

MSCI Blended Benchmark Family

Benchmark Statement

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Benchmark Statement: MSCI Blended Index Family

1 Objective of the Indexes in the Family

- 1.1 The MSCI blended benchmark family is comprised of indexes whose aim is to accurately and objectively measure performance of a market or economic reality defined as a combination of 1) MSCI equity indexes with indexes representing other asset classes or 2) indexes representing only non-equity asset classes.
- 1.2 Blended indexes contain component indexes that represent a particular market segment, theme or a variety of investment strategies and objectives. Examples of MSCI Indexes within this family include the WMA Private Investor Index Series, the Liquid Real Estate Indexes, the FX Hedge and the Global Currency Indexes.
- 1.3 The geographical boundaries of indexes in this family are global and are represented by the boundaries that are present in the component indexes that comprise the MSCI blended index.
- 1.4 These boundaries are illustrated in the following table:

MSCI ACWI & FRONTIER MARKETS INDEX									
MSCI ACWI INDEX					MSCI EMERGING & FRONTIER MARKETS INDEX				
MSCI WORLD INDEX			MSCI EMERGING MARKETS INDEX			MSCI FRONTIER MARKETS INDEX			
DEVELOPED MARKETS			EMERGING MARKETS			FRONTIER MARKETS			
Americas	Europe & Middle East	Pacific	Americas	Europe, Middle East & Africa	Asia	Europe & CIS	Africa	Middle East	Asia
Canada	Austria	Australia	Argentina	Czech Republic	China	Croatia	Kenya	Bahrain	Bangladesh
United States	Belgium	Hong Kong	Brazil	Egypt	India	Estonia	Mauritius	Jordan	Sri Lanka
	Denmark	Japan	Chile	Greece	Indonesia	Lithuania	Morocco	Kuwait	Vietnam
	Finland	New Zealand	Colombia	Hungary	Korea	Kazakhstan	Nigeria	Lebanon	
	France	Singapore	Mexico	Poland	Malaysia	Romania	Tunisia	Oman	
	Germany		Peru	Qatar	Pakistan	Serbia	WAEMU ²		
	Ireland			Russia	Philippines	Slovenia			
	Israel			Saudi Arabia	Taiwan				
	Italy			South Africa	Thailand				
	Netherlands			Turkey					
	Norway			United Arab Emirates					
	Portugal								
	Spain								
	Sweden								
	Switzerland								
	United Kingdom								
MSCI STANDALONE MARKET INDEXES ¹									
						Americas	Europe & CIS	Africa	Middle East
						Jamaica	Bosnia Herzegovina	Botswana	Palestine
						Panama	Bulgaria	Zimbabwe	
						Trinidad & Tobago	Malta		
							Iceland		
							Ukraine		

¹ The MSCI Standalone Market Indexes are not included in the MSCI Emerging Markets Index or MSCI Frontier Markets Index. However, these indexes use either the Emerging Markets or the Frontier Markets methodological criteria concerning size and liquidity.

² The West African Economic and Monetary Union (WAEMU) consists of the following countries: Benin, Burkina Faso, Ivory Coast, Guinea-Bissau, Mali, Niger, Senegal and Togo. Currently the MSCI WAEMU Indexes include securities classified in Senegal, Ivory Coast and Burkina Faso.

- 1.5 MSCI blended indexes are governed by a number of methodology documents, including the specific blended index methodology; if an MSCI index is a component, the relevant MSCI index methodology; the MSCI Index Calculation Methodology; and the MSCI Index Policies.
- 1.6 The MSCI blended benchmark family also may include custom indexes based on MSCI methodology with specifications agreed with clients.
- 1.7 The MSCI blended benchmark family contains only Non-Significant indexes as defined by Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indexes used as benchmarks.

2 Methodology and Index Design Guidelines and Reviews

- 2.1 MSCI indexes in the MSCI blended benchmark family aim to accurately and objectively measure performance of a market or economic reality as represented by an investment opportunity set accessible to institutional investors based on a market, market segment, theme, or investment strategy. MSCI indexes are constructed and maintained with the following prime objectives in mind:
- Representativeness
 - Replicability
 - Efficiency
- 2.2 The index design objectives are achieved through the use of a transparent rules-based methodological approach to index construction and maintenance.
- 2.3 MSCI indexes are rebalanced on a regular schedule ranging from daily to annually. The vast majority of the indexes are rebalanced on semi-annual or quarterly basis. A rebalancing may also be triggered by conditions specified in the relevant methodology.
- 2.4 As part of the regular index rebalancing process, MSCI indexes are reviewed relative to the market or strategy they are designed to reflect. This assists in the evaluation of methodologies for both consistency and effectiveness and may highlight situations where changes in the methodology are warranted to reflect changes in the underlying market opportunity.

