

Construction Rules for the Morningstar Korea Target Date Indexes



Overview3

Index Construction3

Average Asset Class Allocation4

Index Maintenance and Calculation5

Scheduled Maintenance5

Index Calculation and Price Data6

Methodology Review and Index Cessation Policy6

Data Correction and Precision6

Intraday Index Data Corrections6

Index-Related Data and Divisor Corrections6

Exceptions7

Appendixes7

Appendix 1: Details of Morningstar Categories7

Appendix 2: Constituent Indexes7

Appendix 3: Modifications to the Rulebook8

About Morningstar Indexes8

Overview

The Morningstar Korea Target Date Indexes are a market-based tool designed for creating and benchmarking target date investment portfolios for Korean investors. By leveraging Morningstar's database of multi asset funds to determine weights across key asset classes, the indexes provide investors with a regionally relevant asset allocation framework that is aligned with the Morningstar Categories for Korea Target Date Funds.

The Morningstar Korea Target Date Index series is comprised of the following indexes:

- Morningstar Korea Target Date Retirement NR KRW Index
- Morningstar Korea Target Date 2025 NR KRW Index
- Morningstar Korea Target Date 2030 NR KRW Index
- Morningstar Korea Target Date 2035 NR KRW Index
- Morningstar Korea Target Date 2040 NR KRW Index
- Morningstar Korea Target Date 2045 NR KRW Index
- Morningstar Korea Target Date 2050 NR KRW Index
- Morningstar Korea Target Date 2055 NR KRW Index

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

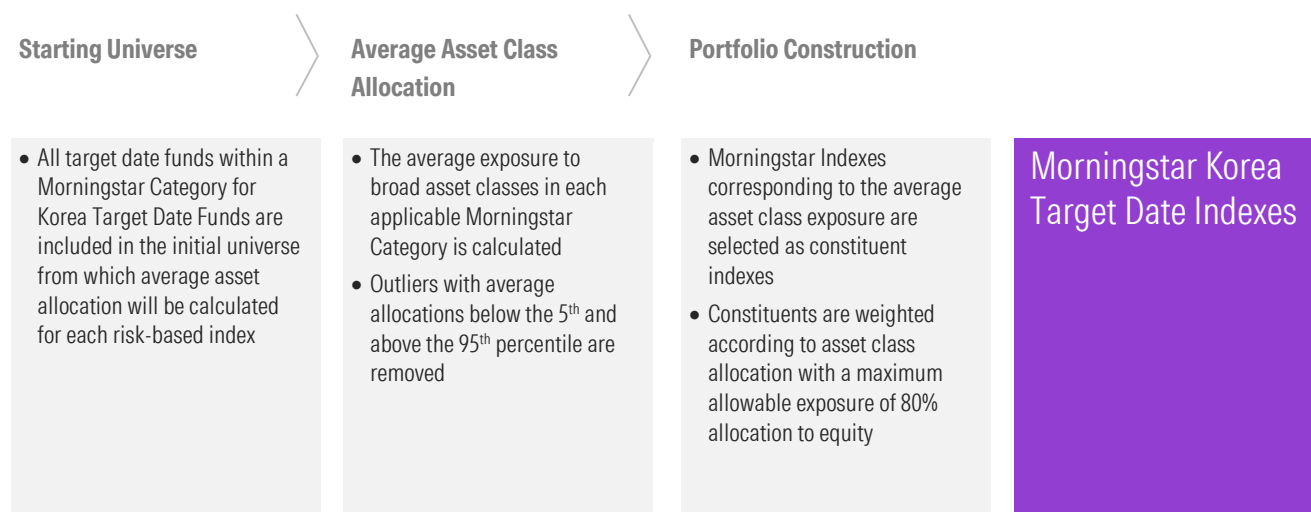
This document is also available in Korean.

Index Inception and Performance Start Date

The index inception date is March 24, 2023, and the performance start date, when the first back-tested index value was calculated, is January 31, 2017 for all of the indexes within the Morningstar Korea Target Date Index Series, except for the Morningstar Korea Target Date 2055 NR KRW index which has a performance start date of June 30, 2020.

Index Construction

Exhibit 1: Construction Process



Average Asset Class Allocation

Starting Universe

All allocation funds within a given Morningstar Category for Korea Target Date Funds are included in the initial universe from which average asset allocation will be calculated for each risk-based index. The Morningstar Categories from which funds are included for each initial fund universe are listed in Appendix 1. Each fund universe is defined as:

- All open end funds are selected within the given Morningstar Category
- Only surveyed fund level asset allocation data submitted to the Morningstar fund database is considered for averaging of fund level asset allocation.
- Only funds with up-to-date submitted portfolio allocation information, including regional and country allocation breakdowns, at every month-end portfolio date are considered.
- To avoid double counting, only one share class of a fund is considered.

Average Asset Class Allocation

The simple average exposure to broad asset classes in each applicable Morningstar Category (fund universe) is calculated to determine the asset allocation for each risk-based Target Allocation index that is aligned to its associated Morningstar Category. The broad asset classes include allocations to equity, fixed income, and cash. To compute the simple average for the applicable Morningstar Category:

- A minimum of 5¹ funds must be present in the applicable Morningstar Category as of the cut-off date as specified in the *Annual Reconstitution* section².
- A fund level historical average asset allocation is computed for each open end fund in the given Morningstar Category.
 - The fund level historical average asset allocation is derived by computing the historical average asset class allocation for each fund over the past 36 months or number of months in the current Morningstar Category, whichever is lower.
- The fund level average historical asset allocation data is then averaged among all funds within each Category to arrive at the Category level asset allocation³.

