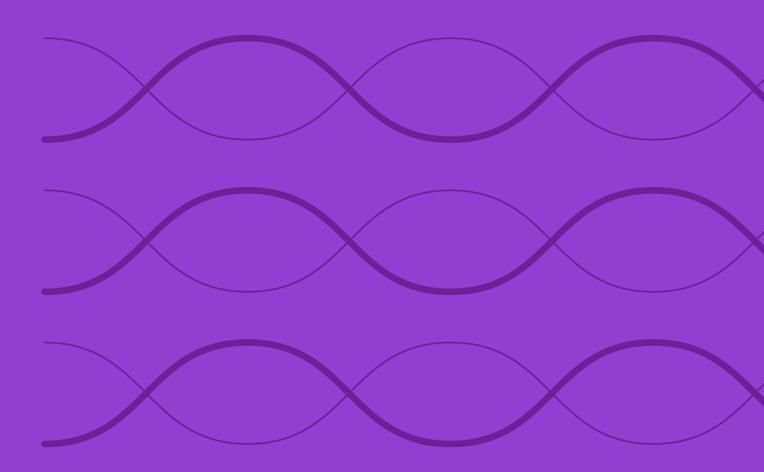


# Construction Rules for the Morningstar® Sector Moat Focus Indexes



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### **Overview**

The Morningstar® Sector Moat Focus Indexes are designed to provide exposure to companies with Morningstar® Economic Moat™ Ratings of wide or narrow that are trading at the lowest current market price/fair value ratios within their respective parent sector benchmarks. Moat ratings and fair value estimates are determined through independent research conducted by the Morningstar Equity Research team.

For more information on the moat rating process and fair value estimation performed by Morningstar Equity Research, refer to Morningstar Equity Research Methodology.

For more information on Morningstar sector assignments, refer to the **Global Equity Classification Structure**.

These indexes do not incorporate environmental, social, or governance criteria.

**Index Inception and Performance Start Date** 

The index inception and performance start dates, when the first back-tested index values were calculated, are provided in Appendix 4.



#### **Index Construction**

#### **Methodology Summary Starting Universe Eligibility Portfolio Construction** • Sector region parent from • Wide or narrow economic • Select N eligible stocks with Morningstar Sector the Morningstar Global the lowest price/Fair value moat rating Moat Focus Indexes Markets Indexes • Fair value estimate Covers stocks · Equal weight constituents Momentum must not rank in representing the top the bottom 20% of the eligible · Apply country capping and 97% of the investable turnover buffers. market. New constituents must have a minimum ADTV of \$5M.

For additional details, refer to the "Assigning Stocks to the Index" section. N for each index is provided in the appendix

# **Starting Universe**

At each reconstitution, constituents of each Morningstar Sector Moat Focus Index are derived from the corresponding Morningstar Sector Index (benchmark). Morningstar Sector Indexes are in turn, derived from the Morningstar Markets Index. For more details on benchmark construction, refer to the Construction Rules for Morningstar Global Sector Indexes.

# **Eligibility**

To be eligible for inclusion in the index, all securities must meet the following criteria:

- Analyst Data
  - o The company must be assigned an economic moat rating of wide or narrow by Morningstar's Equity Research team.
  - o The company must be assigned a fair value estimate by Morningstar's Equity Research team.
  - o The fair value estimate must not be under review at the time of reconstitution.
- The company must have 12 months of price history.
- If a company has more than one eligible share class:
  - o Preference is given to the one that is a current index constituent.
  - o Otherwise, the most liquid share class determined by Morningstar Indexes is used.
- Momentum Screen



- Eligible securities are ranked by their total returns over the past 12 months<sup>1</sup>. The securities in the bottom 20% are screened out.
- Liquidity Filter
  - Non index constituents must have a three-month average daily trading value, or ADTV, of at least \$5 million.

