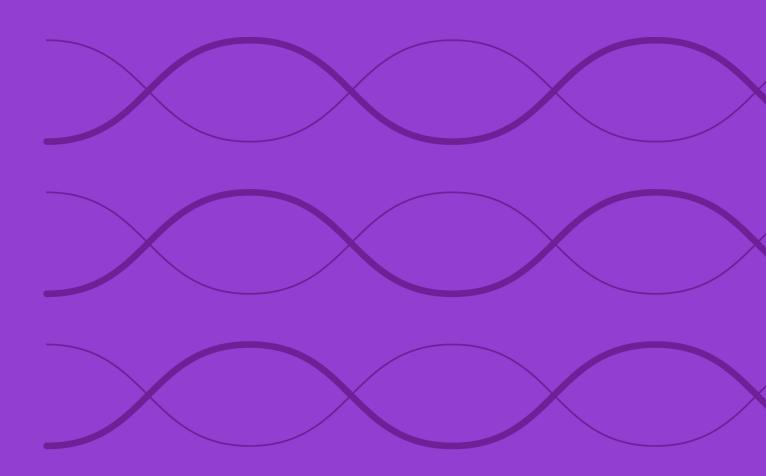


# Construction Rules for the Morningstar New Zealand Target Allocation Plus Indexes



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#### **Overview**

The Morningstar New Zealand Target Allocation Plus Indexes serve as market-based tools that facilitate the creation and benchmarking of multi-asset investment portfolios. 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. In the Morningstar New Zealand Target Allocation Plus series, international equity exposure is hedged by a static 50% hedge ratio.

The Morningstar New Zealand Target Allocation Plus Index series is composed of the following indexes:

- Morningstar New Zealand Aggressive Target Allocation Plus Index
- Morningstar New Zealand Growth Target Allocation Plus Index
- Morningstar New Zealand Balanced Target Allocation Plus Index
- Morningstar New Zealand Moderate Target Allocation Plus Index
- Morningstar New Zealand Conservative Target Allocation Plus Index

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

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

The index inception date is June 30, 2023. The performance start date, when the first back-tested index value was calculated, is June 30, 2005, for all indexes within the Morningstar New Zealand Target Allocation Plus Index series.

#### **Index Construction**

#### **Methodology Summary**

#### **Starting Universe**

 All open-end funds within a Morningstar Category for New Zealand Allocation Funds are included in the initial universe from which average asset allocation will be calculated for each risk-based index.

# Average Asset Class Allocation

- The average exposure to broad asset classes in each applicable Morningstar Category is calculated.
- Outliers with average allocations below the 5<sup>th</sup> and above the 95<sup>th</sup> percentile are removed.

# **Portfolio Construction**

- Morningstar Indexes corresponding to the average asset class exposure are selected as constituent indexes.
- International equity exposure is hedged with a static hedge ratio of 50%.
- Constituents are weighted according to asset class allocation.

Morningstar New Zealand Target Allocation Plus Indexes



# **Average Asset Class Allocation**

## Starting Universe

Index constituents of the New Zealand Target Allocation Plus 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 from the Morningstar Multisector Fund Category universe in New Zealand. Each
  Target Allocation category index includes funds in corresponding PIE as well as non-PIE in Multisector categories and
  Insurance Multisector categories. Funds in the separate account subcategory are excluded.
- Surveyed fund holdings in the Morningstar fund database are considered for averaging of fund-level asset allocation.

### 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, property, fixed income, and cash. To compute the simple average for the applicable Morningstar Category:

- 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 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:

- 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:
  - o A sub-asset 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.
  - Weights of the sub-asset classes are rounded to the nearest 50 basis points.
  - The weight of other asset classes is rescaled proportionally among the rest to sum up to 100%. Asset classes classified as others are, but not restricted to, commodities, private equity, and so on.
  - o International equity allocation for New Zealand Multisector categories is hedged based on a static hedge ratio of 50%. As a result, the weight from international exposure is split equally into unhedged and hedged international exposure. To ensure 50% hedging, the hedge split is calculated after the sub-asset classes are decided and rounded off to the nearest 50 basis points. Finally, each Morningstar New Zealand Target Allocation Plus Index has a designated level of equity and property allocation. Therefore, equity and



property 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 the last annual reconstitution.

Index files are published according to the global calendar schedule. For more information, please refer to the <u>Morningstar Indexes Holiday Calendar</u>.

#### **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 <u>Appendix 2</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 Morningstar Index Methodology Change Policy.

In the event of a review of the underlying constituent indexes to the Morningstar New Zealand Target Allocation Plus 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 more than 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 Decommissioning Policy.

#### **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**

Each Morningstar Category considered in the Morningstar New Zealand Target Allocation Plus Index Series has a defined range of equity and property exposure, which is listed below. The definition of each Morningstar Category is made public and reviewed semi-annually.



Region	Morningstar Category Name	<b>Equity or Equity-like Range</b>	Midpoint
New Zealand	Multisector Aggressive	80%-100%	90%
	Multisector Aggressive Non-PIE		
	Insurance Multisector Aggressive		
	Insurance Multisector Aggressive Non-PIE		
	Multisector Growth	60%-80%	70%
	Multisector Growth Non-PIE		
	Insurance Multisector Growth		
	Insurance Multisector Growth Non-PIE		
	Multisector Balanced	40%-60%	50%
	Multisector Balanced Non-PIE		
	Insurance Multisector Balanced		
	Insurance Multisector Balanced Non-PIE		
	Multisector Moderate	20%-40%	30%
	Multisector Moderate Non-PIE		
	Insurance Multisector Moderate		
	Insurance Multisector Moderate Non-PIE		
	Multisector Conservative	0%-20%	10%
	Multisector Conservative Non-PIE		
	Insurance Multisector Conservative		
	Insurance Multisector Conservative Non-PIE		

# **Appendix 2: Constituent Indexes**

The constituent indexes of the Morningstar New Zealand Target Allocation Plus Indexes are listed below and are subject to their own rules, which can be found on the <u>Morningstar Indexes website</u>:

Indexes	Asset Class	Constituent Morningstar Indexes		
New Zealand Target Allocatio Plus Indexes	Domestic equity	Morningstar Australia New Zealand 50/50 GR NZD Index		
	<sup>on</sup> International equity	Morningstar Global ex-Australia NR NZD Index		
	International equity (hedged)	Morningstar Global ex-Australia NR Hedged NZD Index		
	New Zealand Real Estate	Morningstar New Zealand Real Estate GR NZD Index		
	International Property (hedged)	Morningstar Global ex-Australia REIT NR Hedged NZD Index		
	New Zealand Fixed Income	Morningstar New Zealand Treasury Bond GR NZD Index		
	International Fixed Income (hedged)	Morningstar Global Core Bond GR Hedged NZD Index		
	Cash	Morningstar New Zealand Dollar Overnight Cash GR NZD Index		



#### **Appendix 3: Modifications to the Rulebook**

Section	Description of Change	Update Date
Entire Rulebook	Minor formatting changes	May 2025
	Added Exceptions Section	
	Removed Computational and Reporting Precision Section	

# **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.

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