MSCI PIMFA PRIVATE INVESTOR INDEX SERIES METHODOLOGY

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1 Introduction

The MSCI PIMFA Private Investor Indexes aim to represent the performance of Conservative, Income, Growth, Balanced and Global Growth investment strategies defined by the Personal Investment Management and Financial Advice Association for United Kingdom domestic investors with Pounds Sterling (GBP) denominated exposure. This methodology book provides a description of the rules and guidelines followed by MSCI for the construction and maintenance of the MSCI PIMFA Private Investor Index Series. These Indexes are produced by MSCI, with component index weights provided by the Personal Investment Management and Financial Advice Association (PIMFA).

The MSCI PIMFA Private Investor Index Series consists of the following five indexes:

- MSCI PIMFA Private Investor Conservative Index
- MSCI PIMFA Private Investor Income Index
- MSCI PIMFA Private Investor Growth Index
- MSCI PIMFA Private Investor Balanced Index
- MSCI PIMFA Private Investor Global Growth Index

The primary purpose of the MSCI PIMFA Private Investor Indexes is to act as performance benchmarks for wealth managers to compare to their portfolios. The Indexes are available in price and net variants calculated as per the MSCI Price Index methodology and the MSCI Net Daily Total Return (DTR) Index methodology respectively described in the MSCI Index Calculation Methodology.

The MSCI PIMFA Private Investor Indexes are part of the MSCI Blended Index Family. For further details on the MSCI Blended Index Family, please refer to the MSCI Blended Index Family – Benchmark statement available on www.msci.com.

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1 MSCI Index Calculation Methodology available at https://www.msci.com/index-methodology
2 Constructing the MSCI PIMFA Private Investor Index Series

2.1 INDEX STRUCTURE
The MSCI PIMFA Private Investor Index Series consists of five indexes designed to represent a variety of investment strategies.

- MSCI PIMFA Private Investor Conservative Index
  The MSCI PIMFA Private Investor Conservative Index aims to represent the investment strategy of a client adopting a conservative approach to their investment.

- MSCI PIMFA Private Investor Income Index
  The MSCI PIMFA Private Investor Income Index aims to represent the investment strategy of a client seeking an income flow from their investment.

- MSCI PIMFA Private Investor Growth Index
  The MSCI PIMFA Private Investor Growth Index aims to represent the investment strategy of a client seeking capital growth from their investment.

- MSCI PIMFA Private Investor Balanced Index
  The MSCI PIMFA Private Investor Balanced Index aims to represent the investment strategy of a client seeking a balanced approach between income and capital growth in their portfolio.

- MSCI PIMFA Private Investor Global Growth Index
  The MSCI PIMFA Private Investor Global Growth Index aims to represent the investment strategy of a client seeking capital growth from their investment.

2.2 INDEX WEIGHTING SCHEME
The five indexes are constructed as combinations of the following component indexes at specified weights. The component index weights\(^2\) are provided by PIMFA on a quarterly basis.

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\(^2\) The component index weights for each index are determined by the PIMFA’s Indices Committee, who may choose to make these publicly available.

The component index weights for the MSCI PIMFA Private Investor Indexes are available at [www.msci.com/pimfa-private-investor-indexes](http://www.msci.com/pimfa-private-investor-indexes)
- MSCI United Kingdom (UK) IMI
- MSCI ACWI ex UK Index
- MSCI World Index
- MSCI Emerging Markets (EM) Index
- Markit iBoxx £ Gilts Index
- Markit iBoxx £ Corporates Index
- Markit iBoxx UK Gilt Inflation-Linked Index
- Cash Equivalent (BoE Bank Rate – 0.75%)
- MSCI United Kingdom IMI Liquid Real Estate Index
- Alternatives Equivalent (100% MSCI World Diversified Multiple-Factor Index – 70% MSCI World Index + 70% BoE Bank Rate)

The price variant in Pound Sterling (GBP) of the MSCI PIMFA Private Investor Indexes utilize the price variant in Pound Sterling (GBP) for the underlying MSCI component indexes and the Clean Price Index (CPI) for the underlying Markit component indexes, while the net variant in Pound Sterling (GBP) of the MSCI PIMFA Private Investor Indexes utilize the net variant in Pound Sterling (GBP) for the underlying MSCI component indexes and the Total Return Index (TRI) for the underlying Markit component indexes.

The methodology for construction and maintenance of the component indexes is detailed in Appendix 1.