### **Portfolio Construction**

- Buffer Rules
  - Index constituents of the sub-portfolio ranked within the top 150% of target count in the eligible universe based on lowest current market/price fair value ratio are given preference in subsequent steps.
- Country Capping
  - At the time of reconstitution, the maximum weight of an individual country in each sub-portfolio is capped at its corresponding weight in the benchmark + 10% or 40%, whichever is higher. This constraint is enforced through stock selection.

Maximum Country Weight = Max (40%, benchmark weight + 10%)

- Price/Fair Value Selection
  - The aggregate portfolio is formed from two sub-portfolios. All buffered constituents are retained in the index. From among the remaining companies, those representing the lowest current market price/fair value ratios are included in the index sub-portfolio until the target number of constituents is reached.

# Number of Stocks

Each Morningstar Sector Moat Focus Index consists of two sub-portfolios that each target a fixed number of companies (N) at reconstitution. These target counts are shown in Appendix 4. However, if securities fall short of the selection and eligibility criteria, or if securities are added or deleted as a result of corporate actions after reconstitution, the sub-portfolio can hold more or fewer than N companies. In addition, securities that are deleted from the Morningstar Sector Index after June and December reconstitutions are simultaneously deleted from the Morningstar Sector Moat Focus Index. The aggregate portfolio can contain between N and 2\*N constituents.

# Index Weighting

The index is equal weighted. For more details, refer to the Morningstar Indexes Calculation Methodology rulebook.



<sup>&</sup>lt;sup>1</sup> Momentum is measured through the most recent month-end prior to the reconstitution.

#### **Index Maintenance and Calculation**

# **Scheduled Maintenance**

The sub-portfolios are reconstituted and rebalanced semi-annually on a quarterly staggered schedule. Consequently, about half of the total index membership is reset every quarter in March, June, September, and December, on the Monday following the third Friday. If Monday is a holiday, it is effective on the next business day. In addition, the sub-portfolio weights are reset to 50% each in June and December. Refer to Appendix 3 for the staggered reconstitution implementation process.

The analyst data (moat rating and fair value estimates) used to reconstitute the index is as of the Tuesday before the second Friday of the reconstitution month.

Refer to Appendix 2 for details on reconstitution and rebalancing.

Index files are published according to the global calendar schedule. For more information, please refer to the <u>Morningstar Indexes Holiday Calendar</u>.

## **Corporate Actions**

The treatment of corporate actions will be as per the alternatively-weighted indexes corporate action methodology. For more details, please refer to the <u>Morningstar Indexes Corporate Actions Methodology rulebook</u>.

### **Index Calculation and Price Data**

Details about index calculations and price data can be found in their respective rulebooks: Morningstar Indexes Calculation Methodology and Equity Closing Prices Used for Index Calculation.



# **Methodology Review and Index Cessation Policy**

The 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. For more details, refer to the <u>Morningstar Index Methodology Change Policy</u>.

Morningstar Indexes notifies all subscribers and stakeholders of the index that circumstances might arise that require a material change to, or a possible cessation of, the index. These circumstances are generally not within Morningstar's control and may include significant changes to the underlying market structure, inadequate access to necessary data, geo-political events, and regulatory changes. In addition, factors such as low usage or methodology convergence may result in the cessation of an index.

Because the cessation of the index or benchmark index could disrupt subscriber products that reference this index, all subscribers are encouraged to have robust fallback procedures if an index is terminated. For more details, refer to the Morningstar Index Cessation Process.



#### **Data Correction and Precision**

## **Intraday Index Data Corrections**

Commercially reasonable efforts are made to ensure the accuracy of data used in real-time index calculations. If incorrect price or corporate action data affects index daily highs or lows, it is corrected retroactively as soon as is feasible.

