

MSCI Real Estate – BMR Benchmarks Methodology Specifications

November 2023



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1 Introduction

This document sets out the additional detailed methodology specifications for BMR Benchmarks. ("BMR" refers collectively to the EU benchmark regulation and the UK benchmark regulation post Brexit.)

A "BMR Benchmark" is an MSCI Private Real Estate Index for which MSCI Limited has provided written permission in each instance to its client to be used for a BMR regulated use.

The process to request BMR regulated use for these BMR Benchmarks or other indexes can be found on the index regulation page of MSCI's website at www.msci.com/index-regulation.

With respect to the BMR, for BMR Benchmarks in the MSCI property benchmark family, MSCI has chosen not to apply certain articles of the BMR as allowed under the BMR. MSCI has published a MSCI Real Estate – BMR property benchmark family - Compliance Statement which explains the exemptions taken by MSCI.

BMR Benchmarks fall into two families based on the their 'input data' as defined by the BMR:

- MSCI property benchmark family. The input data for this family is property valuations, and in
 periods when a transaction occurs, the property transacted prices. The data for each of the
 properties in the relevant BMR Benchmarks is supplied by MSCI's data providers. Based on
 MSCI's current understanding and assumptions, property valuations are "contributions of input
 data" under the BMR.
 - No other substitutes are made and no other order of priority of use of input data applies to this family.
- MSCI property fund (with published NAV) benchmark family. The input data for this family is the
 Net Asset Value ("NAV") of each of the funds included in the relevant BMR Benchmark as
 supplied by its data providers. This input data is published on the MSCI website at each index
 release. Because the data is publicly available, the data is considered "readily available" and is
 not "contribution of input data" under the BMR.
 - There are no substitutes for fund NAVs and therefore no priority of use of input data for this family.



2 Methodology Documentation Set for the BMR Benchmarks in the MSCI Property Benchmark Family

- MSCI Real Estate Index Policies
- MSCI Property Indexes Methodology
- MSCI Real Estate BMR Benchmarks Methodology Specifications
- MSCI Global Data Standards for Real Estate Investment
- MSCI Standards for Real Estate Valuations



3 Methodology Documentation Set for the BMR Benchmarks in the MSCI Property Fund (with published NAV) Benchmark Family

- MSCI Real Estate Index Policies
- MSCI Property Fund Indexes Methodology
- MSCI/AREF UK Quarterly Property Fund Index Methodology
- MSCI Real Estate BMR Benchmarks Methodology Specifications
- MSCI Global Data Standards for Real Estate Investment



4 MSCI Real Estate - BMR Benchmarks Methodology Specifications

The methodology specifications for construction of benchmarks are provided in the next two sections. All BMR Benchmarks are or are constructed from the MSCI UK Annual Property Index, the MSCI UK Quarterly Property Index or the MSCI/AREF UK Quarterly Property Fund Index. The specifications are described as follows:

	Description
BMR Benchmark Name	This is the official name of the BMR Benchmark
Peer Group Filter	The Standard Index or sub-index, with any exclusions, from which the BMR Benchmark is constructed
Geographic Filter	Geographic Filter which could indicate a country or region within a country
Property Attribute Filter	Property attribute filters encompass a wide variety of asset characteristics that can be used to define index subsets. The most frequently referenced attributes are property sectors and more detailed property types.
Primary Methodologies	The primary methodologies to which these specifications are applied.
History	Frozen or unfrozen. Note, all BMR Benchmarks are required to have frozen history.
Refresh Cycle	Annual or Quarterly
Minimum Valuation Frequency	Annual or Quarterly
Publication Frequency	Annual or Quarterly
Rebalancing Frequency	Annual or Quarterly
Currency	GBP
Measure	Total Return or Net Total Return - unitized adjusted for crossholdings
Sample Filter	All Assets or Standing Investments
Measure Function	Weighted average or Percentile ranking



5 ESG Disclosures

As part of the European Union's Sustainable Finance package, the Benchmark Regulation has been amended to require benchmark administrators to publish specified ESG metrics for all EU regulated ESG indexes and to make certain ESG related disclosures in the methodologies for all EU regulated indexes.

