

Integrating ESG Into Morningstar's Equity Research: A User's Guide

We take a valuation-focused approach.

Morningstar Equity Research

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Executive Summary

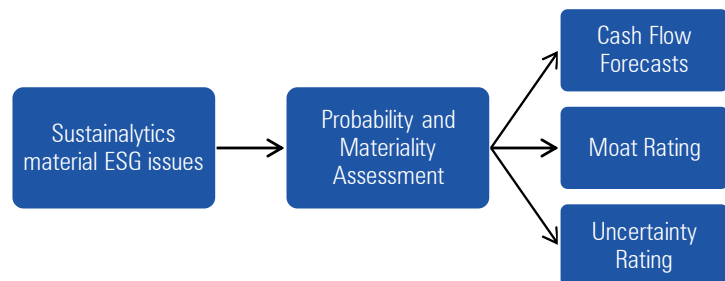
Analysis of environmental, social, and governance risks is not optional for long-term investors. Identifying ESG risks and estimating their impacts is critical in properly assessing potential investment in individual companies, informing traditional measures of cash flow, balance sheet, and earnings. While our equity research analysts at Morningstar have always considered material risks in determining their intrinsic value estimates for stocks, formalizing this process for ESG and incorporating it into our existing framework best serves investors in making informed decisions.

Our ESG analysis, effective Dec. 9, 2020, begins with the building blocks of Sustainalytics' company-level Risk Rating, focusing our efforts on the most material ESG issues and thereby the most valuation-relevant risks. By capturing ESG factors in our intrinsic value estimate (through our cash flow forecasts and economic moat rating), as well as our required margin of safety (through our uncertainty rating), we afford ESG a central role in our methodology in a way that aligns with our valuation focus and long-term orientation.

Key Takeaways

- ▶ Analysts estimate the probability and materiality to a company's intrinsic value related to ESG risks. Risks that are likely to materialize are incorporated into an analyst's explicit cash flow forecasts.
- ▶ Our analysts also assess whether ESG-related risks could threaten the value creation capabilities of an otherwise competitively advantaged business, thereby precluding or limiting an economic moat.
- ▶ All else equal, companies that face greater ESG risks have more uncertain futures. We therefore demand a greater margin of safety before recommending long-term investment for those firms.

Exhibit 1 ESG is Incorporated Throughout Morningstar's Methodology



Source: Morningstar.

Integrating ESG Into Our Methodology

Approach

We have incorporated ESG into our equity research methodology in a way that aligns with our investment philosophy and long-term mandate. ESG ratings and analysis are important inputs into our research process, and are directly integrated into the following areas:

- ▶ Cash flow forecasts (if applicable)
- ▶ Economic moat rating
- ▶ Uncertainty rating

Our analysis begins with Sustainalytics' company-level ESG Risk Rating, which is based on material ESG issues, or MEIs, to focus our efforts on the most valuation-relevant risks¹.

Analysts then consider the probability and materiality of risks related to these MEIs, which may impact explicit cash flow forecasts, Economic Moat ratings, and Uncertainty ratings.

Integrating ESG considerations into the core of our methodology allows us to avoid the pitfall of "greenwashing" or the appearance of adding ESG analysis without actually doing so. Additionally, by utilizing existing rating processes and governance mechanisms, we facilitate comparability across our broad global coverage universe.

Cash Flow Forecasts

At Morningstar, our analysts model three scenarios for each company under coverage using a discounted cash flow approach. Our base case determines our fair value estimate, and is the analyst's forecast for the most likely outcome for a company. To supplement our base case, we model two more potential outcomes through scenario analysis--a bull case and a bear case. In each, the analyst forecasts a future state that has an estimated 25% chance of occurrence.

An analyst includes in the base case any impact from ESG factors where there is at least an estimated 50% probability of occurrence. This process can include adjustments to the income statement or cash flow statement forecasts, along with enterprise value adjustments, such as environmental or legal liabilities. If relevant, these factors are discussed in several sections within our company report, including Business, Strategy, and Outlook, as well as Fair Value and Profit Drivers.

An ESG risk that is estimated to have a less-than 50% probability of occurring, but a greater-than 25% chance, is included in the bull and/or bear cases, and is discussed in the Scenario Analysis section of the company report.

¹ Sustainalytics's ESG Risk Rating measures the degree to which a company's enterprise value is at risk due to ESG factors. Within this rating, Sustainalytics identifies material ESG issues, or MEIs. A material ESG issue is an area that may have a significant effect on a company's enterprise value. MEIs are focused on a topic, or set of related topics that require a common set of management initiatives or a similar type of oversight. There are 20 MEIs identified by Sustainalytics, which are used as the building blocks to its company ESG risk ratings. From these, Sustainalytics identifies the most potentially impactful as top MEIs for each company.