#### **Index-Related Data and Divisor Corrections**

Incorrect pricing and corporate action data for individual issues in the database will generally be corrected upon detection. In addition, an incorrect divisor of an index, if discovered within two days of its occurrence, will be fixed retroactively on the day it is discovered to prevent an error from being carried forward. Commercially reasonable efforts are made to correct an older error subject to its significance and feasibility.

For more details, refer to the Recalculation Guidelines.

## **Computational and Reporting Precision**

For reporting purposes, index values are rounded to two decimal places and divisors are rounded to appropriate decimal places.

# **Exceptions**

While Morningstar will seek to apply the method described above, the market environment, supervisory, legal, financial, or tax reasons may require an alternative approach to be adopted. A decision to take an alternative approach will be made by the relevant Morningstar Indexes Methodology Committee, and in all instances, the application of a nonstandard process will be reported to the Morningstar Indexes Oversight Committee.



# **Appendixes**

# Appendix 1: Modifications to the Rulebook

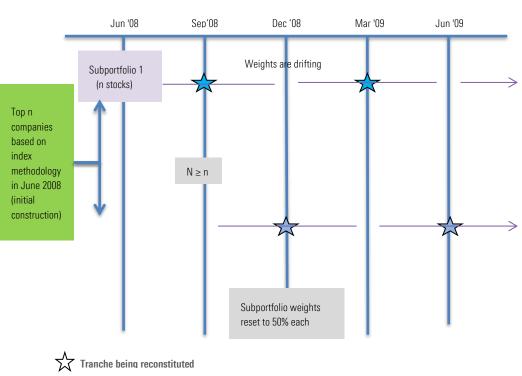
Section	Description of Change	Update Date
Index Construction	Liquidity Filter to be applied before Buffer Rules	June 2017
Entire Rulebook	Rulebook updated to new template	March 2023
Exhibit 1	Constituent count clarification	November 2023
Eligibility	Momentum screen clarification	November 2023

# **Appendix 2: Glossary**

Terms	Description
Reconstitution	During each reconstitution, the steps mentioned in the index construction process are performed, resulting in membership reset.
Rebalance	During each rebalancing, the weights are reset and adjusted for updated free-float and shares outstanding data.

# **Appendix 3: Staggered Reconstitution Process**







The portfolio construction process is described below:

- 1. At initial construction (eg. June 2008), both of the subportfolios are reconstituted at the same time and therefore have an identical portfolio composition. The subportfolios are set to equal weights at 50% each.
- 2. In September, only the first subportfolio is reconstituted, while the second is not (drifted leg). As a result, the composition of the subportfolios may not remain identical.
- 3. In December, the second subportfolio is reconstituted and the first forms the drifted leg. In addition, the subportfolio weights are reset to 50% each and distributed among the securities within them in proportion to their weights.
- 4. In March, the first subportfolio is reconstituted again.
- 5. In June, the second subportfolio is reconstituted. In addition, the subportfolio weights are reset to 50%.
- 6. The process is repeated (go to Step 2).

# **Appendix 4: Individual Indexes**

Index	Performance Inception Date	Inception Date	Number of constituents*
Developed Markets	Date		constituents
Morningstar Developed Markets Consumer Cyclical Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Developed Markets Consumer Defensive Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Developed Markets Energy Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Developed Markets Financial Services Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Developed Markets Healthcare Moat Focus Index	December 17, 2004	March 27, 2017	25
Morningstar Developed Markets Industrials Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Developed Markets Real Estate Moat Focus Index	December 17, 2004	March 27, 2017	25
Morningstar Developed Markets Technology Moat Focus Index	December 17, 2004	March 27, 2017	25
Morningstar Developed Markets Communication Services Moat Focus Index	December 15, 2006	December 19, 2016	25
Morningstar Developed Markets Utilities Moat Focus Index	June 19, 2009	December 19, 2016	25
Morningstar Developed Markets Basic Materials Moat Focus Index	December 16, 2011	December 19, 2016	25
Morningstar Developed Markets Basic Materials and Energy Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Developed Markets Technology and Communication Services Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Developed Markets Financial Services and Real Estate Moat Focus Index	December 17, 2004	December 19, 2016	25
Global			
Morningstar Global Consumer Cyclical Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Consumer Defensive Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Energy Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Financial Services Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Healthcare Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Industrials Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Real Estate Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Technology Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Communication Services Moat Focus Index	December 15, 2006	December 15, 2006	25
Morningstar Global Utilities Moat Focus Index	December 17, 2004	December 19, 2016	25
Morningstar Global Basic Materials Moat Focus Index	December 16, 2011	December 16, 2016	25
Morningstar Global Basic Materials and Energy Moat Focus Index	December 17, 2004	December 19, 2016	25



