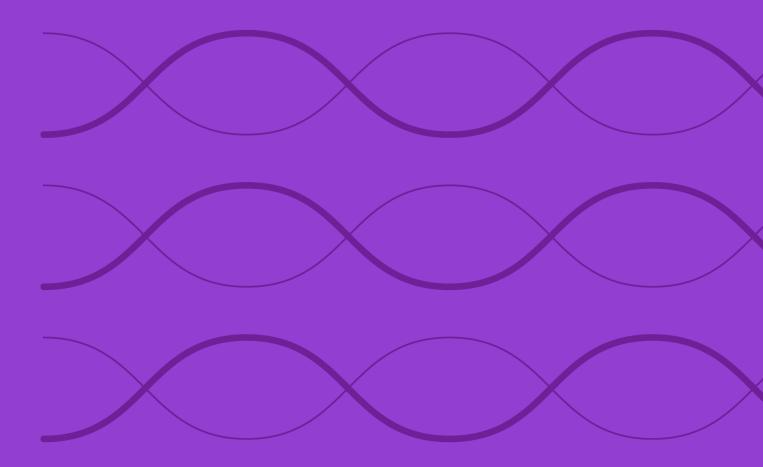
# M RNINGSTAR Indexes

# Construction Rules for the Morningstar Broad Style Wide Moat Focus Indexes



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# **Overview**

Shaped by the forward-looking insights of Morningstar's equity analysts, the Morningstar Broad Style Wide Moat Focus Indexes are designed to target value or growth stocks with durable competitive advantages and attractive valuations. This unique approach combines fundamental insights with objective portfolio construction, which facilitates consistency and investability.

Value and growth style assignments are underpinned by a 10-factor model incorporating both backward- and forwardlooking metrics. The indexes reflect that companies can display both growth and value characteristics and may therefore be members of both growth and value indexes.

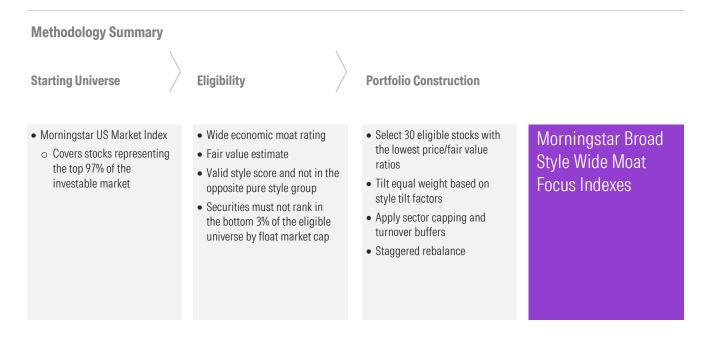
These indexes do not incorporate environmental, social, or governance criteria.

Index Inception and Performance Start Date

The index inception dates and performance start dates, when the first back-tested index value was calculated, are listed in Appendix 3.



## **Index Construction**



#### **Starting Universe**

At each reconstitution, constituents of the Morningstar Broad Style Wide Moat Focus Indexes are derived from the Morningstar US Market Index (benchmark). For more details on benchmark construction, refer to the Construction Rules for <u>Morningstar US Market Indexes</u>.

#### **Eligibility**

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To be eligible for inclusion in the Index, all constituents must meet the following criteria:

- Analyst Data
  - o The company must be assigned an economic moat rating of wide by Morningstar's Equity Research team.
  - o The company must be assigned a fair value estimate by Morningstar's Equity Research team.
  - $_{\odot}$  The fair value estimate must not be under review at the time of reconstitution.
  - Companies must have a valid Style Orientation Score as determined under <u>Morningstar Broad Style Index methodology</u>.
    Securities with the opposite pure style score from that targeted by the index are not eligible for inclusion (for example, pure value stocks will not be eligible for inclusion in the Morningstar US Broad Growth Wide Moat Focus Index).
- Minimum float market cap filter
  - At each reconstitution date in the subportfolio getting reconstituted, securities with a wide moat rating and fair value estimate from the parent benchmark will be ranked on float market capitalization and those securities ranking in the bottom three percent (by count) based on lowest float market capitalization are not eligible for inclusion in the index.
- If a company has more than one eligible share class:
  - $\,\circ\,$  Select the one that is a current index constituent.

 $\circ\,$  Otherwise, select the most liquid share class determined by Morningstar Indexes.

# **Portfolio Construction**

- Buffer Rules
  - Index constituents of the subportfolio ranked within the top 150% of the head count in the eligible universe based on current market price/fair value ratio are given preference in subsequent steps.
- Portfolio Selection
  - The aggregate portfolio is formed from two subportfolios. All buffered constituents are retained in the reconstituted subportfolio. The remaining eligible companies are ranked by their current market price/fair value ratios (from low to high), and those trading at the lowest ratios are included in the index subportfolio until the number of constituents reaches 30.

# Number of Stocks

Each reconstituted subportfolio targets 30 constituents based on a transparent ranking system subject to selection and eligibility criteria at reconstitution. 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 subportfolio can hold more or fewer than 30 companies. The aggregate portfolio typically contains between 30 and 60 constituents. Securities that are deleted from the Morningstar US Market Index the June and December reconstitutions are simultaneously deleted from the Morningstar Broad Style Wide Moat Focus Indexes.

# Index Weighting

The indexes are tilted from equal weight based on the style scores. The value tilt is used for the Morningstar US Broad Value Wide Moat Focus Index and the growth tilt is used for the Morningstar US Broad Growth Wide Moat Focus Index. The maximum weight of an individual sector in the index is capped at 10% plus its corresponding weight in the benchmark, or 40%, whichever is higher.

