MSCI FIXED INCOME ESG UNIVERSAL INDEXES METHODOLOGY

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1 Introduction

The MSCI Fixed Income ESG Universal Indexes (the 'Indexes') aim to represent the performance of an investment strategy that by re-weighting market value weights based upon certain ESG metrics seeks to increase exposure to those companies demonstrating both a robust ESG profile as well as a positive trend in improving that profile, while seeking to minimize exclusions from the parent index.

Institutional investors are increasingly looking for ways to integrate ESG into their investment decision-making process. By doing so, they mainly aim to mitigate long-term risks, generate higher risk-adjusted performance and/or align investments with the broader societal objectives. Historically, ESG integration index strategies have relied on an exclusionary approach whereby poor ESG performers would be screened out from an investment opportunity set. However, such approaches may be challenging for large asset owners to reconcile with their 'universal owner' position.

The MSCI Fixed Income ESG Universal Indexes are constructed in following steps. First, the issuers with the weakest ESG profile are excluded from an MSCI Corporate Bond Index (the 'Parent Index'). Second, an ESG re-weighting factor is defined that reflects an assessment of both the current ESG profile (based on the current MSCI ESG Rating – see section 3.3.1) as well as the trend in that profile (based on the MSCI ESG Rating Trend – see section 3.3.2). Finally, securities from the market value weights of the Parent Index are re-weighted using this combined ESG score to construct the MSCI Fixed Income ESG Universal Index.

Currently MSCI constructs the Indexes for USD IG Core, USD IG, USD HY, EUR IG, EUR HY, GBP IG, GBP HY and CAD IG Corporate Bonds Indexes¹.

¹ The Indexes are governed by a set of methodology and policy documents ("Methodology Set"), including the present index methodology document. The Methodology Set for the Indexes can be accessed from MSCI's webpage https://www.msci.com/index-methodology in the section 'Search Methodology by Index Name or Index Code'. The Methodology Set includes a document 'ESG Factors in Methodology' that contains the list of environmental, social, and governance factors considered, and how they are applied in the methodology (e.g., selection, weighting or exclusion).

2 Constructing the MSCI Fixed Income ESG Universal Indexes

2.1 Underlying Universe

The applicable universe includes all the existing constituents of the Parent Index. This approach aims to provide an opportunity set with sufficient liquidity and capacity.

2.2 Eligibility Criteria

The MSCI Fixed Income ESG Universal Indexes use company ratings and research provided by MSCI ESG Research to determine eligibility for index inclusion.

2.2.1 ESG Ratings Eligibility

Companies not rated by MSCI ESG Research on MSCI ESG Ratings are not eligible for inclusion in the indexes.

2.2.2 ESG Controversies Score Eligibility

The Indexes use MSCI ESG Controversies Scores to identify companies that are involved in very serious controversies involving the environmental, social, or governance impact of their operations and/or products and services.

Companies are required to have an MSCI ESG Controversies Score of 1 or above to be eligible for inclusion in the Indexes.

Companies not assessed by MSCI ESG Research on MSCI ESG Controversies are not eligible for inclusion in the indexes.

2.2.3 Controversial Business Involvement Criteria

The Indexes use MSCI ESG Business Involvement Screening Research to identify companies that are involved in Controversial Weapons. Companies that meet the business involvement criteria are excluded from the Indexes ². Please refer to Appendix 1 for details on these criteria.

2.3 Determination of Combined ESG Score

Each company in the eligible universe is assigned a Combined ESG score, which is calculated by considering a company's MSCI ESG Rating and its MSCI ESG Rating Trend.

2.3.1 ESG Rating Score

Using the MSCI ESG Rating, companies are grouped so as to assign an ESG Rating score to each company in the eligible universe as illustrated in the table below.

² All securities that are not excluded by the specified MSCI ESG Business Involvement Screening Research (BISR) criteria are eligible for inclusion in the index.

