

MSCI ASIA APEX INDEXES METHODOLOGY

November 2023



Contents

1.	. Introduction	3
2	. Index Construction Methodology	4
	2.1 Eligibility Screens	4
	2.1.1 Country Filters	4
	2.1.2 Eligible Security Filter	4
	2.2 Index Construction	4
3	. Index Maintenance Methodology	5
	3.1 Quarterly Index Review	5
	3.1.1 Buffer Rules	5
	3.1.2 Cutoff Date for Market Capitalization and Prices used for the Rebalancing	5
	3.1.3 Announcement Policy	6
	3.2 Ongoing Event-Related Maintenance	6
	3.2.1 Early Inclusions of Non-Index Constituents	6
	3.2.2 Early Deletions of Existing Constituents	6
Α	ppendix I: Changes to this Document	7



1. Introduction

The MSCI Asia APEX Indexes are a set of free float-adjusted market capitalization indexes designed to track the performance of the various size segments of the MSCI All Country (AC) Asia ex Japan Index while putting stronger emphasis on tradability compared to the broader MSCI AC Asia ex Japan size Indexes¹. The MSCI Asia APEX Indexes share similar construction rules and methodology, but differ slightly in terms of the construction and maintenance parameters. Specifically,

- The MSCI Asia APEX 50 Index tracks the performance of the 50 largest most tradable securities in the MSCI AC Asia ex Japan Standard Index.
- The MSCI Asia APEX Mid Cap 50 Index tracks the performance of the 50 largest most tradable securities in the MSCI AC Asia ex Japan Mid Cap Index.
- The MSCI Asia APEX Small Cap 200 Index tracks the performance of the 200 largest most tradable securities in the MSCI AC Asia ex Japan Small Cap Index².

¹ The MSCI AC Asia ex Japan Standard Index, the MSCI AC Asia ex Japan Mid Cap Index and the MSCI AC Asia ex Japan Small Cap Index are collectively referred to as MSCI AC Asia ex Japan size indexes or parent indexes

² The Indexes are governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document. The Methodology Set for the Indexes can be accessed from MSCl's webpage https://www.msci.com/index-methodology in the section 'Search Methodology by Index Name or Index Code'.



2. Index Construction Methodology

The selection universe of the MSCI Asia APEX Indexes is based on constituent securities of the underlying MSCI AC Asia ex Japan size indexes ("Parent Index") subject to the following eligibility screens.

2.1 Eligibility Screens

2.1.1 Country Filters

Given the objective of the MSCI Asia APEX indexes is to serve as effective tradable proxies for the broader parent indexes, the country filters are designed to minimize multiple currency exposures of the MSCI Asia APEX Indexes. Countries with less than three securities (10 securities in the case of MSCI Asia APEX Small Cap 200 Index) ranking in the top 50 (200) in terms of free float-adjusted market capitalization or countries with less than 5% weight in the underlying index are excluded from the MSCI Asia APEX 50 Index and the MSCI Asia APEX Mid Cap 50 Index (MSCI Asia APEX Small Cap 200 Index).

2.1.2 Eligible Security Filter

Securities subject to foreign ownership restrictions are excluded from the universe. Real Estate Investment Trusts (REITs) are excluded due to investment product restrictions in certain countries, e.g. Japan. China B shares are excluded. If a company has multiple share classes, only the larger security will be eligible. In addition, a minimum Average Traded Value Ratio (ATVR) threshold of 30% is applied in the construction of the MSCI Asia APEX Mid Cap 50 and MSCI Asia APEX Small Cap 200 Indexes to improve the liquidity profile of the indexes. No ATVR threshold is applied in the construction of the MSCI Asia APEX 50 Index.

2.2 Index Construction

After applying the eligible security and country filters, the remaining securities in the underlying MSCI AC Asia ex Japan size indexes are ranked by free float-adjusted market capitalization in descending order and the largest 50 (200) securities are selected to construct the MSCI Asia APEX 50 Index and MSCI Asia APEX Mid Cap 50 Index (MSCI Asia Apex Small Cap 200 Index).



