first company that reaches a cumulative free float-adjusted representation of not less than 99% (if below) or not more than 99.25% (if above) and the Global Minimum Size Reference is recalculated.
- **The Standard Index Global Minimum Size Reference** for Developed Markets is the full company market capitalization of the company ranked at the same rank that determined the Standard Index Global Minimum Size Reference at the previous Index Review (that is not a light rebalancing) as long as the cumulative free float-adjusted market capitalization coverage of the existing DM Investable Equity Universe at that rank is between 85 and 87%. If the coverage at that rank is not between 85% and 87%, the rank is reset to that company that reaches a cumulative free float-adjusted representation of not less than 85% (if below) or not more than 87% (if above) and the Global Minimum Size Reference is calculated.
- **The Large Cap Index Global Minimum Size Reference** for Developed Markets is the full company market cap of the company ranked at the same rank that determined the Large Cap Index Global Minimum Size Reference at the previous Index Review (that is not a light rebalancing) as long as the cumulative free float-adjusted market capitalization coverage of the existing DM Investable Equity Universe at that rank is between 70 and 72%. If the coverage at that rank is not between 70% and 72%, the rank is reset to that company that reaches a cumulative free float-adjusted representation of not less than 70% (if below) or not more than 72% (if above) and the Global Minimum Size Reference is recalculated.

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- **For Emerging Markets** the Global Minimum Size Reference for each size-segment is set at half of the USD Global Minimum Size Reference for Developed Markets.
- **For Frontier Markets** the Global Minimum Size References are calculated using the same approach as for Developed Markets, but are based on the FM Investable Equity Universe.

Using the rank of the company that determined the Global Minimum Size Reference at the previous Index Review (that is not a light rebalancing) - within acceptable representation ranges - is aimed at providing more stable Global Minimum Size References, compared to an approach that focuses on a targeted percentile coverage.

The existing DM Investable Equity Universe is used to keep the Global Minimum Size Reference up to date on a daily basis and at Light Rebalancings. For Index Review (that are not a light rebalancing) , the fully updated DM Investable Equity Universe is used.

Example:

At the previous Index Review of the Standard Indexes, the Global Minimum Size Reference was determined to be USD 3.95 billion and reflected the market capitalization of the 1700th company in the DM Investable Equity Universe with a cumulative free float-adjusted market coverage of 85% at that rank. In the current Index Review, the market capitalization of the 1700th company is chosen as the pro forma Global Minimum Size Reference. If the cumulative free float-adjusted market capitalization coverage of the 1700 companies is between 85 – 87% of the DM Investable Equity Universe, the full market capitalization of the 1700th company will be used as the new Global Minimum Size Reference. If, however, the cumulative free float-adjusted market capitalization of the DM Investable Equity Universe is 88%, then the rank of the company determining the Global Minimum Size Reference is reset. In this case, suppose the top 1600 companies cumulatively cover 87% of the free float-adjusted market capitalization, then the market capitalization of the 1600th company is the new Global Minimum Size Reference for the DM Standard Indexes. At the next Index Review, the full market capitalization of the 1600th company will be the pro forma Global Minimum Size Reference.

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Appendix XI: Frontier Markets Country Classification

The table below provides the country classification in terms of minimum liquidity that MSCI uses as basis for the maintenance of the MSCI Frontier Markets Indexes and of Standalone Market Indexes.

MSCI Frontier Markets Indexes

Very Low Liquidity (2.5% ATVR)	Low Liquidity (5% ATVR)	Average Liquidity (15% ATVR)
Bahrain	Iceland	Bangladesh
Baltic States**	Jordan	Pakistan
Croatia	Kazakhstan	Vietnam
Mauritius	Kenya	
Morocco	Oman	
Nigeria	Romania	
Serbia		
Slovenia		
Sri Lanka		
Tunisia		
WAEMU***		

Standalone Market Indexes^

Very Low Liquidity (2.5% ATVR)	Low Liquidity (5% ATVR)	Average Liquidity (15% ATVR)
Bosnia-Herzegovina		Argentina
Botswana		
Bulgaria		
Jamaica		
Lebanon		
Malta		
Panama		
Palestine		
Trinidad & Tobago		
Ukraine		
Zimbabwe		

^The list includes all Standalone Market Indexes rebalanced using the MSCI Frontier Markets Liquidity Thresholds.
***The Baltic States consists of the following member countries: Estonia, Latvia and Lithuania*
****The West African Economic and Monetary Union (WAEMU) consists of the following member countries: Benin, Burkina Faso, Ivory Coast, Guinea-Bissau, Mali, Niger, Senegal and Togo*

The categorization is reviewed at each Index Review.

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Appendix XII: MSCI DR Indexes

Constructing the MSCI DR Indexes

The MSCI DR Indexes are constructed by substituting the constituents of the corresponding MSCI Standard Indexes (herein, "Parent Indexes") with liquid Depositary Receipts (DR) for each constituent. Only level II and level III American Depositary Receipts (ADR) listed on the New York Stock Exchange or the NASDAQ, Global Depositary Receipts (GDR) as well as ADRs listed on the London Stock Exchange are eligible for inclusion in the MSCI DR Indexes. DRs are deemed liquid if their ATVR is 15% or above. If more than one DR exists for a constituent, the most liquid listing will be included in the MSCI DR Index.

Constituents of the Parent Indexes without DR listings are excluded from the MSCI DR Indexes.

Maintaining the MSCI DR Indexes

Number of Shares (NOS) and Foreign Inclusion Factors (FIF) used for DRs in the MSCI DR Indexes

The NOS of the DRs in the MSCI DR Indexes is based on the maximum DRs that could be issued by dividing the number of shares of the Parent Index by the DR ratio (ratio between the common shares and the DRs). The purpose of this is to allow the DR to reflect accurately the full market capitalization of the company in the DR Indexes.

The FIF is the same as the Parent Index constituent´s FIF in order to reflect accurately the free-float adjusted market capitalization of the security.

Quarterly Listing Reviews

There is a Quarterly Listing Review, which coincides with the regular Quarterly Index Reviews of the Parent Indexes. At each Quarterly Listing Review, all listings for all constituents of the Parent Index are examined. If a new liquid DR for a current constituent of the Parent Index, which is not a constituent of the MSCI DR Index, is identified, it is added to the MSCI DR Index as part of the Review. The DR must be listed and trading for at least three months before being added to the MSCI DR Index.

Constituents of the MSCI DR Indexes with an ATVR below 10% will be excluded from the MSCI DR Indexes as part of the Quarterly Listing Review.

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All constituents deleted from the Parent Indexes resulting from Index Reviews will be simultaneously deleted from the MSCI DR Indexes, provided the asset was included in the MSCI DR Indexes. Additions to the Parent Indexes will be added to the corresponding MSCI DR Indexes only if they meet the liquidity and seasoning requirements.

Index Review of Changes in NOS and in FIF

Updates in NOS and FIF to the Parent Indexes will be applied simultaneously to the corresponding DRs adjusted by the respective DR ratio.

Ongoing Event Related Changes

The implementation in the MSCI DR Indexes of changes in security level information, such as FIF and NOS, as a result of corporate events generally mirrors the implementation of these events in the Parent Indexes. This rule will normally apply to deletions, changes in the number of shares and FIFs, of securities due to mergers and acquisitions, conversion of shares, or share placements and offerings.

For rights issues opened only to local shareholders, MSCI will not apply a Price Adjustment Factor (PAF) to the market price of the DR, but will increase the number of shares of the DR simultaneously with the change for the Parent Indexes, in order to keep the DR ratio constant.

Corporate actions such as splits, reverse splits, consolidations, stock dividends, and spin offs which affect the Parent Indexes and its DRs may occur either at the same time or at different times due to, for example, differences in operational procedures in the stock exchanges of the DR and the underlying security. Therefore, MSCI will take the ex-date provided by the corresponding Stock Exchange of both the parent and the DR.

In the case of a stock split involving a change in the DR ratio, it might result only in a change in the number of shares and a PAF for the parent and not for the DR or vice versa.

Despite the full replication of the event maintenance, the impact of a given event on the Parent Index and on the DR Index may be different as a result of potential price discrepancies between respective listings at the time of the implementation of the event.

Additions and Deletions due to Corporate Events

For a constituent added to a Parent Index following a corporate event, the most liquid DR for such constituent will be eligible for inclusion in the respective MSCI DR Index at the next regularly scheduled Index Review, provided it meets all index inclusion requirements.

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A constituent deleted from a Parent Index following a corporate event will be simultaneously deleted from the corresponding MSCI DR Index, provided the corresponding DR listing was included in the MSCI DR Index.

IPOs

DRs of IPOs which are significant in size and included early in the MSCI Global Standard Indexes according to Sub-section 3.2.4.1, will be simultaneously included in the MSCI DR Indexes.

Dividend Reinvestment for DRs Indexes

As per the MSCI Index Calculation Methodology, cash dividends paid to DR constituents are reinvested in the MSCI DR indexes on the ex-date of the DR dividend.

Withholding tax

MSCI uses companies' country of incorporation of the Parent Indexes to determine the relevant dividend withholding tax rate applied to the DR in calculating the gross and net dividends. Consequently, for DR the withholding tax rates will be the same one used for the Parent Indexes.

Dividend Fees Payable by DR Holders

Normally a dividend fee is applied to dividends paid by DRs. This fee is an administrative cost associated with processing the dividend and it is a standard practice for depositary banks to charge it to the DR shareholders. MSCI does not take into account this dividend fee amount in the calculation of gross and net dividends.

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Appendix XIII: MSCI Domestic Indexes

The MSCI Domestic Indexes are designed to represent the performance of the domestic equity markets of certain countries.

Most of the MSCI Domestic Indexes are based on the MSCI Global Investable Market Indexes Methodology. The indexes use the Domestic Inclusion Factor (DIF) as the free float adjustment factor for the market capitalization of each security. MSCI defines the free float of a security as the proportion of tradable shares outstanding that are deemed to be available for purchase in the public equity markets by domestic investors. In practice, limitations on free float available to domestic investors also include strategic and other shareholdings and these are not considered as part of available free float. Free float of MSCI GIMI and MSCI Domestic indexes are reviewed, as defined in Sub-Section 3.1.7 based on the date of data defined in Sub-Section 3.1.9. Please see Appendix VI for details on MSCI Free Float Definition and Estimation Guidelines. Currently, MSCI Domestic Indexes based on the MSCI Global Investable Market Indexes Methodology are available for China[54], India, GCC Countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates), Korea and Australia[55].

MSCI China A Onshore Indexes

The MSCI China A Onshore Indexes, referred to as the MSCI China A Indexes prior to March 1, 2018, are part of the MSCI Domestic Indexes.

The MSCI China A Onshore Indexes are based on the MSCI Global Investable Market Indexes, with the following methodology adaptations:

Equity Universe:

For the MSCI China A Onshore Indexes, the universe is defined as all China A shares listed on the Shanghai and Shenzhen Stock Exchanges. In general, all listed equity securities, or listed securities that exhibit characteristics of equity securities, except investment trusts, mutual funds and equity derivatives, are eligible for inclusion in the universe. Securities with a “ST” or “*ST” status are excluded from the Equity Universe (see Appendix I for more details).

[54] The domestic China Index is known the MSCI China A Onshore Index.

[55] The domestic Australia and Korea Indexes are known as the MSCI Australian Shares Indexes and the MSCI Korean Shares Indexes respectively.

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Equity Universe Minimum Size:

The Equity Universe Minimum Size applied to the MSCI China A Indexes are based on the Global Minimum Size Reference of the Emerging Markets under the MSCI Global Investable Market Indexes Methodology.

Assigning a Free Float-Adjustment Factor:

MSCI defines the free float of a China A security as the proportion of tradable shares outstanding that are deemed to be available for purchase in the public equity markets by domestic investors. In practice, limitations on free float available to domestic investors also include strategic and other shareholdings that are not considered part of available free float.

MSCI free float-adjusts the market capitalization of each security using an adjustment factor referred to as the Domestic Inclusion Factor (DIF). The DIF is not subject to Foreign Ownership Limits (FOL).

Currently, the index market capitalization of securities in the MSCI China A Onshore Indexes is determined as Domestic Inclusion Factor * Security Full Market Capitalization as in the MSCI Global Investable Market Indexes.

Investment Sanctions Related to U.S. Executive Order 13959

The MSCI China A Onshore Indexes will not take into account investment sanctions related to the U.S. Executive Order 13959 dated November 12, 2020 which Prohibits Transactions by U.S. Persons in Certain Chinese Companies (the “Order”).