ESG Rating	ESG Category	ESG Rating Score
AAA	Leaders	2
AA	Leaders	2
Α		1
BBB	Neutral	1
BB		1
В	Laggards	0.5
CCC		0.5

2.3.2 ESG Rating Trend Score

MSCI ESG Rating Trend shows the ESG rating change from prior to current: it is expressed as the number of levels between the current rating and the previous rating. The rating trend is positive for a ratings upgrade (for example, the company's ESG rating changed from BBB to AAA), negative for ratings downgrade (for example company's ESG rating changed from AA to A) and zero for no change in the rating.

An 'ESG Rating Trend Score' is assigned to each company based on its ESG Rating Trend as per the following table-

ESG Rating Trend	ESG Rating Trend Score
Upgrade	1.25
Neutral	1
Downgrade	0.75

ESG Rating Trend-

- Upgrade- Company's latest ESG Rating has increased by at least one level compared too previous assessment.
- Neutral- Company's latest ESG Rating has stayed the same as its ESG Rating from previous assessment or MSCI ESG Research has initiated coverage on the company.
- Downgrade- Company's latest ESG Rating has decreased by at least one level compared to its previous assessment.

2.3.3 Combined ESG Score

The Combined ESG Score is calculated for each company as follows:

Combined ESG Score = ESG Rating Score × ESG Trend Score

2.3.4 Combined ESG Score Capping

In order to reduce reverse turnover in the index, the Combined ESG Score of a security is capped between the ESG Rating Scores corresponding to MSCI ESG Rating of 'AAA' (best rating) and 'CCC' (worst rating).

For example – If in year 1 a company is upgraded to AAA from BBB, then the weight of the company in the index will increase in year 1. However, if the company maintains its rating at AAA in year 2 then since the rating cannot improve beyond AAA, the index would otherwise need to decrease the weight of that company (as the company's un-capped Combined ESG Score in year 2 will be less than the Combined ESG Score in year 1).

Similarly, in year 2, the index would otherwise need to increase the weight of a company in year 2 which was downgraded to CCC rating (the worst possible rating) in year 1 and then maintained its rating at CCC in year 2.

2.4 Weighting Scheme

At each rebalancing, all the securities from the eligible universe are weighted by the product of their market value weight in the Parent Index and the Combined ESG Score.

Security Weight = Combined ESG Score × Market Value Weight in the Parent Index

The above weights are then re-normalized to 100%.

Additionally, constituent weights are capped at 5% at the issuer level to mitigate concentration risk:

Note that the capping of the issuer weight is done for the pro forma index as of the rebalancing effective date, based on the closing prices as of the index review cut-off date. In cases where the issuer weight breaches the cap as a result of market price movements or corporate events between the cut-off date and the rebalancing effective date, the capping is not applied again. Similarly, even if any issuer weight breaches the cap as a result of market price movements or corporate events between two monthly reviews, no capping is applied.

3 Maintaining the MSCI Fixed Income ESG Universal Indexes

3.1 Monthly Index Review

The composition of the Index is reviewed monthly, with an effective rebalancing impact on the first business day of the month (Rebalancing Date). For clarification, bonds are added to the Index on the closing of last business day of every month, however, the return impact is on the first business day of the month.

In general, change in the Index composition is based on latest data available (including MSCI ESG & Climate data) as of three days prior to the Rebalancing Date, which is defined as the Cut-Off Date. Any inclusion or exclusion criteria satisfied for a given security in the universe, after the Cut-Off Date (T-3), will generally become effective at the following monthly rebalancing; should conditions remain unchanged. In exceptional cases, for instance, cases of input data correction, MSCI can reduce the Cut-Off Date for Index rebalancing from T-3 to T-2, T-1 or T. In such instances, MSCI will notify Index clients of such changes via an announcement.

Any cash that accrues within the index each month is re-invested on a pro-rata basis across the index constituents on the effective date of rebalancing. The opening index portfolio on the Rebalancing Date starts with zero accrued cash balance.