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3 In case of market closure or when Markit iBoxx Indexes are not available to MSCI on a specific day or a specific period, MSCI carries forward previous day Markit Index Level to calculate its indexes.
3 Maintaining the MSCI PIMFA Private Investor Index Series

3.1 MONTHLY INDEX REVIEWS

The MSCI PIMFA Private Investor Indexes are reviewed and rebalanced on a monthly basis, wherein, at the beginning of each month, the weight assigned to each component index is aligned with the latest weight provided by PIMFA. Between the monthly reviews, the relative daily performance in GBP of the component indexes determine the weights of the component indexes in each PIMFA Private Investor index.

The component indexes constituting the MSCI PIMFA Private Investor Indexes follow the rebalancing schedules described in their respective methodology documents.

3.2 ONGOING EVENT-RELATED CHANGES

In general, the MSCI PIMFA Private Investor Indexes follows the event maintenance of the component indexes.

Any security added or deleted from a component index follows the same treatment in the corresponding MSCI PIMFA Private Investor Index that uses the component index.

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4 The component index weights for the MSCI PIMFA Private Investor Indexes are available at [www.msci.com/pimfa-private-investor-indexes](http://www.msci.com/pimfa-private-investor-indexes)

5 In the event that PIMFA does not provide the component index weights for an upcoming quarter, the component index weights effective for the corresponding index at the previous quarter will be applied for the rebalance of the index.
Appendix 1 – Methodology for Component Indexes

The following component indexes are used in the construction of the MSCI PIMFA Private Investor Index Series.

**MSCI UNITED KINGDOM (UK) IMI**

The MSCI United Kingdom IMI is constructed and maintained in accordance with the MSCI Global Investable Market Indexes methodology\(^6\).

The MSCI United Kingdom IMI, price variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Price Index methodology described in the MSCI Index Calculation Methodology.

The MSCI United Kingdom IMI, net variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Net Daily Total Return Index methodology described in the MSCI Index Calculation Methodology.

**MSCI ACWI EX UK INDEX**

The MSCI ACWI Ex UK Index is constructed and maintained in accordance with the MSCI Global Investable Market Indexes methodology.

The MSCI ACWI Ex UK Index, price variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Price Index methodology described in the MSCI Index Calculation Methodology.

The MSCI ACWI Ex UK Index, net variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Net Daily Total Return Index methodology described in the MSCI Index Calculation Methodology.

**MSCI WORLD INDEX**

The MSCI World Index is constructed and maintained in accordance with the MSCI Global Investable Market Indexes methodology.

The MSCI World Index, price variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Price Index methodology described in the MSCI Index Calculation Methodology.

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\(^6\) MSCI Global Investable Market Indexes methodology available at [https://www.msci.com/index-methodology](https://www.msci.com/index-methodology)
The MSCI World Index, net variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Net Daily Total Return Index methodology described in the MSCI Index Calculation Methodology.

MSCI EMERGING MARKETS INDEX

The MSCI Emerging Markets Index is constructed and maintained in accordance with the MSCI Global Investable Market Indexes methodology.

The MSCI Emerging Markets Index, price variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Price Index methodology described in the MSCI Index Calculation Methodology.

The MSCI Emerging Markets Index, price variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Net Daily Total Return Index methodology described in the MSCI Index Calculation Methodology.

MARKIT iBOXX £ GILTS INDEX

The index is the Markit iBoxx £ Gilts Index7.

The Markit iBoxx £ Gilts Index, Clean Price Index (CPI) calculated in GBP may be utilized for the calculation of the price variant of the MSCI PIMFA Private Investor Indexes, while the Markit iBoxx £ Gilts Index, Total Return Index (TRI) calculated in GBP may be utilized for the calculation of the net variant of the MSCI PIMFA Private Investor Indexes.

MARKIT iBOXX £ CORPORATES INDEX

The index is the Markit iBoxx £ Corporates Index8.

The Markit iBoxx £ Corporates Index, Clean Price Index (CPI) calculated in GBP may be utilized for the calculation of the price variant of the MSCI PIMFA Private Investor Indexes, while the Markit iBoxx £ Corporates Index, Total Return Index (TRI) calculated in GBP may be utilized for the calculation of the net variant of the MSCI PIMFA Private Investor Indexes.

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MARKIT iBOXX UK GILT INFLATION-LINKED INDEX

The index is the Markit iBoxx UK Gilt Inflation-Linked Index⁹.