3. Index Maintenance Methodology

3.1 Quarterly Index Review

The composition of the MSCI Asia APEX Indexes is fully reviewed on a quarterly basis to coincide with the regular Index Reviews of the MSCI Global Investable Market Indexes. The changes are implemented at the end of February, May, August and November.

During the Quarterly Index Reviews, the number of securities will be restored to 50 (200) for the MSCI Asia APEX 50 and the MSCI Asia APEX 50 Mid Cap Index (MSCI Asia APEX Small Cap 200 Index). Note that the number of index constituents between the index reviews may differ from these numbers due to additions and deletions resulting from corporate events on existing constituents.

In addition, MSCI will also reassess the eligibility of underlying countries during the Quarterly Index Reviews. Non-constituent countries represented by three (10) or more securities in the top 50 (200) and representing more than 5% of the underlying MSCI AC Asia Ex Japan Index will be considered for inclusion in the MSCI Asia APEX 50 Index and the MSCI Asia APEX Mid Cap 50 Index (MSCI Asia APEX Small Cap 200 Index) while existing constituent countries with only one (three) securities in the top 50 (200) will be removed.

If a security that is scheduled to be added to or deleted from the MSCI APEX Indexes is suspended from trading on the day before the effective implementation date of the index review, MSCI will cancel the implementation for the security. When the implementation of a deletion from a Parent Index is postponed, the implementation of the deletion from the indexes derived from that Parent Index will also be postponed. When the deletion is implemented in the Parent Index after the security resumes trading, the security will be simultaneously deleted from the derived index.

3.1.1 Buffer Rules

To minimize index turnover, additions to and deletions from the index during rebalancing will be controlled by buffer rules.

Non-constituents that satisfy all eligibility criteria and rank 35th (140th) in the respective MSCI AC Asia ex Japan size indexes and above will be added to the MSCI Asia Apex 50 Index and the MSCI Asia APEX Mid Cap 50 Index (MSCI Asia APEX Small Cap 200 Index) and existing constituents which rank below 65th (240th) will be deleted from the index. If the number of securities differ from 50 (200) after applying the buffer rules, the lowest ranked securities within the index will be deleted, or the next highest ranked securities will be added to the index to restore the number of constituents to 50 (200).

Quarterly Index Reviews may also result in changes in Foreign Inclusion Factor (FIF) and updates in number of shares for existing constituents.

3.1.2 Cutoff Date for Market Capitalization and Prices used for the Rebalancing

The cutoff date for market capitalization and prices used for the rebalancing of the MSCI Asia APEX Indexes is the close of the 9th business day prior to the February, May, August and November quarterly index review implementation dates.



3.1.3 Announcement Policy

The results of the rebalancing are announced nine business days before the effective date of each Quarterly Index Review.

3.2 Ongoing Event-Related Maintenance

With the exception of the treatment as described below, the MSCI Asia APEX Indexes follows the event maintenance of the Parent Index. Details regarding the treatment of corporate events not covered below can be found in the MSCI Corporate Events Methodology Book, available at:

https://www.msci.com/index/methodology/latest/CE

3.2.1 Early Inclusions of Non-Index Constituents

A spun-off security that qualifies for immediate inclusion to the underlying MSCI AC Asia ex Japan size indexes will generally be eligible for immediate inclusion to the corresponding MSCI Asia APEX Indexes. However, spun-off securities that are already constituents of the underlying MSCI AC Asia ex Japan Indexes are not added to the corresponding MSCI Asia APEX Indexes at the time of the spin off.

There will be no fast inclusion for IPOs. Securities that are added to the underlying MSCI AC Asia ex Japan size indexes between the Quarterly Index Reviews will only be considered for inclusion in the corresponding MSCI Asia APEX Indexes during the next Quarterly Index Review.

