Morningstar Sustainability Ratings Methodology Change
FAQ: Incorporating Sovereign Debt

Summary
In 2016, Morningstar released the Morningstar Sustainability Rating™ to help investors use environmental, social, and governance, or ESG, information to evaluate portfolios. The rating provided a reliable, objective way to evaluate how portfolios are meeting ESG challenges based on underlying company ESG Ratings from Sustainalytics.

In 2019, Morningstar enhanced the Morningstar Sustainability Rating methodology by replacing Sustainalytics' company ESG Rating with its ESG Risk Rating, which measures the degree to which a company’s economic value may be at risk due to ESG issues.

In November 2021, Morningstar will enhance the Sustainability Rating to cover not just corporate investments held by funds but also investments in countries, such as Sovereign Debt.

This FAQ document aims to answer common questions about this most recent change.

Background Questions
What is the objective of this methodology change?
The primary objective of the 2021 methodology enhancement is to expand the range of assets that are used in the calculation of the Sustainability Rating.

By leveraging the Sustainalytics Country Risk Rating to incorporate ESG risk analysis for sovereign holdings, our fund ratings will offer a more complete picture of the ESG risk associated with multi-asset and fixed-income portfolios.

The change represents a shift from the Sustainability Rating framework historically based on a single sustainability score to a modular approach, based on multiple sustainability sleeve scores and ratings. This provides a more comprehensive assessment of ESG risk through multiple lenses.

The enhancement enables greater coverage, expanding the range of funds that will receive a rating.

Prior to this change, only holdings in corporations through either stocks or corporate bonds would be included in the calculation of the rating. This meant that many funds with significant sovereign exposure do not meet the coverage threshold to receive ratings. With this change, there will be a significant...
increase in the number of funds that meet the threshold to receive Sustainability Ratings, especially portfolios that have significant sovereign holdings like fixed-income and allocation funds.

**When does the new methodology take effect?**

The calculation will change in early November 2021. This means once Morningstar’s month-end calculations are done and the data is moved to product, which is around the sixth business day in November, this change will have taken effect.

**Changes to the Sustainability Rating are more frequent than with other Morningstar Ratings. Can you explain why?**

The Sustainability Rating has undergone several enhancements since its introduction in 2016. We have made changes to incorporate historical scores and to adjust the peer group in 2018, and in 2019 we adopted Sustainalytics flagship ESG Risk Ratings framework. The higher frequency of changes is due to the rapidly changing landscape of ESG data, the increasing availability of ESG-related data, and the growing importance of ESG to more investors each year.

We anticipate continued enhancements such as this on a similarly regular basis, as there is no reason for us to believe the speed of landscape change in ESG will slow in the future. However, Morningstar evaluates the benefits of any change against the implications to users of our ratings and makes every effort to ensure minimal disruption and a seamless transition.

**Coverage Changes and Impact on Existing Rated Funds**

How will this methodology change impact funds with existing Sustainability Ratings?

Based on our analysis, most funds will not be affected. Approximately 74% will retain the same rating, approximately 25% will either gain or lose one globe, and less than 1% will change by more than one globe.

How many funds will be rated as a result of this change?

Based on our analysis, we anticipate an approximately 35% increase in the number of funds that receive a rating, with the largest increases in fixed-income and asset-allocation funds.

**Methodology**

What are the requirements for a fund to receive a Morningstar Sustainability Rating?

Coverage Requirements:

There are three checks we do to validate that there is appropriate coverage to provide a rating:

1) At least 67% of a fund’s qualified holdings must be eligible to receive an ESG risk score, which would either be an ESG Risk Rating (for corporate holdings) or Country Risk Rating (for sovereign holdings).

2) Then, if corporate holdings comprise 5% or more of the portfolio, we require at least 67% of the corporate portion to have ESG Risk Ratings.

3) Then, if sovereign holdings comprise 5% or more of the portfolio, we require at least 67% of the sovereign portion to have Country Risk Ratings.
Category Size:
We only ascribe Sustainability Ratings to Global Categories that have 30 or more funds receiving Historical Sustainability Scores. Any fund that is in a category with less than 30 funds will not receive a Sustainability Rating.

Portfolio History:
Morningstar must be in receipt of full portfolio holdings data for a fund to attain a Sustainability Rating. The latest portfolio data must be less than nine months old. To reduce volatility in the rating, we take into consideration the latest 12 months of portfolios. Any gaps in this data are filled by the most recent portfolio available.

