

MSCI GLOBAL CORE QUARTERLY PROPERTY FUND INDEX (UNFROZEN) METHODOLOGY

March 2024



Contents	1	Introduction	3
	2	Methodology Documentation Set	4
	2.1	MSCI Real Estate Index Policies	4
	2.2	MSCI Property Fund Indexes Methodology	4
	2.3	MSCI Global Core Quarterly Property Fund Index (Unfrozen) Methodology.....	4
	3	MSCI Global Core Quarterly Property Fund Index (Unfrozen)...	5
	3.1	Initial Inclusion Requirements.....	5
	3.2	Change in Composition	6
	3.3	Index Series.....	7
	3.4	Sub-Indexes	7
	3.5	Quarterly Eligibility Assessment of Index Constituents.....	7
	4	Data Provision Requirements.....	9
	4.1	Net Asset Value Reporting Requirements	9
	5	Index Calculation Methodology.....	10
	5.1	Methodology Transition	10
	5.2	Weighting	11
	5.3	Rules for Performance Reporting	12
	5.4	Unfrozen History Reporting.....	12
	6	Appendix I: Inclusion criteria – MSCI Global Core Quarterly Property Fund Index (Unfrozen).....	13
	7	Appendix II: Inclusion criteria for Sub-Indexes of Global Core PFI	15
	8	Appendix III: Versioning Table.....	16

1 Introduction

The objective of 'MSCI Global Core Quarterly Property Fund Index (Unfrozen)' ("Global Core PFI") is to represent the performance of unlisted open-ended pooled real estate funds across regions, with a core investment mandate, that are quarterly valued. The funds can be invested anywhere in the world through a single country, cross border, or pan-regional investment mandate. The Index is value-weighted based on the capital employed of its constituent property funds and the returns are calculated using fixed currency conversion methodology to reflect the performance in the reporting currency of fund vehicles.



2 Methodology Documentation Set

The construction and maintenance rules for the Global Core PFI are collectively described in the following documents:

2.1 MSCI REAL ESTATE INDEX POLICIES

The [MSCI Real Estate – Index Policies](#) document describes the various governance policies related to the construction, maintenance and termination of the MSCI Private Real Estate indexes to provide consistency in decisions and avoid ambiguity in its responses to particular events.

2.2 MSCI PROPERTY FUND INDEXES METHODOLOGY

The [MSCI Property Fund Indexes Methodology](#) describes the general methodology that is being used for the calculation of the MSCI Property Fund Indexes and includes the methodology for the index composition, data requirements and index calculation methodology.

2.3 MSCI GLOBAL CORE QUARTERLY PROPERTY FUND INDEX (UNFROZEN) METHODOLOGY

This document includes the rules and methods specific to the Global Core PFI.

3 MSCI Global Core Quarterly Property Fund Index (Unfrozen)

3.1 INITIAL INCLUSION REQUIREMENTS

In addition to the standard MSCI requirements for MSCI Property Fund Indexes (refer to [MSCI Property Fund Indexes Methodology](#) for further details), there are additional eligibility requirements for initial inclusion in the Global Core PFI. The fund should:

1. Be an unlisted fund.
2. Be a comingled/pooled fund.
3. Have a minimum of 85% of their Gross Asset Value (GAV) invested in direct property. Fund's eligibility to this rule is assessed for its full history, at the time of initial inclusion.
4. Have their underlying direct property performance measured by MSCI at least quarterly. Fund's eligibility to this rule is assessed for its full history, at the time of initial inclusion.
5. Be open-ended or semi open-ended. In case a fund closes to new contributions or redemptions, its inclusion in the index will be reviewed. Semi open-ended funds are open-ended funds where investors may be subject to an initial "lock in" for the first 3 to 5 years of the life of the fund during which either,
 - a. investors are not permitted to redeem their investment, or
 - b. redemptions by investors are restricted to a maximum fixed percentage of their investment in any one year.
6. Have a GAV greater than USD 100 Million (funds not denominated in USD will be converted at latest quarter's end exchange rate). Fund's eligibility to this rule is assessed for its full history, at the time of initial inclusion.

In addition to the above rules used for MSCI Global Quarterly Property Fund Index (Unfrozen) ("GPFI"), the following rules are applicable for a fund to be included in Global Core PFI. To be a Core fund it should:

7. Have a self-declared 'Core' fund strategy as reported by the fund.
8. Carry no more than 40% leverage, where leverage is defined as the ratio of total debt to the fund's total Gross Asset Value. Fund's eligibility to this rule is assessed for its full history, at the time of initial inclusion.



