
Morningstar Sustainability Rating

Methodology

Morningstar Research

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Executive 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 provides a reliable, objective way to evaluate how their portfolios are meeting ESG challenges.

In 2018, we will enhance the current methodology by making the following changes:

- ▶ Incorporate historical holdings
- ▶ Increase rating threshold to 67% of portfolio covered
- ▶ Expand peer groups to using the Morningstar Global Category
- ▶ Increase peer group size threshold to 30 scored portfolios to receive globe ratings

The changes to the methodology will be effective October 2018.

Introduction

The Morningstar Sustainability Rating is a measure of how well the holdings in a portfolio are performing on environmental, social and governance, or ESG, issues relative to a portfolio's peer group. The rating is an historical holdings-based calculation using company-level ESG analytics from Sustainalytics, a leading provider of ESG research. It is calculated for managed products and indexes globally using Morningstar's portfolio holdings database.

The Morningstar Sustainability Rating is the result of a three-step process. First, we calculate the Morningstar Portfolio Sustainability Score for every portfolio reported within the trailing 12 months. Second, we use these scores to calculate a portfolio's Morningstar Historical Portfolio Sustainability Score. Third, we assign a Morningstar Sustainability Rating for a portfolio based on its Morningstar Historical Portfolio Sustainability Score relative to its Morningstar Global Category. The calculations for each step are detailed below.

Morningstar Portfolio Sustainability Score

The Morningstar Portfolio Sustainability Score is an asset-weighted average of normalized company-level ESG scores with deductions made for controversial incidents by the issuing companies, such as environmental accidents, fraud, or discriminatory behavior. The Portfolio Sustainability Score is calculated as follows:

$$\text{Portfolio Sustainability Score} = \text{Portfolio ESG Score} - \text{Portfolio Controversy Deduction}$$

Portfolio ESG Score

The Portfolio ESG Score is an asset-weighted average of normalized company-level ESG scores. Sustainalytics' company-level ESG scores reflect how well a firm is addressing ESG issues based on a series of indicators measuring preparedness, disclosure, and performance.

$$\text{Portfolio ESG} = \sum_{x=1}^n \text{ESG}_{\text{Normalized}} \times \text{Weights}_{\text{adj}}$$

Sustainalytics assesses a company's performance on ESG issues relative to other firms in the same global industry peer group, using a 0-100 scale. Because the relevance of particular ESG issues varies across the peer groups, a unique combination of indicators is used within each peer group to determine the company-level ESG score.

The use of a unique combination of indicators for each peer group means the same score shared by two companies in different peer groups may not be equivalent--one company's score may signal that it is an "outperformer" in its peer group while the other company's identical score may indicate that it is an "underperformer" in its peer group. The peer groups also have varying ESG score ranges and means. To make the ESG scores comparable across peer groups, which is necessary for evaluation of diversified portfolios, Morningstar normalizes the scores of each peer group using a z-score transformation, as follows:

$$Z_{\text{peer}} = \frac{ESG_x - \mu_{\text{peer}}}{\sigma_{\text{peer}}}$$

Where:

$$\begin{aligned} ESG_x &= \text{Sustainalytics Company ESG score} \\ \mu_{\text{peer}} &= \text{Peer Group Mean ESG score} \\ \sigma_{\text{peer}} &= \text{Peer Group Standard deviation of ESG scores} \end{aligned}$$

The z-scores are used to create the normalized ESG scores on a 0-100 scale, with a mean of 50, as follows:

$$ESG_{\text{Normalized}} = 50 + (Z_{\text{peer}} \times 10)$$

Normalized company ESG scores can be interpreted as follows:

70+	=	Company scores at least two standard deviations above average in its peer group
60	=	Company scores one standard deviation above average in its peer group
50	=	Company scores at peer group average
40	=	Company scores one standard deviation below average in its peer group
30–	=	Company scores at least two standard deviations below average in its peer group

Once the company ESG scores are normalized, they are aggregated to a Portfolio ESG Score using an asset-weighted average of all covered securities. Covered securities include equity and fixed-income securities issued by companies that have ESG scores. Securities issued by companies that do not have ESG scores, as well as short positions, options, and derivatives typically issued by third-party financial firms, are not covered.

To receive a Portfolio ESG Score, at least 67% of a portfolio's assets under management must have a company ESG score. The percentage of the assets under management of the covered securities is rescaled to 100% before calculating the Portfolio ESG Score.

Portfolio Controversy Score

Sustainalytics tracks and categorizes ESG-related incidents, referred to as "controversies," on more than 10,000 companies globally. Each incident is assessed in terms of its level of impact on the environment and society and its related risk to the company itself. While a single company may be involved in multiple ESG-related incidents at any given time, Sustainalytics also scores companies based on the highest level of current involvement in ESG-related incidents, on a 0-100 scale, as follows:

Exhibit 1 Sustainalytics Controversy Score

Category	Impact on Environment or Society	Risk to Company	Company Score
5	Severe	Serious	0
4	High	High	20
3	Significant	Significant	50
2	Moderate	Minimal	80
1	Low	Negligible	99
0	No evidence of controversy	None	100

Source: Morningstar, Inc.