Out-of-Scope Investment Types:
Certain investment types are considered out of scope for the Morningstar Sustainability Rating, regardless of whether they meet the additional criteria. Synthetic ETFs are considered out of scope, as these are fully derivative vehicles. Private funds are also considered out of scope for the Morningstar Sustainability Rating. Money market funds, while not technically out of scope, are rarely eligible for the Morningstar Sustainability Rating, and Morningstar does not currently look through to the underlying securities of money market funds held within a fund-of-fund portfolio. We are considering opportunities to represent ESG risk analysis for these types of excluded investment types, but ultimately, the existing methodology does not currently accommodate them.

What makes an asset eligible or ineligible when determining whether a portfolio has sufficient coverage to receive a Morningstar Sustainability Rating?
At least 67% of a fund’s qualified holdings must be eligible to receive an ESG risk score, which would either be an ESG Risk Rating (for corporate holdings) or Country Risk Rating (for sovereign holdings). Qualified holdings are security types determined to carry ESG risk and considered in scope, composed of long positions excluding cash and derivatives. For more detailed information regarding what security types are considered in scope to carry ESG risk, please refer to: previous FAQ.

Eligible assets are qualified assets that are eligible for coverage under an existing risk-ratings framework and therefore eligible to contribute to a portfolio’s Corporate or Sovereign Sustainability Score. Eligible assets include corporate securities such as equities and fixed-income instruments issued by corporate entities, which are eligible for coverage under the Sustainalytics ESG Risk Rating framework, as well as sovereign bonds, which are eligible for coverage under the Sustainalytics Country Risk Rating framework. Security types such as municipal bonds and commodities, which carry ESG risk but for which a risk-rating framework does not yet exist, are considered ineligible.

Will the historical Sustainability Ratings change, and what will happen to historical data at the time of the release?
Historical Morningstar Sustainability Ratings will not be changed or recalculated as part of the new methodology release. A fund’s history of Morningstar Sustainability Ratings will continue to display in all products that currently output this data. For consistency, Corporate and Sovereign Sustainability Ratings
will not be calculated retroactively, and historical Corporate and Sovereign Sustainability Ratings will populate on a going-forward basis at the time of release. As with previous methodology updates, we preserve the history of ratings and supporting data points to reflect the methodology at that time.

Can I still view the history of data points that are being split into a corporate and sovereign version, such as the Sustainability Score?
Prior to this update, the Sustainability Score and its supporting data points have only reflected the corporate portion of a portfolio. After the incorporation of sovereign holdings, the Sustainability Score will be renamed to the Corporate Sustainability Score. Historical scores for the Corporate Sustainability Score will reflect the historical scores from the Sustainability Score and will preserve the history to reflect the methodology at that time. A Sovereign Sustainability Score will be added.

Will I still be able to see a single Sustainability Score for a fund or portfolio?
No. The single Sustainability Score (historic or current) will be superseded by two separate scores: one focused on the corporate portion of the portfolio (Corporate Sustainability Score) and one focused on the sovereign portion of the portfolio (Sovereign Sustainability Score). These scores are calculated, measured, and presented separately, so there is no longer a single Sustainability Score for any single portfolio. The key reason for this is that the measures for corporate entities and sovereign entities are incompatible, and before being rated against their peer group, it would be inappropriate to combine them as they measure two different things: one the ESG risk of a country, and the other is the ESG risk of a company. We strongly believe these should be compared separately.

Why not calculate a single portfolio Sustainability Score using both corporate ESG Risk Ratings and Sovereign Country Risk Ratings?
Creating a single flattened portfolio aggregate across both sovereign and corporate investments could conflict with our Sustainability Ratings methodology, where we are independently comparing the relative ESG Risk of corporates and sovereign investments within the peer group.

Although the Sustainalytics’ ESG Risk Ratings and Country Risk Ratings are based on similar principles and are designed to measure the degree of absolute ESG risk, the two ratings measure fundamentally distinct forms of ESG risk. The ESG Risk Rating measures the risk to enterprise value, based on exposure to ESG issues and the management of that exposure, while Country Risk measures the risk to long-term economic development, where assessing the risks to future wealth are of primary importance.

While the ESG Risk Ratings and Country Risk Ratings are comparable and complementary, they are not directly interchangeable or intended to act as proxies for one another when there is a discrepancy in coverage between a portfolio’s sovereign and corporate holdings.

