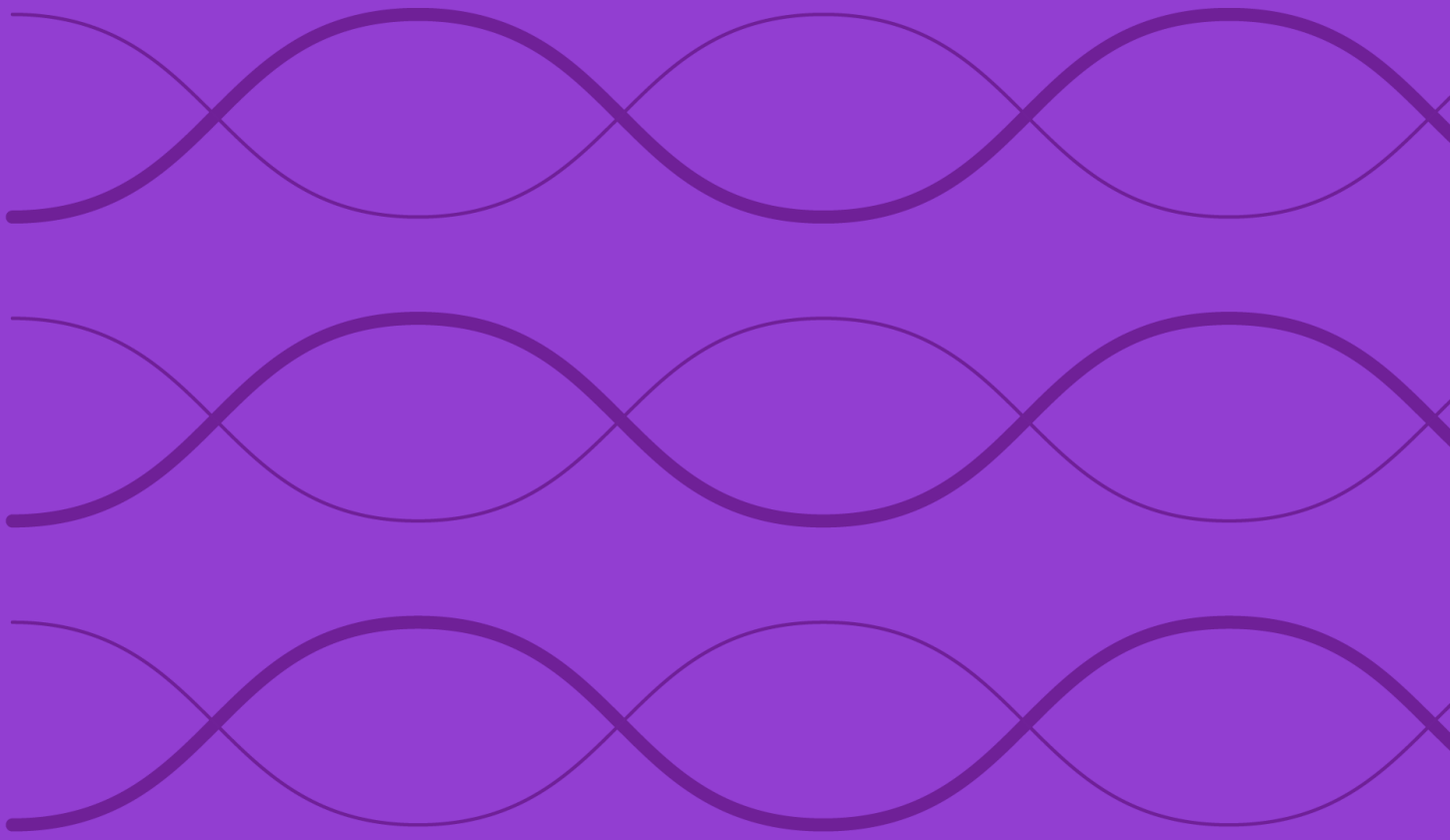
MORNINGSTAR Indexes

Construction Rules for the Morningstar® Target Allocation Indexes™



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MORNINGSTAR®

Overview

The Morningstar Target Allocation Indexes are a market-based tool designed for creating and benchmarking multi-asset investment portfolios according to region-specific asset class preferences and risk tolerances. 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 Allocation Funds.

