
Construction Rules for the Morningstar® Global Food Innovation IndexSM

Morningstar Indexes

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Overview

The Morningstar® Global Food Innovation IndexSM provides exposure to companies well positioned to experience meaningful economic benefits as a supplier, producer, or user of promising food innovation technologies consisting of four subthemes: Alternative Proteins, Agriculture Technology, Sustainable Food Production & Packaging, and Nutritional Innovation & Safety. These exposures are identified via research efforts conducted by Morningstar's Equity Research team.

Please refer to Appendix 1 for more details on theme definitions.

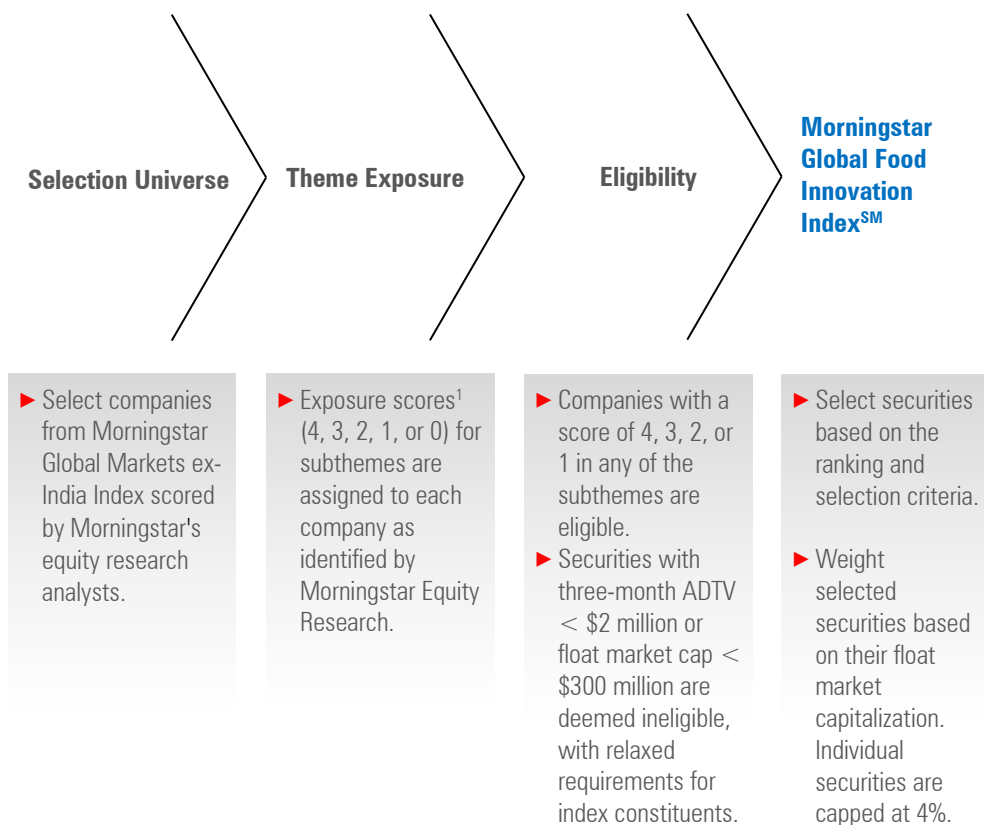
This index family does not incorporate environmental, social, and governance criteria.

Performance Inception Date

The inception date of the index is Dec. 30, 2021, and the performance inception date, when the first back-tested index values were calculated, is Dec. 21, 2018.

Index Construction

Exhibit 1 Morningstar Global Food Innovation Index Construction Process



¹ Please refer to Appendix 1 for more details.

For additional details, refer to the "Assigning Stocks to the Index" section.

Assigning Stocks to the Index

Selection Universe

At each reconstitution, constituents of the Morningstar Global Food Innovation Index are derived from the corresponding Morningstar Global Markets ex-India Index (benchmark). For more details on benchmark construction, refer to the [Construction Rules for the Morningstar Global Markets Index](#).