How does the methodology account for the fact that a limited number of countries comprise most sovereign issuers?
While the Country Risk Ratings naturally fall into a normal distribution, a small number of countries comprise most sovereign debt issuers globally. This results in very narrow Portfolio Sovereign
Sustainability Score distributions for several Morningstar global categories. For example, the sovereign portion of portfolios in the U.S. fixed-income category is typically invested entirely or almost entirely in U.S. sovereign debt, which results in a very narrow distribution of sovereign scores.

In order to prevent insignificant differences in scores from resulting in meaningfully different ratings, we are implementing a minimum distribution requirement for all ratings. This does not prevent peer groups with very narrow distributions from receiving ratings, but rather it requires that the distribution of scores for each rating bracket are sufficiently differentiated from other scores in order for a portfolio to receive a rating in another bracket. More details on this can be found below.

**How does the minimum distribution requirement for ratings work?**
To prevent insignificantly small differences in scores from resulting in different ratings, we have integrated a minimum distribution requirement. In practice, this means that scores must be sufficiently different from the median score to be assigned an ordinal rating of 2 or 4 and must be sufficiently different from the 2-3 breakpoint or 3-4 breakpoint to achieve an ordinal rating of 1 or 5, respectively. The determination of what constitutes sufficiently different is set to 0.25 for sovereigns and 0.4 for corporates.

Figure 1 below demonstrates the application of the minimum 0.25 distribution requirements for sovereigns. The minimum difference between the 50th percentile and 3-4 breakpoint is 0.25. This has the effect of requiring the width of the distribution of scores that receive a 3 to be at least 0.5. For a fund to ever receive a rating higher or lower than a 3, it must be at least 0.25 greater or less than the 50th percentile. If the entire distribution of scores for a peer group is less than 0.5, a fund in that peer group will receive a rating of 3. This ensures that insignificant differences in scores do not result in different ratings while also maintaining the intent of the relative ratings. If all portfolios in a given peer group are investing in the sovereign bond issuers in roughly the same proportions, it is not possible to have a relative ESG risk rating above or below average relative to those of peers.
How were the minimum distribution widths for corporates and sovereigns determined?
The absolute values for the minimum distribution widths for corporate and sovereign scores are based on determining a standard deviation, which was meaningful enough to capture outlier situations but modest enough that it did not begin to function as a primary determinant for rating breakpoints. The values for sovereign risk and corporate risk are different enough to account for both the differences in the distributions that exist for these two asset types and the need for a model that remains straightforward and consistent for users.

Based on testing, we found that 10% of the standard deviation at the managed-portfolio universe level for each risk type (meaning 10% of the standard deviation for all corporate assets and 10% of the standard deviation for all sovereign assets) fulfilled these goals of the minimum distribution buffer. These equate to a minimum distribution of 0.25 for sovereigns and 0.4 for corporates. We intend to review this standard on an annual basis to assess whether the minimum distribution requirements need to be adjusted.

How will the methodology for assigning ratings change?
Currently, portfolios are assigned ratings as part of a three-step process, beginning with assigning rankings to all scored portfolios in a peer group and ending with a maximum risk score ceiling for each rating. The only step that is changing will be the second step, where we replace the existing buffer rule with the minimum-distribution requirement rule:
### Exhibit 2 Current Methodology

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Flatten portfolio &amp; look through to the underlying securities</td>
</tr>
<tr>
<td>2.</td>
<td>Focus &amp; Rescale – exclude ineligible assets like cash, derivatives</td>
</tr>
<tr>
<td>3.</td>
<td>Check for at least 67% coverage of portfolio with ESG Risk Scores applied to Equities and Corporate bonds</td>
</tr>
<tr>
<td>4.</td>
<td>Calculate Weighted aggregation snapshot Sustainability Score</td>
</tr>
<tr>
<td>5.</td>
<td>Calculate weighted moving average Historical Sustainability Score</td>
</tr>
<tr>
<td>6.</td>
<td>Rank within Global Category Peer group</td>
</tr>
<tr>
<td>7.</td>
<td>Derive Globe Rating</td>
</tr>
</tbody>
</table>

Source: Morningstar.