Morningstar Global Technology and Communication Services	December 17, 2004	December 19, 2016	25
Moat Focus Index			
Morningstar Global Financial Services and Real Estate Moat	December 17, 2004	December 19, 2016	25
Focus Index			
U.S.			
Morningstar US Consumer Cyclical Moat Focus Index	December 20, 2002	December 19, 2016	20
Morningstar US Consumer Defensive Moat Focus Index	December 17, 2004	December 19, 2016	20
Morningstar US Financial Services Moat Focus Index	December 20, 2002	December 19, 2016	20
Morningstar US Healthcare Moat Focus Index	December 20, 2002	December 19, 2016	20
Morningstar US Industrials Moat Focus Index	December 20, 2002	December 19, 2016	20
Morningstar US Technology Moat Focus Index	December 20, 2002	December 19, 2016	20
Morningstar US Utilities Moat Focus Index	December 17, 2004	December 19, 2016	20
Morningstar US Basic Materials and Energy Moat Focus Index	December 17, 2004	December 19, 2016	20
Morningstar US Technology and Communication Services	December 20, 2002	December 19, 2016	20
Focus Index			
Morningstar US Financial Services and Real Estate Moat Focus	December 20, 2002	December 19, 2016	20
Index			

<sup>\*</sup> Number of constituents is targeted for each subportfolio



## **About Morningstar Indexes**

Morningstar Indexes was built to keep up with the evolving needs of investors—and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers, and advisors in navigating investment opportunities across major asset classes, styles, and strategies. From traditional benchmarks and unique IP-driven indexes to index design, calculation, and distribution services, our solutions span an investment landscape as diverse as investors themselves.

## **Morningstar Indexes Methodology Committee**

The Morningstar Indexes Methodology Committee oversees all new index development, index methodology changes, and cessation of indexes for any indexes where Morningstar owns the intellectual property. This committee is also charged with ensuring that indexes align with Morningstar Research principles and values. The group comprises members of the index team with index research, product development, product management, client service, index implementation, and operation expertise who provide the first layer of governance over index design and methodology.

## **Morningstar Indexes Operations Committee**

The Morningstar Indexes Operations Committee governs the processes, systems, and exception handling of the day-to-day management of all live indexes, including index rebalancing and reconstitution, restatements, market classification, and contingency management. The committee oversees the annual review of index methodology (as required by U.K. and EU benchmark regulations, or BMR), ensuring that methodologies remain fit for purpose and continue to achieve their stated investment objectives. The group comprises members of the index team with data, operations, corporate actions, product development, index launch, client service, and index management experience who provide the first layer of governance over index operations.

## **Morningstar Indexes Oversight Committee**

The Morningstar Indexes Oversight Committee is responsible for the index oversight function as per the requirements of the U.K. and European BMR, providing independent oversight of all aspects of the governance of benchmark administration as required by the relevant BMR. Its remit extends to all calculation and administration-related business activities of Morningstar Indexes, including administration of Morningstar-owned benchmarks as well as client-owned benchmarks and index calculation. The oversight function is part of the organizational structure of Morningstar but is separate and independent from the index business, index management, and the other index committees.

## www.indexes.morningstar.com

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