

MSCI Real Estate -Index Policies

MSCI Private Real Estate Indexes

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Overview

MSCI provides a wide variety of Private Real Estate Indexes¹, which are governed by rules-based methodologies.

MSCI methodology documents outline index objectives and describe the rules and guidelines followed by MSCI to develop and maintain the MSCI Private Real Estate Indexes in the widest set of possible circumstances, including situations of market stress. MSCI's rules-based index methodologies are designed to ensure that indexes are determined with integrity, and that discretion with respect to methodology is only used in unusual cases not effectively addressed by the methodologies.

An MSCI Private Real Estate Index will be governed by a number of methodology documents, including either the <u>MSCI Property Indexes Methodology</u> or the <u>MSCI Property Fund Indexes Methodology</u>. The methodology documentation is outlined in the <u>MSCI Global Methodology Standards for Real Estate Investment</u> document. These three documents are published on MSCI's website at <u>www.msci.com/real-estate-methodology</u>.

¹ An MSCI Private Real Estate Index for a country or region with the broadest market coverage, for a specific index methodology, and for a specific reporting frequency is defined as a "Standard Index". For example, UK Standard Indexes include, among others, the MSCI UK Quarterly Property Index, MSCI UK Annual Property Index, and MSCI/AREF UK Quarterly Property Fund Index.

A "BMR Benchmark" is an MSCI Private Real Estate Index for which MSCI has provided written permission in each instance to its client to be used under the EU benchmark regulation and/or any similar post-Brexit UK regulation (collectively, the "BMR"). A BMR Benchmark may be a Standard Index or an index calculated from a Standard Index using pre-configured specifications.



Real Estate Index Design Guidelines

These guidelines are followed in the development and maintenance of all MSCI Private Real Estate Indexes.

MSCI Private Real Estate Indexes aim to accurately and objectively measure the performance of a private real estate investment market, market segment or strategy as represented by private real estate investment data available to MSCI. This data is primarily provided on a voluntary basis by or on behalf of institutional private real estate investments are illiquid and heterogeneous, and data related to these investments are not widely available and there are no substitutes.

The index objective should be clearly stated in the specific methodology documentation.

MSCI Private Real Estate Indexes should be constructed with the following goals in mind:

- Representativeness
- Data quality
- Timeliness

Index methodologies should be rules-based and aim to find the right balance between representativeness of the underlying market, market segment or strategy, as well as the quality of available data and the timeliness of reporting the results to the market.

The rationale for adopting each specific methodology should be based on a thorough review of the market, market segment or strategy the indexes are intended to represent.



INDEX AND METHODOLOGY REVIEW PROCESS

INDEX REVIEW

MSCI Private Real Estate Indexes are updated monthly, quarterly, bi-annually, or annually as applicable to the relevant index.

The data used to determine MSCI Private Real Estate Indexes, as well as the Standard Index results, is reviewed with each index update by Real Estate Index Research and/or Real Estate Data Management.

The index composition will be determined with each index update and could change for the MSCI Property Indexes due to purchases or sales of existing properties. Furthermore, the composition for MSCI Private Real Estate Indexes could change due to new data providers or data providers that have discontinued providing data. The inclusion of new properties in the property indexes as well as the inclusion of new funds in the property fund indexes in the MSCI Private Real Estate Indexes is rules based.

Any material composition changes² to Standard Indexes are escalated to the Real Estate Index Committee ("REIC"), which determines if any further action or investigation is required prior to index publication. Composition changes could result from, among other things, the addition of a new data provider, the withdrawal of an existing data provider, or delayed data supply from a data provider. Further actions may include delaying the index publication to mitigate a material decline in composition due to delayed supply or, in rare cases, index termination.

Material composition changes are announced on the MSCI website in advance or simultaneously with the publication of the index.

METHODOLOGY REVIEW

The MSCI Property Index methodology and the MSCI Property Fund Index methodology are formally reviewed, at least annually. The objective of the review is to ensure the methodology continues to reflect its stated objective and complies with the index design guidelines in this document.

Annually, the eligibility criteria for index inclusion, measures and filters are assessed. This is facilitated by analyzing a representative set of indexes, including all Standard

² A "material composition change" is an increase or decrease in the total index capital value for a Standard MSCI Property Index or total net asset value for a Standard MSCI Property Fund Index due only to changes in composition that has a net impact of greater than 500 basis points.



Indexes. The review may highlight situations where changes in the methodology are warranted to reflect changes in the underlying market.

In addition, for the Standard Property Indexes, a review of the representativeness by analyzing the market coverage and a comparison of valuations and sale prices is conducted, reviewed by the REIC and published annually.

Any proposed methodology changes are presented to the REIC and will trigger a consultation if they are material methodology changes as defined in the Methodology and Index Consultation Policy in this document.



Index Policies

METHODOLOGY AND INDEX CONSULTATION POLICY

Material changes to the MSCI Private Real Estate Index methodologies are infrequent. When faced with a situation that may result in a material methodology change³ to an MSCI Private Real Estate Index methodology, to inform its decision process, MSCI seeks to understand the differing perspectives through its consultation process⁴. Consultations provide essential feedback for increasing transparency, providing access to information, fueling innovation and improvement, and ensuring the on-going relevance of the indexes. After considering the feedback from the consultation process, the decision remains the responsibility of MSCI solely, through the REIC.