The indexes do not incorporate Environmental, Social, or Governance (ESG) criteria.

The following index series are covered in this rulebook:

- Morningstar® US Target Allocation Indexes℠
- Morningstar® Canada Target Allocation Indexes™
- Morningstar® UK Target Allocation Indexes™
- Morningstar® Euro Target Allocation Indexes™
- Morningstar® EAA USD Target Allocation Indexes™

The indexes within each regional listed above are listed in Appendix 1.

Index rules for other regions in the Morningstar Target Allocation series are available in separate region-specific documents.

Index Inception and Performance Start Date

The index inception date is June 30, 2020, and the performance start date, when the first back-tested index value was calculated, is June 30, 2000, for all of the indexes in the Morningstar Target Allocation Index series listed above.

Index Construction

Methodology Summary

Starting Universe	Average Asset Class Allocation	Portfolio Construction	
• All open-end funds are selected from the Morningstar Fund Category for each region in the initial universe from which average asset allocation will be calculated for each risk-based index.	• The average exposure to broad asset classes in each applicable Morningstar Category is calculated. • Funds with average allocations below the 5th and above the 95th percentile are removed.	• Morningstar Indexes corresponding to the average asset class exposure are selected as constituent indexes. • Constituents are weighted according to asset class allocation.	Morningstar® Target Allocation Indexes™

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Average Asset Class Allocation

Starting Universe

Index constituents of the Target Allocation Index family are based on commonly used, nonoverlapping asset classes in each eligible fund universe for a Morningstar Allocation Fund Category. 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 funds with up-to-date submitted portfolio allocation information, including regional and country allocation breakdowns, at every month-end portfolio date are 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 20 funds must be present in the applicable Morningstar Category as of the cut-off date as specified in the Annual Reconstitution section.
- 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 allocation.

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 asset allocation.
- 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:

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        - 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 Target Allocation Index has a designated level of equity. Therefore, equity allocation weights are recentered to the midpoint of equity range for each category, as specified in Appendix 1. Weights of the other two broad asset classes, and 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 Allocation 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.

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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, eligibility requirements, 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 Target Allocation 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 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

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 methodology 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 Morningstar Indexes Methodology Committee, and in all instances, the exception will be reported to the Morningstar Indexes Oversight Committee.

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Appendixes

Appendix 1: Details of Morningstar Categories

Each Morningstar Category considered in the Morningstar Target Allocation Index series has a defined range of equity or equitylike exposure, which is listed below. The definition of each Morningstar Category is made public and reviewed semi annually.

Region	Morningstar Category Name	Equity or Equitylike Range	Midpoint
United States	US Conservative Target Allocation	15% - 30%	22.5%
	US Moderately Conservative Target Allocation	30% - 50%	40.0%
	US Moderate Target Allocation	50% - 70%	60.0%
	US Moderately Aggressive Target Allocation	70% - 85%	77.5%
	US Aggressive Target Allocation	85%+	92.5%
Canada	Canada Fixed Income Target Allocation	5% - 40%	22.5%
	Canada Neutral Target Allocation	40% - 60%	50.0%
	Canada Equity Target Allocation	60% - 90%	75.0%
	Canada Fixed Income Global Target Allocation	5% - 40%	22.5%
	Canada Neutral Global Target Allocation	40% - 60%	50.0%
	Canada Equity Global Target Allocation	60% - 90%	75.0%
United Kingdom	UK Cautious Target Allocation	0% - 20%	10.0%
	UK Moderately Cautious Target Allocation	20% - 40%	30.0%
	UK Moderate Target Allocation	40% - 60%	50.0%
	UK Moderately Adventurous Target Allocation	60% - 80%	70.0%
	UK Adventurous Target Allocation	80% - 100%	90.0%
Europe	Euro Cautious Target Allocation	0% - 35%	17.5%
	Euro Moderate Target Allocation	35% - 65%	50.0%
	Euro Aggressive Target Allocation	65% - 100%	82.5%
	Euro Cautious Global Target Allocation	0% - 35%	17.5%
	Euro Moderate Global Target Allocation	35% - 65%	50.0%
	Euro Aggressive Global Target Allocation	65% - 100%	82.5%
EAA	EAA USD Cautious Target Allocation	0% - 35%	17.5%
	EAA USD Moderate Target Allocation	35% - 65%	50.0%
	EAA USD Aggressive Target Allocation	65% - 100%	82.5%

