

# Construction Rules for the Morningstar® Japan Target Allocation Index Family

## Morningstar Indexes

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## Overview

The Morningstar® Japan Target Allocation Index family is a broadly diversified set of indexes designed to help investors with differing risk tolerance levels benchmark their multi-asset portfolios. The indexes are designed to maintain a fixed level of equity exposure and are aligned with the Morningstar Category classifications for funds. The underlying index weights are derived from eligible open-end funds in Morningstar’s fund holdings data. Conceptually, the Morningstar Japan Target Allocation Index family members are indexes of indexes.

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

The key objectives of the Morningstar Japan Target Allocation Indexes are:

- ▶ **Transparency:** The construction and maintenance of the indexes follow clear and well-defined rules.
- ▶ **Representative:** These indexes have simple construction rules that reflect the aggregate asset-allocation decisions of the multi-asset fund managers in a certain Morningstar Category.
- ▶ **Aligned to Morningstar Categories:** The indexes closely align with the Morningstar Category system for funds.
- ▶ **Home bias:** The indexes are built to capture the home bias exhibited by the funds in a specific region. This ensures better representation of a local investor’s experience.
- ▶ **Investable:** Morningstar index security selections pass liquidity and pricing screens to ensure index accuracy and promote index replication.
- ▶ **Seamless asset-class representation:** Index building blocks from one source enhance attribution analysis by eliminating asset-class overlap.

There are two main considerations in the construction rules for the indexes:

### Security Selection Methodology

Securities are selected by including asset classes that are widely accepted and used by a majority of fund managers in a Morningstar Category. The underlying indexes are designed to capture local investor preferences. Broadly, three asset classes — equity, fixed income, and cash — are represented in each target allocation index. Equity and fixed-income asset classes are further broken down into subasset classes based on the regions. For example, the equity asset class is split into Japan Equity, Developed Market ex-Japan Equity, Emerging Market Equity, Japanese REIT, and Foreign REIT.

### **Asset Allocation**

The asset allocation generates the weights of the underlying stock, bond, and cash indexes. These weights closely represent the asset allocation of all eligible open-end funds in an allocation category of Japan. The asset-class weights are generated using the surveyed fund holdings in Morningstar's funds database.

### **Index Inception Date and Performance Inception Date**

The inception date of the index family is March 22, 2021, and the performance inception dates of the indexes in the family are listed in Appendix 6. This was when the first back-tested index value was calculated.

### **Index Construction**

#### **Assigning Indexes to the Index**

##### **Index Universe**

Index constituents of the Japan Target Allocation Index family are based on commonly used, nonoverlapping asset classes in each eligible fund universe for a Morningstar Allocation Fund Category. Calculation of the constituent index weights is explained in the Index Weighting section. Details of the index constituents for every region are mentioned in Appendix 3. The index constituents are reviewed annually. Rules governing security inclusion into the constituent index, index reconstitution/rebalancing, security splits/dividends/contract expirations, and other index mechanics are detailed in the rulebooks that govern each index. These rulebooks are available on the [Morningstar website](#).

#### **Index Weighting**

##### **Fund Universe**

The weights of the constituent indexes are determined by the average asset-class allocation weights of all eligible funds in each Morningstar Category listed in Appendix 2. The fund universe is defined as:

- ▶ All open-end funds are selected from the Morningstar Fund Category universe in Japan.
- ▶ Surveyed fund holdings in Morningstar fund database are considered for averaging of fund-level asset allocation.

Allocation weights as defined in the subsequent pages are based on asset-allocation data as surveyed from the fund annual reports.

### Fund-Level Asset-Class Weights

For each open-end fund in Morningstar's funds database, the asset-class exposure is calculated by computing the historical average of asset allocation over 36 months or months in the current Morningstar Category, whichever is lower.

### Category-Level Asset-Class Weights

The fund-level historical asset-allocation data is rolled up within each category to arrive at the category-level asset allocation.

- ▶ Removal of outliers: Funds with average allocation (as computed above) toward equity, bond, cash, and other asset classes below the 5<sup>th</sup> and above the 95<sup>th</sup> percentile of the respective Morningstar Allocation Category fund universe are dropped. All other funds are considered eligible for further calculations.
- ▶ A simple average asset allocation is calculated across all eligible funds in each Morningstar Allocation Category. The average asset allocation for a category is updated only if there are more than 20 eligible funds in the category as of the cutoff date.
- ▶ Allocations toward equity, bond, and cash are represented by underlying indexes. The weight of other asset classes is rescaled proportionally among the rest to sum to 100%. Asset classes classified as *others* are, but not restricted to, commodities, private equity, and so on.
- ▶ Allocation weights toward Developed Markets ex-Japan Bond is split and redistributed to better capture the risk profile of the underlying asset classes. Developed Markets ex-Japan Bond allocation is split into hedged and unhedged portions based on fund-level hedged asset-allocation information. The hedged portion is added to Japan bond allocation, and the unhedged portion is represented with a separate index. Details of the representative indexes are in the appendix.
- ▶ A subasset class is represented by an appropriate index only if its weight is:
  - ▶ More than 50 basis points for an existing asset class.
  - ▶ More than 150 basis points for a new asset class.
- ▶ The weights are rounded off to the nearest 50 basis points to avoid churn from small changes in constituent asset-class weights.

