

Chapter 15


Algorithmic Governance in ESG Ratings: Addressing Bias and Enhancing Transparency in AI-Driven Sustainable Finance

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ABSTRACT

ESG ratings serve as guides for corporate investment and strategic decisions and are appended with numerous biases, inconsistencies, and lack of transparency. The present chapter attempts to examine the ratings of 100 companies from different industries and regions and compare S&P Global with MSCI and Sustainalytics. The chapter researches the effects of size, sector, and regional biases on scores using a mixed-method approach. Findings show that energy-intensive sectors are downgraded because of sustainability efforts; large firms get higher grades due to better disclosure, and performance is also higher for companies in jurisdictions marked by stringent regulations. Inconsistencies in ratings are illustrated further by examples of the specific study cases that deal with BlackRock and Tesla. This chapter brings an AI-enabled framework that uses blockchain and machine learning, as well as real-time information, to boost transparency and standardization in response to these issues.

1. INTRODUCTION

ESG Ratings are the linchpins of sustainable finance as they deeply affect how investors behave and corporations form strategies and command regulatory measures. ESG ratings assess a company's financial strength and sustainability performance, influencing investment flows, corporate actions and

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regulatory developments (Bao et al., 2024). On the converse, MSCI, Sustainalytics and S&P Global engage in relatively deviating practices from the view of ESG ratings, ultimately leading to distinct and often contradictory evaluations of the same firms (Zhang & Li 2024). For the fact that many agencies rate Tesla very highly for its environmental practices, others would assign very low rankings to the firm due to poor governance (Di Martino et al. 2024). Such dissimilarity becomes vastly obscure for stakeholders envisioning to make decisions guided by ESG ratings. Further divergence in the ratings discourages and diminishes the very receipt from ESG. Ratings agencies are said to have their models, sources of data and weighting procedures that lead to varying and inconsistent representations about a company's ESG performance (Khan et al. 2016). It is common for scores to be heavily biased toward size; the larger the company, the lower the rating, whereas the greenest of start-ups have a chance of being rated low (Dobrick et al., 2023). Whereas sector bias punishes sectors like energy and manufacturing for their environmental downgrades even if companies in these sectors are already making considerable moves toward sustainability (Asif et al., 2023). The geographical location where a business operates holds a pivotal prominence in defining its ESG rating. Enterprises located in countries with strict ESG regulations generally achieve higher scores than their counterparts in less refined frameworks (Palombo & Teti, 2024). Such implicit biases in the ESG rating processes make ESG metrics an ineffective approach in encouraging investments that are responsible and ensuring corporate accountability. Thereby, the net effect is a distorted depiction of disclosures relating to sustainability efforts by the company.

The phenomenon of greenwashing, where companies tend to overstate their claims regarding sustainability, continues to be one of the most vehemently discussed topics (Li et al. 2024). The selective disclosure of information by a corporation poses colossal challenges to stakeholders attempting to verify its genuine commitment to sustainability. This results in stakeholders stemming with high hypothetical views towards ESG performance data. Alongside the loss of faith in the nature and process of ESG ratings, there comes the question of whether there are proper means to validate corporate claims. Transparency still prevails as the focal point since agencies must be sure of the kinds of data on which they base ESG rating creation processes (Deloitte, 2023). This chapter concerns itself with getting down to brass tacks concerning the integrity and efficiency of the ESG ratings and provides concrete and practical recommendations that come forth from this discourse. By standardizing the scoring method, rating agencies can determine ratings altogether under one heading (Kleinberg et al., 2018). This is intended to increase equity by establishing milestones per industry, therefore correcting for firm size by a further check. A big issue in that regard then is greenwashing, i.e., deceptive eco-friendly marketing (Li et al., 2024). In comparison with other performance aspects, selective disclosures point at the performance of ESG by making it highly challenging to gauge corporate commitment to sustainability. Thereby undermining ESG credibility and calling for yet better methods to validate these statements made by companies. The methodologies and data sources should be clear to the stakeholders (Deloitte, 2023). XAI and other technological developments are to improve the transparency of the rating process and show how the score is generated (Maiorano & Morelli, 2024). For example, XAI could disclose weights on the environmental, social and governance factors and what each contributed to a company's overall score. Such transparency may help rebuild that trust and, therefore, the effectiveness of ESG ratings as a real tool of sustainable finance. This chapter explores ways that can be incorporated into improving the quality and effectiveness of attempted ESG ratings in the long run. Rating agencies should design and follow a standard scoring method to promote uniformity, and those ratings should adhere to one set of rules (Kleinberg et al., 2018). The objective here is to correct for bias through regulations by creating industry-based standards and normalized comparisons across firms to consider the company size.

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