

Morningstar Equity Benchmark Family — Benchmark Statement

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1. Objective of the Indexes in the Family

- 1.1 The Morningstar equity benchmark family comprises indexes that consist of liquid equities that provide investors with accurate benchmarks for performance measurement and offer building blocks for portfolio construction. These indexes provide an accurate, comprehensive depiction of global equity markets' performance and fundamental characteristics through a comprehensive portfolio of accessible and liquid stocks. Morningstar's primary equity index methodology is the Morningstar® Global Markets Index. Other equity indexes within the family, including individual regional and country indexes are derived from the constituents of the Morningstar Global Markets Index. Any exception to this rule would be highlighted in the respective equity index methodology books.
- 1.2 To be eligible for the Morningstar Global Markets index, all constituents of the U.S. and ex-U.S. universe must meet the following criteria: trading frequency, dollar trading volume and turnover, and free-float market-capitalization requirements. Each security that meets these general criteria is considered for inclusion in one of three economic segment indexes: U.S., developed ex-U.S., or emerging. The country classification process determines membership in the appropriate index. Each security that passes all the screens will be assigned one of the following capitalization bands: large, mid-, or small.
- 1.3 The Morningstar Global Index is designed with the key objective of facilitating asset allocation across geographic regions and countries in mind. The Morningstar Global Markets Index should provide building blocks that serve as asset class proxies based on economic segment (the U.S.; developed, excluding the U.S.; and emerging), geographical regions, and country. Countries are classified as developed if they meet all the following criteria:
 - Annual per capita GNI falls in the high-income category, as defined by the World Bank, for the most recent three consecutive years. As of 2014, the World Bank defines countries with per capita GNI in excess of \$12.736 as high income.
 - The country must not have in place any broad-based discriminatory controls against nondomiciled investors for the most recent three years.
 - The country's stock markets must exhibit these characteristics:
 - Transparency
 - Market regulation
 - Operational efficiency
 - Absence of broad-based investment restrictions

Countries that do not meet all the above criteria fall into the emerging-markets economic segment. For example, a country may be classified as high income by the World Bank, but because of a lack of transparency within local markets, it falls into the emerging-markets economic segment. For more detail on the Morningstar Global Markets Index methodology, please see the <u>rulebook</u>.

1.4 These boundaries are illustrated in the following table:

Γ		Γ	I
Developed	Australia	Emerging	Brazil
	Austria		Chile
	Belgium		China
	Canada		Colombia
	Denmark		Czech Republic
	Finland		Egypt
	France		Greece
	Germany		Hungary
	Hong Kong		India
	Ireland		Indonesia
	Israel		Malaysia
	Italy		Mexico
	Japan		Pakistan
	Netherlands		Peru
	New Zealand		Philippines
	Norway		Poland
	Portugal		Qatar
	Singapore		Russia
	Spain		Saudi Arabia
	Sweden		South Africa
	Switzerland		South Korea
	United Kingdom		Taiwan
	United States		Thailand Turkey United
			Arab Emirates

