MORNINGSTAR Indexes

Construction Rules for the Morningstar® Developed Markets ex-Japan Human Capital Index

August 2026

Overview

The Morningstar® Developed Markets ex-Japan Human Capital Index is designed to enhance exposure to companies with strong human capital management practices while minimizing the tracking error to the parent benchmark. The index reduces exposure to companies involved in high controversies or those that are not compliant with the United Nations Global Compact (UNGC).

The index is constructed using a constrained optimization framework that aims to minimize tracking error, improve diversification and higher human capital management score relative to the parent benchmark.

To forecast tracking error of the index portfolios, Morningstar uses Morningstar Global Industry Standard Risk Model. For more information on the risk model, refer to Morningstar Risk Model Methodology.

These indexes incorporate Controversies, UNGC and Human Capital Management data, provided by Sustainalytics, a Morningstar company that provides sustainability research

Index Inception and Performance Start Date

The index inception date is July 13, 2026, and the performance start date, when the first back-tested index value was calculated, is June 19, 2020.

Index Construction

Methodology Summary

Starting Universe	Eligibility	Portfolio Construction	
• Morningstar Developed Markets ex Japan Target Market Exposure Index ○ Represents the top 85% of the investable market by market cap	• Securities must be covered by the Morningstar Risk Model. • One primary share class would be included representing the full company weight.	• Weight companies based on the objective and constraints through an optimization process	Morningstar® Developed Markets ex-Japan Human Capital Index

Starting Universe

At each reconstitution, constituents of the Morningstar Developed Markets ex-Japan Human Capital Index are derived from the Morningstar Developed Markets ex-Japan Target Market Exposure (benchmark). For more details on benchmark construction, refer to the construction rules for the Morningstar Global Target Market Exposure Indexes.

Eligibility

To be eligible for index inclusion, all constituents must meet the following criteria:

- Must be covered by the Morningstar Global Standard Risk Model (USD Currency).
- The secondary share classes are excluded with the primary share classes representing the full company weight. In this document, we refer to these primary share classes as "security" going forward.

Portfolio Construction

Optimization Parameters

At every reconstitution, the Morningstar® Developed Markets ex-Japan Human Capital Index portfolios are created using an optimizer to minimize the objective and meet the constraints as follows:

- Ex-ante tracking error of the portfolio is minimized w.r.t benchmark.
- No short positions are allowed.

- Weighted Average Human Capital Management score of the portfolio is at least 10% higher relative to the Weighted Average Human Management Capital Score of parent index.
- The maximum weight of high controversy (level 4, 5) securities or UNGC non-compliance is restricted to 90% of the benchmark weight. Securities with null controversy or UNGC data are additionally down weighted to 90% of the benchmark weight.
- The maximum weight of securities is restricted to min (benchmark weight + 2%, benchmark weight * 3)
- The turnover constraint is relaxed up to 30% in increments of 1% starting from 5%.
- Sector active weight constraints: To limit deviation from corresponding weights in the parent benchmark, the sector weights in the index are maintained within a lower and upper bound, calculated as:
  - Lower bound = Weight in the benchmark – 2.5%
  - Upper bound = Weight in the benchmark + 2.5%
- Region active weight constraints: To limit deviation from corresponding weights in the parent benchmark, the region weights in the index are maintained within a lower and upper bound, calculated as:
  - Lower bound = Weight in the benchmark – 1.5%
  - Upper bound = Weight in the benchmark + 1.5%
- Country active weight constraints: To limit deviation from corresponding weights in the parent benchmark, the country weights in the index are maintained within a lower and upper bound, calculated as:
  - Lower bound = Weight in the benchmark – 1%
  - Upper bound = Weight in the benchmark + 1%

For more details on the optimization construction, please refer to Appendix 3.

The turnover constraint is reset for the June 2026 reconstitution prior to index launch.

Number of Stocks

The number of stocks in the index is variable, subject to the size of the starting universe and the application of eligibility criteria at the time of reconstitution.

Index Weighting

The weights of index constituents are determined through an optimization process subject to the objective function and weight constraints described in the "Optimization Parameters" section above.

Index Maintenance and Calculation

Reconstitution and Rebalancing

The index is reconstituted, where the membership is reset, and rebalanced quarterly on the third Friday of March, June, September, and December. Adjustments are implemented after Friday's market close and reflected the following Monday. The market data used for reconstitution is as of the last trading day of February, May, August, and November.