### Exhibit 3 Methodology after November 2021 Enhancement

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>If corporate weight &gt; 5%: Does corporate sleeve have &gt;=67% coverage?</td>
</tr>
<tr>
<td>2.</td>
<td>Calculate Corporate ESG Risk Score (Current and Historical)</td>
</tr>
<tr>
<td>3.</td>
<td>Rank within Global Category peer group</td>
</tr>
<tr>
<td>4.</td>
<td>Calculate Corporate Rating (1-5)</td>
</tr>
<tr>
<td>5.</td>
<td>Derive Globe Rating</td>
</tr>
</tbody>
</table>

Source: Morningstar.
Will the individual Corporate and Sovereign Sustainability Ratings be represented by globes?
No, the globe iconography will remain specific to a fund’s overall Morningstar Sustainability Rating.™ Sleeve ratings will only be represented by an ordinal rating, 1-5, and descriptive ratings, as outlined below.

**Exhibit 3 Overall Morningstar Sustainability Rating**

<table>
<thead>
<tr>
<th>Percent Rank</th>
<th>Sustainability Rating</th>
<th>Ordinal Rating</th>
<th>Rating Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest 10%</td>
<td>🌍🌍🌍🌍🌍</td>
<td>5</td>
<td>High</td>
</tr>
<tr>
<td>Next 22.5%</td>
<td>🌍🌍🌍🌍</td>
<td>4</td>
<td>Above Average</td>
</tr>
<tr>
<td>Next 35%</td>
<td>🌍🌍🌍</td>
<td>3</td>
<td>Average</td>
</tr>
<tr>
<td>Next 22.5%</td>
<td>🌍🌍</td>
<td>2</td>
<td>Below Average</td>
</tr>
<tr>
<td>Lowest 10%</td>
<td>🌍</td>
<td>1</td>
<td>Low</td>
</tr>
</tbody>
</table>

Source: Morningstar Data

**Exhibit 3 Sleeve Sustainability Rating (Corporate & Sovereign)**

<table>
<thead>
<tr>
<th>Percent Rank</th>
<th>Ordinal Rating</th>
<th>Rating Description</th>
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<tr>
<td>Highest 10%</td>
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<td>1</td>
<td>Low</td>
</tr>
</tbody>
</table>

Source: Morningstar Data

Please note, for each peer group, the median scoring portfolio receives a 3 rating. Ratings are assigned to other portfolios in the peer group to achieve a normal distribution, with an exception made for cases where the scores within the peer group are not meaningfully differentiated. In practice, this can mean that all portfolios within some peer groups may receive the same corporate or sovereign rating.

**Will I be able to see the corporate and sovereign sleeve ratings?**
Yes, these data points will be made available through our range of products.
How can I compare the ESG risk of funds across different categories?
As the Sustainability Rating is a peer-group relative rating, an absolute comparison of funds across categories is not something to do without context. A 5-globe fund in one category will not necessarily have a lower ESG risk than a 2-globe fund in another.

A simple analogy would be rating the height of students within each school year: the tallest getting 5 globes, the shortest getting 1 globe. Expecting the 5-globe recipients in the youngest class to be taller than a 1-globe recipient in the final school year would be inappropriate.

Prior to this change, comparing the underlying Sustainability Score would have given you a simple way of comparing funds with different objectives, but with this change comes additional complexity. As we now take investments in countries into consideration, there are two independent Risk Scores to be considered when comparing between categories: the Corporate Sustainability Score and the Sovereign Sustainability Score.

Does the Sustainability Rating include Sustainable Impact?
The Morningstar Sustainability Rating™ is a measure of ESG Risk exclusively. While there is a strong correlation between ESG Risk and Impact, at present, our rating is purely investment-risk-based. We believe it is important to keep Investment Risk and Impact separate as they are serving two very different purposes.

Products
Does this change introduce additional data points?
Yes. To be able to illustrate the building blocks of the rating, Morningstar will provide the individual sleeve portfolio-exposure breakdowns, coverage, scores, and ratings to help users understand how the overall rating for a fund is derived.

Within Morningstar products, any display of the Sustainability Rating for funds and related data will be updated in November.

What historical data will be available for the ratings?
Morningstar provides historical Morningstar Sustainability Ratings dating back to August 2018.

Prior to November 8th, will Morningstar clients be able to see which funds will receive Sustainability Ratings coverage as a result of the enhancement?
Morningstar intends to make this information available to clients closer the above date. Please work with your Customer Success Manager to obtain more specific details.

For more information about when and how to see the Sustainability Ratings and related metrics in a Morningstar data feed, software product, or solution, work with your Customer Success Manager to obtain the details on your specific platform and use case.
About Morningstar Sustainability Research
Morningstar’s Sustainability Solutions help financial professionals make sense of the sustainable investing landscape with differentiated data, research, and analytics for a growing number of applications.

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