For further information on index total return calculation and corporate events handling please refer to the MSCI Fixed Income Index Calculation Methodology³. For the holiday calendar used in the index, please refer to the MSCI Fixed Income Data Methodology⁴

³ Please refer to MSCI Fixed Income Index calculation methodology for further details on calculation of market value. Available at https://www.msci.com/index-methodology

⁴ Please refer to MSCI Fixed Income Index Data methodology for further details on calculation of market value. Available at https://www.msci.com/index-methodology

4 MSCI ESG Research

The Indexes are products of MSCI Inc. that utilize information such as company ratings and research produced and provided by MSCI ESG Research LLC (MSCI ESG Research), a subsidiary of MSCI Inc. In particular, the Indexes use the following MSCI ESG Research products: MSCI ESG Ratings, MSCI ESG Controversies, MSCI ESG Business Involvement Screening Research and MSCI Climate Change Metrics. MSCI Indexes are administered by MSCI Limited.

4.1 MSCI ESG Ratings

MSCI ESG Ratings aim to measure entities' management of environmental, social and governance risks and opportunities. MSCI ESG Ratings use a weighted average key issue calculation that is normalized by industry to arrive at an industry-adjusted ESG score (0-10), which is then translated to a seven-point scale from 'AAA' to 'CCC', indicating how an entity manages relevant key issues relative to industry peers.

The MSCI ESG Ratings methodology can be found at: <u>https://www.msci.com/esg-and-climate-methodologies</u>.

4.2 MSCI ESG Controversies

MSCI ESG Controversies provide assessments of controversies concerning the potential negative environmental, social, and/or 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.

The MSCI ESG Controversies methodology can be found at: <u>https://www.msci.com/esg-and-climate-methodologies</u>.

4.3 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 <u>http://www.msci.com/resources/factsheets/MSCI_ESG_BISR.pdf.</u>

Appendix 1: Controversial Business Screening Criteria

Companies that are involved in certain controversial business activities are excluded from the MSCI ESG Universal Indexes:

- Cluster Bombs
 - MSCI ESG Research's cluster bomb research identifies public companies that are involved in the production of cluster bombs and munitions, or the essential components of these products.
- Landmines
 - MSCI ESG Research's landmines research identifies public companies that are involved in the production of anti - personnel landmines, anti - vehicle landmines, or the essential components of these products.
- Depleted Uranium Weapons
 - MSCI ESG Research's depleted uranium weapons research identifies public companies involved in the production of depleted uranium weapons and armor.
- Chemical and Biological Weapons
 - MSCI ESG Research's chemical and biological weapons research identifies public companies that are involved in the production of chemical and biological weapons, or the essential components of these products.
- Blinding Laser Weapons
 - MSCI ESG Research's blinding laser weapons research identifies public companies that are involved in the production of weapons utilizing laser technology to cause permanent blindness.
- Non-Detectable Fragments
 - MSCI ESG Research's non-detectable fragments research identifies public companies that are involved in the production of weapons that use non-detectable fragments to inflict injury.
- Incendiary Weapons (White Phosphorus)
 - MSCI ESG Research's incendiary weapons research identifies companies that are involved in the production of weapons using white phosphorus.

Involvement criteria:

- Producers of the weapons
- Producers of key components of the weapons (only applies to cluster bombs, landmines, depleted uranium weapons as well as chemical and biological weapons).
- Ownership of 20% or more of a weapons or components producer. The minimum limit is raised to 50% for financial companies having an ownership in a company that manufactures controversial weapons or key components of controversial weapons.
- Owned 50% or more by a company involved in weapons or components production.

Revenue limits:

Any identifiable revenues, i.e., zero tolerance.

Appendix 2: Changes to this Document

The following modifications have been made since December 2023:

Updated Section 1 to provide additional references.

Updated Section 2 to add further clarification regarding the eligibility of securities.

Clarified treatment of Cut Off Date for exceptional cases in Section 3

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