Because the presence of controversy is a negative contributor to a company's overall sustainability performance, Morningstar reverses the scale of company controversy scores when aggregating them to create a Portfolio Controversy score, as follows:

$$MContra_p = 100 - \sum_i^n w_i SCont_i$$

Where:

MContra_p = the Morningstar Portfolio Controversy Score
SContra_i = the Sustainalytics controversy score of company *i*

To receive a Portfolio Controversy Score, at least 67% of a portfolio's assets under management must have a company controversy score. Covered securities include equity and fixed-income securities issued by companies that have controversy scores. Securities issued by companies that do not have controversy scores, as well as short positions, options, and derivatives typically issued by third-party financial firms, are not covered. The percentage of assets of the covered securities will be rescaled to 100%.

To calculate the Portfolio Sustainability Score, we rescale the Portfolio Controversy Score, creating the Portfolio Controversy Deduction, as follows:

Exhibit 2 Portfolio Controversy Deduction

	Highest Controversy Level	Portfolio Controversy Deduction
Best	0	0
	1	0.2
	2	4
	3	10
	4	16
Worst	5	20

Source: Morningstar, Inc.

Morningstar Portfolio Sustainability Score

To summarize, the Morningstar Portfolio Sustainability Score is calculated as:

$$\text{Portfolio Sustainability Score} = \text{Portfolio ESG Score} - \text{Portfolio Controversy Deduction}$$

In order to receive a Morningstar Portfolio Sustainability Score, a portfolio must have a Portfolio ESG Score and a Portfolio Controversy Score.

Morningstar Historical Portfolio Sustainability Score

The Morningstar Historical Portfolio Sustainability Score is a weighted average of the trailing 12 months of Morningstar Portfolio Sustainability Scores. Historical portfolio scores are not equal-weighted; rather, more-recent portfolios are weighted more heavily than more-distant portfolios. The formula is below:

$$Historical\ Portfolio\ Sustainability\ Score = \frac{\sum_{i=0}^{11} (12 - i) \times Portfolio_Sustainability_i}{\sum_{i=0}^{11} i + 1}$$

Where:






i = number of months from present

Combining the trailing 12 months of portfolio scores adds consistency while still reflecting portfolio managers' current decisions by weighting the most recent portfolio scores more heavily.

Morningstar Sustainability Rating

Based on their Morningstar Historical Portfolio Sustainability Score, funds are assigned absolute category ranks and percent ranks within their Morningstar Global Categories, provided that a category has at least 30 funds with Portfolio Sustainability Scores. A fund's Morningstar Sustainability Rating is its normally distributed ordinal score and descriptive rank relative to the fund's global category. In order for a fund to receive a Morningstar Sustainability Rating, its Morningstar Global Category must have at least 30 funds with Historical Portfolio Sustainability Scores. Exhibit 3 summarizes the rating distribution.

Exhibit 3 Morningstar Sustainability Rating

Distribution	Score	Descriptive Rank	Rating Icon
Highest 10%	5	High	
Next 22.5%	4	Above Average	
Next 35%	3	Average	
Next 22.5%	2	Below Average	
Lowest 10%	1	Low	

Source: Morningstar, Inc.

Frequency of Calculations

The Morningstar Sustainability Score is updated whenever Morningstar receives the most recent portfolio. The Morningstar Sustainability Rating and ranks will be issued monthly based on the most recent company data from Sustainalytics. Portfolios will receive a rating one month and six business days after their reported as-of date based on the most recent portfolio. The fund will be ranked relative to peers on the same 1 month and 6 business day lag. If a portfolio has not yet been received for the

rating date, the most recent portfolio available will be used for score and ranking, provided the portfolio is less than 276 days old. ■■

References

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http://im.mstar.com/im/newhomepage/Morningstar_Category_Definitions_US_June_2016.pdf

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Appendix A: Pillar Scores

Portfolio E, S, and G Pillar Scores

Sustainalytics' company-level ESG scores can be disaggregated into three pillar scores—environmental, social, and governance. Morningstar calculates portfolio-level scores for each pillar, using the same method for normalizing scores that is used for the Portfolio ESG Score, described above. Scores are aggregated by using the peer group weighted contribution of the pillar, as follows:

$$Portfolio\ Pillar = \sum_{x=1}^n Pillar\ Normalized \times Weight_{adj} \times PeerPillarWeight$$

This is necessary because the contribution of each pillar to a company's overall ESG Score may differ by peer group. Using the peer group-weighted contribution more accurately reflects the overall contribution of each pillar to a company's overall ESG Score.

Morningstar Global Category Rank, Category Percent Rank, and Rank Description

The Portfolio ESG Score and Portfolio Controversy Score will be assigned absolute category ranks, percent ranks, and normally distributed ordinal scores and descriptive ranks within their Morningstar Global Category, as follows:

Exhibit 4 Portfolio ESG Scores

Distribution	Score	Descriptive Rank
Highest 10%	5	High
Next 22.5%	4	Above Average
Next 35%	3	Average
Next 22.5%	2	Below Average
Lowest 10%	1	Low

Source: Morningstar, Inc.

Exhibit 4 Portfolio Controversy Scores

Distribution	Score	Descriptive Rank
Lowest 10%	5	Low
Next 22.5%	4	Below Average
Next 35%	3	Average
Next 22.5%	2	Above Average
Highest 10%	1	High

Source: Morningstar, Inc.

About Morningstar Sustainability Research

Morningstar Sustainability Research is dedicated to helping investors evaluate the values and impact of their investments.

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