MSCI K-Series Indexes:

The MSCI K-Series Indexes are parallel versions of the MSCI China A Onshore Indexes that exclude relevant securities impacted by the investment sanctions related to the Order.

The treatment of investment sanctions related to the Order in the MSCI K-Series Indexes mirrors the treatment of such sanctions in the MSCI Global Investable Market Indexes, as described in Appendix V: Treatment of Investment Sanctions Related to U.S. Executive Order 13959.

- Any changes to the list of securities impacted by this treatment would be publicly announced.

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Appendix XIV: MSCI China Indexes

MSCI offers a range of equity indexes designed to represent the performance of the China equity market. The table below outlines the MSCI China Indexes.

MSCI China Indexes Offering

MSCI China Indexes	Share Class											
						Domestic						
	B Shares	H Shares	Red Chips	P Chips	Foreign Listings	A Shares	CDR*	Connect eligible only	Size-Segment	Listing	Index Inclusion Factor	Free Float Inclusion Factor
Integrated China Equity Universe												
MSCI China All Shares Index	✓	✓	✓	✓	✓	✓	✓		L/M/S	Onshore		FIF
MSCI China A International Index						✓			L/M/S	Onshore		FIF
MSCI China Indexes	✓	✓	✓	✓	✓	✓	✓	✓	L/M	Connect	20%	FIF
MSCI China A Inclusion Index						✓		✓	L/M	Connect		FIF
MSCI China A Inclusion RMB Index						✓		✓	L/M	Onshore		FIF
MSCI China A Index						✓		✓	L/M	Connect		FIF
MSCI China A RMB Index						✓		✓	L/M	Onshore		FIF
Domestic China A Shares Equity Universe												
MSCI China A Onshore Index						✓			L/M/S	Onshore		DIF

* CDRs are generally subject to the same requirements as China A shares, including Stock Connect eligibility further described in Appendix on Index Maintenance of the MSCI China Indexes. CDRs are not included in the MSCI China A Onshore Index, MSCI China A Index, MSCI China A Inclusion Index and MSCI China A International Index.

*The **MSCI China All Shares Indexes*** are built on the basis of the integrated China Equity Universe, including China A shares. The MSCI China All Shares Indexes are designed to represent the opportunity set of China share classes. They will be used as the basis for the construction of the MSCI China Indexes, included in Emerging Markets, subject to additional screening and inclusion factors, as well as the newly launched MSCI China A Indexes, which reflect only securities available through the Stock Connect program.

The ***MSCI China A International Indexes*** are constructed to represent the performance of the China A shares component of the MSCI China All Shares Indexes. These indexes include China A shares regardless of their eligibility for trading through the Stock Connect program.

For more details on the MSCI China All Shares and MSCI China A International Indexes, please refer to the MSCI China All Shares Indexes Methodology[56].

The ***MSCI China Indexes*** are designed to represent the performance of the Chinese securities that are included in the MSCI Emerging Markets Indexes. In addition to the Red-chips, P-chips, B shares, H shares and foreign listings, Stock Connect eligible Large Cap and Mid Cap China A shares and CDRs are included at 20% of their actual free float-adjusted market capitalization using the Stock Connect listing.

[56] Available on https://www.msci.com/index-methodology

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Following the inclusion of Mid Cap China A shares in the MSCI Emerging Markets Index in the November 2019 Index Review, the ***MSCI China A Indexes***[57] represent the performance of the China A shares portion of the MSCI China Index.

The MSCI China A Indexes are calculated using the Stock Connect listing based on the offshore RMB exchange rate (CNH), while the MSCI China A RMB Indexes are variants of the MSCI China A Indexes that are calculated using China A local listings based on the onshore RMB exchange rate (CNY).

The ***MSCI China A Inclusion Indexes***[58] represent the China A share portion of the MSCI China Index and are identical to the MSCI China A Indexes following the inclusion of Mid Cap China A shares in the MSCI Emerging Markets Index. These indexes are also calculated using the CNH and CNY rates similar to the MSCI China A Indexes.

In addition, MSCI will also continue to calculate the **MSCI China A Onshore Indexes**[59] which are based on the Domestic Inclusion Factor (DIF) that is not subject to FOL and constructed only on the basis of the China A Equity Universe. Until March 1 2018, these indexes were named the MSCI China A Indexes.

[57] Please refer to Appendix XVII for more details.

[58] Please refer to Appendix XVI for more details.

[59] Please refer to Appendix XII for more details on the MSCI China A Onshore Indexes.

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Appendix XV: Index Maintenance of the MSCI China Indexes

This section has been updated in January 2020[60].

Inclusion of China A Shares in the MSCI China Indexes

China A shares were initially included in the MSCI Emerging Markets and the MSCI China Indexes following a two-step inclusion process as part of the May 2018 Index Review and August 2018 Index Review. Large cap China A shares were included in the MSCI China Indexes with an index inclusion factor (IIF) of 2.5% in the May 2018 Index Review which was later increased to 5% in the August 2018 Index Review

The weight of China A shares in the MSCI China Indexes was further increased in 2019 to 10%, 15% and 20% as part of the May 2019 Index Review, August 2019 Index Review and November 2019 Index Review, respectively. Mid Cap China A shares were also added as part of the November 2019 Index Review.

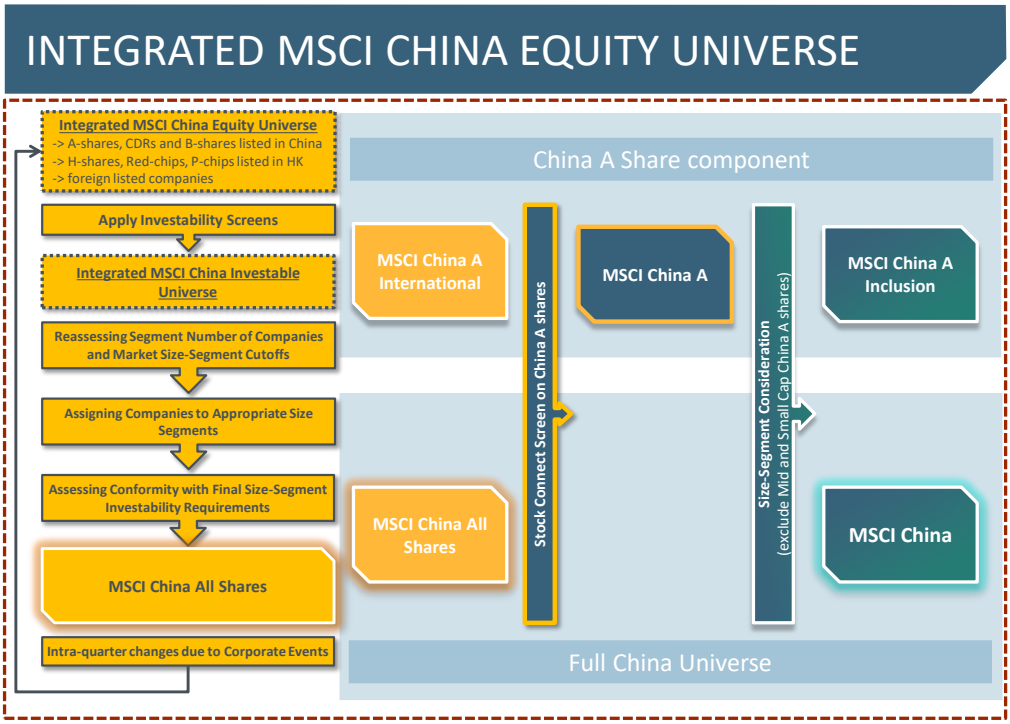
Index Maintenance of the MSCI China Indexes

This section should be read in conjunction with the earlier Section 2 'Constructing the MSCI Global Investable Market Indexes' and Section 3 'Maintaining the MSCI Global Investable Market Indexes' as it describes only the points specific to maintenance of the MSCI China Indexes.

The MSCI China All Shares Indexes are the basis for the construction of the MSCI China Indexes included in Emerging Markets, subject to additional screening and inclusion factors.

[60] The MSCI China Indexes in this section refers to the MSCI China Indexes included in the MSCI Emerging Markets Indexes.

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Integrated MSCI China Equity Universe

The MSCI China Indexes will be maintained using the MSCI Global Investable Market Indexes methodology under the Emerging Market framework. They will be constructed on the basis of the integrated MSCI China Equity Universe comprised of A - shares, CDRs[61] and B - shares listed in China, H - shares, Red - chips, and P - chips listed in Hong Kong and foreign listings listed outside China or Hong Kong, identical to the universe used for the construction of the MSCI China All Shares Index.

While all share classes from the integrated China Equity Universe will be included in the construction of the MSCI Investable Equity Universe, as well as in the process of allocation of companies into the Size-Segments, China A shares of companies allocated to the Small Cap Size-Segments as well as China A shares not available through the Stock Connect will not be included in the MSCI China Indexes.

[61] CDRs are generally subject to the same requirements as China A shares, including Stock Connect eligibility further described in this section.

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Calculation of Market Capitalization

For the purpose of index rebalancing, the security market capitalization of all the China A shares in the integrated China equity universe will be converted to US Dollars using onshore RMB exchange rate (CNY) regardless whether CNY or CNH rate is used for index calculation. For example, the issuer market capitalization of a company used as part of the rebalancing for the CNY or CNH based indexes would be the same and would be based on the CNY exchange rate.

Impact of the Index Inclusion Factor for the Index Construction

The IIF, if applicable, will not be taken into consideration in the context of an index inclusion decision. However, it will be applied in addition to the FIF in the calculation of the security index weights. More specifically, the IIF will not have any impact on the calculation of a security's free float-adjusted market capitalization, Annualized Traded Value Ratios (ATVRs) or foreign room that will be screened as part of the rebalancing process at the time of Index Reviews.

Investability Requirements

In addition to the Investability Requirements described in section 2.2, MSCI will exclude newly eligible securities (securities that are not current constituents of the Investable Market Indexes) from the investable equity universe if the securities:

- Are suspended on the Price Cutoff date, or
- Have been suspended for at least 50 days consecutively in the past 12 months[62]

Companies and securities are evaluated based on the integrated MSCI China Equity Universe. China A shares of companies will be assessed based on their current status in the MSCI China All Shares Indexes for this requirement, subject to the relevant buffer rules.

Calculation of the Market Size-Segment Cutoffs and Assigning Companies to the Size-Segments

The Market Size-Segment Cutoffs and the Size-Segment allocation of companies are based on the integrated MSCI China Investable Equity Universe. China A shares of companies will be assessed based on their current status in the MSCI China All

[62] As of each day from the effective date of the Index Review one year prior to the price cutoff date of the current Index Review (for example: a non-Index constituent suspended for 50 days as of any day from June 1, 2017, the effective date of the May 2017 Index Review, to April 23, 2018, the price cutoff date of the May 2018 Index Review, would not have been eligible for the Investable Market Universe of the May 2018 Index Review)

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Shares Indexes for this requirement, subject to the relevant buffer rules. After this step, allocation to Size-Segments within the MSCI China Indexes is identical to the MSCI China All Shares Indexes.

Foreign Ownership Limits and Foreign Room

MSCI currently applies a Foreign Ownership Limit of 30% on all China A shares.

MSCI will monitor the Foreign Room of China A shares and will apply the necessary adjustment factors according to section 3.1.6.2.

Assessing Conformity with Final Size-Segment Investability Requirements

Like for any other market, once companies are assigned to each Size-Segment, the securities of companies are evaluated for conformity with the additional Size-Segment Investability Requirements for each Size-Segment. However, in addition to the requirements described in the relevant sections, such as Section 2.3.6 and 3.1.6, China A shares are further screened on the basis of their Stock Connect eligibility, Size-Segment allocation status, as well additional full company market capitalization requirements.

More specifically, during Index Reviews, China A shares that are non-current constituents of the MSCI China Index and assigned to the Large Cap or Mid Cap Size-Segments must meet the following requirements to be added to the MSCI China Index:

- 1.0x the Standard Cutoff in terms of company full market capitalization
- 0.5x the Standard Cutoff in terms of security FIF-adjusted market capitalization
    - Securities with FIF below 0.15 must meet 1.8x 0.5x the Standard Cutoff in terms of Security FIF-adjusted Market Capitalization
- Stock Connect eligibility

China A shares assigned to Small Cap Size-Segment will not be added to the MSCI China Indexes.

China A shares that are existing constituents of the MSCI China Index must meet the requirements specified in Section 3.1.6 and remain Stock Connect eligible to be retained in the MSCI China Index.