Economic Moat

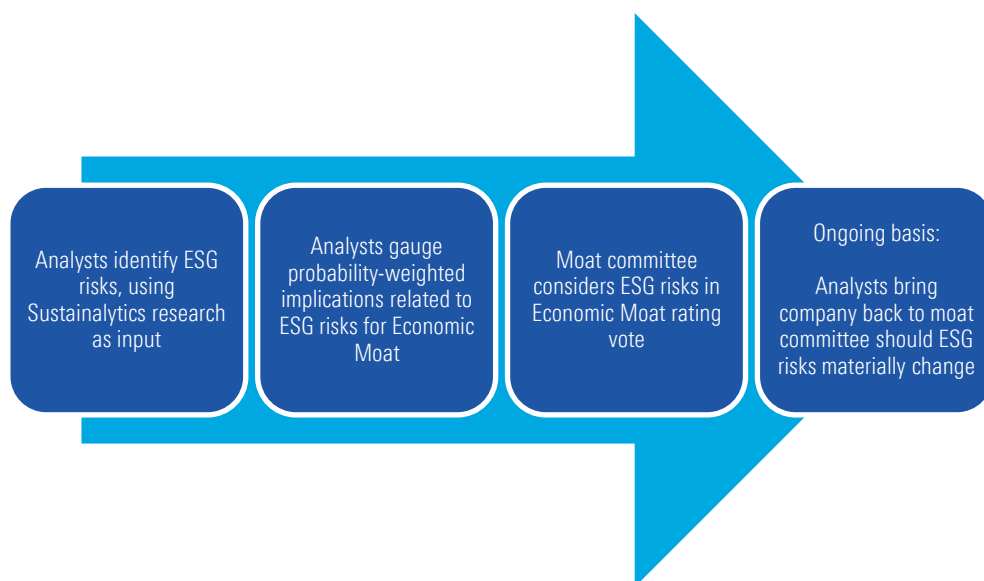
An economic moat is a structural feature that allows a firm to sustain excess profits over a long period of time. To assign a company a narrow economic moat, we must determine that the firm is more likely than not to generate return on invested capital, or ROIC, above its weighted average cost of capital, or WACC, for at least the next 10 years. Wide-moat companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years.

We also assess whether there is a substantial threat of major value destruction that could prevent us from assigning a company an economic moat. In this context, value destruction is typically defined as either: a firm's value being destroyed over time as ROIC fails to exceed WACC on a normalized basis during the next 10 or 20 years, or cumulative economic profit falling below zero during the same period.

We see ESG analysis playing an integral part in analyzing potential value destruction threats, particularly as many ESG risks can carry sizeable impact despite a low probability of materializing. Examples include idiosyncratic threats, such as reputational risk from environmental damage; business risk from reduced consumer demand or increased costs due to social pressure; and financial health threats arising from poor governance practices.

We have updated our economic moat rating process to integrate ESG risks, as shown in Exhibit 2. For every top MEI as identified by Sustainalytics, our analysts assess whether future related ESG-related considerations could pose a threat of major value destruction to a company. Relevant ESG factors are discussed in the economic moat section of our company report.

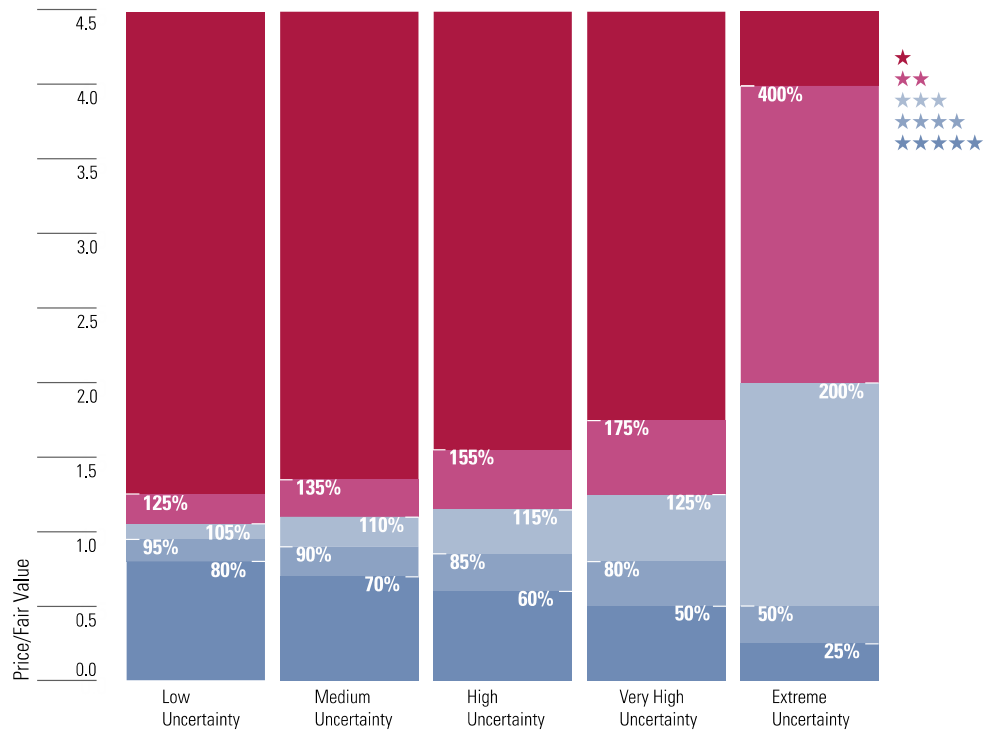
Exhibit 2 Integrating ESG Into Our Economic Moat Rating: Process Update