9. 80% of all direct property capital value (excl. Purchases) must be invested in Held-Stabilized properties as per active management segmentation¹. Fund's eligibility to this rule is assessed for its full history, at the time of initial inclusion.

3.2 CHANGE IN COMPOSITION

The addition of new funds and withdrawal/termination of existing funds are normal events in the evolution of the MSCI Property Fund Indexes. There are additional requirements and clarification for the Global Core PFI.

New Funds:

1. are required to provide data of their investment performance as per requirements², subject to a minimum of either five years or the period from date of launch of the fund.

Removed/Withdrawn Funds:

1. Withdrawal from the Index should be through written communication to MSCI.

Re-admitted Funds:

1. To be re-admitted to the Index, the funds must provide MSCI with the data to calculate their investment performance during the whole period since their last inclusion in the Index.
2. Re-admitted funds are subject to the same eligibility requirements as potential new constituents.

Formal communication of a material change in the index composition will be done through an Index announcement made available at www.msci.com, in accordance with the thresholds as defined in the [MSCI Real Estate – Index Policies](#).

¹ Refer to section 3.2.6 of MSCI Property Indexes Methodology document

² refer section 3 of the [MSCI Property Fund Indexes Methodology](#)

3.3 INDEX SERIES

The standard index publication for Global Core PFI comprises of a NAV level series and an Asset level series.

1. **MSCI Global Core Quarterly Property Fund Index (Unfrozen) – NAV level Series:** The NAV Series are value weighted and measures Net Asset Value (NAV) returns compiled from NAV and other investment related data collected at fund level.
2. **MSCI Global Core Quarterly Property Fund Index (Unfrozen) – Asset Level Series:** The Asset-level Series is calculated using quarterly valuations of the direct real estate investments of Global Core PFI constituents.

The underlying fund constitution of both the series of Global Core PFI are identical.

3.4 SUB-INDEXES

Global Core PFI currently comprises of a standard index (refer to section 3.3), and sub-indexes based on funds' sector allocation strategy. The sub-indexes of Global Core PFI are outlined below:

MSCI Global Core Quarterly Property Fund Index (Unfrozen) – All Funds

- a. **MSCI Global Core Diversified Quarterly Property Fund Index (Unfrozen):**
 - i. Includes funds that have a self-declared strategy to be a diversified fund by sector allocation.
 - ii. Funds investing not more than 50% in a single property type sector, as per MSCI Global Property Classification Sectors
- b. **MSCI Global Core Specialist Quarterly Property Fund Index (Unfrozen):**
 - i. Includes funds that have a self-declared strategy to be a specialist fund by sector allocation.
 - ii. Funds investing more than 70% in a single property type sector, as per MSCI Global Property Classification Sectors

Each of these Indexes has a base date of December 2007. The eligibility assessment for the funds contributing to first release of Global Core PFI was carried out based on fund data history as of December 2023.

3.5 QUARTERLY ELIGIBILITY ASSESSMENT OF INDEX CONSTITUENTS

The fund characteristics may change over time either strategically or temporarily due to market movements or transaction activity. The quarterly review of eligibility is designed to ensure that the index composition is aligned with index inclusion criteria on an on-going basis. An observation period for funds temporarily not aligned to the index inclusion criteria is aimed at stability of index composition. Both quarterly review of eligibility and



observation period ensures on-going review of index composition and reporting using a rules-based approach.

Quarterly Review: Following the index inclusion, MSCI reviews the constituent funds of the Global Core PFI every quarter for their eligibility into the index based on the certain rules, as listed in Appendix I. Any non-adherence to the criteria based on quarterly eligibility assessment of the funds will result in a rules-based index exclusion, subject to the observation period, where applicable.

The rules within the scope of Quarterly Review and Observation Period are listed in Appendix I.

Observation Period is defined as a time window of four quarters in which MSCI will monitor the existing index funds that are in temporary non-adherence to a particular criterion. Any non-adherence to the specific inclusion rule for four consecutive quarters will result in rules-based exclusion of the fund from the fourth quarter. Once excluded, a fund is subsequently re-admitted in that quarter when it meets the inclusion criteria.

See Exhibit 1 below for illustration of methodology of observation period applicable to the index.