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

This sector capping is enforced by reweighting the index constituents. Additional details on sector capping are provided in Appendix 5.

- Tilt Factor Calculation
  - Stocks in each parent index are divided into three groups that represent their style characteristics along the growth/value spectrum: pure growth, blend, and pure value.

The growth index tilt factor for pure growth stocks is 1.0, and the growth index tilt factor for pure value stocks is 0.0. Similarly, the value index tilt factor for pure value stocks is 1.0, and the value index tilt factor for pure growth stocks is 0.0.



The growth index is derived as the union of the pure growth region and all stocks with nonzero growth style weights in the blend range. The value index is derived as the union of all stocks in the pure value region and all stocks with nonzero value style weights in the blend range.

Weights of constituents assigned to the blend range are allocated to the value and growth indexes based on a tilt factor calculated from the cumulative standard normal function. This transformation converts the standardized style score of each stock to a tilt factor value between 0 and 1. For more details, refer to the <u>Morningstar Broad Style Index Family</u> <u>rulebook</u>.



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

#### **Scheduled Maintenance**

The subportfolios are reconstituted quarterly with 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 immediately following business day. In addition, the subportfolio weights are reset to 50% each in June and December. Refer to Appendix 4 for the staggered reconstitution implementation process.

The analyst data (moat rating and fair value estimates) used to reconstitute the index is as of the first 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</u> <u>Indexes Holiday Calendar</u>.

#### **Corporate Actions**

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

**Index Calculation and Price Data** 

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



# **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 also notifies all subscribers and stakeholders of the index that circumstances might arise that require a material change to the index or a possible cessation of the index. 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 Methodology Committee.

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 <u>Morningstar Index Cessation Process</u>.



# **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 calculations, corrections are applied prospectively.

#### **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.

# **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 Index Methodology Committee, and in all instances, the application of a nonstandard process will be reported to the Morningstar Index Oversight Committee.



# **Appendixes**

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**Appendix 1: Modifications to the Rulebook** 

Section	Description of Change	Update Date
Entire rulebook	Moved to new template	May 2023
Stock Selection/Index Weighting	Moved the description of the tilt weighting factor and sector capping from the Stock Selection section to the Index Weighting section.	May 2023
Data Correction and Precision	Computational and Reporting Precision Section removed	May 2025
Index Maintenance & Calculation	Analyst data used for reconstitution updated from the Tuesday before the second Friday of the reconstitution month to the first Friday of the reconstitution month	3

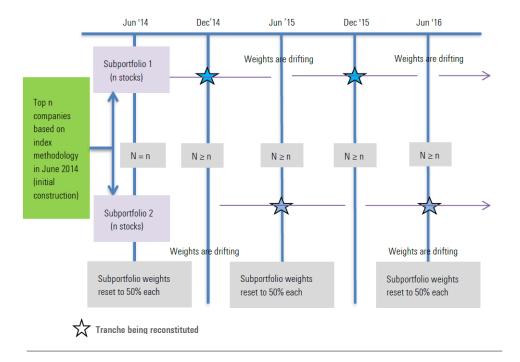
Appendix 2: Glossary			
Terms	Description		
Reconstitution	During each reconstitution, the steps mentioned in the index construction process are performed, resulting in membership reset.		
Rebalance	During each rebalancing, the weights are reset for updated free-float and shares outstanding data.		

Appendix 3: Index Variants and Inception Dates<sup>1</sup>

Index Name	Performance Start Date	Inception Date
Morningstar Broad Value Wide Moat Focus Index	12/15/2006	11/10/2022
Morningstar Broad Growth Wide Moat Focus Index	12/15/2006	11/10/2022



<sup>&</sup>lt;sup>1</sup> Buffers mentioned in the Security Selection section are not applied at the June 20, 2022, reconstitution to simulate an initial construction for the index composition at the June 20,2022 reconstitution for all indexes in the family.



#### **Appendix 4: Staggered Reconstitution Process**

The portfolio construction process is described below:

- 1. At initial construction (for example, June 2008), both 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 5: Sector Capping**

The Broad Style Wide Moat Focus Index Family has staggered reconstitution schedule and the weighting scheme is tilted equal weight. At every reconstitution, the sector weights of the reconstituted subportfolio are constrained considering the sector weights of the drifted subportfolio, such that the sector capping for the index is applied on the overall portfolio. Securities are selected based on PFV and buffer rules without any replacement of constituents during selection.

The stock selection and sector capping process are described below, taking an example of reconstitution in June/December for the first subportfolio. The same process takes place for reconstitution in March/September for the second subportfolio:

- 1. Select the top 30 stocks by lowest PFV and calculate their tilted weight.
- 2. Calculate drifted weights for the second subportfolio constituents as of close of one day prior to reconstitution date.
- 3. For each sector within the subportfolio to be reconstituted, calculate the residual weights by subtracting the drifted subportfolio sector weights from the sector cap. The target weights of both the subportfolios in the overall index are considered as well during this step. This is done so that the overall portfolio does not breach the sector cap.
- 4. Sector weights for first subportfolio are calculated keeping the residual weights calculated for each sector above (in step 3) as the cap for each sector. This cap can be different for each sector, as it depends on the sector weights calculated for the drifted subportfolio.
- 5. If any sector breaches the cap, the extra weight is re-distributed across the whole reconstituted subportfolio in proportion to their existing weights. This process is done iteratively until the weight of each sector is within its limit.



#### **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 Index Methodology Committee**

The Morningstar Index 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 Index Operations Committee**

The Morningstar Index 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 Index Oversight Committee**

The Morningstar Index 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

#### **Contact Us**

#### indexes@morningstar.com

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