Stock Connect Eligibility

China A Shares that are eligible for both buy and sell under either the Shanghai Connect or the Shenzhen Connect program will be eligible for inclusion to the MSCI China Index.

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Stock Connect eligibility will be reviewed on a quarterly basis coinciding with the regular MSCI Index Reviews. A China A share will only be considered for inclusion to the Stock Connect compatible indexes if it becomes accessible through the Stock Connect program on or prior to the Index Review Price Cutoff Date.

For example, a China A share becoming accessible through the Stock Connect programs after the Price Cutoff Date of the May Index Review will not be considered for the May Index Review.

Additions of China A Shares during Light Rebalancings

During a Light Rebalancing, China A shares that are non-current constituents of the MSCI China Index must meet the following requirements to be added to the MSCI China Index:

- 1.8x the Interim Market Size-Segment Cutoff in terms of company full market capitalization
- 1.8x one-half times the Interim Market Size-Segment Cutoff in terms of security FIF-adjusted market capitalization
- Stock Connect eligibility

Stock Connect Daily Limit Breach

MSCI will not postpone the implementation of Index Review changes for Stock Connect listings of China A shares when the Stock Connect daily limit is breached on the effective implementation date.

Ongoing Event Related Changes

The ongoing event-related changes to the MSCI China Indexes primarily follow the MSCI GIMI Methodology and the MSCI Corporate Events Methodology.

In order to reflect accessibility of securities trading on Stock Connect and keep the MSCI Indexes replicable, methodologies were enhanced in order to more accurately reflect the investment process of Stock Connect investors, especially for cases when Stock Connect is closed but the onshore Chinese domestic market is trading.

Details of the treatment of Stock Connect China A shares can be found in Appendix VII of the MSCI Corporate Events Methodology.

This section provides details on specific Corporate Events treatment of China A Stock Connect securities in the MSCI China Indexes in relation to their status in MSCI China All Shares.

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Stock Connect Eligibility

Existing China A share constituents of the Stock Connect compatible indexes that are no longer accessible through the Stock Connect programs will be deleted from the indexes with a notice period of at least two full business days.

If the impacted securities are suspended on the day prior to the implementation date, MSCI will postpone the implementation. The postponed deletions will be implemented two days after the securities resume trading.

Stock Connect Daily Limit Breach

MSCI will not postpone the implementation of corporate events for Stock Connect listings of China A shares when the Stock Connect daily limit is breached on the effective implementation date.

Early Inclusions

IPOs of China A shares will only be reviewed for addition to the MSCI China Index at subsequent Index Reviews in order to assess the Stock Connect eligibility of the security.

Other cases of early inclusion of China A shares (for example but not limited to spin off, merger, acquisition) will only be considered for inclusion in the MSCI China Indexes

- if the event involves an existing constituent of the index,
- if the new security is assigned to the Large Cap or Mid Cap size-segment,
- and if the Stock Connect eligibility of the security is announced on or before the day of MSCI sending “Confirmed” corporate event announcement for the relevant event.

The IIF applicable to a newly added security will be the same as the IIF of the Parent security. The treatment for such cases, if any, would be communicated to clients with sufficient advance notice through the regular channels.

For example, a spin-off resulting from an existing Large Cap or Mid Cap China A share constituent of the MSCI China Index that qualifies for the Small Cap size-segment would not be added to the MSCI China Index but would be reviewed for inclusion in the following Index Review.

As another example, if a merger between an existing Large Cap China A share constituent of the MSCI China Index and a Small Cap China A share not represented in the MSCI China Index results in a new security that qualifies for the Large Cap size-segment, the new security will be included in the MSCI China Index.

Furthermore, migrations of China A shares to the Large Cap or Mid Cap Size-Segment from the Small Cap Size-Segment of the MSCI China All Shares Indexes outside regular Index Reviews will not be added to the MSCI China Index. However,

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migrations of China A shares from the Large Cap or Mid Cap Size-Segment to the Small Cap Size-Segment of MSCI China All Shares Indexes outside of regular Index Reviews will be simultaneously deleted from the MSCI China Index.

For example, if a China A share constituent of the MSCI China All Shares IMI is migrating from Small Cap to Large Cap or Mid Cap due to a corporate event, the China A share security will not be added to the MSCI China Index at the time of the implementation of the corporate event and will be considered for inclusion in the following Index Review for MSCI China Index. However, if a China A share constituent of the MSCI China All shares IMI is migrating from Large Cap or Mid Cap to Small Cap due to a corporate event, the China A share security will be deleted from the Large Cap or Mid Cap Size-Segment of MSCI China Index at the time of the implementation of the corporate event.

Calculation of the Interim Market Size-Segment Cutoffs

The Interim Market Size-Segment Cutoffs are calculated based on the integrated MSCI China Investable Equity Universe. The Interim Size-Segment Cutoffs for the MSCI China Indexes and the MSCI China All Shares Indexes will be the same starting from June 1 2018.

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Appendix XVI: MSCI China A Inclusion Indexes

The MSCI China A Inclusion Index and MSCI China A Inclusion RMB Index are designed to track the progressive partial inclusion of A shares in the MSCI Emerging Markets Index over time.

The MSCI China A Inclusion Index is designed for global investors accessing the A shares market using the Stock Connect framework.

The MSCI China A Inclusion RMB Index is designed for domestic China investors.

The Indexes are constructed to represent the performance of the China A shares component of the MSCI Emerging Markets Index.

Index Construction

At initial construction, the constituents of the MSCI China A Inclusion Indexes were derived from the MSCI China A Large Cap Provisional Index by excluding securities that have been suspended for 50 consecutive days or more. The MSCI China A Large Cap Provisional Index reflected the China A shares which were included in Emerging Markets in June 2018.

While the MSCI China A Large Cap Provisional Index was discontinued after June 2018, the MSCI China A Inclusion Indexes continue to reflect the China A shares which are included in Emerging Markets.

Mid Cap China A shares were included as part of the November 2019 Index Review.

Index Maintenance

The constituents of the MSCI China A Inclusion Index are derived from the MSCI China Index at each Index Review by including only the China A shares component.

Following the inclusion of Mid Cap China A shares, the MSCI China A Inclusion Indexes are identical to the MSCI China A Indexes.

The ongoing event-related changes to the MSCI China A Inclusion Index follow the MSCI GIMI Methodology. For more information on the details of the implementation of ongoing event related changes, please refer to section 3.2 of the MSCI GIMI Methodology and the MSCI Corporate Events Methodology.

Index Calculation

The MSCI China Inclusion Index is calculated using China A Stock Connect listings based on the offshore RMB exchange rate (CNH).

The MSCI China Inclusion RMB Index is calculated using China A local listings based on the onshore RMB exchange rate (CNY).

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Appendix XVII: MSCI China A Indexes

The MSCI China A Indexes[63] and the MSCI China A RMB Indexes are designed to represent the performance of the China A shares portion of the MSCI China Index.

The MSCI China A Indexes are designed for global investors accessing the China A shares market through the Stock Connect program.

The MSCI China A RMB Indexes are designed for domestic China investors and have the same constituents as the MSCI China A Indexes.

Currently, MSCI calculates the Standard as well as the Large Cap and the Mid Cap Size Segment Indexes for both the MSCI China A and the MSCI China A RMB Indexes.

Index Construction

The MSCI China A Indexes were initially constructed by deriving the constituents from the MSCI China All Shares Indexes by first selecting the China A shares securities and then filtering out the China A shares securities that are not accessible through the Stock Connect program.

Index Maintenance

Currently, the constituents of the MSCI China A Inclusion Index are derived from the MSCI China Index at each Index Review by including only the China A shares component.

Ongoing Event Related Changes

The ongoing event-related changes to the MSCI China Indexes primarily follow the MSCI GIMI Methodology and the MSCI Corporate Events Methodology.

In order to reflect accessibility of securities trading on Stock Connect and keep the MSCI Indexes replicable, methodologies were enhanced in order to more accurately reflect the investment process of Stock Connect investors, especially for cases when Stock Connect is closed but the onshore Chinese domestic market is trading.

Details of the treatment of Stock Connect China A shares can be found in Appendix VIII of the MSCI Corporate Events Methodology.

[63] The MSCI China A Onshore Indexes were previously known as the MSCI China A Indexes prior to March 1, 2018. Please refer to Appendixes XII and XIV of the MSCI GIMI Methodology for more details on the MSCI China A Onshore Indexes.

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Index Calculation

The MSCI China A Indexes are calculated using China A Stock Connect listings based on the offshore RMB exchange rate (CNH).

The MSCI China A RMB Indexes are calculated using China A local listings based on the onshore RMB exchange rate (CNY).

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Appendix XVIII: Transition to the MSCI GIMI Methodology

MSCI transitioned the current Standard Index, the Small Cap Index and all indexes derived from the Standard Index to the Global Investable Market Indexes methodology described in this book at the end of May 2008.

All indexes that are constructed with the Standard Indexes as their basis, such as the GDP-weighted indexes, 10/40 Indexes and other custom indexes, High Dividend Yield Indexes, the MSCI Global Value and Growth Indexes, etc., continued to be derived from the Standard Indexes throughout the transition.

The transition of the MSCI Standard and the MSCI Small Cap Indexes to the MSCI Global Investable Market Indexes methodology occurred in two phases. The first phase occurred as of the close of November 30, 2007 and the second phase occurred as of the close of May 30, 2008.

All indexes derived from the MSCI Standard Indexes followed the two phase transition except the MSCI Euro and Pan Euro Indexes which were transitioned in one phase in November 2007.

The transition was synchronized for all markets and composites.

During the transition period, MSCI was producing the MSCI Provisional Standard and Provisional Small Cap Indexes to assist investors in understanding the changes that would have occurred if the Global Investable Market Indexes methodology had been immediately implemented in the current MSCI Standard and Small Cap Indexes. The Provisional Indexes also provided increased flexibility to current investors who wished to transition to the Global Investable Market Indexes methodology on their own schedule.

The Provisional Standard and Provisional Small Cap Indexes and the new Size-Segment and Style Indexes that were created based on this methodology were official MSCI indexes and, as such, could be used for a variety of purposes, including as the basis for new investment mandates and for investment vehicles such as indexed mutual funds, exchange traded funds and listed and over-the-counter derivative contracts.

Provisional Indexes

Provisional Indexes, together with the constituents, could be used by clients who wished to measure their performance against such indexes, ahead of MSCI's official implementation schedule. The Provisional Indexes and the new Size-Segment and Style Indexes were maintained according to the index maintenance principles of the Global Investable Market Indexes methodology.

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Deriving the Size-Segment Indexes at Initial Construction of the Provisional Indexes

In the initial construction of the Provisional Size-Segment Indexes, the Segment Number of Companies in each size-segment and the Market Size-Segment Cutoffs was determined as described in section 2 of this methodology book. However, with a view to reducing transition turnover and ongoing turnover, the following additional rules were used at initial construction:

- The Standard Indexes targeted market coverage and size integrity as described in Sub-section 2.3.3: Determining the Segment Number of Companies and Associated Market Size-Segment Cutoffs using the 85% ± 5% Market Segment Coverage Range, and specifically aiming at reaching 85%, when possible. However, a Global Minimum Size Range of 0.5 times to 1.05 times the Global Minimum Size Reference, rather than 0.5 times to 1.15, was used for initial construction to limit turnover during the transition, as long as market coverage did not exceed 90%.
- The buffer zones used in maintaining the MSCI Global Investable Market Indexes at Semi-Annual Index Reviews were fully populated at initial construction with companies from the current Standard and Small Cap Indexes, in order to minimize turnover during the transition. If a company was represented in both the Standard and the Small Cap Index, it was evaluated using the eligibility requirements of the Standard Index only. For details on the application of buffer zones in the assignment of companies to size-segments, please see Sub-section 3.1.5.1: Using Buffer Zones to Manage the Migration of Companies between Size-Segment Indexes.
- At initial construction the Market Size-Segment Cutoffs and associated Segment Number of Companies of the Investable Market Segment were derived by including all companies equal to or larger than the Global Minimum Size Reference for this segment.

Publication of Provisional Indexes

In preparation for the transition, as of the close of May 3, 2007, the list of pro forma index constituents under the Global Investable Market Indexes methodology for the Provisional MSCI Standard and Small Cap Indexes in each market and for all Provisional Indexes derived from the Standard indexes were made available to clients. The Provisional Indexes started with a base level of 1000 as of the close of May 31, 2007. All Global Investable Market Indexes, including the Provisional Standard and Provisional Small Cap Indexes, were calculated as of June 1, 2007 and published daily as of the close of June 5, 2007.