- 1.5 Groupings of Morningstar equity indexes include Morningstar® Global Markets Index regional and market indexes and related size and sector indexes. These indexes serve as the parent indexes for other Morningstar equity indexes that address specific investment objectives such as Morningstar ESG Indexes and Morningstar Thematic Indexes.
- 1.6 A particular equity index will be governed by multiple methodology documents, including the specific equity index methodology, the Morningstar® Global Markets Index Methodology (or other parent index methodology), the Morningstar Indexes Calculation Methodology, the Morningstar Corporate Actions Methodology, and the Fundamental and Proprietary Data Methodology.
- 1.7 The Morningstar equity benchmark family also includes custom indexes that may include specific screens, exclusion lists, or alternative weightings on parent indexes described above in section 1.6.
- 1.8 The Morningstar equity 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 Indexes in the Morningstar equity benchmark family provide an accurate, comprehensive depiction of the performance and fundamental characteristics of global equity markets through a comprehensive portfolio of accessible and liquid stocks. The Morningstar Global Index is designed with the following key objectives in mind:
 - Transparent and objective rules
 - The right balance between comprehensive market coverage and full investability
 - Nonoverlapping and hierarchical
 - Facilitate asset allocation across geographic regions and countries
 - Minimize index turnover
- 2.2 The index objectives are achieved through a transparent rules-based methodological approach to index construction and maintenance. Please see the <u>Construction Rules for the Morningstar® Global Markets Index</u> for more information.
- 2.3 The index is rebalanced quarterly and implemented after the close of business on the third Friday of March, June, September, and December and is effective the following Monday. If Monday is a holiday, rebalance is effective on the immediate following business day. The market data used for rebalancing is as of the last trading day of February, May, August, and November. The index is reconstituted semiannually and implemented after the close of business on the third Friday of June and December and is effective the following Monday. If Monday is a holiday, reconstitution is effective on the immediate following business day. The market data used for reconstitution is as of the last trading day of April and October.
- 2.4 Each rebalancing involves the following:
 - Changes in index shares (free float, total shares outstanding, index-specific adjustment factor) of each Constituent.
 - Addition of spin-offs/IPOs to the global markets index

3. Index Content Governance

- 3.1 Morningstar Index Methodology Committee (IMeC) oversees all new indexes development, index methodology changes, the annual review of existing index methodologies and cessation of indexes. For more detail, please see the Morningstar Index Methodology Committee charter.
- 3.2 For the Morningstar® Global Markets Index methodology and child methodologies, all results and analysis related to Index Reviews are presented to, reviewed, discussed by the IMeC and approved by the Morningstar Index Product Committee.
- 3.3 The Morningstar Index Product Committee is responsible for final decisions on market classifications and may be consulted on selected index terminations and serves as an escalation point for the IMeC. Relevant topics deemed to have material importance, as determined by the IMeC, are discussed and decided by the Morningstar Index Product Committee. For detail, please see the Morningstar Index Product Committee charter.
- 4 Index Calculation and Discretion
- 4.1 Morningstar indexes in the Morningstar equity benchmark family are calculated using transacted security prices from stock exchanges. Morningstar does not use any bids, asks, or any estimations as alternatives to stock prices. In

certain corporate actions, Morningstar uses estimated price to calculate index level. Morningstar equity 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 Morningstar equity indexes rely on the continued availability of transacted security prices from stock exchanges and permission for Morningstar to use such data for determining the Morningstar equity indexes. Morningstar reserves the right to use an alternative pricing source, if necessary, as described below.
- 4.4 For indexes calculated in real-time, the last trade price intraday is used. For exchange closures and holidays, the prior day's closing value will be used. In the event of a U.S. exchange interruption where an opening price is unavailable, the "Consolidated Tape" will be used. If this is not available, the previous closing price will be used. In addition, real time calculations will switch to a "Composition Tape" for all impacted securities. If the interruption is not resolved by market close, the closing prices list provided by the exchange will be used. If a closing prices list is not provided, the last trade on the "Composition Tape" for the respective security will be used. In the event a non-U.S. exchange faces an interruption, real-time calculations will cease until a confirmation is received from the exchange that activities have resumed. If the interruption is not resolved by market close, the closing prices list provided by the exchange will be used. If a closing prices list is not provided, the last trade price for the respective security will be used.
- 4.5 The methodology for Morningstar index construction, maintenance, and calculation are available in publicly accessible methodology rulebooks and standard operating procedure guidebooks. These documents are available on the Morningstar indexes website.
- 4.6 Morningstar'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:
- Corporate events not previously encountered or unusually complex in nature,
- Structural changes to the underlying markets,
- Operational issues at stock exchanges,
- Geo-political events,
- Events beyond human control
- 4.7 The Product Committee is responsible for the governance over the creation and maintenance of all Morningstar branded Indexes, ensuring the highest standards are continuously met. Any matters arising from exceptional or undocumented events will be resolved at the discretion of the Morningstar Index Product Committee.
- 4.8 Typically, Morningstar does not perform explicit ex-post analysis of decisions besides its regular reviews of indexes and methodologies.
- 4.9 The process described above ensures any act of discretion will be agreed upon by a group of experts only in extraordinary circumstances. All committees are governed by terms of reference and all decisions are appropriately documented and archived. Please see the official Morningstar Indexes Calculation Methodology for detail.

