

MSCI USA ESG UNIVERSAL TOP - BOTTOM 150/50 RETURN SPREAD INDEX METHODOLOGY

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Contents

1	Introduction	4
2	MSCI ESG Research	5
2.1	MSCI ESG Ratings.....	5
2.2	MSCI ESG Controversies.....	5
2.3	MSCI ESG Business Involvement Screening Research	5
3	Constructing the MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index	6
3.1	Applying the MSCI Short and Leveraged Daily Indexes Methodology.....	6
4	Maintaining the MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index	8
4.1	Ongoing Events Related Changes	8
5	Methodology for Component Indexes.....	9
5.1	Constructing the MSCI USA ESG Universal Top 100 5% Issuer Capped Index.....	9
5.1.1	Applicable Universe	9
5.1.2	Eligible Universe.....	9
5.1.3	Security Selection	9
5.1.4	Weighting Scheme.....	10
5.2	Constructing the MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index.....	10
5.2.1	Applicable Universe	10
5.2.2	Eligible Universe.....	10
5.2.3	Security Selection	10
5.2.4	Weighting Scheme.....	11
5.3	Maintaining the MSCI USA ESG Universal Top 100 5% Issuer Capped Index and MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index.....	11
5.3.1	Quarterly Index Reviews	11



5.3.2 Ongoing Event-Related Changes11

1 Introduction

The MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index (“the Index”) aims to represent the performance of a strategy based on the return spread between a long position on constituents of the MSCI USA ESG Universal Top 100 5% Issuer Capped Index and a short position on constituents of the MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index.

This methodology book provides a description of the rules and guidelines followed by MSCI for the construction and maintenance of the Index.

2 MSCI ESG Research

MSCI ESG Research LLC provides in-depth research, ratings and analysis of the environmental, social and governance-related business practices of thousands of companies worldwide. It consists of an integrated suite of tools and products to efficiently manage research, analysis and compliance tasks across the spectrum of ESG factors.

The Index uses research provided by MSCI ESG Research LLC. In particular, the Index uses the following three MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Business Involvement Screening Research and MSCI ESG Controversies data.

For details on MSCI ESG Research's full suite of ESG products, please refer to: http://www.msci.com/products/esg/about_msci_esg_research.html

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/esgratings>.

2.2 MSCI ESG CONTROVERSIES

MSCI ESG Controversies provides assessments of controversies concerning the negative environmental, social and governance impact of company operations, products and services. The evaluation framework used in MSCI ESG Controversies is designed to be consistent with international norms represented by the UN Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact. MSCI ESG Controversies Score falls on a 0-10 scale, with "0" being the most severe controversy.

For more details on MSCI ESG Controversies Score, please refer to: <https://www.msci.com/documents/10199/acbe7c8a-a4e4-49de-9cf8-5e957245b86b>.

2.3 MSCI ESG BUSINESS INVOLVEMENT SCREENING RESEARCH

MSCI ESG Business Involvement Screening Research (BISR) aims to enable institutional investors to manage environmental, social and governance (ESG) standards and restrictions reliably and efficiently.

For more details on MSCI ESG Business Involvement Screening Research, please refer to: http://www.msci.com/resources/factsheets/MSCI_ESG_BISR.pdf

3 Constructing the MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index

The MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index is constructed using the MSCI Short and Leveraged Daily Indexes Methodology.

Additionally, a constant index-level reduction is applied to the overall return calculation designed to represent the average financing cost of replicating the index (as noted in Table 1, in Section 3.1).

3.1 APPLYING THE MSCI SHORT AND LEVERAGED DAILY INDEXES METHODOLOGY

The MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index is designed to represent the performance of a strategy that is long on constituents of the "Long Component Index" and short on constituents of the "Short Component Index".

The component indexes within the MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index are reset on a quarterly basis to the pre-defined weights as detailed in Table 1. The weights of component indexes may drift based on the daily performance differential of the respective component indexes during the quarter.

The Index is computed using a variant of the MSCI Short and Leveraged Daily Indexes Methodology¹ that does not apply stock borrowing costs or the overnight risk-free rates.

The Index returns are calculated daily by subtracting the daily return of the Short Component Index from the daily return of the Long Component Index, as per the applicable weights for each component index on a given day.

Table 1: MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index composition

Reset-weighting Frequency	Long Component Weight	Long Component Index	Long Component Variant	Short Component Weight	Short Component Index	Short Component Variant	Annual Return Adjustment
Quarterly	150%	MSCI USA ESG Universal Top 100 5% Issuer Capped Index	Net Daily Total Return Index	50%	MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index	Net Daily Total Return Index	0.30%

¹MSCI Short and Leveraged Daily Indexes methodology is available at <https://www.msci.com/index-methodology>



Please refer to Section 5 for further details on the component indexes of the MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index.

The adjustment to the return calculation using the Return Adjustment fixed percentage is made on a daily basis using an actual/360 day count convention.

4 Maintaining the MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index

4.1 ONGOING EVENTS RELATED CHANGES

The MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index is derived from the underlying MSCI Indexes. As a result, corporate events are reflected in the Index as they are captured in the underlying MSCI Indexes.