Consultation papers and discussions with market participants are an ideal channel to share the reasoning and the motivation behind MSCI proposals. Structured dialogues enable market participants to share their views and public consultations give them the lead time they need to fully evaluate potential index changes and implications.

METHODOLOGY CONSULTATION PROCESS

MSCI commences a consultation when the REIC supports a proposal that could result in a material methodology change typically resulting from either market-related developments or regular methodology or index reviews.

Once the decision to open a consultation has been taken by the REIC, a consultation document is created which describes the consultation topic and, in some cases, presents either the initial thinking on the matter or a draft proposal. This document is approved by the REIC before it is made available publicly, including the date by which feedback must be provided to MSCI.

A consultation begins in general with a communication giving the highlights of the MSCI proposal(s) and the location of the consultation document on MSCI's website.

³ "Material methodology change" to an index methodology is a change affecting principles of index construction, changes in the index inclusion criteria as well as index methodology corrections or clarifications potentially affecting interpretation of the rules of the methodology. On the other hand, index methodology updates resulting from application of existing methodology principles (e.g. threshold updates based on existing formulas) or minor clarification of existing rules or corrections without altering the meaning of the methodology text are generally not considered as material.

⁴ Changes to specifications to BMR Benchmarks are addressed directly with the relevant permissioned clients.



MSCI collects feedback from market participants in a variety of formats including but not limited to in person meetings, calls, mails, surveys, etc. as deemed appropriate.

Once MSCI has gathered all required feedback, MSCI will analyze the views and formulate an informed recommendation that will be presented, discussed and debated at the REIC. The REIC will take the final decision on the proposal.

The final decision, including the rationale that has led to it, and the timeframe for the implementation of the change, if any, is made publicly available. Most consultation participants request that their feedback remains confidential. MSCI may nevertheless publicly disclose feedback if specifically requested by respective market participants. In that case, the relevant feedback would be published together with the final results of the consultation.

If the final decision is to change the methodology, MSCI will announce the changes and timeframe of implementation, and will update the relevant methodology documentation subsequently.

The length of a consultation and lead time provided for implementation varies depending on the complexity of the topic, breadth of client impact as well as impact on the index composition. The length of the consultation is clearly communicated as part of the consultation process and needs to be sufficient for market participants to meaningfully review what is proposed and respond. Methodology changes are generally announced at least one month prior to their implementation, unless specific circumstances require an earlier implementation timeline as determined by the REIC.

Note: MSCI contacts clients on a regular basis to discuss general market practices.



INDEX TERMINATION POLICY

MSCI Private Real Estate Indexes may need to be terminated under certain circumstances where the methodology no longer achieves its objective and cannot be effectively adapted. These circumstances are generally not fully within MSCI's control and may include significant reduction in the availability of data which is provided voluntarily, changes in the structure of the underlying market, geo-political events, and regulatory changes. Additionally, factors such as low usage of an index may result in MSCI's proposal to terminate the index.

If a Standard Index⁵ termination is proposed or required, MSCI would proceed as follows:

- MSCI would investigate any opportunities to remedy the situation, including making efforts to increase the index coverage and improve data quality.
- The REIC would review the impact and approve appropriateness of a potential termination.
- MSCI may perform a consultation including a discussion of possible alternatives, if any.
- MSCI would publicly announce any termination of the index in advance.
- If practicable, MSCI would continue to calculate the index for an announced period of time to give users the opportunity to transition to another index or otherwise prepare for the termination of the MSCI index.
- In the event that an appropriate alternative index is established, the details of the methodology governing this index as well as the timing of the transition would be publicly communicated in advance of implementation.

MSCI will generally announce index terminations with at least three months' notice, with the following exceptions:

 In the case of index terminations due to circumstances not within MSCI's control, such as significant changes to the structure of underlying market, drastic changes to the market infrastructure, lack of access to necessary data, geopolitical events, and regulatory changes, the REIC will determine the appropriate termination timeframe depending on the specific situation.

⁵ The potential termination of a BMR Benchmark would be addressed directly with relevant permissioned clients



• In certain cases, indexes may be created and maintained to reflect future methodology changes in advance of their implementation. The termination of such indexes will be announced at least one week prior to the termination date.

Indexes that are created from Standard Indexes would also be terminated if the Standard Index is terminated.

Any index may be discontinued or suspended, without notice, if fewer than the required minimum number of properties or funds/portfolios are eligible and available for inclusion, or if a one portfolio or fund dominates the composition, when applying a given methodology to a market. MSCI may resume calculation of such indexes if over time enough properties/funds become eligible and available.



CORRECTION POLICY

MSCI applies a 36-month correction period for index errors with a material impact on a Standard MSCI Private Real Estate Index. A 'material impact' is:

- for MSCI Property Indexes: a change of greater than 50 bps to the total return, 50 bps to capital growth, or 25 bps to the income return;
- for MSCI Property Fund Indexes: a change of greater than 50 bps to the total return.