Refer to Appendix I and II for the details on ESG disclosures. This information is provided as per the European Commission's Delegated Regulation (EU) 2020/1817, supplementing Regulation (EU) 2016/2011 of the European Parliament and of the Council (the "EU Benchmark Regulation") as regards the minimum content of the explanation on how ESG factors are reflected in the benchmark methodology.



6 BMR Benchmarks in the MSCI Property Benchmark Family

BMR Benchmark Name	MSCI UK (excluding Central London Office
	Fund - 631) Central London Office Annual
	Property Index (Total Return; GBP)
Peer Group Filter	MSCI UK Annual Property Index excluding
	Central London Office Fund - 631 managed by
	Nuveen Real Estate Management Limited
Geographic Filter	Central London (based on UK Regions
	definition in MSCI Property Indexes
	Methodology)
Property Attribute Filter	Office (based on Sector definition in MSCI
	Property Indexes Methodology)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Annual
Minimum Valuation Frequency	Annual
Publication Frequency	Annual
Rebalancing Frequency	-
Currency	GBP
Measure	Total Return
Sample Filter	All Assets
Measure Function	Weighted Average



BMR Benchmark Name	MSCI UK (excluding UK Retail Warehouse Fund - 605) Quarterly Valued Retail Warehouse Annual Property Index (Total Return; GBP)
Peer Group Filter	MSCI UK Annual Property Index excluding UK Retail Warehouse Fund - 605 managed by Nuveen Real Estate Management Limited
Geographic Filter	UK
Property Attribute Filter	Quarterly and monthly valued assets; Retail Warehouse (based on Detailed Property definition in MSCI Property Indexes Methodology)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Annual
Minimum Valuation Frequency	Quarterly
Publication Frequency	Annual
Rebalancing Frequency	-
Currency	GBP
Measure	Total Return
Sample Filter	All Assets
Measure Function	Weighted Average



BMR Benchmark Name	MSCI UK (excluding Shopping Centre Fund – 656) Shopping Centres Annual Property
	Index (Total Return; GBP)
Peer Group Filter	MSCI UK Annual Property Index excluding
	Shopping Centre Fund - 656 managed by
	Nuveen Real Estate Management Limited
Geographic Filter	UK
Property Attribute Filter	Shopping Centre (based on Detailed Property
	definition in MSCI Property Indexes
	Methodology)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Annual
Minimum Valuation Frequency	Annual
Publication Frequency	Annual
Rebalancing Frequency	-
Currency	GBP
Measure	Total Return
Sample Filter	All Assets
Measure Function	Weighted Average



BMR Benchmark Name	MSCI UK excluding Central and Inner London Office Quarterly Property Index (Total Return; GBP)
Peer Group Filter	MSCI UK Quarterly Property Index
Geographic Filter	Excluding Central and Inner London (based on UK Regions definition in MSCI Property Indexes Methodology)
Property Attribute Filter	Office (based on Sector definition in MSCI Property Indexes Methodology)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Total Return
Sample Filter	All Assets
Measure Function	Weighted Average



BMR Benchmark Name	MSCI UK Shopping Centres: > 700,000 sq ft Annual Property Index (Total Return; GBP)
Peer Group Filter	MSCI UK Annual Property Index
Geographic Filter	UK
Property Attribute Filter	Shopping centres (based on Detailed Property definition in MSCI Property Indexes Methodology) with a floorspace greater than 700,000 sq ft (based on fixed value band)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Annual
Minimum Valuation Frequency	Annual
Publication Frequency	Annual
Rebalancing Frequency	-
Currency	GBP
Measure	Total Return
Sample Filter	All Assets
Measure Function	Weighted Average



BMR Benchmark Name	MSCI UK Quarterly Property Index (Total Return; GBP)
Peer Group Filter	MSCI UK Quarterly Property Index
Geographic Filter	UK
Property Attribute Filter	All sectors
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Total Return
Sample Filter	All Assets
Measure Function	Weighted Average