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After the May 2008 Index Review, the Provisional Standard and Provisional Small Cap Indexes were discontinued.

Reflecting Constituent Changes in the Standard Indexes at the Transition Points

In the first phase of the transition in November 2007:

- After the Provisional Standard Indexes were rebalanced as per the SAIR, they were compared to the relevant Standard Indexes.
- All companies that were in the Provisional Standard Index but not in the corresponding Standard Index were added to the Standard Index at half of their free float-adjusted market capitalization, and all companies that were not in the Provisional Standard Index but in the corresponding Standard Index were retained in the Standard Index but at only half of their free float-adjusted market capitalization.

In the second and final phase in May 2008:

- The Provisional Standard Indexes were rebalanced.
- Any and all differences between the rebalanced Provisional Standard Index and the Standard Index were fully implemented in the Standard Indexes.

The transition of the Small Cap Indexes was synchronized with the transition of the Standard Indexes, following the same timeline and approach.

Index Inclusion Factors were used to manage the indexes throughout the transition.

The table below provides some examples of Index Inclusion Factors for companies through the phases of the transition. The index market capitalization of securities was determined as Index Inclusion Factor*FIF*Security Full Market Capitalization.

		Phase I		Phase II	
	Current Index Inclusion Flag	Provisional Proforma Index Inclusion Flag (November 30, 2007)	Standard Proforma Inclusion Factor (November 30, 2007)	Provisiona Proforma Index Inclusion Flag (May 30, 2008)	Standard (final) Inclusion Factor (May 30, 2008)
Existing Constituents					
Company A	1	1	1	1	1
Company B	1	0	0.5	0	0
Company C	1	0	0.5	1	1
Company D	1	1	1	0	0
New Constituents					
Company E	0	1	0.5	1	1
Company F	0	1	0.5	0	0
Company G	0	0	0	1	1

For example, say companies A, B, C and D were current constituents of the Standard Index. Company A continued as a constituent of the

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Standard Index under the Global Investable Market Indexes methodology. It had an Index Inclusion Factor of 1 throughout the transition. Company B was not eligible for inclusion in the Standard Index under the Global Investable Market Indexes methodology. So, in the first phase, it was marked for removal from the Standard Index and an Index Inclusion Factor of 0.5 was applied to it. In the second phase the Index Inclusion Factor went to 0 indicating removal of the company from the Standard Index. Company C was also identified for removal from the Standard Index and had an Index Inclusion factor of 0.5 in the first phase. But when evaluated at phase 2, it became eligible for inclusion and the Index Inclusion Factor was changed to 1 for the second phase. Company D was retained in the Standard Index when evaluated in the first phase and carried an Index Inclusion Factor of 1 for that phase. But in phase 2, it was no longer eligible for inclusion in the Standard Index and, hence its Index Inclusion Factor was changed to 0.0.

Companies E, F, and G were new constituents that were eligible for inclusion under the Global Investable Market Indexes methodology. Company E remained eligible for inclusion to the Standard Index throughout the transition and had an Index Inclusion Factor of 0.5 in the first phase and 1 in the second phase. Company F, was identified as an addition in the first phase, but at the second phase it was no longer eligible for inclusion. Its Index Inclusion Factor of 0.5 in the first phase was therefore changed to 0 in the second phase. Company G was not eligible for inclusion in the first phase and carried an Index Inclusion Factor of 0. But in the second phase, it became eligible for inclusion and its Index Inclusion Factor was reset to 1, indicating full inclusion in the Standard Index.

Index Reviews and Treatment of On-Going Market Events during the Transition Period

During the transition period, from May 4, 2007 through May 30, 2008, MSCI was maintaining its schedule of regular Index Reviews for its Standard and Small Cap Index series. The Provisional Indexes and Size-Segment Indexes were maintained according to the index maintenance principles of the Global Investable Market Indexes methodology.

To minimize changes not related to the transition, all changes in the Standard Indexes were coordinated with the Provisional Indexes. Only very significant changes in the equity markets and constituents were reflected during the Quarterly Index

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Reviews for the existing Standard and Small Cap Indexes. All new additions of companies to the Provisional Standard Indexes resulting from IPOs and the August 2007 and February 2008 Index Reviews were also included in the Standard Indexes at their full free float-adjusted market capitalization.

Ongoing Event Related Changes

Effective from March 29, 2007 and throughout the transition, the ongoing maintenance of the Standard and Small Cap Indexes was made with a view to minimize potential reverse turnover in the indexes.

Effective May 4, 2007 all and only securities newly added to the Provisional Standard and Small Cap Indexes as a result of ongoing maintenance of corporate events could be added to the Standard and to the Small Cap Indexes, respectively. Before May 31, 2007 these were additions to the list of pro-forma constituents of the Provisional Standard and Provisional Small Cap Indexes.

May 2007 Annual Full Country Index Review of the Standard Indexes and Semi-Annual Index Review of the Small Cap Index

The changes resulting from the May 2007 Annual Full Country Index Review of the existing Standard Indexes were announced on May 3, 2007, earlier than its normal announcement schedule, to coincide with the availability of the pro-forma list of constituents of the MSCI Global Investable Market Indexes. Further, in order to minimize reverse turnover, the May 2007 Annual Full Country Index Review for the Standard Indexes used the same Global Minimum Size Requirement and other investability requirements that were applied in the construction and maintenance of the Provisional Standard Indexes. Only securities that were constituents of the Provisional Standard Indexes were added to the Standard Indexes to bring the Industry Group representation closer to 85%, if necessary. If an Industry Group was over represented, only companies not included in the Provisional Standard Indexes were deleted.

The current Small Cap Indexes continued to target securities of companies in the full market capitalization range of USD 200–1,500 million that defines the small cap universe under the current Small Cap Index methodology. The changes resulting from the May 2007 Index Review of the current Small Cap Indexes were made available on May 3, 2007, along with the final pro forma list of constituents of the MSCI Global Investable Market Indexes. In order to minimize reverse turnover, the May 2007 Index Review for the Small Cap Indexes used the same Global Minimum Size Requirement and other investability screens that were applied in the construction and maintenance of the Provisional Small Cap Indexes. Only securities that were constituents of the Provisional Small Cap Indexes were added to the Small Cap Indexes to bring the Industry Group representation closer to 40%, if necessary.

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Potential deletion of a security from the Small Cap Indexes due to excessive industry group representation was considered only if it was not a constituent of the Provisional Small Cap Indexes.

August 2007 Quarterly Index Review

In August 2007, the first QIR for the Provisional Standard and Provisional Small Cap Indexes was conducted under the principles of the Global Investable Market Indexes methodology. Newly eligible companies that were included in the Provisional Standard Indexes as a result of the August 2007 Index Review were also added to the existing Standard Indexes as of the close of August 31, 2007. The migration of companies between the Provisional Standard and Provisional Small Cap Indexes was also reflected in the Standard and Small Cap Indexes.

November 2007 Semi-Annual Index Review

The changes in the Standard and Small Cap Indexes during the November 2007 Index Review were determined in two steps:

- Identification of the changes resulting from the regular Semi-Annual Index Review and;
- Identification of the additional changes resulting from the first phase of the transition to the Global Investable Market Indexes Methodology.

In the first step, MSCI performed the regular Semi-Annual Index Review of the Standard and Small Cap Indexes under the principles of the Global Investable Market Indexes Methodology, meaning that all changes in the Standard and Small Cap Indexes were coordinated with the Semi-Annual Index Review of the Provisional Standard and Provisional Small Cap Indexes. Similar to the August 2007 Quarterly Index Review, the additions to and deletions from the Provisional Standard and Provisional Small Cap Indexes resulting from the review were fully added to or deleted from the current Standard and Small Cap Indexes.

In the second step, MSCI determined the difference in each constituent's free float-adjusted market capitalization between the indexes resulting from the first step above and the corresponding Post Semi-Annual Index Review Provisional Standard and Provisional Small Cap Indexes. Then, one-half of this difference was added to or deleted from the Standard and Small Cap Indexes. This was implemented by applying the Index Inclusion Factor (IIF) of 0.5 to all additions and deletions resulting from the transition.

February 2008 Quarterly Index Review

In February 2008, the second QIR for the Provisional Standard and Provisional Small Cap Indexes was conducted under the principles of the Global Investable Market

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Indexes methodology. Newly eligible companies that were included in the Provisional Standard Index as a result of the February 2008 Index Review were also added to the Standard Index as of the close of February 29, 2008. The migrations of companies between the Provisional Standard and Provisional Small Cap Indexes were also reflected in the Standard and Small Cap Indexes.

May 2008 Semi-Annual Index Review

In May 2008, the second SAIR for the Provisional Standard and Provisional Small Cap Indexes was conducted under the principles of the Global Investable Market Indexes methodology. The addition or deletion of the remaining difference of the free float-adjusted market capitalization for each constituent was implemented in the Standard and Small Cap Indexes as of the close of May 30, 2008. After this, the Provisional Indexes were discontinued as of the close of June 30, 2008.

Transitioning Other Indexes

Global Value and Growth Indexes

The Global Value and Growth Indexes followed the timeline and implementation of the Standard Indexes.

Starting with the first phase of the transition, the style classification of the Provisional MSCI Global Value and Growth Indexes prevailed over that of the current Global Value and Growth Indexes. Therefore, at the first phase of the transition, the constituents of the existing MSCI Global Value and Growth Indexes acquired style inclusion factors derived from the Global Investable Market Indexes. In those rare cases where an existing constituent of the current Global Value and Growth Indexes were not included in the Global Investable Market Indexes, those constituents retained their current style inclusion factors.

Euro and Pan-Euro Indexes

The MSCI Euro and MSCI Pan-Euro Indexes are subsets of the Standard MSCI EMU and MSCI Europe Indexes, respectively, and aimed to capture 90% of the market capitalization of the broader benchmarks.

The MSCI Euro Pan-Euro methodology evolved to the methodology for the Large Cap Index under the Global Investable Market Indexes methodology. Consequently,

- The enhanced MSCI Pan Euro Index became identical to the MSCI Europe Large Cap Index under the MSCI Global Investable Market Indexes methodology.
- The enhanced MSCI Euro Index became identical to the MSCI EMU Large Cap Index under the MSCI Global Investable Market Indexes methodology.

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The transition of the MSCI Euro and MSCI Pan-Euro Indexes to the Global Investable Market Indexes methodology took place in a single phase, as of the close of business on November 30, 2007.

Indexes Based on the Standard Indexes

Indexes constructed with the Standard Indexes as their basis, such as the High Dividend Yield Indexes, GDP-weighted indexes, 10/40 Indexes and other custom indexes, continued to be derived from the Standard Indexes throughout the transition.

GCC Countries Indexes

MSCI transitioned the current MSCI GCC Countries Indexes to the enhanced MSCI GCC Countries Indexes Methodology.

The transition of the MSCI GCC Countries Indexes to the enhanced MSCI GCC Countries Indexes Methodology occurred in one single phase. The transition was implemented as of the close of May 30, 2008.

In order to add transparency to the transition process and to assist clients in planning and implementing their individual transition strategies, MSCI provided Provisional Indexes for the MSCI GCC Countries Indexes constructed and maintained according to the enhanced MSCI GCC Countries Indexes Methodology.

Summary Transition Timeline

The transition time line for the Standard Index (and Small Cap Index) is as shown below.

