MSCI WORLD ROBOTICS AI AND CLOUD TECHNOLOGIES SELECT ESG INDEX METHODOLOGY

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1   Introduction

The MSCI World Robotics AI and Cloud Technologies Select ESG Index aims to represent the performance of stocks which are determined to have high exposure to business activities such as Robotics, Artificial Intelligence and Cloud Technology related activities. The index in addition has an ESG screen to exclude stocks with low ESG performance based on MSCI ESG Research metrics. The Index aims to achieve diversification by capping exposure to US listed companies to 75% and weight of individual securities to 5%. Taking into account UCITS III investment limits, MSCI applies constraints on the weights of the index. These constraints are applied in line with the MSCI 10/40 Index Methodology

2   MSCI ESG RESEARCH

The MSCI World Robotics AI and Cloud Technologies Select ESG Index uses company ratings and research provided by MSCI ESG Research. The index uses the following MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies, MSCI Business Involvement Screening Research, and MSCI Climate Change Metrics.

For details on MSCI ESG Research's full suite of ESG products, please refer to: https://www.msci.com/esg-integration

2.1   MSCI ESG RATINGS

MSCI ESG Ratings provides research, analysis and ratings of how well companies manage environmental, social and governance risks and opportunities.

MSCI ESG Ratings provides an overall company ESG rating - a seven-point scale from 'AAA' to 'CCC'. In addition, the product provides scores and percentiles indicating how well a company manages each key issue relative to industry peers.

For more details on MSCI ESG Ratings, please refer to: https://www.msci.com/esg-ratings

3   Index Construction Methodology

The MSCI World Robotics AI and Cloud Technologies Select ESG Index is constructed by selecting stocks from the MSCI World Index (herein "Parent Index") based on rules explained in the following sections.

The Index includes companies which are determined to have high exposure to business activities such as Robotics, Artificial Intelligence, Cybersecurity, Sharing Economy, Social Media, Digital Payments and Cloud Computing.

3.1   THE SET OF RELEVANT WORDS AND PHRASES USED FOR CONSTITUENT SELECTION

MSCI uses a broad set of relevant words and phrases derived from the index objective which are important to describing the product and services that cater to increased adoption & utilization of products and services due to digital technology, robotics, Artificial Intelligence and cloud computing.

3.2   COMPANY LEVEL DATA USED FOR ASSESSING COMPANY EXPOSURE

The following data is used at the company level:

- Business segment information from company annual reports and vendor data sources: business segment names, assigned SIC Codes[1] and related revenue.

- An English language summary description of the company's business activities from public sources.

3.3   INITIAL ELIGIBLE UNIVERSE

All stocks from the Parent Index which satisfy any of the following criteria are selected for the initial eligible universe.

3.3.1   SELECTION OF BUSINESS SEGMENTS

Company identified business segment names are compared against the set of relevant words. Companies from the Parent Index which include at least one relevant word in their business segment names are included in the initial eligible universe.

3.3.2   SELECTION ON COMPANY SUMMARY DESCRIPTION

The company's summary business description is compared against the set of relevant words. Companies from the Parent Index which include at least two distinct relevant words in their summary description are included in the initial eligible universe.

3.4   SELECTED BUSINESS SEGMENTS

Selected business segments are business segments which include at least one relevant word. These are the business segments based on the criteria identified in section 3.3.1.

3.5   SIC CODE SELECTION

Company business segments are mapped to a SIC code. The SIC Code selection is a set of all the SIC codes which satisfy the following criteria:

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[1] Company's business segments are assigned with a specific SIC (Standard Industry Classification) description for products and services, used by official agencies within the US government. These descriptions provide additional information on the nature of the segment.

- The SIC code is mapped to at least one of the 'selected business segments' as described in section 3.4.
- The SIC code is assigned to the business segments of at least two different stocks from the eligible universe. SIC Code 9999 is not selected.

3.6   CALCULATING THE STOCK RELEVANCE SCORE

A relevance score for all stocks in the eligible universe is calculated. The relevance score for a company is calculated by taking into account the portion of company's revenue which is derived from the selected business segments (as described in section 3.4) and business segments mapped to any SIC Code selected in the SIC Code selection step (as described in section 3.5).