Uncertainty Rating

To assign a company's uncertainty rating, we calculate the ratio of the difference between the bull and bear case fair value estimates (numerator) and the base case fair value estimate (denominator). The larger the ratio, the higher uncertainty in a stock, and the more margin of safety we require before recommending buying or selling the stock (as expressed by our star rating).

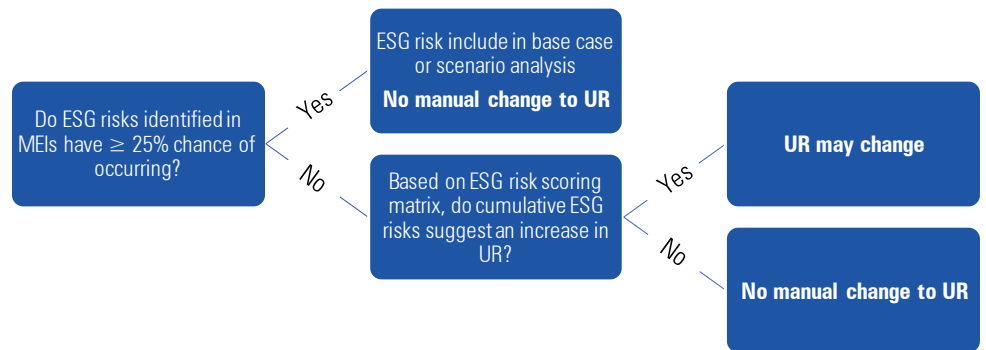
Exhibit 3 Morningstar Equity Research Star Rating Methodology



Source: Morningstar.

Similar to integrating ESG risks into our existing economic moat framework, we integrate ESG into our existing uncertainty framework. As a reminder, those ESG risks that analysts estimate have a greater-than-25% probability of materializing are already captured in our bear-case modelling, and therefore directly influence the uncertainty rating. However, we have updated our uncertainty rating framework to allow analysts to raise the uncertainty rating if there are a number of low-probability ESG risks that may have a material impact on a company. Our updated process is shown in the decision tree in Exhibit 4.

Exhibit 4 Integrating ESG Into Our Uncertainty Rating (UR): Process Update



Source: Morningstar.

To determine if a company's uncertainty rating warrants an increase, we have developed a scoring system based on the analyst's estimated probability and materiality of ESG risks. Based on this assessment, the analyst will score the risk using the table in Exhibit 5.

Exhibit 5 Our Uncertainty Rating ESG Risk Scoring Matrix for a Single Material ESG Issue

		Materiality of ESG Risk, % of FVE				
		<10%	10-24%	25-49%	50%-74%	75%+
Probability	<10%	0 points	1	2	4	5
	10-24%	1	4	8	13	18
	25-49%	No score, risk modeled in scenario analysis				
	50%+	No score, risk modeled in base case				

Source: Morningstar.

The analyst then adds the score from all potential risks. If the cumulative score suggests a raised uncertainty rating is warranted, as shown in Exhibit 6, the analyst may manually adjust the uncertainty rating.

Exhibit 6 Our Framework For When Analysts May Decide to Raise a Company's Uncertainty Rating due to ESG Risks

ESG Risk "Points"	Starting Uncertainty Rating			
	Low	Medium	High	Very High
0 - 9 points	Low	Medium	High	Very High
10 - 14	Consider Medium	Medium	High	Very High
15 - 19	Strongly Consider Medium	Consider High	High	Very High
20 - 39	Strongly Consider Medium	Strongly Consider High	Consider Very High	Very High
40+	Consider High	Strongly Consider High	Strongly Consider Very High	Consider Extreme

Source: Morningstar.

Our scoring system is set so that a higher starting uncertainty rating requires a greater probability-adjusted impact (that is, more ESG risk "points") from ESG risks before suggesting a raised uncertainty rating. This is because our uncertainty rating reflects confidence around our fair values due to a number of factors, including operating and financial sales sensitivity to the overall economy, product concentration, pricing power, and other company-specific events. In cases where our confidence is already low (as reflected by a higher uncertainty rating) due to non-ESG issues, the addition of ESG issues represents a smaller overall impact to our overall confidence level (in other words, "a drop in the bucket"). Conversely, in cases where our confidence is high, ESG issues are more likely to have an impact on uncertainty rating.

Any increased uncertainty ratings are documented in the company report in either the Uncertainty and Risks section, or Scenario Analysis section. ■■

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