3 Index Content Governance

- 3.1 MSCI's Index Policy Committee ("IPC") and Equity Index Committee ("EIC") preside over content matters relating to its indexes such as the development and interpretation of MSCI index methodologies in the MSCI blended benchmark family.
- 3.2 The EIC is primarily responsible for supervising the design, development, approval and interpretation of index methodologies. EIC discussions may be informed by feedback from the investment community. Nonetheless, all decisions taken by the committees are the sole responsibility of its members.
- 3.3 The IPC is responsible for final decisions on market classifications may be consulted on selected index terminations and serves as an escalation point for the EIC. Relevant topics

deemed to have material importance, as determined by the EIC, are discussed and decided by the IPC.

4 Index Calculation and Discretion

- 4.1 MSCI indexes in the blended benchmark family are calculated by combining published index levels (component indexes) according to methodological rules. MSCI does not use substitutes for component indexes. MSCI blended indexes do not use “contributed” input data.
- 4.2 The return of the indexes is determined in a number of currencies including USD and EUR.
- 4.3 The MSCI blended indexes rely on the continued availability of component index levels and permission for MSCI to use such data for determining the MSCI blended indexes. To the extent that such data is temporarily or permanently unavailable (whether as a result of a market disruption event or otherwise), the MSCI index methodologies apply the fall back measures described below.
- 4.4 In case of the unavailability of a component index level used in the calculation of an MSCI blended index level, MSCI carries forward the latest available component index level to calculate its indexes. If MSCI determines that another level is more appropriate based on the circumstances, an announcement would be sent to clients with the related information. All such determinations are made by the EIC.
- 4.5 The rules for MSCI index construction, maintenance and calculation are contained in publicly available methodology books and complemented with internal guidelines and operating procedures. Each process is conducted by well-trained personnel according to documented rules and operating procedures.
- 4.6 MSCI’s rules-based index methodologies provide that discretion is not used in the production of the indexes except in unusual cases not effectively addressed by the methodology. These include, but may not be limited to:
- Structural changes to the underlying markets,
 - Operational issues experienced by non-MSCI component index providers,
 - Geo-political events,
 - Events beyond human control
- 4.7 Where there may be a need to take an action that is not prescribed in the methodology, senior members across the MSCI Index Research and Data Management departments will develop a proposed approach with the goal of remaining consistent with the goals of the methodology and ensuring timely calculation and distribution. These proposals are reviewed by the EIC. In cases when time permits and the cases are deemed material,

MSCI may consult with clients on the proposed approach. MSCI will then announce the decided action to all market participants at the same time.

- 4.8 Typically, MSCI does not perform explicit ex-post analysis of decisions, other than through its regular reviews of indexes and methodologies, but always welcomes feedback from market participants on decisions made.
- 4.9 The framework described above eliminates the exercise of discretion by an individual and ensures any required exercise of discretion is managed through escalation to committees of experts. All committees are governed by terms of reference and all decisions are appropriately documented and archived. The IPC and EIC each have at least 6 members respectively and decisions are reached by consensus.

5 Corrections

- 5.1 In the case of data errors that occur in the determination or calculation of an index in the MSCI blended benchmark family if the impact of the error is below a documented threshold, no historical index restatement is made.
- 5.2 If the impact of the error on performance is above this threshold at the index level, indexes are restated historically.
- 5.3 MSCI applies a 12-month correction period for index errors. Errors discovered that are older than 12 months are generally not corrected.
- 5.4 Corrections related to regular index rebalancings are assessed on a case by case basis. MSCI typically considers the following factors in determining the most appropriate corrective action: index investability and replicability as well as potential reverse turnover.
- 5.5 All corrections are announced simultaneously to all market participants.