5. Corrections

- 5.1 Morningstar Indexes strives to deliver the highest-quality data. Despite Morningstar's focus on excellence, index-level and/or constituent inaccuracies may occur as a result of a late or missed dividend, a pricing error, an incorrect application of methodology, or any other missed/incorrectly applied data input. In the case of data errors that occur in the determination or calculation of an index in the Morningstar equity benchmark family, if the impact of the error is below a documented threshold, no recalculation is made. Please see the Morningstar Index Recalculation Guidelines for detail.
- 5.2 If the impact of the error on performance is above the particular threshold at the index return, indexes will be recalculated.
- 5.3 If a group of Morningstar indexes is affected by an error and at least one of the indexes has an error that calls for a recalculate, Morningstar Indexes will restate all affected indexes regardless of the magnitude of the error or the time elapsed since its occurrence.
- 5.4 If a calculation agent automatically recalculates an index that is a component of a Morningstar multi-asset index, Morningstar Indexes will restate the multi-asset index regardless of the magnitude of the error or the time elapsed since its occurrence.
- 5.5 Corrections related to regular index rebalancings or corporate events are assessed on a case by case basis. Morningstar typically considers the following factors in determining the most appropriate corrective action: index investability and replicability as well as potential reverse turnover.
- 5.6 Clients will be notified at the earliest possibility in the case of a recalculation and file reposting.

6. Consultations

- 6.1 Morningstar Index methodologies are reviewed during an index's regularly scheduled maintenance to ensure that it reflects the underlying economics of the market or the strategy it intends to represent. All methodology change proposals are first reviewed by IMeC. Each proposal is accompanied by a rigorous impact analysis to understand the rationale and extent of the change. IMeC is responsible for classifying each change as minor or major. A methodology change is considered major or material when the comparability of the time series data across the change date is disjointed relative to the historical trend. Major changes are escalated to MIPC for further review and approval. To inform the decision-making process and ensure outside stakeholders have a voice when there is a downstream impact, IMeC or MIPC may, if deemed necessary, initiate a consultation process. The consultation process is detailed in the Morningstar Indexes Methodology Change Policy.
- 6.2 If a consultation is required, a consultation document highlighting the proposed changes and relevant analysis is broadly distributed to market participants, including, but not limited to, clients and external stakeholders. The client consultation document covers these points:
 - Information on the driving force for the change.
 - Proposed methodology changes.
 - List of affected indexes and an impact analysis as deemed appropriate.

- Due date for providing feedback.
- Contact details for responding to the survey.

The product management team may conduct the client consultation through any or all of the following mediums: meeting with clients or through a telephone call, mailing clients, or conducting a survey.

- 6.3 Given a thorough analysis of the methodology change proposal, including outside consultation feedback, the MIPC owns the final and authoritative decision on the methodology change. The committee will account for criteria in the best interest of the end investor.
- 6.4 The final decision, including the rationale for the change, is communicated to all the market participants at the same time and will be implemented in the upcoming reconstitution after providing a three-month notice.
- 6.5 The methodology change statement published on the Morningstar Indexes website will cover these points:
 - The methodology change and its rationale
 - List of affected indexes and an impact analysis as deemed appropriate.
 - Effective date of the approved change.