## Index Maintenance and Calculation

### Scheduled Maintenance

The indexes are reconstituted annually and implemented after the close of business on the last business day of June and is effective the following business day. The data used to reconstitute the indexes is as of the last calendar day of April.

The index is rebalanced monthly and implemented after the close of business on the last business day of every month and is effective the following business day.

Refer to Appendix 1 for details on reconstitution and rebalancing.

### Price Data

Price data is the end-of-day index level of index constituents calculated by Morningstar for index-level calculation. The return variants are listed in Appendix 3.

### Methodology Review and Index Cessation Policy

Maintenance of the Morningstar Japan Target Allocation Indexes depends on the Morningstar Category definitions and the underlying indexes. In the event of a review of any allocation category used in the indexes, the methodology will be reviewed to ensure closer alignment and representation of the Morningstar Allocation Categories. In the event of a review of the underlying constituent indexes, the methodology will be placed under review as well. The final decision on whether to represent a new subasset class, whose weight is in excess of 150 basis points, as detailed in the Index Weighting — Category-Level Asset Class Weights section with a distinct index, lies with the Index Committee.

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 the 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 affect index daily highs or lows, they are 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: Glossary

Terms	Description
<b>Reconstitution</b>	During each reconstitution, the membership is reset, and the index weight of each constituent is adjusted.
<b>Rebalance</b>	During each rebalance, the weights are reset.

### Appendix 2: Details of Morningstar Categories

Each Morningstar Category in Japan considered in the index family has a defined range of risk scores, which is listed below. The definitions of each Morningstar Category are made public and reviewed semiannually. For details of the Morningstar Category definitions, please visit our [Indexes Resource Page](#).

Morningstar Category Name	Composite Risk Score Range
Japan Fund Conservative Allocation	0 – 40
Japan Fund Moderately Conservative Allocation	40 – 60
Japan Fund Moderate Allocation	60 – 75
Japan Fund Moderately Aggressive Allocation	75 – 90
Japan Fund Aggressive Allocation	> 90

**Appendix 3: Constituent Indexes** – The component indexes of each benchmark index are subject to their own rules. Those rulebooks can be found below.

Asset Class	Index Name
Japanese Equity	Morningstar Japan GR JPY
Developed Markets ex-Japan Equity	Morningstar Developed Markets ex-Japan NR JPY
Emerging Market Equity	Morningstar Emerging Markets NR JPY
Japanese REITs	Morningstar Japan REIT GR JPY
Global ex-Japan REITs	Morningstar Global Markets ex-Japan REIT NR JPY
Japanese Bond	Morningstar Japan Core Bond GR JPY
Developed Market ex-Japan Bond	Morningstar Global ex-Japan Core Bond GR JPY
Emerging Markets Bond	Morningstar Emerging Markets Composite Bond GR JPY
Cash	Morningstar Japan Cash GR JPY

[Construction Rules for the Morningstar® Bond Indexes](#)

[Construction Rules for the Morningstar® Global Markets ex-US IndexSM](#)

#### Appendix 4: Redistribution of Hedged Allocation

To better represent the asset-class risk, Developed Markets exJapan Bond allocation is split into Developed Markets ex-Japan Bond (hedged) and Developed Markets ex-Japan Bond (unhedged). This is achieved by computing a hedging ratio from the actual fund-level holdings data. Hedge Ratio computed is used to split the Developed Markets ex-Japan Bond allocation as below:

$$DM\ exJP\ Hedged = DM\ exJP\ Bond \times Hedge\ Ratio$$

$$DM\ exJP\ Unhedged = DM\ exJP\ Bond \times (1 - Hedge\ Ratio)$$

Developed Markets ex-Japan Hedged allocation is added to Japan Bond allocation, represented with Morningstar Japan Core Bond GR JPY. Developed Markets ex-Japan Unhedged allocation is represented with Morningstar Global ex-Japan Core Bond GR JPY.

#### Appendix 5: Splitting Convertible Bond Between Equity and Bond Allocation

Japanese and foreign convertible bond allocation are split into their proportional equity and bond portions. To arrive at the split ratio between equity and bonds, a returns-based style analysis is conducted for a three-year period. The results are used to compute the bond and equity portions for Japanese and foreign bond allocation.

#### Appendix 6: Individual Indexes

Index Name	Inception Date	Performance Inception Date
Morningstar® Japan Conservative Target Allocation Index <sup>SM</sup>	March 22, 2021	June 30, 2005
Morningstar® Japan Moderately Conservative Target Allocation Index <sup>SM</sup>	March 22, 2021	June 30, 2005
Morningstar® Japan Moderate Target Allocation Index <sup>SM</sup>	March 22, 2021	June 30, 2005
Morningstar® Japan Moderately Aggressive Target Allocation Index <sup>SM</sup>	March 22, 2021	June 30, 2005
Morningstar® Japan Aggressive Target Allocation Index <sup>SM</sup>	March 22, 2021	June 30, 2005

**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**

For any queries, reach out to us via our [communication page](#).



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