3.2.2 Early Deletions of Existing Constituents

If a security is deleted from the underlying MSCI AC Asia ex Japan size indexes due to corporate events, it will be automatically removed from the corresponding MSCI Asia APEX Indexes. Examples are 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.

When the number of securities in the MSCI Asia APEX 50 Index and the MSCI Asia APEX Mid Cap 50 Index (MSCI Asia Apex Small Cap 200 Index) falls below or rises above 50 (200) due to corporate events, no additions or deletions will be made to restore the number of constituents to 50 (200) until the next Quarterly Index Review.



Appendix I: Changes to this Document

The following sections have been modified since the last version in February 2012:

Section 3.1: Quarterly Index Review

• Clarification on implementation of suspended securities

Section 3.2.1: Early Inclusions of Non-Index Constituents

• Clarification on early inclusion of spun-off securities that are already constituents

The following sections have been modified since August 2017:

Section 1: Introduction

Updates

Section 3.1.3: Announcement Policy

Added new section

Section 3.2: Ongoing Event-Related Maintenance

Added clarification

The following sections have been modified since November 2023:

Methodology book was updated to reflect the transition of the MSCI Global Investable Market Indexes (GIMI) to Quarterly Comprehensive Index Reviews.

All references to "Semi-Annual Index Reviews" and "Quarterly Index Reviews" of the MSCI GIMI were replaced with "Index Reviews."

Section 1: Introduction

Added footnote on Methodology Set



Contact us

msci.com/contact-us

AMERICAS

Americas 1 888 588 4567 * Atlanta + 1 404 551 3212 Boston + 1 617 532 0920 + 1 312 675 0545 Chicago Monterrey + 52 81 1253 4020 **New York** + 1 212 804 3901 San Francisco + 1 415 836 8800 São 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 0800 91 59 17 *

ASIA PACIFIC

China North 10800 852 1032 * China South 10800 152 1032 * Hong Kong +852 2844 9333 Mumbai + 91 22 6784 9160 00798 8521 3392 * Seoul Singapore 800 852 3749 * Sydney +61 2 9033 9333 Taipei 008 0112 7513 * Thailand 0018 0015 6207 7181 *

+81 3 5290 1555

Tokyo

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading researchenhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit www.msci.com.

The process for submitting a formal index complaint can be found on the index regulation page of MSCI's website at:

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

^{*} toll-free



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. All rights in the Information are reserved by MSCI and/or its Information Providers.

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 may include "Signals," defined as quantitative attributes or the product of methods or formulas that describe or are derived from calculations using historical data. Neither these Signals nor any description of historical data are intended to provide investment advice or a recommendation to make (or refrain from making) any investment decision or asset allocation and should not be relied upon as such. Signals are inherently backward-looking because of their use of historical data, and they are not intended to predict the future. The relevance, correlations and accuracy of Signals frequently will change materially.

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. The calculation of indexes and index returns may deviate from the stated methodology. 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 msci.com.

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. 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 a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, provided that applicable products or services from MSCI ESG Research may constitute investment advice. 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. MSCI ESG and climate ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI Imited (UK).

Please note that the issuers mentioned in MSCI ESG Research materials sometimes have commercial relationships with MSCI ESG Research and/or MSCI Inc. (collectively, "MSCI") and that these relationships create potential conflicts of interest. In some cases, the issuers or their affiliates purchase research or other products or services from one or more MSCI affiliates. In other cases, MSCI ESG Research rates financial products such as mutual funds or ETFs that are managed by MSCI's clients or their affiliates, or are based on MSCI Inc. Indexes. In addition, constituents in MSCI Inc. equity indexes include companies that subscribe to MSCI products or services. In some cases, MSCI clients pay fees based in whole or part on the assets they manage. MSCI ESG Research has taken a number of steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its research and ratings. More information about these conflict mitigation measures is available in our Form ADV, available at https://adviserinfo.sec.gov/firm/summary/169222.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD 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 S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Global Market Intelligence.

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at https://www.msci.com/privacy-pledge.