Security Selection

To be eligible for the indexes, all constituents must be part of the benchmark index and must meet the following criteria in sequence:

- ▶ Securities with average three-month trailing daily trading volume less than \$2 million or free-float market capitalizations less than \$300 million are ineligible for the indexes. Current index constituents are eliminated if they have average three-month trading volume less than \$1.5 million or free-float market capitalization less than \$200 million.

- ▶ If a company has more than one eligible share class:
 - ▶ Select the one that is a current index constituent.
 - ▶ Otherwise, select the most liquid share class determined by Morningstar Indexes.
- ▶ Companies must have a valid nonzero exposure score in at least one of the four individual subthemes.
- ▶ Qualifying potential constituents are then assigned a Tier 1 or Tier 2 rating based on the following criteria.
 - ▶ Tier 1: Constituents having a score of:
 - Either 3 or 4 in any of the four individual subthemes
 - Or, an Aggregate Score (sum of all four subthemes) of 5 or more
 - Or, a score of 2 in at least two of the any four individual subthemes
 - ▶ Tier 2: All the constituents not assigned a Tier 1 rating are defined as Tier 2

The ranking criteria is given below:

- ▶ Tier 1 constituents preferred over Tier 2
 - ▶ Higher Aggregate Score
 - ▶ Number of subthemes in which a constituent scores 4
 - ▶ Number of subthemes in which a constituent scores 3
 - ▶ Number of subthemes in which a constituent scores 2
 - ▶ Number of subthemes in which a constituent scores 1
 - ▶ Current index constituents are given preference.
 - ▶ Security total market capitalization, preferring smaller over larger.
- ▶ If the total number of Tier 1 constituents is greater than or equal to 50 then all such Tier 1 constituents are selected but if the total number of Tier 1 constituents is less than 50 then the shortfall is filled with Tier 2 constituents and the total number of securities in the index is capped at 50.

Number of Stocks

During reconstitution, if the total number of Tier 1 constituents is greater than or equal to 50 then the number of stocks in the index is subject to the selection and eligibility criteria at the time of reconstitution, but if the total number of Tier 1 constituents is less than 50 then the target number of stocks in the index is 50. 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 indexes can have more or fewer than the targeted number. During reconstitution, if the number of securities is less than the target, then all eligible securities would be selected, and the weight of the constituents will be determined based on the index weighting scheme. The schedule for reconstitution and corporate actions is available in the "Index Maintenance and Calculation" section.

Index Weighting

The index constituents are float-market-capitalization weighted. Individual security weights are capped at 4%, with the excess weights redistributed over the other constituents in the whole portfolio in proportion to their existing weights.

For more details, refer to the [Morningstar Indexes Calculation Methodology](#).

Index Maintenance and Calculation

Scheduled Maintenance

The index is reconstituted and rebalanced annually and implemented after the close of business on the third Friday of December and effective the following Monday. If that Monday is a holiday, it is effective on the immediately following business day. The market data and theme scores used for reconstitution and rebalance is as of the last trading day of November.

Because the reconstitution of the Morningstar Global Food Innovation Index is less frequent than the parent index (Morningstar Global Markets ex-India Index), the securities excluded from the parent index (Morningstar Global Markets ex-India Index) at the reconstitution effective date are also deleted from Morningstar Global Food Innovation Index. For clarity, this means that any constituent excluded from the parent index during its reconstitution is also excluded from the Morningstar Global Food Innovation Index at the same date. It will not be replaced, and its weight is reallocated among existing constituents in proportion to its existing weight.

Corporate Action

The treatment of corporate actions will be as per the market capitalization weighted indexes. Details can be found in 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: [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 take into account 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 [Morningstar Indexes Methodology Change Policy](#).

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 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 [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 be corrected upon detection. In addition, an incorrect divisor of an index, if discovered within five days of its occurrence, will always 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.