In these cases, history for the relevant Standard and related indexes will be restated as soon as practicable and no later than the next index update.

Errors discovered that are older than 36 months are generally not corrected.

There may be certain circumstances not defined by this policy, where MSCI may also correct and restate history, subject to REIC review and approval.

Restatements of a Standard Index history as the result of a correction will be published in an announcement on the MSCI website with an explanation of the corrections made.

For clarity, indexes with unfrozen history incorporate all available data, including historical data corrections regardless of time of occurrence or threshold, at each index update unless a Standard Index is already released for the same reporting frequency.

Data Provision

MSCI relies primarily on voluntary contributions of investment data for the determination of its Private Real Estate Indexes, which are primarily provided by or on behalf of institutional investors or private real estate managers. All such data providers are subject to the "MSCI Real Estate Data Provider Code of Conduct" which is available on the index regulation page of MSCI's website at https://www.msci.com/index-regulation.

The "MSCI Real Estate Data Provider Code of Conduct" specifies the responsibilities, requirements, and expectations of data providers with respect to the data they provide to MSCI for the determination of the MSCI Private Real Estate Indexes. Non-compliance may result in exclusion in whole or in part from the MSCI Private Real Estate Indexes.



Use of Judgment and Discretion in Index Determination

MSCI has a rules-based approach for data validation and verification. Outliers identified as part of this process require explanations and the decisions to exclude or include a property or fund from or in an index based on explanations requires judgment and is therefore subject to a hierarchy of MSCI review. Cases where there is no consensus amongst MSCI reviewers or that are complex are escalated to the REIC for final decision on inclusion or exclusion.

MSCI's rules-based index methodologies and operating procedures are designed to ensure that discretion is not used in other aspects of the production of the indexes except in unusual cases not effectively addressed by the methodologies or operating procedures. These include, but may not be limited to:

- Temporary or permanent unavailability of data,
- Structural changes to the underlying markets,
- Geo-political events and regulatory changes,
- Events beyond human control.

Where there is a need to take an action that is not prescribed in the methodologies or operating procedures, a proposal is developed with the goal of remaining consistent with the objectives of the methodology and ensuring timely calculation and distribution of the indexes. This proposal is then reviewed and, if appropriate, approved by the REIC.

In cases which are deemed material and where time permits, MSCI may consult with clients on the proposed approach. MSCI announces the decided action on the MSCI website.

Typically, MSCI does not perform explicit ex-post analysis of decisions, but always welcomes feedback from market participants on decisions made.

The framework described above aims to prevent the exercise of judgment or discretion by any one individual and ensure that any interpretation of data validity or methodology is managed through a hierarchy of MSCI review or escalation to the REIC, if necessary.



Notice on Private Real Estate Index Usage

MSCI Private Real Estate Indexes may be used for a variety of purposes, ranging from research to portfolio analysis to performance reporting. They are used by a variety of market participants including asset owners, portfolio managers and researchers. Not all MSCI Private Real Estate Indexes are appropriate for all potential uses. Market participants and data users should use their judgment when selecting an index for a particular purpose.

MSCI Private Real Estate Indexes and the effectiveness of methodologies can be affected by a large number of factors, most of which are beyond MSCI's control. These factors may include structural changes in the underlying market, loss of voluntary data provision, geo-political events and regulatory changes. These circumstances may result in a material change to the index and MSCI may change the methodology as a result. In rare cases, these circumstances will result in the termination of an index. MSCI Private Real Estate Index users should consider this possibility, including the need to terminate or modify the terms of a fund or financial product as a result of the termination of a calculation of an index.

MSCI assumes no responsibility for any potential use of its indexes by clients for a particular purpose. The effective representation of a market, market segment or strategy is the primary aim for MSCI.

BMR regulated use of any MSCI Private Real Assets Indexes, including MSCI Private Real Estate Indexes, requires a specific written permission letter from MSCI, pursuant to the process described on the index regulation section of <u>www.msci.com</u>. Only MSCI Private Real Estate Index clients are eligible to apply for such permission. BMR regulated use of any MSCI Private Real Assets Indexes, including the MSCI Private Real Estate Indexes, without such specific written permission is strictly prohibited.



APPENDIX: Versioning Table

VERSION	PUBLICATION DATE	KEY CHANGES
V1.0	January 2019	First release of separate document, which was previously included in the MSCI Global Methodology Standards for Real Estate Investments.
V1.1	June 2019	Name of the document changed from MSCI Real Estate Index Design Guidelines and Policies to MSCI Real Estate – Index Policies. Merged the Methodology Change Policy
		and the Consultation Policy into the Methodology and Index Consultation Policy.
		The Naming of Indexes section has been moved to the MSCI Global Methodology Standards for Real Estate Investments.
		Integrated the Index Composition Change Policy within the Index and Methodology Review Process section.
		Updated the wording of all sections in the document.
V1.2	December 2020	Note included to correction policy to clarify the practice pertaining to Standard Indexes (released for the same reporting frequency) with unfrozen history
V1.3	June 2022	Updated with details pertaining to minimum notice period for implementation of material methodology changes and index terminations





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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.

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