BMR Benchmark Name	MSCI UK Distribution Center Quarterly Property
	Index (Total Return; GBP)
Peer Group Filter	MSCI UK Quarterly Property Index
Geographic Filter	UK
Property Attribute Filter	Distribution Center (based on Detailed
	Property definition in MSCI Property Indexes
	Methodology)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Total Return
Sample Filter	All Assets
Measure Function	Weighted Average



BMR Benchmark Name	MSCI UK Daily Traded APUTs and PAIFs Quarterly Property Index (Capital Value Sector Weights; GBP)
Peer Group Filter	Daily Traded Authorized PUTs (APUTs) and Property Authorised Investment Fund (PAIFs), based on self-reported portfolio classification and trading frequency of the portfolios within the MSCI UK Quarterly Property Index
Geographic Filter	UK
Property Attribute Filter	 The weights are determined by: Retail, Industrial and Office (based on Sector definition in MSCI Property Indexes Methodology) Other (total of Residential, Hotel and Other based in Sector definition in MSCI Property Indexes Methodology)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Capital Value Weights
Sample Filter	All Assets
Measure Function	-



BMR Benchmark Name Peer Group Filter	MSCI UK Daily Traded APUTs and PAIFs Quarterly Property Index (Capital Value Weight by Type and UK Region; GBP) Daily Traded Authorized PUTs (APUTs) and Property Authorised Investment Fund (PAIFs), based on self-reported portfolio classification and trading frequency of the portfolios within the MSCI UK Quarterly Property Index.
Geographic Filter	 The weights are determined by: City, West End & Mid Town, South East (based on UK Regions definition in MSCI Property Indexes Methodology) Rest of UK comprises UK excluding South East (based on UK Regions definition in MSCI Property Indexes Methodology)
Property Attribute Filter	 The weights are determined by: Industrial and Office (based on Sector definition in MSCI Property Indexes Methodology) Retail Warehouses, Shopping Centres and Standard Retails (based on Property Type definition in MSCI Property Indexes Methodology) Other (total of Residential, Hotel and Other based on Sector definition in MSCI Property Indexes Methodology)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Capital Value Weights
Sample Filter	All Assets
Measure Function	-



BMR Benchmark Name	MSCI UK Balanced Portfolios Quarterly Property Index (Capital Value Sector Weights; GBP)
Peer Group Filter	Balanced portfolios within the MSCI UK Quarterly Property Index based on allocation of direct property assets within any sector of <70% of the total capital value. The sectors are defined as Retail, Office, Industrial, Residential, Hotel and Other as defined in MSCI Property Indexes Methodology. Allocation is beingdetermined based on a rule based approach by MSCI. Till Q4 2019 the classification is based on the initial allocation in new funds included in the index. From Q1 2020 onwards the classification of all portfolios within the index is updated annually during the Q1 update and additional new portfolios will be classifed based on the allocation at the moment of index inclusion.
Geographic Filter	UK
Property Attribute Filter	 The weights are determined by: Retail, Industrial and Office (based on Sector definition in MSCI Property Indexes Methodology) Other (total of Residential, Hotel and Other based in Sector definition in MSCI Property Indexes Methodology)
Primary Methodology	MSCI Property Indexes Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	Annually Reviewed
Currency	GBP
Measure	Capital Value Weights
Sample Filter	All Assets
Measure Function	-



7 BMR Benchmarks in the MSCI Property Fund (with published NAV) Benchmark Family

BMR Benchmark Name	MSCI/AREF UK All Balanced Open-ended Quarterly Property Fund Index (Net Total Return-unitized adjusted for crossholdings; GBP)
Peer Group Filter	MSCI/AREF All Balanced Open-ended UK Quarterly Property Fund Index
Geographic Filter	UK
Property Attribute Filter	-
Primary Methodology	MSCI Property Fund Indexes Methodology and MSCI/AREF UK Quarterly Property Fund Index Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Net Total Return - unitized adjusted for crossholdings
Sample Filter	-
Measure Function	Weighted Average