The Markit iBoxx UK Gilt Inflation-Linked Index, Clean Price Index (CPI) calculated in GBP may be utilized for the calculation of the price variant of the MSCI PIMFA Private Investor Indexes, while the Markit iBoxx UK Gilt Inflation-Linked Index, Total Return Index (TRI) calculated in GBP may be utilized for the calculation of the net variant of the MSCI PIMFA Private Investor Indexes.

CASH EQUIVALENT (BOE BANK RATE – 0.75%)¹⁰

The Cash Equivalent (BoE Bank Rate – 0.75%) represents the performance of the Bank of England Bank Rate dominated in Pound Sterling (GBP) minus 0.75% annual¹¹.

A floor of 0% is set for this component, i.e. if the value of BoE Bank Rate decremented by a fixed 0.75% annually becomes less than 0%, then the value of the component would be kept at 0%.

MSCI UK IMI LIQUID REAL ESTATE INDEX

The MSCI UK IMI Liquid Real Estate Index is constructed by combining MSCI UK IMI Core Real Estate Volatility Tilt Index and the Markit iBoxx UK Gilt Inflation-Linked Short Index.

The Index is constructed and maintained in accordance with the MSCI Liquid Real Estate Indexes methodology available at https://www.msci.com/index-methodology.

The MSCI UK IMI Liquid Real Estate Index, price variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Price Index methodology described in the MSCI Index Calculation Methodology.

The MSCI UK IMI Liquid Real Estate Index, net variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Net Daily Total Return Index methodology described in the MSCI Index Calculation Methodology.

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⁹ http://content.markitcdn.com/corporate/Company/Files/DownloadFiles?CMSID=84b9904db5254b3db95ce057b52c8a2c

¹⁰ Prior to November 01, 2019, the cash equivalent used in the indexes was (GBP Libor 1-week – 1%) in GBP.

¹¹ Annualized on a 365 day basis
ALTERNATIVES EQUIVALENT (100% MSCI WORLD DIVERSIFIED MULTIPLE-FACTOR INDEX - 70% MSCI WORLD INDEX + 70% BOE BANK RATE$^{12}$)

The 100% MSCI World Diversified Multiple-Factor Index - 70% MSCI World Index + 70% BoE Bank Rate Index (the "Index") is constructed using a combination of the MSCI World Diversified Multiple-Factor index, the MSCI World Index and the BoE Bank Rate.

The MSCI World Diversified Multiple-Factor Index is constructed and maintained in accordance with the MSCI Diversified Multiple-Factor Indexes methodology available at https://www.msci.com/index-methodology.

The MSCI World Diversified Multiple-Factor Index, price variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Price Index methodology described in the MSCI Index Calculation Methodology.

The MSCI World Diversified Multiple-Factor Index, net variant in GBP measures the performance of the Index in Pound Sterling (GBP), calculated as per the MSCI Net Daily Total Return Index methodology described in the MSCI Index Calculation Methodology.

On a monthly basis, the weights for the MSCI World Diversified Multiple-Factor Index, MSCI World Index and BoE Bank Rate in the Index are reset to pre-defined proportions. The following weights are effective at the open of the first business day of each month:

- MSCI World Diversified Multiple-Factor: 100%
- MSCI World Index: -70%
- BoE Bank Rate$^{13}$: 70%

In between the monthly rebalances, the weights of the MSCI World Diversified Multiple-Factor Index, MSCI World Index and BoE Bank Rate in the Index will evolve based on the relative daily return performance in GBP of each component.

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$^{12}$ Prior to November 01, 2019, this component was constructed as 50% MSCI World Diversified Multiple-Factor Index + 50% GBP Libor 1-Week

$^{13}$ A floor of 0% is set for this component, i.e. if the value of BoE Bank Rate becomes less than 0%, then the value of the component would be kept at 0%.
THE FOLLOWING SECTIONS HAVE BEEN MODIFIED SINCE FEBRUARY 2017

Section 2.1

- Update to clarify eligibility of cash and alternative asset class component indexes for inclusion to the MSCI PIMFA Private Investor Global Growth Index

THE FOLLOWING SECTIONS HAVE BEEN MODIFIED SINCE MAY 2017

Section 2.2

- Update to clarify treatment in case of missing component indexes

THE FOLLOWING SECTIONS HAVE BEEN MODIFIED SINCE OCTOBER 2017

- Update to rebrand the MSCI WMA Private Investor Index Series to the MSCI PIMFA Private Investor Index Series

Section 2.2 and Appendix 1

- Update to include the change in the Cash Equivalent from (Libor – 1%) to (BoE Bank Rate – 0.75%)
- Update to include the change in the alternative asset class component
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