EXHIBIT 1: ILLUSTRATION OF METHODOLOGY – OBSERVATION PERIOD FOR EXISTING CONSTITUENTS OF INDEX & SUB-INDEXES

	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10
Inclusion rule compliance (Yes / No)	Yes	Yes	No	No	No	No	No	No	Yes	Yes
	Observation Period Prior to Exclusion (4 quarters)			Fund excluded from the index			No observation period before Re-admission of fund			
Index Inclusion Status (Yes / No)	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes

Note: Period indicates quarter

4 Data Provision Requirements

4.1 NET ASSET VALUE REPORTING REQUIREMENTS

In addition to the standard requirements, as part of the MSCI Global Data Standards for Real Estate Investments, there are additional requirements for the NAV. These requirements are:

1. Vehicles are required to report their NAV on at least a quarterly basis and should have done so for the whole of the period of their performance history within the Index.
2. Constituents of the Index must agree to calculate their NAV on a consistent basis from quarter to quarter. This basis will that specified in their own articles of association (or equivalent).
3. Each fund's NAV should be based on the valuation of at least 95% of the value of its property portfolio. The valuation must also cover properties held through joint or indirect investments. Any other indirect property investments, such as shares in listed property companies and derivatives, should also be re-valued.
4. The revaluation of the property portfolio should be undertaken each quarter as per Market Value³ definition determined by the International Valuation Standards or equivalent. All properties should be valued by a third-party appraiser at least annually.

³ Refer to [MSCI Standards of Real Estate Valuations](#) for more details



5 Index Calculation Methodology

5.1 METHODOLOGY TRANSITION

MSCI Global Core PFI uses the same index return calculation methodology as MSCI Global Quarterly Property Fund Index (Unfrozen), ('GPFI').

For GPFI, MSCI consulted with the real estate investment community on the incorporation of a time-weighted return methodology including adjustment for daily weighted external cash flows for use in the MSCI Property Fund Indexes methodology for return calculation and index weighting.

As announced in April 2020 following the public [consultation](#), the new methodology is implemented starting with Q3 2021 results reporting of GPFI. The methodology for GPFI has been changed to align it with the methodology changes made to underlying regional indexes.

Starting Q3 2021 reporting, the GPFI Methodology is constructed by applying the Time-Weighted Return index calculation methodology (with the exception of UK and USA Property funds) as detailed in the [MSCI Property Fund Indexes Methodology](#) (Section 4.3). Until Q2 2021, the methodology was constructed by applying the Unitized index calculation methodology (with exception of USA property funds and Canada property funds for all periods and Pan-Asia property Funds from July 2017 to June 2020) as detailed in the [MSCI Property Fund Indexes Methodology](#) (Section 4.2).

For UK property funds in GPFI the return is calculated using Time weighted return (TWR) methodology starting index results of Q1 2022. For USA property funds in GPFI the return will continue to use Modified Dietz calculation methodology. The return of Pan-Asia funds in GPFI is calculated based on Time-weighted return methodology from the quarter ending June-2017 while prior to this, their performance in GPFI will continue to be calculated as per unitized methodology. Longer term returns are calculated based on the combination (splicing) of the two methodologies as outlined in the illustration below.

Table 1: Splicing of Index Calculation Methodology

Sub-index	Index Constituents by Region/Strategy	Index Calculation Methodology		
		Modified Dietz	Unitized	Time-Weighted Return
Asia Pacific	Pan-Asia	-	Till March 2017	April 2017 onwards
	Australia (Core Wholesale)	-	Till June 2021	July 2021 onwards
Europe	Pan-Europe	-	Till June 2021	July 2021 onwards
	UK	-	Till December 2021	Jan 2022 onwards
	Netherlands	-	From 2008-2012	-
North America	USA	All periods	-	-
	Canada	Till June 2021	-	July 2021 onwards

5.2 WEIGHTING

The funds included in the Global Core PFI are weighted based on the index calculation methodology used to calculate return for the fund. The weighting process for each index calculation methodology is summarized below and is detailed in the [MSCI Property Fund Indexes Methodology](#) (Section 4).

Calculation methodology	Constituent Weighting based on
Modified Dietz	Weighted average equity
Unitized	NAV at the beginning of the month
Time-Weighted Return	Capital employed (which is derived as previous period Net Asset Value (NAV) adjusted by external cashflows)



5.3 RULES FOR PERFORMANCE REPORTING

MSCI applies both the standard confidentiality rule, and the fund dominance rule, to determine if index results will be made available. Please refer to [MSCI Property Fund Index Methodology](#) for details.

5.4 UNFROZEN HISTORY REPORTING

The Global Core PFI returns are unfrozen, which means they do not have fixed histories and returns will be updated when new data becomes available, or corrections are made. Therefore, inclusion of a new fund with historical data impacts the historical index returns. MSCI evaluates from time to time, the need to determine if it is suitable to freeze the Index.