3.6.1   RELEVANCE SCORE DISCOUNT FACTOR

A stock level relevance score discount factor is calculated by normalizing the cumulative frequency of relevant words in the company's summary description relative to all companies selected on summary business descriptions as described in section 3.3.2.

At a company's business segment level, the revenue discount factor is applied on revenue from the SIC Code selected in section 3.5. The revenue discount factor is 1 for revenue derived from the selected business segment.

3.6.2   RELEVANCE SCORE

Relevance score for stocks in the eligible universe is calculated as:

Relevance Score = [revenue from the selected business segments (as described in section 2.4) + relevance score discount factor * revenue from the business segments mapped to selected SIC Code (as described in section 2.5)] / Total company revenue.

3.6.3   ELIGIBLE UNIVERSE

Stocks from the initial eligible universe with a relevance score of 25% or more are included in the eligible universe.

3.7 ADDITIONAL SCREENS

3.7.1 LIQUIDITY SCREEN

The securities from the eligible universe above are subsequently screened for 6-month ADTV to be greater than USD 5 Million.

ADTV is defined as Average Daily Traded Volume and is calculated as:

$$ADTV_{6M} = \frac{ATV_{6M}{}^2}{252}$$

3.7.2 ESG ELIGIBILITY CRITERIA

The companies from eligible universe above with an MSCI ESG Rating of 'BB' or above are included in the MSCI World Robotics AI and Cloud Technologies Select ESG Index.

3.8 WEIGHTING SCHEME

The securities remaining after the additional screening from the in section 3.7.2 are included in the index. These securities are weighted by their market cap. The weight of each selected security is capped at 5% at initial construction and at every Index Review. Additionally, the exposure to securities listed in USA is capped at 75%. At the final step, the exposure of the resulting set of constituents is capped based on the MSCI 10/40 Indexes methodology[3].

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[2] For details on ATV calculation methodology, please refer to following documents:
https://www.msci.com/eqb/methodology/meth_docs/MSCI_IndexCalcMethodology_Apr2019.pdf

https://www.msci.com/documents/10199/7366222/MSCI_GIMIMethodology_Jun2019.pdf/5dc8116b-6d0f-bdd2-7f51-1882b4470059

[3] MSCI Index Calculation Methodology at https://www.msci.com/index-methodology

4   Maintenance of the Index

4.1   SEMI-ANNUAL INDEX REVIEWS

The MSCI World Robotics AI and Cloud Technologies Select ESG Index is reviewed on a semi-annual basis using the steps described in section 3, coinciding with the May and November Semi-Annual Index Reviews.

The pro forma index is in general announced nine business days before the first effective date.

4.2   ONGOING EVENT RELATED CHANGES

The following section briefly describes the treatment of common corporate events within the MSCI World Robotics AI and Cloud Technologies Select ESG Index.

No new securities will be added (except where noted below) to the Index between Index Reviews. For cases where additions are noted below, securities will be added to the Index only if added to the Parent Index. Parent Index deletions will be reflected simultaneously.

EVENT TYPE	EVENT DETAILS
New additions to the Parent Index	A new security added to the parent index (such as IPO and other early inclusions) will not be added to the index.
Spin-Offs	All securities created as a result of the spin-off of an existing Index constituent will be added to the Index at the time of event implementation. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.
Merger/Acquisition	For Mergers and Acquisitions, the acquirer's post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the Index. If an existing Index constituent is acquired by a non-Index constituent, the existing constituent will be deleted from the Index and the acquiring non-constituent will not be added to the Index.
Changes in Security Characteristics	A security will continue to be an Index constituent if there are changes in characteristics (country, sector, size segment, etc.) Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.

Further detail and illustration regarding specific treatment of corporate events relevant to this Index can be found in the MSCI Corporate Events Methodology book under the sections detailing the treatment of events in Capped Weighted and Non-Market Capitalization Weighted indexes.

The MSCI Corporate Events methodology book is available at:
https://www.msci.com/index-methodology

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* = toll free

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