BMR Benchmark Name	MSCI/AREF UK Other Balanced Open-ended Quarterly Property Fund Index (75th Vehicle- level Percentile Net Total Return-unitized adjusted for crossholdings; GBP)
Peer Group Filter	MSCI/AREF Other Balanced Open-ended UK Quarterly Property Fund Index
Geographic Filter	UK
Property Attribute Filter	-
Primary Methodology	MSCI Property Fund Indexes Methodology and MSCI/AREF UK Quarterly Property Fund Index Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Net Total Return - unitized adjusted for crossholdings
Sample Filter	-
Measure Function	75th Vehicle-Level Percentile



BMR Benchmark Name	MSCI/AREF UK Other Balanced Open-ended Quarterly Property Fund Index (Net Total Return-unitized adjusted for crossholdings; GBP)
Peer Group Filter	MSCI/AREF Other Balanced Open-ended UK Quarterly Property Fund Index
Geographic Filter	UK
Property Attribute Filter	-
Primary Methodology	MSCI Property Fund Indexes Methodology and MSCI/AREF UK Quarterly Property Fund Index Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Net Total Return - unitized adjusted for crossholdings
Sample Filter	-
Measure Function	Weighted Average



BMR Benchmark Name	MSCI/AREF UK All Balanced Open-ended
	Quarterly Property Fund Index (50th Vehicle-
	level Percentile Net Total Return-unitized
	adjusted for crossholdings; GBP)
Peer Group Filter	MSCI/AREF All Balanced Open-ended UK
	Quarterly Property Fund Index
Geographic Filter	UK
Property Attribute Filter	-
Primary Methodology	MSCI Property Fund Indexes Methodology
	and MSCI/AREF UK Quarterly Property Fund
	Index Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Net Total Return - unitized adjusted for
	crossholdings
Sample Filter	-
Measure Function	50th Vehicle-Level Percentile



MSCI/AREF UK All Balanced Open-ended
Quarterly Property Fund Index (75th Vehicle-
level Percentile Net Total Return-unitized
adjusted for crossholdings; GBP)
MSCI/AREF All Balanced Open-ended UK
Quarterly Property Fund Index
UK
-
MSCI Property Fund Indexes Methodology
and MSCI/AREF UK Quarterly Property Fund
Index Methodology
Frozen
Quarterly
Quarterly
Quarterly
-
GBP
Net Total Return - unitized adjusted for
crossholdings
-
75th Vehicle-Level Percentile



BMR Benchmark Name	MSCI/AREF UK Other Balanced Open-ended
	Quarterly Property Fund Index (50th Vehicle-
	level Percentile Net Total Return-unitized
	adjusted for crossholdings; GBP)
Peer Group Filter	MSCI/AREF Other Balanced Open-ended UK
	Quarterly Property Fund Index
Geographic Filter	UK
Property Attribute Filter	-
Primary Methodology	MSCI Property Fund Indexes Methodology
	and MSCI/AREF UK Quarterly Property Fund
	Index Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Net Total Return - unitized adjusted for
	crossholdings
Sample Filter	-
Measure Function	50th Vehicle-Level Percentile



BMR Benchmark Name	MSCI/AREF UK Other Balanced Open-ended Quarterly Property Fund Index (25th Vehicle- level Percentile Net Total Return-unitized adjusted for crossholdings; GBP)
Peer Group Filter	MSCI/AREF Other Balanced Open-ended UK Quarterly Property Fund Index
Geographic Filter	UK
Property Attribute Filter	-
Primary Methodology	MSCI Property Fund Indexes Methodology and MSCI/AREF UK Quarterly Property Fund Index Methodology
History	Frozen
Refresh Cycle	Quarterly
Minimum Valuation Frequency	Quarterly
Publication Frequency	Quarterly
Rebalancing Frequency	-
Currency	GBP
Measure	Net Total Return - unitized adjusted for crossholdings
Sample Filter	-
Measure Function	25th Vehicle-Level Percentile



Appendix I: ESG Disclosure for the BMR Benchmarks in the MSCI Property Benchmark Family