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

Corporate Actions

The treatment of corporate actions will be as per the alternatively-weighted indexes corporate action methodology. For more details, please refer to the Morningstar Indexes Corporate Actions Methodology.

Index Calculation and Price Data

Details about index calculations and price data can be found in their respective rulebooks: Morningstar Indexes Calculation Methodology and Morningstar Equity Indexes Price Methodology.

Methodology Review and Index Decommissioning 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.

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 decommissioning of the index or benchmark index could disrupt subscriber products that reference this index, all subscribers are encouraged to have robust fallback procedures in the event an index is decommissioned. For more details, refer to the Morningstar Index Decommissioning Policy.

Data Corrections

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

Index calculation data input defects—such as price, dividends, other mandatory corporate actions, or foreign-exchange rates—that do not affect the index shares and if discovered within two trading days are generally corrected, and the index is recalculated regardless of the performance impact.

Where such index calculation data input defects are discovered after two trading days, an index restatement will typically only occur if the impact on performance is material; otherwise, the correction is applied prospectively.

For more details, refer to the Recalculation Guidelines.

Exceptions

While Morningstar will seek to apply the method 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 relevant 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: Glossary

Term	Description
Reconstitution	During each reconstitution, the steps mentioned in the index construction process are performed, resulting in membership reset.
Rebalance	During each rebalancing, the weights are reset and adjusted for updated free-float and shares outstanding data.

Appendix 2: Human Capital Management Score

Human Capital encompasses a company's management of its human resources, from acquiring and retaining top talent, to providing advancement opportunities in a diverse and equal work environment and adopting an inclusionary corporate culture. It also captures a company's management of its labour relations, including upholding freedom of association and non-discrimination practices, alongside adherence to working hours and minimum wage. Effective Human Capital management safeguards companies against legal ramifications stemming from employee rights violations, mitigates financial losses due to demotivation and decreased productivity, and prevents operational disruptions caused by a disengaged workforce.

Exposure to Human Capital risk is driven primarily by a company's labour structure, which is based on its labour and skill intensity, the propensity for work stoppages and level of diversity within the workforce. The management evaluation considers how well a company is mitigating its exposure through suitable policies and programmes and how these efforts are reflected in the actual performance of a company on relevant metrics. The management score is determined by aggregating the weighted individual management and risk event indicator scores. The selection of indicators and their respective weights are determined at subindustry level based on their thematic relevance for a given subindustry and Sustainalytics Research & Methodology experts' assessment of what management is needed for mitigating exposure to Human Capital. The scoring scale is 0-100 with higher being better.

Appendix 3: Optimization Methodology

Ex-Ante Tracking Error

$$TE = (w_p^T - w_b^T)(X^T FX + \lambda D)(w_p - w_b)$$

Where:
w_p = vector of portfolio weights, unknown
w_b = vector of benchmark weights
X = matrix of asset factor exposure
F = factor covariance matrix
D = specific (idiosyncratic, residual) risk block of covariance matrix
$X^T FX$ = systematic (factor-driven) risk block of covariance matrix from the risk model
λ = 1.5, specific risk aversion parameter; λ=1 results in a specific risk-neutral volatility forecast; λ>1 implies greater penalty for asset-specific risk not modelled by systematic risk factor exposures

Any risk model will miss some systematic sources of risk due to bias-variance trade off. The model will therefore underestimate the contribution of specific risk to the risk of the overall portfolio, because it assumes the residual risk is perfectly uncorrelated and diversifiable. $\lambda = 1.5$ was chosen to compensate for the above effects based on empirical testing of ex-post tracking error.

Appendix 4: ESG Screens

ESG Variable	Field Id	Backfill Date*	Missing data Treatment #
Highest Controversy Level	121010112599	-	-
UNGC Compliance Status	231112111799	-	-
Human Capital Management Score	181124152399	2020-11-04	Nulls are assigned 0.

* The missing data prior to the backfill date have been backfilled based on the earliest data available.
# Missing data treatment is applied after the data backfill process is completed.

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 the European Benchmarks Regulation ("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 European BMR, providing independent oversight of all aspects of the governance of benchmark administration as required by the 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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