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Appendix 2: Constituent Indexes

The constituent indexes of the Morningstar Target Allocation Indexes are listed below and are subject to their own rules, which can be found on the Morningstar Indexes website.

Region	Asset Class	Constituent Morningstar Indexes
US	Domestic equity	Morningstar US Market TR USD
	International equity	Morningstar Developed Markets ex-US NR USD
	Emerging markets equity	Morningstar Emerging Markets NR USD
	Domestic investment grade fixed income	Morningstar US Core Bond TR USD
	Domestic high yield fixed income	Morningstar US High-Yield Bond TR USD
	International fixed income (hedged)	Morningstar Global ex-US Core Bond GR Hedged USD
	Cash	Morningstar US Dollar 1-Month Cash TR USD
Canada	Domestic equity	Morningstar Canada GR CAD
	US equity	Morningstar US Market NR CAD
	International ex-North America equity	Morningstar Developed Markets ex-North America NR CAD
	Emerging markets equity	Morningstar Emerging Markets NR CAD
	Domestic fixed income	Morningstar Canada Core Bond GR CAD
	International investment grade fixed income (hedged)	Morningstar Global ex-Canada Core Bond GR Hedged CAD
	US high yield fixed income (hedged)	Morningstar US High Yield GR Hedged CAD
	Cash	Morningstar Canadian Dollar 1-Month Cash GR CAD
UK	Domestic equity	Morningstar UK GR GBP
	Europe ex-UK equity	Morningstar Developed Markets Europe ex-UK NR GBP
	International ex-Europe equity	Morningstar Developed Markets ex-Europe NR GBP
	Emerging-markets equity	Morningstar Emerging Markets NR EUR
	Domestic fixed income	Morningstar UK Core Bond GR GBP
	International fixed income (hedged)	Morningstar Global ex-UK Core Bond GR Hedged GBP
	Cash	Morningstar Pound Sterling Overnight Cash GR GBP
Europe	Regional equity	Morningstar Developed Markets Europe GR EUR
	International ex-Europe equity	Morningstar Developed Markets ex-Europe NR EUR
	Emerging-markets equity	Morningstar Emerging Markets NR EUR
	Regional fixed income	Morningstar Eurozone Core Bond GR EUR
	International ex-Europe fixed income (hedged)	Morningstar Global ex-Eurozone Core Bond GR Hedged EUR
	Cash	Morningstar Euro 1-Month Cash GR EUR
EAA USD	US equity	Morningstar US Market TR USD
	International equity	Morningstar Developed Markets ex-US NR USD
	Emerging-markets equity	Morningstar Emerging Markets NR USD
	US fixed income	Morningstar US Core Bond TR USD

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International fixed income (hedged)	Morningstar Global ex-US Core Bond GR Hedged USD
Cash	Morningstar US Dollar 1-Month Cash TR USD

Appendix 3: Modifications to the Rulebook

Section	Description of Change	Update Date
Appendix 2	• Updated to include high-yield bond asset class in US Target Allocation Indexes	July 3, 2023
Rulebook version	• Transitioned August 2022 rulebook version to updated brand template	July 3, 2023
Exceptions and Appendix 1	• Corrected equity range for EAA USD Target Allocation Indexes • Added exceptions section	December 12, 2023
Appendix 2	• Updated to include high-yield bond asset class in Canada Target Allocation Indexes, effective June 28, 2024	May 10, 2024

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.

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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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