Date	Provisional/New	Standard & Small Cap
March 28, 2007	Final MSCI Global Investable Market Indexes methodology was announced.	No impact.
May Annual Index Review	Initial construction based on data used in Standard and Small Cap Index Review, including population of the buffers.	Regular Annual Index Review of the Current Standard Index., taking into account new minimum size requirements. Regular SAIR of the Current Small Cap Index. Corporate events, IPOs and other new company additions treated in accordance with the current index methodology.
May 3, 2007	List of index constituents for	Results of May Annual Index Review were

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	Provisional Standard and Provisional Small Cap Indexes, under the Global Investable Market Indexes methodology for each of the MSCI Provisional Standard and Provisional Small Cap Indexes, was made available.	announced.
May 31, 2007	Provisional Indexes start with a base level of 1000 as of the close of May 31, 2007 and calculation began	Annual Index Review changes became effective.
June 5, 2007	Start of daily publication of the Provisional Standard and Provisional Small Cap Indexes. New Large Cap, Mid Cap, and Investable Market Indexes also published.	No impact.
August 2007	QIR of the Provisional and new indexes using buffers zones, updates of NOS, FIFs, IPO and newly eligible companies inclusions, etc.	QIR of the current Standard and Small Cap Indexes reflecting changes in NOS, FIF, etc. Addition of IPOs and newly eligible companies to the Provisional Standard Index Series were reflected in the Standard Index at their full weight. Migrations between the Provisional Standard and Provisional Small Cap Indexes were also reflected in the Standard and Small Cap Indexes.
November 2007	SAIR for Provisional and Size-Segment Indexes.	First phase of the transition included in QIR for Standard Indexes and SAIR for Small Cap Indexes.
November 30, 2007	Rebalanced Provisional Indexes implemented.	Partially transitioned Standard and Small Cap Indexes implemented.
February 2008	QIR of Provisional and new Size-Segment Indexes using buffers, updates of NOS, IPO inclusions, etc.	QIR of the current Standard and Small Cap Indexes reflecting changes in NOS, FIF etc. Addition of IPOs and newly eligible companies to the Provisional Standard Index Series were reflected in the Standard

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		Index at their full weight. Migrations between the Provisional Standard and Provisional Small Cap Indexes were also reflected in the Standard and Small Cap Indexes.
May 2008 SAIR and Annual Review	SAIR for Provisional and Size-Segment Indexes.	Second and final phase of the transition included in May Annual Index Review for Standard Indexes and SAIR for Small Cap Indexes.
May 30, 2008		Fully transitioned Standard and Small Cap Indexes implemented.
After June 1, 2008	Provisional Indexes discontinued.	All MSCI global equity indexes operate under Global Investable Market Indexes methodology.

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Appendix XIX: Transition to a Quarterly Comprehensive Index Review

Prior to the February 2023 Index Review, the MSCI Global Investable Market Indexes were reviewed on a quarterly basis which involved:

- Semi-Annual Index Reviews (SAIRs) in May and November and
- Quarterly Index Reviews (QIRs) in February and August

The objective of the SAIRs was to systematically reassess the various dimensions of the Equity Universe for all markets, involving a comprehensive review of the Size-Segment Indexes.

QIRs aimed to capture significant market driven changes that were not captured in the index at the time of their actual occurrence but are significant enough to be reflected before the next SAIR.

Following positive feedback from market participants in a market consultation, MSCI transitioned to a Quarterly Comprehensive Index Review (QCIR) schedule starting from the February 2023 Index Review. In a QCIR, MSCI employs the index maintenance methodology of an SAIR across each of the quarterly Index Reviews.

Foreign Inclusion Factors and Number of Shares were fully reviewed up to the Price Cutoff Date of each QCIR starting from the May 2023 Index Review.

Treatment of MSCI Derived Indexes with Different Index Review Schedules compared to Parent Indexes

Indexes constructed from a parent index that follows GIMI methodology but apply an alternative weighting methodology and/or additional screening methodology (Derived Indexes), such as MSCI Factor, ESG or Capped Indexes, may have Index Review schedules which do not always coincide with the Index Review schedule of their respective parent index.

For Derived Indexes whose Index Review schedule is less frequent compared to their parent, for example less frequent than quarterly (e.g. semi-annual, annual) compared to the MSCI Global Investable Market Indexes which are reviewed on a quarterly basis, changes resulting from the parent index, such as deletions, additions, as well as Number of Shares and Foreign Inclusion Factor changes, will be reflected as per the intra-rebalance treatment specified in their respective methodologies.

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Appendix XX: Changes to the MSCI Frontier Markets Indexes Methodology

In August 2022, a consultation was launched with proposals to enhance the MSCI Frontier Markets Indexes Methodology with the aim of addressing the following:

- A limited number of eligible securities and much smaller investment opportunity set caused by higher size cutoffs linked to Developed Markets (DM)
- Significantly higher country concentration, as a few heavily-weighted markets at the top of the index exist along with a longer list of smaller markets at the bottom
- Frequent changes in index composition, often driven by market reclassifications

Following feedback from market participants, the changes below were implemented at the August 2023 Index Review:

- Independent size cutoffs for Frontier Markets are no longer linked to Developed Markets,
- For each individual Frontier Market, a reduction in the minimum number of companies meeting Standard Index requirements for Size and Liquidity from two companies to one, and
- Regional consolidation of individual markets for the purpose of index construction and maintenance where appropriate, starting with the Baltic States, i.e., Estonia, Lithuania and Latvia:
    - MSCI considers Estonia, Lithuania and Latvia as a single market for the purpose of index construction and maintenance under the MSCI Global Investable Market Indexes Methodology to derive the constituents of the MSCI Baltic States Indexes. The MSCI Estonia, MSCI Lithuania and MSCI Latvia Indexes are then derived from the constituents of the MSCI Baltic States Indexes,
    - As part of the August 2023 Index Review, the constituents of the MSCI Estonia and MSCI Lithuania Indexes were considered as existing constituents of the MSCI Baltic States Index for rebalancing purpose,
    - The MSCI Baltic States Indexes is maintained as a Very Low Liquidity market with a minimum Annualized Traded Value Ratio (ATVR) requirement of 2.5%.

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Changes to the Methodology Book

The following sections have been modified since November 2012:

3.2.4. Quarterly Index Review of Changes in FIFs

- Update of the footnote on page 45

3.3.3.3 Early Inclusion of Non-Index Constituents

- Update of the last paragraph on page 52

3.3.4.1 IPOs and Other Early Inclusions

- Update on page 54

3.3.5 Corporate Events Affecting the Index Review

- Update on page 55

Appendix I: Eligible Classes of Securities (Developed Markets)

- Update on page 73

Appendix III: Country Classification of Securities

- Update of the last paragraph on page 80
- Update on Russia on page 80
- Update on China on page 80

The following sections have been modified since February 2013:

2.2.5 Minimum Length of Trading Requirements

- Update last paragraph of section

3.1.6.2 Existing Constituents

- Update on page 39 and the footnote on page 40

3.2.4 Quarterly index Review of Changes in FIFs

- New paragraph end of section

3.2.5 Quarterly Index Review of Changes in the Number of Shares (NOS)

- New paragraph end of section

3.3.3.2 Changes in Size or Style Segment Classification as a Result of a Large Corporate Event

- Update on page 51

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3.3.3.3 Early Inclusion of Non-Index Constituents

- Updates on page 52

3.3.4.1 IPOs and Other Early Inclusions

- Updates on page 55

5.1.1 Updating MSCI Frontier Markets Index Coverage

- New second paragraph

5.1.2 Standalone Country Indexes

- New section

5.2.2 Categorization of Frontier Markets into very low, low or average liquidity markets

- Updates on page 67

Appendix I: Eligible Markets (Emerging Markets & Frontier Markets)

- Updates on page 72 and 75
- Updates the footnote on page 71, 72 and 75

Appendix III: MSCI Ineligible Securities

- Updates on page 84

Appendix IV: Free Float Definition and Estimation Guidelines

- Updates on page 92

The following sections have been modified since May 2013:

3.1.9 Date of Data Used for Semi-Annual Index Review

- Updates on page 39

3.2.6 Date of Data Used for Quarterly Index Review

- Updates on page 47

Appendix III: MSCI Ineligible Securities

- Updates on page 84

The following sections have been modified since August 2013:

2.3.5.2 Minimum Liquidity Requirement for the Standard Indexes

- Section removed

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- Updates on page 24

3.1.6 Assessing Conformity with Final Size-Segment Investability Requirements

- Updates on page 37

3.1.6.2 For Existing Constituents

- Updates on page 39
- Updates of the Footnote on page 39

3.2.1.4 Assessing Conformity with Final Size-Segment Investability Requirements

- Part of the section updated and moved under new section 3.2.3
- One paragraph added
- Updates of the Footnote on page 43

3.2.4 Quarterly Index Reviews of Changes in FIFs

- Update in footnote

3.2.4 Quarterly Index Reviews of Changes in Number of Shares (NOS)

- Updates

3.3.3.2 Changes in Size or Style Segment Classification as a Result of a Large Corporate Event

- Update for small cap

3.3.3.3 Early Inclusions of Non-Index Constituents

- Update in second paragraph

3.3.4.1 IPOs and Other Early Inclusion

- Updates

The following sections have been modified since November 2013:

3.1.6.2 For Existing Constituents

- Updates in second to the last paragraph
- Added footnote

3.2.1.4 Assessing Conformity with Final Size-Segment Investability Requirements

- Updates in third to the last paragraph
- Added footnote

Appendix IX: Minimum Market-Relative Liquidity Requirements for the Standard Index

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- Section deleted

The following sections have been modified since February 2014:

2.1.1 Identifying Eligible Equity Securities

- Deleted "Other than Business Development Companies in the U.S."

3.1.5 Assigning Companies to Appropriate Size-Segments

- Updates in first and second bullet points – added "or equal to"

3.2.1.3 Assigning Companies to Appropriate Size-Segments

- Update in first bullet point – added "or equal to"

5.2.2. Categorization of Frontier Markets into very low, low or average liquidity markets

- Updates in the first and fourth paragraph

Appendix I: Equity Markets and Universe

- Added sub-section on Ineligible Alert Boards

Appendix IX: Frontier Markets Country Classification

- Added the West African Economic and Monetary Union (WAEMU) as a Standalone Index

The following sections have been modified since May 2014:

2.1.1 Identifying Eligible Equity Securities

- Updates in the first paragraph and footnotes

2.4 Index Continuity Rules

- Updates in this section
- Section 3 Introduction
- Clarification paragraph added

3.1.9 Data used for Semi-Annual Index Reviews

- Updates in this section

3.2.2 Quarterly Index Review of Addition of Companies Currently not Constituents of the Investable Market Indexes

- Updates in this section

3.2.6 Data used for Quarterly Index Reviews

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- Updates in this section

3.3.3.1 Changes in FIF, Number of Shares or Industry Classification for Existing Constituents

- Updates in this section

4.2.2 Quarterly Index Reviews of February and August

- Updates in this section

5.2.4 Index Continuity Rules

- Clarification paragraph added

Appendix III: Country Specific Cases

- Updates in this section

Appendix V: Global Industry Classification Standard (GICS)

- Updates in this section

Appendix X: MSCI Provisional Saudi Arabia Indexes

- New section

The following sections have been modified since August 2014:

2.1.1 Identifying Eligible Equity Securities

- Clarification on eligibility of Limited Partnerships

3.1.4.1 Determining Initial Segment Number of Companies

- Clarification on counting the Initial Segment Number of Companies for the IMI

Section 3.1.9: Date of Data Used for Semi-Annual Index Review

- Added footnote

Section 3.2.6: Date of Data Used for Quarterly Index Review

- Added footnote

3.3.3.1 Changes in FIF, Number of Shares or Industry Classification for Existing Constituents

- Clarification on treatment of securities with decreased FOL or foreign room outside of Index Reviews

Appendix I: Eligible Classes of Securities (Developed Markets)

- Updated table

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Appendix I: Eligible Classes of Securities (Emerging Markets)

- Updated table

Appendix III: Country Specific Cases

- Updates in this section
- Appendix I: Updated list of countries with REITs

The following sections have been modified since November 2014:

Section 3.3.3.4: Early Deletions of Existing Constituents

- Updated deletion price and examples of early deletion

Appendix I: Eligible Classes of Securities (Emerging Markets)

- Updated deletion price for Ineligible Alert Boards

Appendix XI: MSCI Provisional Indexes for Coverage Enhancements

- New section

Appendix XIII: Transition of MSCI China A Index

- Deleted “Treatment of Suspensions”

Appendix XV: MSCI India Domestic Index

- New section

Appendix XVI: Enhancements to the Coverage of the MSCI Global Investable Market Indexes

- New section

The following sections have been modified since February 2015:

Appendix I: Equity Markets and Universe

- REITs

Appendix III: MSCI Ineligible Securities

Appendix X: MSCI Provisional Saudi Arabia Indexes

Appendix XI: MSCI Provisional Indexes for Coverage Enhancements

Appendix XIV: MSCI DR Indexes

- Updated for fees on dividends

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Appendix XVI: Enhancements to the Coverage of the MSCI Global Investable Market Indexes

The following section has been modified since May 2015:

Appendix X: MSCI Saudi Arabia Indexes

The following sections have been modified since July 2015:

Appendix I: Equity Markets and Universe

- Updated the table "Eligible Markets (Emerging Markets)"

Appendix XVI: Enhancements to the Coverage of the MSCI Global Investable Market Indexes

- Updated the table "Eligible Markets (Emerging Markets)"

The following sections have been modified since August 2015:

Section 3.2.4: Quarterly Index Reviews Changes in FIFs

- Added clarification in footnote

Appendix XVI: Enhancements to the Coverage of the MSCI Global Investable Market Indexes

- Updated the section on China under the revised Appendix III: Country Classification of Securities

The following section has been modified since October 2015:

Appendix III: Country Classification of Securities

- Added the section on Australia under Country Specific Case

The following sections have been modified since November 2015:

Section 2.2: Determining the Market Investable Equity Universes

- Updates in this section

Section 2.2.1: Identifying Eligible Listings

- New section

Section 2.2.2: Applying Investability Screens

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- New section (content previously included in section 2.2)

Section 2.2.5: DM and EM Minimum Liquidity Requirements

- Updates in this section on priority rules for selection of listings
- Added footnotes for further clarifications on liquidity calculation

Section 3.1.2: Updating the Market Investable Equity Universes

- Updates in this section

Section 3.1.2.1: Eligibility of Foreign Listings

- New section

Section 3.1.2.4: Minimum Liquidity Requirement for Existing Constituents

- Updates in this section on priority rules for selection of listings

Section 3.2.3: Quarterly Index Review of Deletion of Companies Currently Constituents of the Investable Market Indexes

- Updates in this section on priority rules for selection of listings

Section 3.2.5: Quarterly Index Review of Changes in Number of Shares (NOS)

- Updates in this section
- Added footnote

Section 5.1.2: Standalone Market Indexes

- Section deleted

Section 6: MSCI Standalone Market Indexes

- New section

Appendix I: Equity Markets and Universe

- Updated all the tables to reflect eligibility of foreign listings
- Updated list of countries with REITs to include Pakistan

Appendix III: Country Classification of Securities

- Updated the sections “General Framework” and “Other Cases”
- Updated the treatment of China under the section “Country Specific Cases”
- Added the treatment of Greece under the section “Country Specific Cases”
- Deleted the sections “Review and Maintenance” and “Country of Coverage of Companies Not Eligible for Inclusion in the MSCI Global Investable Market Indexes”

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Appendix IV: Foreign Listing Materiality Requirement

- New appendix

Appendix V: Free Float Definition and Estimation Guidelines

- Updates in the table on the Classification of Shareholder Types

Appendix X: Frontier Markets Country Classification

- Updates in the format of the table

Appendix XVI: Enhancements to the Coverage of the MSCI Global Investable Market Indexes

- Appendix deleted

The following sections have been modified since February 2016:

Section 3.1.9: Date of data used for Semi-Annual Index Review

- Updates in this section on ongoing maintenance of securities' share classes, share types and alternate listing

Appendix V: Free Float Definition and Estimation Guidelines

- Added sub-section on Treatment of High Shareholding Concentration

The following sections have been modified since April 2016:

Section 3.1.9: Date of Data Used for Semi-Annual Index Review

- Updated the treatment of cases monitored and updated right up to the Price Cutoff Date

Section 3.2.4: Quarterly Index Review of Changes in FIFs

- Added the treatment of IPO over-allotment options

Section 3.2.5: Quarterly Index Review of Changes in Number of Shares (NOS)

- Added the treatment of over-allotment options

Section 3.2.6: Date of Data Used for Quarterly Index Review

- Updated the treatment of cases monitored and updated right up to the Price Cutoff Date

The following sections have been modified since May 2016:

Section 2.2.3: Equity Universe Minimum Size Requirement

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- Added a footnote

Section 2.2.5: DM and EM Minimum Liquidity Requirement

- Updates in this section on calculation of Frequency of Trading

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Classes of Securities for Stock Exchanges in Developed Markets”

Appendix III: Country Classification of Securities

- Added the treatment of countries subject to economic sanctions under the section “Country Specific Cases”

Appendix VIII: Policy Regarding Trading Suspensions and Market Closures during Index Review

- Added clarification for “Index Review changes”

The following section has been modified since June 2016:

Appendix XII: MSCI Provisional Pakistan Indexes and MSCI Pakistan Indexes

- New section

The following sections have been modified since August 2016:

Section 2.4: Index Continuity Rules

- Updates in this section

Section 2.6: Classifying Securities under the Global Industry Classification Standard

- Updated to reflect revised GICS structure effective September 1, 2016

Section 5.2.4: Index Continuity Rules

- Updates in this section

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Classes Of Securities For Stock Exchanges In Developed Markets”

Appendix VI: Global Industry Classification Standard (GICS)

- Updated to reflect revised GICS structure effective September 1, 2016

Appendix XIII: MSCI Provisional Indexes for Coverage Enhancements

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- Appendix deleted

The following sections have been modified since October 2016:

Appendix I: Equity Markets and Universe

- Updated the table "Eligible Markets (Developed Markets)"

Section 2.2.5: DM and EM Minimum Liquidity Requirements

- Added footnote on priority rule for local listings

Section 3.1.2.4: Minimum Liquidity Requirement for Existing Constituents

- Added footnote on priority rule for local listings

Section 3.2.3: Quarterly Index Review of Deletion of Companies Currently Constituents of the Investable Market Indexes

- Added footnote on priority rule for local listings

The following sections have been modified since November 2016:

Section 3.1.4.2: Changes in the Segment Number of Companies

- Added footnotes

Section 3.1.9: Date of Data Used for Semi-Annual Index Review

- Updates in this section

Section 3.2.4: Quarterly Index Review of Changes in FIFs

- Updates in this section

Section 3.2.5: Quarterly Index Review of Changes in Number of Shares (NOS)

- Updates in this section

Section 3.2.6: Date of Data Used for Quarterly Index Review

- Updates in this section

Section 3.3.5: Corporate Events Affecting the Index Review

- Clarification paragraph added (first paragraph)

Appendix I: Equity Markets and Universe

- Updated the table "Eligible Markets (Developed Markets)"
- Updated the tables for Frontier Markets and Standalone Markets

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- Updated the list of ineligible alert boards

Appendix VIII: Policy Regarding Trading Suspensions and Market Closures during Index Review

- Added clarification for “Index Review changes”

Appendix XI: MSCI Saudi Arabia Indexes

- Updated following a change in foreign ownership regulation

Appendix XVI: MSCI Domestic Indexes

- Updated to include other domestic countries

Appendix XVII: MSCI China All Shares Indexes and MSCI China A International Indexes

- Appendix added

The following sections have been modified since February 2017:

Section 3.1.7: Semi-Annual Index Review of Changes in FIFs

- Added clarification on threshold used for implementation of FIF changes

Appendix VIII: Policy Regarding Trading Suspensions and Market Closures during Index Review

- Updates in this section

The following sections have been modified since April 2017:

Appendix I: Equity Markets and Universe

- Updated list of countries with REITs to include Saudi Arabia

Appendix V: Free Float Definition and Estimation Guidelines

- Added clarification on buffer used for Semi-Annual Review of Non-Voting Depository Receipts in Thailand

The following sections have been modified since May 2017:

Section 3.2.5: Quarterly Index Review of Changes in Number of Shares (NOS)

- Update in this section
- Section 5.1.1: Updating MSCI Frontier Markets Coverage

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- Update in this section
- Section 6.4.1: Inclusion of Newly Eligible Markets
- Update in this section

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)”
- Updated the tables for Emerging Markets, Frontier Markets and Standalone Markets
- Updated the list of ineligible alert boards

The following section has been modified since June 2017:

Appendix XVIII: MSCI China A International Large Cap Provisional Index

- Appendix added

The following sections have been modified since August 2017:

Section 3.3.3.1: Changes in FIF, Number of Shares or Industry Classification for Existing Constituents

- Clarification of the industry classification review as part of a corporate event

Section 3.3.3.2: Changes in Size Segment, Style Segment or Industry Classification as a Result of a Large Corporate Event

- Clarification of the industry classification review as part of a corporate event

Section 3.3.3.3: Early Inclusions of Non-Index Constituents

- Clarification of the industry classification review as part of a corporate event

Section 5.2.2: Categorization of Frontier Markets into Very Low, Low or Average Liquidity Markets

- Clarification on priority rules for selection of listings

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Classes Of Securities For Stock Exchanges In Emerging Markets”
- Updated the list of ineligible alert boards
- Clarification on the treatment of additions of securities that are on ineligible alert boards

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The following section has been modified since September 2017:

Section 2.7: Constructing and Calculating the Individual MSCI Global Investable Markets Indexes

- Added section to clarify the creation and maintenance of the MSCI GIMI Composite Indexes

The following sections have been modified since October 2017:

Section 2.2.5: DM and EM Minimum Liquidity Requirement

- Updated the requirement for Chinese securities

Section 3.2.1.4: Minimum Liquidity Requirement for Existing Constituents

- Updated the requirement for Chinese securities

Appendix XVIII: Provisional Indexes to Assist the Upcoming Partial Inclusion of China A Shares in Emerging Markets

- Update in this section following consultation conclusion

Appendix XIX: MSCI China A Inclusion Indexes

- Appendix added

The following sections have been modified since November 2017:

Section 2.2.5 DM and EM Minimum Liquidity Requirement

- Clarification on the calculations of ATVR and Frequency of Trading

Section 3.1.2: Updating the Market Investable Equity Universes

- Clarification on the application of investability screens

Section 3.1.6.2: Final Size-Segment Investability Requirements for Existing Constituents

- Clarification on treatment of Standard Index constituents failing the additional investability requirements

Section 3.3.4.1: IPOs and Other Early Inclusions

- Clarification of early inclusions following large offerings

Section 3.4.3.1: Client Announcements

- New treatment for “acknowledged” announcement status

Appendix I: Equity Markets and Universe

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- Updated the table “Eligible Markets (Developed Markets)”
- Updated the table “Eligible Markets (Emerging Markets)”
- Updated the table “Eligible Markets (Frontier Markets)”
- Updated the list of ineligible alert boards
- Clarification on the treatment of securities getting into the ineligible alert boards

The following sections have been modified since February 2018:

Section 5.2.6: IPOs and Other Early Inclusions

- Update in this section

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)”
- Updated the table “Eligible Markets (Emerging Markets)”

Appendix XVIII: Provisional Indexes to Assist the Upcoming Partial Inclusion of China A Shares in Emerging Markets

- Update in this section

The following sections have been modified since March 2018:

Section 3.1.7: Semi-Annual Index Review of Changes in Foreign Inclusion Factors (FIFs)

- Change of implementation treatment for certain events at QIRs

Section 3.2.4: Quarterly Index Review of Changes in FIFs

- Change of implementation treatment for block sales, secondary offerings and acquisition for shares of unlisted assets

Section 3.2.5: Quarterly Index Review of Changes in Number of Shares (NOS)

- Change of implementation thresholds at the time of the event

Section 3.3.3.1: Changes in FIF, Number of Shares or Industry Classification for Existing Constituents

- Change of implementation thresholds at the time of the event

Appendix V: Free Float Definition and Estimation Guidelines

- Updates in this section

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Appendix XI: MSCI DR Indexes

- Previously Appendix XIV

Appendix XII: MSCI Domestic Indexes

- Previously Appendix XV
- Added details on MSCI China A Onshore Index, previously Appendix XIII

Appendix XIII: MSCI Saudi Arabia Index

- Previously Appendix XI

Appendix XIV: MSCI China Indexes

- New section

Appendix XV: Inclusion of China A Shares in the MSCI China Indexes

- new section

Appendix XVI: MSCI China A Inclusion Indexes

- Previously Appendix XIX

Appendix XVII: Transition to the MSCI GIMI Methodology

- Previously Appendix XII

The following sections have been modified since May 2018:

Section 3.3.4.1: IPOs and Other Early Inclusions

- Clarification of the treatment of over-allotment

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)”
- Updated the table “Eligible Markets (Emerging Markets)”
- Updated the table “Eligible Markets (Standalone Markets)”
- Updated the table “Eligible Classes Of Securities For Stock Exchanges In Developed Markets”
- Updated the table “Eligible Classes Of Securities For Stock Exchanges In Standalone Markets”

Appendix V: Free Float Definitions and Estimation Guidelines

- Clarified threshold for updating FOL and FIF related to NVDRs during SAIRs

Appendix X: Frontier Markets Country Classification

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- Updated the table “Eligible Classes Of Securities For Stock Exchanges In Standalone Markets”

The following section has been modified since June 2018:

Appendix XIII: Saudi Arabia Indexes

- Updates in this section

The following sections have been modified since July 2018:

Section 2.2.5: DM and EM Minimum Liquidity Requirements

- Clarifications made to footnote

Appendix XV: Inclusion of China A Shares in the MSCI China Indexes

- Clarified migrations outside of Index Reviews

Appendix XVII: MSCI China A Indexes

- Added new section, previously from MSCI China All Shares Indexes

Appendix XVIII: Provisional GICS Indexes

- New Appendix

Appendix XIX: Transition to the MSCI GIMI Methodology

- Previously Appendix XVII

The following sections have been modified since August 2018:

APPENDIX I: EQUITY MARKETS AND UNIVERSE

- Updated the table “Eligible Markets (Developed Markets)”
- Updated the table “Eligible Markets (Emerging Markets)”
- Updated the table “Eligible Markets (Standalone Markets)”
- Updated the table “Eligible Classes of Securities for Stock Exchanges in Standalone Markets”

Section 2.2.8 Minimum Foreign Room Requirement

- Updated Footnote

Section 3.1.6.2 For Existing Constituents

- Updated Footnote

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Section 3.1.7 Semi-Annual Index Review of Changes In Foreign Inclusion Factors (FIFs)

- Updated Footnote

Section 3.2.1.4 Assessing Conformity with Final Size-Segment Investability Requirements

- Updated Footnote

Section 3.2.2 Quarterly Index Review of Addition of Companies Currently Not Constituents of the Investable Market Indexes

- Updated Footnote

Appendix XVIII: Provisional GICS Indexes

- Updated the dates in the example

The following sections have been modified since September 2018:

Appendix XIII: MSCI Saudi Arabia Indexes

- Updates in this section

Appendix XIX: MSCI Provisional Argentina Indexes

- New Appendix

The following sections have been modified since November 2018:

APPENDIX I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)”
- Updated the table “Eligible Markets (Standalone Markets)”
- Updated the table “Eligible Classes of Securities for Stock Exchanges in Emerging Markets”
- Updated the list of Ineligible Alert Boards

Appendix II: Market Classification Framework

- Modified Market Accessibility Review criteria to reflect the change related to “Availability of Investment Instruments”

Appendix III: Country Classification of Securities

- Updates in Country Specific Cases for China
- Updated Footnote

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Appendix VI: Global Industry Classification Standard (GICS)

- Updates in this section

Appendix XV: Inclusion of China A Shares in the MSCI China Indexes

- Deleted "Provisional China Indexes

The following sections have been modified since December 2018:

Section 2.1.1: Identifying Eligible Equity Securities

- Clarification on the treatment of stapled securities

Section 2.2.5 DM and EM Minimum Liquidity Requirement

- Clarification on the calculations of ATVR and Frequency of Trading

Section 3.1.9 Date of Data Used for Semi-Annual Index Review

- Clarification on the treatment of unlisted securities

Section 3.2.5: Quarterly Index Review of Changes in Number of Shares (NOS)

- Clarification on implementation thresholds at the time of the event

Section 3.2.6 Date of Data Used for Quarterly Index Review

- Clarification on the treatment of unlisted securities

Section 3.3.3.1: Changes in FIF, Number of Shares or Industry Classification for Existing Constituents

- Clarification on implementation thresholds at the time of the event

APPENDIX I: EQUITY MARKETS AND UNIVERSE

- Updated the table "Eligible Markets (Emerging Markets)"
- Updated the table "Eligible Markets (Frontier Markets)"
- Updated the list of Ineligible Alert Boards

APPENDIX III: Country Classification of Securities

- Clarification on the treatment of reverse mergers

Appendix XVIII: MSCI Provisional GICS Indexes

- Appendix removed

The following sections have been modified since February 2019:

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Section 3.1.6.2 Assessing Conformity with Final Size-Segment Investability Requirements for Existing Constituents

- Updated treatment for securities with low Foreign Room with liquid Depositary Receipts (DRs)

Section 3.2.1.4 Assessing Conformity with Final Size-Segment Investability Requirements

- Updated treatment for securities with low Foreign Room with liquid Depositary Receipts (DRs)

Appendix I: Equity Markets and Universe

- Updated list of REITs

Appendix V: Free Float Definition and Estimation Guidelines

- Updated the Treatment of Non-Voting Depositary Receipts in Thailand

Appendix XIII MSCI Saudi Arabia Indexes

- Updated treatment for the MSCI Saudi Arabia Indexes in the context of the reclassification to Emerging Markets

Appendix XV Inclusion of China A Shares in the MSCI China Indexes

- Updated treatment for the MSCI China Indexes in the context of the weight increase of China A shares

Appendix XVIII MSCI Provisional Argentina Indexes and MSCI Argentina Indexes

- Updated treatment for the MSCI Argentina Indexes in the context of the reclassification to Emerging Markets

The following sections have been modified since April 2019:

Section 2.2.5 DM and EM Minimum Liquidity Requirement

- Added clarification on adjustments on ATVR and FOT related to suspensions

Section 3.3.3.4 Early Deletions of Existing Constituents

- Clarification on the treatment of small cap constituents with large full market capitalization but low float-adjusted market capitalization

Section 3.3.5 Corporate Events Affecting the Index Review

- Clarification on the treatment of corporate events affecting pro forma index constituents effective between the price cutoff date and the Index Review effective date

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Appendix I: Equity Markets and Universe

- Updated the table "Eligible Markets (Developed Markets)
- Updated the table "Eligible Markets (Emerging Markets)
- Updated the table "Eligible Markets (Frontier Markets)
- Updated the table "Eligible Markets (Standalone Markets)
- Updated the table "Eligible Classes of Securities for stock exchanges in Emerging Markets
- Updated the table "Eligible Classes of Securities for stock exchanges in Frontier Markets
- Updated the table "Eligible Classes of Securities for stock exchanges in Standalone Markets
- Added clarification on treatment of securities in Ineligible Alert Boards

Appendix III: Country Classification of Securities

- Added clarification on Red-chips
- Clarification on the treatment of country of classification review following an incorporation change

The following sections have been modified since June 2019:

3.2.4 Quarterly Index Reviews of Changes in FIFs

- Clarifications and updates

Appendix II: Market Classification Framework

- Updated the table and summarized measure for "Availability of Investment Instruments"

The following sections have been modified since August 2019:

Section 3.2.2 Quarterly Index Review of Addition of Companies Currently Not Constituents of the Investable Market Indexes

- Clarification on the cutoff used when assigning companies to the Large cap Index

Appendix V: Free Float Definition and Estimation Guidelines

- Clarification on treatment of NVDRs

Appendix XVIII MSCI Provisional Argentina Indexes and MSCI Argentina Indexes

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- Appendix deleted

The following sections have been modified since August 2019:

Section 2.1.1. Identifying Eligible Equity Securities

- Clarification on eligibility of securities

Section 3.4.4. IPOs and Other Early Inclusion

- Clarification on announcement policy on early inclusion of STAR board securities

Appendix I Equity Markets and Universe

- Updates on eligible segments

Appendix XV Inclusion of China A Shares in the MSCI China Indexes

- Updated with details on the third step of weight increase of China A shares

Appendix XVI MSCI China A Indexes

- Updates on migrations

The following sections have been modified since November 2019:

Section 3.2.4: Quarterly Index Review of Changes in FIFs

- Removed the treatment of conversions based on Corporate Events methodology

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)
- Updated the table “Eligible Markets (Standalone Markets)
- Updated list of Ineligible Alert Boards

Appendix III: Country Classification of Securities

- Added clarification on country classification methodology for China

Appendix IV: Foreign Listing Materiality Requirement

- Added Slovenia to the list

Appendix XII: MSCI Domestic Indexes

- Updated list of countries which have domestic indexes to include Australia

The following sections have been modified since January 2020:

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Appendix XIII: Inclusion of the MSCI Saudi Arabia Indexes in the MSCI Emerging Markets Indexes

- Removed and replaced with new Appendix XIII

Appendix XIII: Reclassification of the MSCI Kuwait Indexes to Emerging Markets

- Replaced with old Appendix XIII

Appendix XIV: MSCI China Indexes

- Updated following inclusion of Mid Cap China A shares as part of the November 2019 SAIR

Appendix XV: Index Maintenance of the MSCI China Indexes

- Updated following inclusion of Mid Cap China A shares as part of the November 2019 SAIR

Appendix XVI: MSCI China A Inclusion Indexes

- Updated following inclusion of Mid Cap China A shares as part of the November 2019 SAIR

Appendix XVII: MSCI China A Indexes

- Updated following inclusion of Mid Cap China A shares as part of the November 2019 SAIR

The following sections have been modified since February 2020:

Section 2.5: Classifying Securities under the Global Industry Classification Standard

- Removed details on guidelines for GICS classification

Section 3.2.4: Quarterly Index Review of Changes in FIFs

- Clarifications

Section 3.2.5: Quarterly Index Review of Changes in Number of Shares (NOS)

- Clarifications

Section 3.4.5: Global Industry Classification Standard (GICS)

- Updated to mention the implementation of GICS changes in MSCI indexes

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Frontier Markets)

Appendix V: Free Float Definition and Estimation Guidelines

- Updates

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Appendix VI: Global Industry Classification Standard (GICS)

- Removed the Appendix

The following sections have been modified since April 2020:

Appendix XII: Reclassification of the MSCI Kuwait Indexes to Emerging Markets

- Reflecting the announcements as of April 2020

Section 3.1.2.4: Minimum Liquidity Requirement for Existing Constituents

- Clarification on listing selection

The following sections have been modified since April 2020:

Section 3.1.4.1 Determining Initial Segment Number of Companies

- Clarification

Section 3.1.9: Date of Data Used for Semi-Annual Index Review

- Clarification on full market capitalization calculation

Section 3.2.6: Date of Data Used for Quarterly Index Reviews

- Clarification on full market capitalization calculation

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Emerging Markets)
- Updated the table “Eligible Markets (Frontier Markets)

Appendix III: Country Classification of Securities

- Updates

Appendix V: Free Float Definition and Estimation Guidelines

- Clarifications

The following sections have been modified since May 2020:

2.3.5 Determining Market Size-Segment Cutoffs and Assigning Companies to Size-Segments: Example

- Reordered from previous section

2.5.3 GICS-Based Indexes

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- Combined with previous section Classifying Securities under the Global Industry Classification Standard

Appendix I: Equity Markets and Universe

- Updated the table "Eligible Markets (Emerging Markets)
- Updated list of countries with REITs to include Philippines

Appendix III: Country Classification of Securities

- Clarification

The following section has been modified since August 2020:

Appendix III: Country Classification of Securities

- Updated the treatment of China under the section "Country Specific Cases"

The following section has been modified since September 2020:

Appendix I: Equity Markets and Universe

- Clarification on eligibility under the section "Canadian Income Trusts"

The following sections have been modified since October 2020:

Appendix I: Equity Markets and Universe

- Updated the table "Eligible Markets (Developed Markets)"
- Updated the table "Eligible Markets (Emerging Markets)"
- Updated the table "Eligible Markets (Frontier Markets)"
- Updated the table "Eligible Markets (Standalone Markets)"
- Updated the table "Eligible Classes of Securities for stock exchanges in Emerging Markets"
- Updated the table "Eligible Classes of Securities for stock exchanges in Frontier Markets"

Appendix II: Market Classification Framework

- Updated the table "Markets Under Index Continuity"

Appendix IV: Foreign Listing Materiality Requirement

- Added Singapore to the list

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Appendix IX: Frontier Markets Country Classification

- Removed Kuwait

The following sections have been modified since November 2020:

Appendix V: Treatment of Investment Sanctions Related to U.S Executive Order 13959

- New Appendix added

Appendix XII: MSCI Domestic Indexes

- Updated to reflect treatment of investment sanctions related to U.S. Executive Order 13959

The following sections have been modified since December 2020:

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)”
- Updated the table “Eligible Markets (Emerging Markets)”
- Updated the table “Eligible Markets (Frontier Markets)”
- Updated the table “Eligible Markets (Standalone Markets)”
- Updated the table “Eligible Classes of Securities for stock exchanges in Frontier Markets”
- Updated the table “Eligible Classes of Securities for stock exchanges in Standalone Markets”

Appendix II: Market Classification Framework

- Updated the table “Markets Under Index Continuity”

Appendix V: Treatment of Investment Sanctions Related to U.S. Executive Order 13959

- Added clarifications

Appendix IX: Frontier Markets Country Classification

- Updated the tables “MSCI Frontier Markets Indexes” and “Standalone Market Indexes”

Appendix XII: Reclassification of the MSCI Kuwait Indexes to Emerging Markets

- Appendix deleted

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The following section has been modified since February 2021:

Appendix I: Equity Markets and Universe

- Updated the table "Eligible Markets (Emerging Markets)"
- Updated the table "Eligible Classes of Securities for stock exchanges in Emerging Markets"

The following sections have been modified since March 2021:

Section 2.3.6.3: Treatment of Securities that Exhibit Extreme Price Increase

- New section added following consultation

Section 3.1.6.2: For Existing Constituents

- Clarifications added following consultation

Section 3.2.1.4: Assessing Conformity with Final Size-Segment Investability Requirements

- Clarifications added following consultation

Section 3.2.2: Quarterly Index Review of Additions of Companies Currently not Constituents of the Investable Market Indexes

- Clarifications added following consultation

Appendix VIII: Market Monitoring and Potential Switch to a Light Rebalancing under Conditions of Market Stress

- New Appendix added following consultation

The following sections have been modified since April 2021:

Appendix I: Equity Markets and Universe

- Updated the table "Eligible Markets (Developed Markets)"
- Updated the table "Eligible Markets (Emerging Markets)"
- Updated the table "Eligible Markets (Frontier Markets)"
- Updated the table "Eligible Markets (Standalone Markets)"
- Updated the table "Eligible Classes of Securities for stock exchanges in Emerging Markets"

Appendix II: Market Classification Framework

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- Updated the table “Markets Under Index Continuity”

Appendix IX: Frontier Markets Country Classification

- Removed Iceland from Standalone Markets, added to Frontier Markets

Appendix XIV: MSCI China Indexes

- Added clarifications

Appendix XV: Index Maintenance of the MSCI China Indexes

- Added clarifications

The following sections have been modified since May 2021:

Section 3.3.3.2 Changes in Size or Style Segment Classification as a Result of a Large Corporate Event

- Update for Micro Cap

Section 3.3.3.4 Early Deletions of Existing Constituents

- Update for Micro Cap

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Frontier Markets)”
- Updated the table “Eligible Classes of Securities for stock exchanges in Developed Markets”
- Updated the table “Eligible Classes of Securities for stock exchanges in Emerging Markets”
- Updated the table “Eligible Classes of Securities for stock exchanges in Frontier Markets”
- Updated the table “Ineligible Alert Boards”

The following section has been modified since August 2021:

Appendix V: Treatment of Investment Sanctions Related to U.S Executive Order 13959

- Clarifications added

The following sections have been modified as of September 2021:

Section 2.2.2: Applying Investability Screens

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- Added Financial Reporting Requirement to the list following consultation

Section 2.2.9: Financial Reporting Requirement

- New section added following consultation

Section 4.1: Constructing the MSCI All Cap Indexes

- Added Financial Reporting Requirement to the list following consultation

Section 4.1.6: Financial Reporting Requirement

- New section added following consultation

Appendix III: Country Classification of Securities

- Clarifications added

The following sections have been modified as of November 2021:

Section 3.1.9: Date of Data Used for Semi-Annual Index Review

- Updated FIF and NOS review for additions/deletions

Section 3.2.6: Date of Data Used for Quarterly Index Review

- Updated FIF and NOS review for additions/deletions

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Emerging Markets)”
- Updated the table “Eligible Markets (Frontier Markets)”
- Updated the table “Eligible Markets (Standalone Markets)”
- Updated the table “Eligible Classes of Securities for stock exchanges in Emerging Markets”
- Updated the table “Eligible Classes of Securities for stock exchanges in Frontier Markets”
- Updated the table “Eligible Classes of Securities for stock exchanges in Standalone Markets”

Appendix II: Market Classification Framework

- Updated the table “Markets Under Index Continuity”

Appendix IV: Foreign Listing Materiality Requirement

- Updated the table “Countries for which foreign listings are eligible”

Appendix XI: Frontier markets Country Classification

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- Added Pakistan to Frontier Markets
- Added Argentina to Standalone Markets

The following sections have been modified as of February 2022:

Appendix III: Country Classification of Securities

- Clarifications added

Appendix IX: Policy Regarding Trading Suspensions and Market Closures During Index Reviews

- Clarifications added

The following sections have been modified as of March 2022:

Section 2.5.2: Composite Indexes

- Updated examples of composite indexes

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Emerging Markets)”
- Updated the table “Eligible Markets (Standalone Markets)”
- Updated the table “Eligible Classes of Securities for stock exchanges in Emerging Markets”
- Updated the table “Eligible Classes of Securities for stock exchanges in Standalone Markets”

The following section has been modified as of April 2022:

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)”

The following sections have been modified as of May 2022:

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)”
- Updated the table “Eligible Markets (Frontier Markets)”

Appendix II: Market Classification Framework

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- Updated the table “Markets Under Index Continuity”

Appendix VI: Free Float Definition and Estimation Guidelines

- Updated the table “List of countries for which MSCI monitors foreign room on a quarterly basis”

Appendix XI: Frontier Markets Country Classification

- Added clarification on Russia to footnote on Standalone Markets

The following sections have been modified as of August 2022:

Section 2.2.5 DM and EM Minimum Liquidity Requirement

- Updated Footnote

Section 3.2.5 Quarterly Index Review of Changes in Number of Shares (NOS)

- Updated Footnote

Appendix I: Eligible Markets (Developed Markets)

- Updated Footnote

The following sections have been modified as of November 2022:

Section 3.3.3.3 Early Inclusions of Non-Index Constituents

- Clarification on foreign room requirement when non-constituent acquires constituent

Appendix I: Eligible Markets (Developed Markets)

- Updated Footnote

The following section has been modified as of December 2022:

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Emerging Markets)”

The following sections have been modified as of January 2023:

- Methodology book was updated to reflect the transition to Quarterly Comprehensive Index Reviews.

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- All references to “Semi-Annual Index Reviews” and “Quarterly Index Reviews” were replaced with “Index Reviews”.

Section 3.1.2.1 Eligibility of Foreign Listings

- Update to clarify that foreign listings are eligible if the requirement is met at least two Index Reviews prior

Section 3.1.2.4 Minimum Liquidity Requirement for Existing Constituents

- Updated the requirements for the maintenance (removal) of the Liquidity Adjustment Factor

Section 3.1.2.7 Minimum Length of Trading Requirement

- Clarification on the requirement

Section 3.2: Quarterly Index Reviews in February and August

- Section removed

Section 5.2.1 Categorization of Frontier Markets into Larger and Smaller Markets

- Updated the periodicity of review of the categorization of Frontier Markets as a Larger or Smaller market
- Updated the periodicity of review of the Equity Universe Minimum Float-Adjusted Market Capitalization Requirement for existing constituents

Section 5.2.2 FM Minimum Liquidity Requirement

- Updated the periodicity of review of the categorization of Frontier Markets into very low, low or average liquidity markets

Section 5.2.2.2 Minimum Liquidity Requirement for Existing Constituents

- Updated the requirements for the maintenance (removal) of the Liquidity Adjustment Factor

Appendix II: Market Classification Framework

- Updated table on markets under index continuity

Appendix III: Country Classification of Securities

- Added footnote to “Change in Country Classification” section

Appendix VI: Free Float Definition and Estimation Guidelines

- Included details on the Index Review Changes in FIF and NOS that will be used starting from the May 2023 Index Review

Appendix VIII: Market Monitoring Framework and Potential Switch to a Light Rebalancing under Conditions of Market Stress

- Included details on the maintenance rules to be followed during Light Rebalancings

Appendix XIX: Transition to a Quarterly Comprehensive Index Review

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- New Section

The following sections have been modified as of February 2023:

Appendix II: Market Classification Framework

- Updated the table "Markets Under Index Continuity"

Appendix XX: MSCI Provisional GICS Indexes

- New Section

The following sections have been modified as of March 2023:

Appendix I: Eligible Markets (Standalone Markets)

- Removed Russia from table Eligible Markets along with corresponding footnote

Appendix I: Eligible Classes of Securities (Standalone Markets)

- Removed Russia from table Eligible Classes of Securities along with corresponding footnote

Appendix III: Country Classification of Securities

- Removed "Russia" section

Appendix IV: Foreign Listing Materiality Requirement

- Removed Russia from table along with corresponding footnote

Appendix VII: Price Source for Securities Removed reference to Russia in footnote

- Removed "Russia" section

Appendix XI: Frontier Markets Country Classification

- Removed reference to Russia in footnote

Appendix XII: MSCI DR Indexes

- Removed reference to Russia in "Dividend Reinvestment for DR Indexes" section

The following sections have been modified as of May 2023:

Section 3.1.5.1: Using Buffer Zones to Manage the Migration of Companies between Size-Segment Indexes

- Added clarification

Section 3.1.7: Index Review of Changes in Foreign Inclusion Factors (FIFs)

- Updated the rules for FIF review

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Section 3.1.8: Index Review of Changes in Number of Shares (NOS)

- Updated the rules for NOS review

Section 3.2.3.1: Changes in FIF, Number of Shares or Industry Classification for Existing Constituents

- Alignment with section 3.1.7 for events below implementation threshold

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Developed Markets)”

Appendix II: Market Classification Framework

- Updated the table “Markets Under Index Continuity”

Appendix III: Country Classification of Securities

- Updated the periodicity of Change in Country Classification

Appendix VI: Free Float Definition and Estimation GuidelinesUpdated the rules the NOS review cut off date

- Added reference to the MSCI Free Float Data Methodology
- Removed Index Review of Changes in FIF and NOS starting from the May 2023 Index Review

The following sections have been modified as of July 2023:

Section 2: Constructing the MSCI Global Investable Market Indexes

- Updated footnote

Section 2.1.2: Country Classification of Eligible Securities

- Updated description

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Section 5.1: Frontier Markets Defintion

- Updated definition

Section 5.2: Methodology Used to Construct and Maintain the MSCI Frontier Markets Indexes

- Updated the distinction between Frontier Markets and Developed and Emerging Markets
- Removed subsection on Categorization of Frontier Markets into Larger and Smaller Markets
- Added subsection for Equity Universe Minimum Size Requirement
- Added subsection for Global Minimum Size Reference
- Updated subsection on Minimum Liquidity Requirement for Existing Consitutents
- Removed subsection on Final Size-Segment Investability Requirements
- Updated subsection on Index Continuity Rules
- Removed subsection on IPOs and Other Early Inclusions

Section 6.5: Treatment of Discontinued Standalone Market Indexes

- Added section

Appendix II: Market Classification Framework

- Updated table

Appendix X: Updating the Global Minimum Size References and Ranges Added reference to the MSCI Free Float Data Methodology

- Added reference to Frontier Markets

Appendix XI: Frontier Markets Country Classification

- Updated table

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Appendix XX: MSCI Provisional GICS Indexes

- Deleted section

Appendix XX: Changes to the MSCI Frontier Markets Indexes Methodology

- Added section

The following sections have been modified as of August 2023:

Section 2.2.3: Equity Universe Minimum Size Requirement

- Added distinction for Developed Markets, Emerging Markets, and Frontier Markets

Section 2.3.3: Determining the Segment Number of Companies and Associated Market Size-Segment Cutoffs

- Deleted sentence for disclosing latest Index Review Developed Markets Global Minimum Size Reference for Investable Market Indexes

Section 5.2.2: Global Minimum Size Reference

- Added reference for Frontier Markets Global Minimum Size Reference

Appendix II: Market Classification Framework

- Updated the footnote in the table of “Market Classification Framework” for the high income threshold
- Updated the description, footnote and table of “Markets Under Index Continuity”

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Frontier Markets)”
- Updated the table “Eligible Markets (Standalone Markets)”
- Updated Ineligible Alert Boards and footnotes

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The following sections have been modified as of November 2023:

Section 2.3.2.1: Defining the Global Minimum Size Reference

- Added clarification

Section 3.1.6.2: For existing constituents

- Added footnote

Section 3.1.7: Index Review of Changes in Foreign Inclusion Factors (FIFs)

- Updated the rules for FIF review

Section 3.3: Announcement Policy

- Added clarification

Appendix I: Equity Markets and Universe

- Updated the table “Eligible Markets (Frontier Markets)”
- Updated the table “Eligible Classes of Securities for Stock Exchanges in Frontier Markets”
- Updated list of countries with REITs and added footnote
- Updated Ineligible Alert Boards and footnotes

Appendix II: Market Classification Framework

- Updated the table of “Markets Under Index Continuity”

Appendix III: Country Classification of Securities

- Updated “Change in Country Classification” section

Appendix IV: Foreign Listing Materiality Requirement

- Updated the dates for clarification
- Updated the table of “Countries for which foreign listings are eligible”

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Appendix XI: Frontier Markets Country Classification

- Updated the table

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