After the initial Category level asset allocation is determined, additional adjustments to the average asset class allocation are made as follows:

- Funds with average allocations of equity, fixed income, and cash below the 5th and above the 95th percentile of the associated Category level asset allocation are considered outliers and removed from inclusion for calculation of the

¹ Should the number of funds fall below 5, Morningstar Index Methodology Committee will review the underlying fund data and decide on index continuity.

² This criterion has not been applied to generate the back test results due to limited number of underlying funds historically.

³ For Korea country allocation, exposure data is used at the category level. The underlying data prior to January 31, 2019, for Korea country allocation has been backfilled in history for all the indexes within Morningstar Korea Target Date Index series except Morningstar Korea Target Date 2055 NR KRW Index.

asset allocation. The outliers are removed only when the number of underlying Funds under the associated Category is greater than 10.

- A simple average asset allocation to equity, fixed income, and cash is then calculated across all remaining eligible funds for each respective Category as follows:
 - The equity and fixed income asset classes are further broken down into sub-asset classes that are widely accepted in the local market and are used by a majority of fund managers within the given Morningstar Category. A sub-asset class is represented as part of the asset class allocation 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 (if approved by the Morningstar Index Methodology Committee as specified in the Methodology Review section)
 - Weights of the sub-asset classes are rounded to the nearest 50 basis points.
 - Weight toward other asset classes, which include but are not limited to listed and unlisted real estate, commodities, and private equity are rescaled proportionally and allocated among equity, fixed income, and cash.

Finally, each Morningstar Korea Target Date Index is subject to a maximum level of 80% allocation to equity. Therefore, if an index's average equity allocation weight exceeds 80% at the time of reconstitution, then the equity portion is reduced to 80% and the weights of the underlying sub-asset classes, are rescaled proportionally to determine the final asset class allocation before selecting index constituents.

Portfolio Construction

Morningstar Indexes corresponding to the average asset class exposure are selected as constituent indexes.

Index Weighting

Index constituents are weighted according to the Average Asset Class Allocation.

Index Maintenance and Calculation

Scheduled Maintenance

Annual Reconstitution

The index is reconstituted annually and implemented after the close of business on the last business day of June and is effective the following business day. At the annual reconstitution, the average asset allocation of each Target Date Index is recalculated, and the portfolio construction defining the constituent index membership and weights are reset according to the average asset allocation. The Morningstar Category data used for the annual reconstitution is as of the last calendar day of April (cut-off date).

Monthly Rebalance

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. At each monthly rebalance, the weights are reset to the weights determined at last annual reconstitution.

Index files are published according to the Global calendar schedule. For more information, please refer to the [Morningstar Indexes Holiday Calendar](#).

Index Calculation and Price Data

Price data is the end-of-day index level of constituents calculated by Morningstar for index level calculation. The constituent indexes are listed in Appendix 2.

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 [Morningstar Index Methodology Change Policy](#).

In the event of a review of the underlying constituent indexes to the Morningstar Korea Target Date Indexes, the methodology will be placed under review as well. The final decision on whether to represent a new sub-asset class, whose weight is in excess of 150 basis points, as detailed in the Average Asset Class Allocation section with a distinct index, lies with the Morningstar Index Methodology Committee.

Morningstar Indexes 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. These circumstances are generally not within Morningstar's control and may include significant changes to the underlying market structure, inadequate access to necessary data, geopolitical 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 calculations, corrections are applied prospectively.

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 two 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](#).

Exceptions

While Morningstar will seek to apply the methodology as described within this document, 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 Morningstar Index Methodology Committee, and in all instances, the application of a nonstandard process will be reported to the Morningstar Index Oversight Committee.

Appendixes

Appendix 1: Details of Morningstar Categories

Select Morningstar Categories for Korea Target Date Funds have been used as the basis for each Morningstar Korea Target Date Index as is listed below. The definition of each Morningstar Category is made public and reviewed semi-annually.

Region	Morningstar Category Name	Morningstar Target Date Index
Korea	Korea Target Date Retirement	Morningstar Korea Target Date Retirement NR KRW Index
	Korea Target Date 2025	Morningstar Korea Target Date 2025 NR KRW Index
	Korea Target Date 2030	Morningstar Korea Target Date 2025 NR KRW Index
	Korea Target Date 2035	Morningstar Korea Target Date 2025 NR KRW Index
	Korea Target Date 2040	Morningstar Korea Target Date 2025 NR KRW Index
	Korea Target Date 2045	Morningstar Korea Target Date 2025 NR KRW Index
	Korea Target Date 2050	Morningstar Korea Target Date 2025 NR KRW Index
	Korea Target Date 2055	Morningstar Korea Target Date 2025 NR KRW Index

Appendix 2: Constituent Indexes

The constituent indexes of the Morningstar Korea Target Date Indexes are listed below and are subject to their own rules, which can be found on the Morningstar Indexes [website](#):

Indexes	Asset Class	Constituent Morningstar Indexes
Korea Target Date Indexes	Domestic equity	Morningstar Korea GR KRW Index
	US equity	Morningstar US Market NR KRW Index
	Developed markets ex-US equity	Morningstar Developed Markets ex-US NR KRW Index
	Emerging markets ex-Korea equity	Morningstar Emerging Market ex-KR NR KRW Index
	Domestic fixed income	Morningstar Korea Treasury Bond GR KRW Index
	International fixed income (hedged)	Morningstar Global Core Bond GR Hedged KRW Index
	Cash	Morningstar Korea 1-6 Month Treasury Bond GR KRW Index

Appendix 3: Modifications to the Rulebook

Section	Description of Change	Update Date
Entire rulebook	Minor formatting changes and Computational and Reporting Precision Section removed	May 2025

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 Indexes 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.

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