6 Appendix I: Inclusion criteria – MSCI Global Core Quarterly Property Fund Index (Unfrozen)

#	Inclusion criteria for Global Core PFI		Eligibility reviewed at the point of inclusion	Quarterly review of eligibility	Observation period
1	Listing Status	Unlisted	Yes	Yes	--
2	Commingled/Separate	Commingled	Yes	Yes	--
3	Frequency of Direct Property portfolio measurement by MSCI	Quarterly	Yes	Yes	--
4	Fund Structure	Open-ended or Semi open-ended fund	Yes	Yes	--
5	Minimum Direct Real Estate Investment	85% of GAV	Yes	Yes	4 quarters
6	Minimum Fund Size (by GAV)	USD 100 Million	Yes	Yes	4 quarters
7	Investment style	Reported as 'Core'	Yes	Yes	--
8	Maximum Fund Leverage	40% of GAV	Yes	Yes	4 quarters



#	Inclusion criteria for Global Core PFI		Eligibility reviewed at the point of inclusion	Quarterly review of eligibility	Observation period
9	Minimum exposure to stabilized assets	80% of all direct property capital value (excl. Purchases) must be invested in held stabilized properties	Yes	Yes	4 quarters
10	Data provision requirement	Longest possible history, subject to a minimum of either four quarters, or the period from the date of launch of the fund	Yes	--	--
11	Property Valuation	At least quarterly valuation (internal or external) External valuation at least annually	Yes	Yes	--

7 Appendix II: Inclusion criteria for Sub-Indexes of Global Core PFI

In addition to the inclusion criteria for Global Core PFI as listed in Appendix I above, a fund should fulfil the following requirements to be included in the sub-indexes of Global Core-Diversified PFI & Global Core-Specialist PFI, respectively:

#	Inclusion criteria for Global Core-Diversified PFI		Eligibility reviewed at the point of inclusion	Quarterly review of eligibility	Observation period
1	Sector Allocation Strategy	Reported as 'Diversified' or Not a 'Specialist' fund by Property type sector	Yes	Yes	--
2	Maximum allocation to a single property type sector as per Global Property Classification Segmentation	≤ 50% of Direct Property investment (by Capital Value) in a single property sector	Yes	Yes	4 quarters

#	Inclusion criteria for Core-Specialist Funds		Eligibility reviewed at the point of inclusion	Quarterly review of eligibility	Observation period
1	Sector Allocation Strategy	Reported as 'Specialist' by Property type sector	Yes	Yes	--
2	Minimum allocation to a single property type sector as per Global Property Classification Segmentation	≥70% of Direct Property investment (by Capital Value) in a single property sector	Yes	Yes	4 quarters



8 Appendix III: Versioning Table

Version	Publication Date	Key Changes
V1	March 2024	First release of the MSCI Global Core Quarterly Property Fund Index (Unfrozen) methodology document



Contact us

realestate@msci.com

+ 44 20 7336 4783

AMERICAS

Canada + 1 416 687 6284

US + 1 212 804 3900

EUROPE, MIDDLE EAST & AFRICA

UK + 44 20 7336 9200

France + 44 20 7336 4783

Germany + 49 691 3385 900

Italy + 44 20 7336 9684

Spain + 34 93 467 7403

South Africa + 27 11 656 2115

Sweden + 46 8 400 252 30

ASIA PACIFIC

Australia + 61 2 9033 9300

Hong Kong + 852 2844 9333

Singapore + 65 6826 9339

Japan + 81 3 5211 1455

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 research-enhanced 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: www.msci.com/index-regulation.

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 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 materials may include MSCI Inc., clients 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 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.



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, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.

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>.

NO REGULATED USE OF ANY MSCI PRIVATE REAL ASSETS INDEXES IN ANY JURISDICTION IS PERMITTED WITHOUT MSCI'S EXPRESS WRITTEN AUTHORIZATION. THE PROCESS FOR APPLYING FOR MSCI'S EXPRESS WRITTEN AUTHORIZATION CAN BE FOUND ON THE INDEX REGULATION PAGE OF MSCI'S WEBSITE AT: <https://www.msci.com/index-regulation>.

PRIVACY NOTICE: FOR INFORMATION ABOUT HOW MSCI ESG RESEARCH LLC COLLECTS AND USES PERSONAL DATA CONCERNING OFFICERS AND DIRECTORS, PLEASE REFER TO OUR PRIVACY NOTICE AT [HTTPS://WWW.MSCI.COM/PRIVACY-PLEDGE](https://www.msci.com/privacy-pledge).