5 Methodology for Component Indexes

The following Component Indexes are used in the construction of the MSCI USA ESG Universal Top - Bottom 150/50 Return Spread Index.

- MSCI USA ESG Universal Top 100 5% Issuer Capped Index
- MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index

5.1 CONSTRUCTING THE MSCI USA ESG UNIVERSAL TOP 100 5% ISSUER CAPPED INDEX

The MSCI USA ESG Universal Top 100 5% Issuer Capped Index is constructed by applying the following steps.

- Applicable Universe
- Eligible Universe
- Security Selection
- Weighting Scheme

5.1.1 APPLICABLE UNIVERSE

The Applicable Universe consists of all constituents of the MSCI USA Index (“the Parent Index”).

5.1.2 ELIGIBLE UNIVERSE

Securities subject to the ESG Red Flag Controversies Screen or Controversial Weapons Screen, as per the MSCI ESG Universal Indexes Methodology², are excluded from the Eligible Universe.

5.1.3 SECURITY SELECTION

The 100 securities with the highest Combined ESG Score, calculated as per Section 3.3 of the MSCI ESG Universal Indexes methodology, are included in the Index. In case two or more securities have same Combined ESG Score, then the security with the higher FIF adjusted market capitalization will be given higher priority.

To reduce index turnover and enhance index stability, a 20% buffer on security selection is applied.

² MSCI ESG Universal Indexes methodology is available at <https://www.msci.com/index-methodology>

5.1.4 WEIGHTING SCHEME

At each Index Review, selected securities are weighted as per the MSCI ESG Universal Indexes Methodology.

These weights are then updated to implement sector neutrality i.e. the weight of each sector in the Index is equated with the weight of that sector in the Parent Index at each rebalancing. This is done by normalizing the weights of the constituents within each sector to reflect the Parent Index sector weights.

After the application of sector neutrality, 5% issuer capping is applied to ensure that none of the issuer weights in the index exceeds 5%.

5.2 CONSTRUCTING THE MSCI USA ESG UNIVERSAL BOTTOM 100 5% ISSUER CAPPED INDEX

The MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index is constructed by applying the following steps.

- Applicable Universe
- Eligible Universe
- Security Selection
- Weighting Scheme

5.2.1 APPLICABLE UNIVERSE

The Applicable Universe consists of all constituents of the MSCI USA Index.

5.2.2 ELIGIBLE UNIVERSE

Securities subject to the ESG Red Flag Controversies Screen or Controversial Weapons Screen, as per the MSCI ESG Universal Indexes Methodology, are not excluded from the Eligible Universe.

5.2.3 SECURITY SELECTION

The 100 securities with the lowest Combined ESG Score, calculated as per Section 3.3 of the MSCI ESG Universal Indexes methodology, are included in the Index. In case two or more securities have the same Combined ESG Score, then the security with the higher FIF adjusted market capitalization will be given higher priority.

To reduce index turnover and enhance index stability, a 20% buffer on security selection is applied.

5.2.4 WEIGHTING SCHEME

At each Index Review, selected securities are weighted as per the MSCI ESG Universal Indexes methodology.

These weights are then updated to implement sector neutrality i.e. the weight of each sector in the Index is equated with the weight of that sector in the Parent Index at each rebalancing. This is done by normalizing the weights of the constituents within each sector to reflect the Parent Index sector weights.

After the application of sector neutrality, 5% issuer capping is applied to ensure that none of the issuer weights in the index exceeds 5%.

5.3 MAINTAINING THE MSCI USA ESG UNIVERSAL TOP 100 5% ISSUER CAPPED INDEX AND MSCI USA ESG UNIVERSAL BOTTOM 100 5% ISSUER CAPPED INDEX

5.3.1 QUARTERLY INDEX REVIEWS

The MSCI USA ESG Universal Top 100 5% Issuer Capped Index and the MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index are reviewed on a quarterly basis, coinciding with the May and November Semi-Annual Index Reviews and the February and August Quarterly Index Reviews of the Parent Index.

In general, MSCI uses MSCI ESG Research data (including MSCI ESG Ratings, MSCI ESG Controversies Scores and MSCI Business Involvement Screening Research) as of the end of the month preceding the Index Reviews for the rebalancing of the Index. For some securities, such data may not be published by MSCI ESG Research by the end of the month preceding the Index Review. For such securities, MSCI will use ESG data published after the end of month, when available, for the rebalancing of the Index.

The pro forma Indexes are typically announced nine business days before the effective date.

5.3.2 ONGOING EVENT-RELATED CHANGES

The general treatment of corporate events in the Indexes aims to minimize turnover outside of Index Reviews. The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the Indexes, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the MSCI USA ESG Universal

Top 100 5% Issuer Capped Index and MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index.

The following section briefly describes the treatment of common corporate events within the MSCI USA ESG Universal Top 100 5% Issuer Capped Index and MSCI USA ESG Universal Bottom 100 5% Issuer Capped Index.

No new securities will be added (except where noted below) to the Indexes between Index Reviews. 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	<p>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.</p> <p>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.</p>
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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