INDEX METHODOLOGY



MSCI EQUAL WEIGHTED INDEXES METHODOLOGY

June 2017



1 In	troduction3
2 Co	onstructing the MSCI Equal Weighted Indexes4
3 M	aintaining the MSCI Equal Weighted Indexes5
3.1	Quarterly and Semi-Annual Index Reviews5
3.2	Ongoing Event Related Changes5
4 Aj	opendix 17
	2 Co 3 M 3.1 3.2



1 INTRODUCTION

For over 35 years, MSCI has constructed the most widely used international equity indexes for institutional investors. In calculating its international equity indexes, MSCI employs market capitalization weighting where each constituent in the index is weighted by its free float-adjusted market capitalization. Over time, investors have expressed a desire for index providers to additionally provide indexes based on alternative weighting schemes. For example, MSCI calculates a GDP weighted version of its international equity indexes as some investment professionals prefer to weight countries in a composite index by a variable, like GDP, other than market capitalization.

The MSCI Equal Weighted Indexes offer another alternative to market capitalizationweighted indexes. In the MSCI Equal Weighted Indexes, each security has the same weight, i.e. the weight of each security is set to unity on the rebalancing date. Between two rebalancings, the weight of securities will deviate from the equal weight based on the performance of each security.

This document describes the methodology that MSCI uses to calculate the MSCI Equal Weighted Indexes by applying equal weights to the constituents of the corresponding free float-adjusted market capitalization weighted MSCI global equity indexes (herein, "Parent Indexes").



2 CONSTRUCTING THE MSCI EQUAL WEIGHTED INDEXES

The MSCI Equal Weighted Indexes are constructed from the applicable MSCI country and composites indexes and have the same constituents as the underlying Parent Indexes. At construction and at each rebalancing, each issuer in the equal weighted index is given an equal weight (i.e. 1/N, where N is the number of issuers in the Parent Index). Between two rebalancings, the weightings of constituents will change due to price performance. If there are multiple securities of the same issuer in the index, the issuer will be equal weighted and the securities will be free float-adjusted market capitalization weighted.

At each rebalancing, a constraint factor is calculated for each constituent in the MSCI Equal Weighted Index. The constraint factor is defined as the weight in the MSCI Equal Weighted Index at the time of the rebalancing divided by the weight in the Parent Index. The constraint factor remains constant between index reviews except in case of corporate events as described below



3 MAINTAINING THE MSCI EQUAL WEIGHTED INDEXES

3.1 QUARTERLY AND SEMI-ANNUAL INDEX REVIEWS

The MSCI Equal Weighted Indexes are rebalanced quarterly, and the changes are implemented as of the close of the last business day of February, May, August and November, to coincide with the Index Reviews of their Parent Indexes. The pro forma Indexes are announced five business days before the effective date¹.

3.2 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI Equal Weighted Indexes aims to minimize turnover outside of Index Reviews. The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the MSCI Equal Weighted Index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the MSCI Equal Weighted Index.

The following section briefly describes the treatment of common corporate events within the MSCI Equal Weighted Indexes.

No new securities will be added (except where noted below) to the Index between Index Reviews. Parent Index deletions will be reflected simultaneously.

EVENT TYPE

New additions to the Parent Index

EVENT DETAILS

A new security added to the parent index (such as IPO and other early inclusions) will be added to the index at an estimated full market capitalization adjustment factor on the date of security inclusion.

¹ Some MSCI Equal Weighted Indexes follow a different index review cycle. The list of such indexes is provided in the Appendix



Spin-Offs	All securities created as a result of the spin-off of an existing Index constituent will be added to the Index at the time of event implementation. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.
Merger/Acquisition	For Mergers and Acquisitions, the acquirer's post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the Index.
	If an existing Index constituent is acquired by a non-Index constituent, the existing constituent will be deleted from the Index and the acquiring non-constituent will not be added to the Index.
Changes in Security Characteristics	A security will continue to be an Index constituent if there are changes in characteristics (country, sector, size segment, etc.) Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.

Further detail and illustration regarding specific treatment of corporate events relevant to this Index can be found in the MSCI Corporate Events Methodology book under the sections detailing the treatment of events in Capped Weighted and Non-Market Capitalization Weighted indexes.

The MSCI Corporate Events methodology book is available at: https://www.msci.com/index-methodology



4 APPENDIX 1

The list of MSCI Equal Weighted Indexes that follow a different index review cycle than that described in Section 3.1 is as follows:

Index Name	Rebalancing Frequency	Announcement Date
MSCI World Mid Cap Equal	Semi-annual (May and November	Nine days before the effective
Weighted Index	SAIR)	date
MSCI Europe Mid Cap Equal	Semi-annual (May and November	Nine days before the effective
Weighted Index	SAIR)	date



The following sections have been modified since May 2011:

- Updated Section 3.1: Quarterly and Semi-Annual Index Reviews
- Deleted Appendix
- Added Appendix 1

The following sections have been modified since September 2014:

• The details on the Corporate Events treatment are now included in Section 3.2.



CONTACT US

AMERICAS

clientservice@msci.cor	n
------------------------	---

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
Sao Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800915917*

ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Tokyo	+ 81 3 5290 1555

* = toll free

ABOUT MSCI

For more than 40 years, MSCI's researchbased indexes and analytics have helped the world's leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research.

Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

MSCI serves 98 of the top 100 largest money managers, according to the most recent P&I ranking.

For more information, visit us at <u>www.msci.com</u>.



NOTICE AND DISCLAIMER

• This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or redisseminated in whole or in part without prior written permission from MSCI.

• The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

• The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any
liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if
notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited,
including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or
willful default of itself, its servants, agents or sub-contractors.

 Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

• The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

• None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

• It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

• Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

• The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

• Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

• Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

• MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with
respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses,
approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's
products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment
decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research. MSCI ESG Research materials may include MSCI inc., dients of MSCI
or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including
materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities
and Exchange Commission or any other regulatory body.

• Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD, FEA, InvestorForce, and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.