

# MSCI WORLD THEMATIC SENTIMENT CHOICE INDEX METHODOLOGY

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# 1 Introduction

The MSCI World Thematic Sentiment Choice Index (the 'Index') aims to represent the performance of the four highest ranked MSCI Thematic Indexes, selected monthly from a set of twenty-two MSCI Thematic Indexes, based on a theme specific media sentiment (MediaStats Megatrend Scores) score calculated for each of the respective themes by MKT MediaStats¹.

<sup>&</sup>lt;sup>1</sup> MKT MediaStats is a big-data information technology company specializing in financial markets which generates theme level Megatrend Scores on a monthly basis <a href="https://www.mktmediastats.com/">https://www.mktmediastats.com/</a>. Please refer to Appendix 1 for details.



### 2 Index Construction

The Index is constructed from MSCI ACWI IMI Index (the 'Parent Index'). The following steps are applied at initial construction and at each Index Review (as described in Section 3) of the Index:

- Determine the Applicable Universe
- Eligible Universe Screening
- Security Weighting

#### 2.1 APPLICABLE UNIVERSE

The Applicable Universe for the Index is constructed from the following twenty-two MSCI Thematic Indexes<sup>2</sup> (the 'Component Indexes'):

- 1. MSCI ACWI IMI Ageing Society Opportunities Index
- 2. MSCI ACWI IMI Autonomous Technology & Industrial Innovation Index
- 3. MSCI ACWI IMI Digital Health Index
- 4. MSCI ACWI IMI Efficient Energy Index
- 5. MSCI ACWI IMI Fintech Innovation Index
- 6. MSCI ACWI IMI Future Education Index
- 7. MSCI ACWI IMI Future Mobility Index
- 8. MSCI ACWI IMI Genomic Innovation Index
- 9. MSCI ACWI IMI Millennials Index
- 10. MSCI ACWI IMI Next Generation Internet Innovation Index
- 11. MSCI ACWI IMI Robotics Index
- 12. MSCLACWLIMI Smart Cities Index
- 13. MSCI ACWI IMI Blockchain Economy Index
- 14. MSCI ACWI IMI Clean Energy Infrastructure Index
- 15. MSCI ACWI IMI Cybersecurity Index

<sup>&</sup>lt;sup>2</sup> Prior to March 2017, due to lack of relevant data, the first twelve MSCI Thematic Indexes were used. Please refer to <a href="https://www.msci.com/index-methodology">https://www.msci.com/index-methodology</a> for the methodology of the Component Indexes.



- 16. MSCI ACWI IMI Food Revolution Index
- 17. MSCI ACWI IMI Natural Resources Stewardship Index
- 18. MSCI ACWI IMI Plastics Transition Index
- 19. MSCI ACWI IMI Renewables and Energy Efficiency Index
- 20. MSCI ACWI IMI Sharing Economy Index
- 21. MSCI ACWI IMI Space Exploration Index
- 22. MSCI ACWI IMI Sustainable Water Transition Index

At each Monthly Index Review and at initial construction, the Component Indexes are ranked in the descending order of the MediaStats Megatrend Scores for each corresponding theme. The top four Component Indexes are selected and combined with the following weights based on their rankings:

- Rank 1 25%
- Rank 2 25%
- Rank 3 25%
- Rank 4 25%

The weight of each security after combining the four selected Component Indexes can be calculated as follows:

$$W_{Sec_i}^{CI} = \sum_{j} W_{C_j} W_{Sec_i}^{C_j}$$

Where:

 $W_{Sec_i}^{CI}$  is the weight of security  $Sec_i$  in the combined index CI

 $\mathit{W}_{\mathit{C}_{j}}$  is the target weight of the Component Index  $\mathit{C}_{j}$ 

 $W_{Sec_i}^{C_j}$  is the weight of security  $Sec_i$  in the Component Index  $C_j$ 

 $C_i$  is the selected Component Index

#### 2.2 ELIGIBLE UNIVERSE SCREENING

#### 2.2.1 SECURITY SELECTION

From the Applicable Universe the securities from the MSCI World index are selected for inclusion in the Index.



#### 2.2.2 LIQUIDITY CRITERIA

Securities with 3-month ADTV (Average Daily Traded Value) greater than or equal to USD 10 Million are eligible for inclusion in the Index.

ADTV is calculated as:

$$ADTV_{3M} = \frac{ATV_{3M}^3}{252}$$

Where  $ATV_{3M}$  is annualized 3-month Average Traded Value of the security.

To avoid multiple securities of the same company in the final Index, only the most liquid security for each issuer per its 3-month ADTV, is eligible for inclusion in the Index.

#### 2.3 SECURITY WEIGHTING

At each Index Review and at initial construction, the securities selected for inclusion in the Index are assigned the weights  $W^{CI}_{Sec_i}$  from the Section 2.1 and are normalized to sum to 100%.

Additionally, constituent weights are capped to mitigate concentration risk in the Index. The individual security weights in the Index are capped at 5%.

Subsequently, the minimum values are selected as adjusted weights as follows:

$$W_i^{adj} = Min(W_i, 0.25 \times a)$$

where:

 $W_i$  is the weight after applying the capping at 5%

$$a = \frac{ADTV_i^{1M}}{USD \ 1 \ bn}$$

where:

 $\mathit{ADTV}_i^{\mathit{1M}}$  is the 1-month Average Daily Traded Value of the security

Finally, the weights  $W_i^{adj}$  are normalized to sum to 100%.

 $MSCI\ Global\ Investable\ Market\ Indexes\ Methodology\ at \underline{https://www.msci.com/index-methodology}$ 

<sup>&</sup>lt;sup>3</sup> MSCI Index Calculation Methodology at <a href="https://www.msci.com/index-methodology">https://www.msci.com/index-methodology</a>



# 3 Maintenance of the Index

#### 3.1 MONTHLY INDEX REVIEWS

The Index is reviewed on a monthly basis and rebalanced at the beginning of each month. The pro forma Index is announced nine business days before the effective date.

#### 3.2 ONGOING EVENT RELATED CHANGES

The following section briefly describes the treatment of common corporate events within the Index. Changes in index market capitalization that occur because of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

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 DETAILS
A new security added to the Parent Index (such as IPO and other early inclusions) will not be added to the index.
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.
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: <a href="https://www.msci.com/index-methodology">https://www.msci.com/index-methodology</a>



# **Appendix 1: MediaStats Megatrend Scores**

The MediaStats Megatrend Score is calculated by MKT MediaStats for each thematic Index at the end of every calendar month.

For each thematic index, MKT MediaStats uses business descriptions from each of the indexes methodology document to capture time series and cross-sectional shifts of investor attention and sentiment towards megatrends by analyzing media articles sourced from approximately 100 thousand individual sources.

For further details on the calculation methodology, please refer to <a href="https://www.mktmediastats.com/post/dynamic-megatrend-rotation">https://www.mktmediastats.com/post/dynamic-megatrend-rotation</a>.



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<sup>\* =</sup> toll free

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