Appendixes

Appendix 1: Morningstar's Global Equity Research Theme Identification and Scoring Process

► Step 1

The Morningstar Food Innovation Index targets firms that should enjoy significant economic benefits from the growing adoption of innovations that aim to optimize human diets, food production practices, food safety measures, and the sustainability of related packaging. To best harness specific exposures under this broader theme, the Morningstar Equity Research team's Food Innovation steering committee identifies key subthemes for which thematic exposure scores are solicited from Morningstar equity analysts. These subthemes are reviewed annually by the equity research team and can be subject to change over time as they evolve and new subthemes emerge.

As of Sept. 30, 2021, four Food Innovation subthemes have been identified:

- Alternative Proteins: Food, beverages, or ingredients offering protein sourced from non-animal origins.
- Agriculture Technology: Agriculture technology solutions that enhance yield, improve efficiency, or achieve waste reduction.
- Nutritional Innovation & Safety: Technologies that reduce preventable nutrition-related death and disease via innovation or food safety practices.
- Sustainable Food Production & Packaging: Sustainable food production practices or sustainable packaging solutions for food and beverage.

► Step 2

The Morningstar Equity Research team's Food Innovation steering committee trains analysts on the subthemes and scoring framework. Rather than relying solely on historical data points, analysts provide forward-looking data points that translate to thematic exposure scores of 0, 1, 2, 3, or 4 across each subtheme.

To garner a thematic exposure score above zero for a given subtheme, a firm must be classified as a producer of related goods or services or a supplier of those producers. Additionally, Morningstar equity analysts must classify the firm as being highly likely to enjoy a material net profit increase from its exposure to that subtheme over the next five years and have at least some current revenue exposure to that subtheme. Analysts then estimate the percent of revenue a firm will derive from its exposure to each subtheme at a point in time five years forward. These estimates translate into thematic exposure scores in the following manner:

- 0 – Less than 10% of revenue of a firm
- 1 – 10%-25% of revenue for a producer or supplier firm
- 2 – 25%-50% of revenue for a producer or supplier firm
- 3 – Greater than 50% of revenue for a supplier firm
- 4 – Greater than 50% of revenue for a producer firm

► Step 3

The Morningstar Equity Research Food Innovation Steering Committee then provides a quality control review of each company's thematic exposure scores to optimize internal consistency. During this step, committee members engage in discussions with analysts and directors to test the rationale behind submitted data points. Once the quality control process has been completed, thematic exposure scores are submitted to the Morningstar Indexes team for index reconstitution purposes.

About Morningstar, Inc.

Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia. Morningstar offers an extensive line of products and services for individual investors, financial advisors, asset managers, and retirement plan providers and sponsors. Morningstar provides data on approximately 510,000 investment offerings, including stocks, mutual funds, and similar vehicles, along with real-time global market data on more than 17 million equities, indexes, futures, options, commodities, and precious metals, in addition to foreign exchange and Treasury markets. Morningstar also offers investment management services through its investment advisory subsidiaries.

About Morningstar Indexes

Morningstar® Indexes combine the science and art of indexing to give investors a clearer view into the world's financial markets. Our indexes are based on transparent, rules-based methodologies that are thoroughly back-tested and supported by original research. Covering all major asset classes, our indexes originate from the Morningstar Investment Research Ecosystem—our network of accomplished analysts and researchers working to interpret and improve the investment landscape. Clients such as exchange-traded fund providers and other asset management firms work with our team of experts to create distinct, investor-focused products based on our indexes. Morningstar Indexes also serve as a precise benchmarking resource.

Morningstar Index Product Committee

The Morningstar Index Product Committee is comprised of members who possess a wide array of knowledge in relation to Indexes. 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.

Morningstar Index Oversight Committee

The Morningstar Index Oversight Committee is comprised of informed and qualified professionals who are responsible for the process governance of Morningstar branded Indexes. The Oversight Committee assesses and where appropriate challenges the decisions of Morningstar Indexes with regards to benchmark decisions.

For More Information

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