6 Consultations

- 6.1 MSCI indexes in the MSCI blended benchmark family are regularly reviewed and evaluated by the Index Research team. MSCI conducts consultations before making any material changes to an index methodology.
- 6.2 A consultation begins in general with an announcement giving the highlights of MSCI proposal(s) and indicating the location of the consultation document on MSCI's website. The announcement is widely distributed through multiple channels including the MSCI website, Bloomberg and Reuters and directly to MSCI's clients. These consultations provide market participants the time and opportunity to comment on any potential changes to the index methodology.
- 6.3 Once a consultation is closed and MSCI has gathered all required feedback, the EIC and if appropriate the IPC, reviews the feedback and makes a decision. Any decision to implement changes is announced publicly prior to implementation.
- 6.4 The final decision, including the rationale that has led to it and high level participation statistics, is communicated publicly to all market participants at once. 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.
- 6.5 If the final decision is to change the methodology, it will be part of the announcement, including the timeframe for the implementation of the change. Subsequently, MSCI will update the relevant methodology books.
- 6.6 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 and is clearly communicated as part of the consultation process. The length of a consultation needs to be sufficient for market participants to meaningfully review what is proposed and respond.
- 6.7 For custom indexes, changes to any client specifications are discussed directly with the relevant client.

7 Index Terminations

- 7.1 While terminations of MSCI indexes in the MSCI blended benchmark family are rare, MSCI has clear written policies to address them. There may be certain circumstances where the methodology cannot be adapted in which case terminating the index may be required. These circumstances are generally not within MSCI's control and may include significant changes to the structure of underlying market, drastic changes to the market

infrastructure, lack of access to necessary data, geo-political events, and regulatory changes. Additionally, factors such as methodology convergence or low usage may result in MSCI’s proposal to terminate an index.

7.2 In all of these cases if an index termination is proposed or required, MSCI would proceed as follows:

- The EIC would review the appropriateness and impact of a potential termination.
- MSCI may perform a consultation including a discussion of possible alternatives, if any.
- MSCI would announce the 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 MSCI index is established, the details of the methodology governing this index as well as the timing of the transition would be publicly announced in advance of the implementation.

7.3 The termination of a custom index is handled in consultation with the relevant client.

8 Index Usage

8.1 MSCI indexes in the MSCI blended benchmark family may be used for a variety of purposes, including for research or use as the basis for index-linked investment products. They may be used by a variety of market participants including but not limited to asset owners, portfolio managers, broker-dealers, and researchers. Not all uses are appropriate for all users. Market participants should use their judgment when selecting an index for a particular purpose.

8.2 MSCI indexes and the effectiveness of index methodologies can be affected by a number of factors, most of which are beyond MSCI’s control. These may include, but are not limited to, structural changes to the underlying market including decreases in the size and liquidity of the relevant market segment, infrastructure changes, geo-political events, and regulatory changes. These circumstances may result in a material change the methodology as a result. In rare cases, these circumstances may result in the termination of an index.

8.3 If financial product issuers or investment managers choose to use an MSCI index in the MSCI blended benchmark family as the basis of an index-linked financial product or an investment fund, they should consider this possibility, including the potential need to

terminate or modify the terms of a financial product resulting from the termination of the calculation of the index.

- 8.4 MSCI assumes no responsibility for potential use of its indexes in the MSCI blended benchmark family for particular purpose by clients, whether that use is for research, benchmarking, the basis for an index-linked financial product or investment fund, or some other use. The effective representation of a market or strategy is the primary aim for MSCI.

9 Additional Information

- 9.1 Detailed methodology and policy documents, a search function to find the methodology documents governing a specific MSCI index in the MSCI blended benchmark family and vendor reference codes, if available, can be found on www.msci.com.

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Appendix I – Key Terms

Key term	Definition
Equity Index Committee (EIC)	The Equity Index Committee (EIC) is primarily responsible for the supervision of the design, development, approval and interpretation of index methodologies. Decisions taken by the EIC are the sole responsibility of its members. The committee is staffed strictly by MSCI employees.
Index Policy Committee (IPC)	The Index Policy Committee (IPC) is responsible for final decisions with respect to market classifications and may be consulted on selected index terminations and is an escalation point for the EIC. Relevant topics deemed to have material importance, as determined by the EIC, are discussed and decided by the IPC.

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