7. Index Terminations

- 7.1 Although an index decommissioning is not a common occurrence, circumstances may arise that call for the cessation of a Morningstar Index, including, but not limited to: market structure change, geo-political events, regulatory changes, product definition change, inadequate supply of data, and/or other external factors beyond the control of Morningstar.
- 7.2 In all these cases if an index termination is proposed or required, Morningstar would proceed as follows: Index cessation proposal is brought before the Morningstar Index Committee, who will assess the circumstances, number of potentially impacted stakeholders, as well as the economic and financial impact of the cessation, as necessary. Morningstar will announce to Index subscribers, vendors, and to the general public the intended Index cessation at least three months prior to cessation date. On the specified Index cessation date, the Index will cease to be calculated. Please see the Index Cessation Process Summary for detail.

8. Index Usage

- 8.1 Morningstar indexes in the equity benchmark family may be used for a variety of purposes, including benchmarking 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 The Morningstar global equity index methodology is continually reviewed to ensure it achieves all stated objectives. These reviews consider corporate action treatment, selection, and maintenance procedures. Subscribers to the index will be notified before any methodology changes are made. Morningstar also notifies all index subscribers and stakeholders that circumstances might arise that require a material change to the index, or a possible cessation.

Circumstances that could lead to an index cessation include, but are not limited to, market structure change, product definition change, inadequate supply of data, insufficient revenue associated with the index, insufficient number of clients using the index, and/or other external factors beyond the control of the Morningstar Index Committee.

8.3 If financial product issuers or investment managers choose to use a Morningstar index in the Morningstar equity 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.

9. FSG Disclosures

9.1 ESG disclosures are provided as per the following regulations that were published in the EU Official Journal on December 3, 2020:

- Commission Delegated Regulation (EU) 2020/1816 of 17 July 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.
- Commission Delegated Regulation (EU) 2020/1817 of 17 July 2020 supplementing Regulation (EU) 2016/1011
 of the European Parliament and of the Council as regards the minimum content of the explanation on how
 environmental, social and governance factors are reflected in the benchmark methodology.

9.2 The ESG disclosures pertaining to Commission Delegated Regulation (EU) 2020/1816 for indexes in the Morningstar equity benchmark family will be published by Morningstar at a later date.

Appendix 1: Key Terms

Term	Description		
Reconstitution	Each reconstitution involves the following:		
	Updating the global market's investable equity universe.		
	Reviewing the economic segment- and country-level size segment breakpoints.		
	 Assigning companies to capitalization bands taking into account the buffer zones. 		
	Changes in index shares (free float, total shares outstanding, index-specific adjustment		
	factor) of each constituent.		
Rebalance	Each rebalancing involves the following:		
	Changes in index shares (free float, total shares outstanding, index-specific adjustment		
	factor) of each constituent.		
	Addition of U.S. spin-offs/IPOs to the global markets index		
World Bank	For operational and analytical purposes, the World Bank's main criterion for classifying		
Country	economies is gross national income per capita. The bank's analytical income categories (low,		
Classification	middle, and high) are based on the bank's operational lending categories (civil works		
	preferences, International Development		
	Association eligibility, etc.). These operational guidelines were established decades ago,		
	based on the view that since poorer countries deserve better conditions from the bank,		
	comparative estimates of economic capacity needed to be established. GNI, a broad measure,		

	was considered to be the best single indicator of economic capacity and progress; at the same time it was recognized that GNI does not, by itself, constitute or measure welfare or success in development. GNI per capita is therefore the bank's main criterion of classifying countries. Source: World Bank
Country Market Capitalization and Country Market Capitalization/ GDP Ratio	The size of a country's equity markets should be material, or above \$5 billion. The market should exhibit financial depth; that is, the ratio of the size of the country's equity markets to its gross domestic product should be high. Countries that fall in the bottom 20% are removed from index eligibility.
Additional Country Inclusion Criteria	The following criteria are taken into account when determining country eligibility: • The country's allowance of foreign investors to easily enter and exit the market, as well as to repatriate capital and dividends. • Timely and accurate availability of real-time and historical market data. • The level of interest attracted by the market from international investors.