Explanation of how ESG factors are reflected in the key elements of the benchmark or family of benchmark methodology		
Name of the benchmark administrator: MSCI Limited		
Type of benchmark or family of benchmark: Private Real Estate		
Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	☐ Yes ✓ No	
ESG factors that are taken into account in the benchmark methodology, and how those ESG factors are used for the selection, weighting or exclusion of underlying assets		
a) List of environmental factors considered:	Not Applicable	
b) List of social factors considered:	Not Applicable	
c) List of governance factors considered:	Not Applicable	
Data and standards used		
a) Data input	Not Applicable	
b) Verification and quality of data	Not Applicable	
c) Reference standards	Not Applicable	
Date on which information has last been updated and reason for the update:	The information in this report has last been updated on June 27, 2022 for reasons outlined in Appendix III – Versioning Table	



Appendix II: ESG Disclosure for the BMR Benchmarks in the MSCI Property Fund (with Published NAV) Benchmark Family

Explanation of how ESG factors are reflected in the key elements of the benchmark or family of benchmark methodology	
Name of the benchmark administrator: MSCI Limited	
Type of benchmark or family of benchmark: Private Real Estate	
Name of the benchmark or family of benchmarks: MSCI Property Fund (with published NAV) benchmark family	
Does the benchmark methodology for the benchmark or family of benchmarks take into account ESG factors?	☐ Yes ✓ No
ESG factors that are taken into account in the benchmark methodology, and how those ESG factors are used for the selection, weighting or exclusion of underlying assets	
a) List of environmental factors considered:	Not Applicable
b) List of social factors considered:	Not Applicable
c) List of governance factors considered:	Not Applicable
Data and standards used	
a) Data input Not Applicable	
b) Verification and quality of data	Not Applicable
c) Reference standards	Not Applicable
Date on which information has last been updated and reason for the update:	The information in this report has last been updated on June 27, 2022 for reasons outlined in Appendix III – Versioning Table



Appendix III - Versioning Table

Publication Date	Key Changes
13 June 2019	First release of the document that outlines the BMR Benchmarks Methodology Specifications for the MSCI Property Benchmark Family and MSCI Property Fund (with Published NAV) Benchmark Family
16 July 2019	Included additional BMR methodology details in Section 6 and Section 7
19 Nov 2019	Included additional BMR methodology details in Section 6 and Section 7
11 Dec 2019	Included additional BMR methodology details in Section 6 and Section 7
23 Dec 2019	Included additional BMR methodology details in Section 6 and Section 7
4 June 2020	Included Section 5 on ESG Disclosures and Appendix I and II on ESG Disclosure for BMR Benchmarks in the MSCI Property Benchmark Family and MSCI Property Fund (with Published NAV) Benchmark Family
25 September 2020	Removed Benchmark Specifications for "MSCI UK (excluding Industrial Property Investment Fund – 415) Industrial Quarterly Property Index (Total Return GBP)"
23 December 2020	Updated ESG Disclosures in Appendix I and II in order to align with the Commission Delegated Regulation (EU) 2020/1816
24 December 2021	Updated publication date post annual review. No changes to the document.
1 February 2022	Based on 'Conclusion of consultation on changes to the inclusion criteria of MSCI/AREF UK Quarterly Property Fund Index' as announced in June 2021, the 'BMR Benchmark Name' and 'Peer Group Filter' in section 7 are updated (where applicable) to include only 'Open-ended' funds, as per the MSCI/AREF UK Quarterly Property Fund Index methodology. These changes to methodology are applicable starting Q1 2022 index results reporting on a moving forward basis.



	Updated BMR methodology details in Section 6
28 March 2022	MSCI UK (excluding UK Retail Warehouse Fund - 605) Retail Warehouse Quarterly Property Index (Total Return; GBP) is discontinued and a new methodology specification is added – MSCI UK (excluding UK Retail Warehouse Fund - 605) Quarterly Valued Retail Warehouse Annual Property Index (Total Return; GBP).
	Updated BMR methodology details in Section 6: MSCI UK Healthcare Annual Property Index (Total Return; GBP) benchmark discontinued.
27 June 2022	Added clarification in section 5: ESG Disclosures referencing the relevant regulation for the minimum content of the explanation on how ESG factors are reflected in the benchmark methodology



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