The Dark Side of ESG Ratings: Future Challenges for Corporate Strategies

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Abstract

This paper critically examines the methodological inconsistencies of Environmental, Social, and Governance (ESG) ratings and their impact on financial decision-making. While ESG scores are intended to guide investors and policymakers toward responsible business practices, discrepancies in rating methodologies raise concerns about their reliability and strategic value. Using a conceptual and theoretical framework, the paper integrates perceptions from institutional theory, signaling theory, and the sociology of valuation to explore how ESG ratings shape corporate sustainability narratives. It also draws on empirical studies to demonstrate inconsistencies in ESG scores and their consequences for financial markets. The study identifies three primary flaws in ESG ratings: (1) Divergent methodologies lead to inconsistent scores across rating agencies; (2) Firms prioritize ESG disclosure over actual sustainability improvements, fostering greenwashing; and (3) The lack of transparency in ESG rating methodologies distorts investment signals, leading to mispricing risks and misaligned sustainability incentives. Additionally, the absence of strong social indicators within ESG frameworks may contribute to the ineffectiveness of these ratings in truly capturing corporate sustainability.

The paper does not provide primary empirical analysis but synthesizes existing literature to propose a refined understanding of ESG ratings. It highlights the need for future research on regulatory standardization, AI-driven ESG assessments, and independent verification mechanisms. The findings suggest that investors should not rely solely on ESG ratings when making financial decisions. Instead, they should combine multiple sustainability metrics and qualitative assessments to avoid misleading investment choices. A lack of ESG rating standardization risks undermining public trust in sustainable finance and corporate responsibility efforts. Furthermore, the insufficient emphasis on social indicators within ESG ratings may hinder their ability to promote genuine corporate accountability and social progress.

This paper contributes to the growing critique of ESG rating methodologies by arguing that without regulatory intervention, ESG scores will continue to serve as unreliable indicators of corporate sustainability.

Keywords: ESG Ratings; sustainable finance; corporate governance; greenwashing; investment risk; standardization; financial markets; institutional theory; signaling theory; sustainability metrics

Citation: Arslan A., Yener S., Akturan A. (2025) The Dark Side of ESG Ratings: Future Challenges for Corporate Strategies. *Foresight and STI Governance*, 19(3), pp. 78–85. https://doi.org/10.17323/fstig.2025.26712

Introduction

Over the past decade, ESG ratings have become central to sustainable-finance decision-making[1]. Yet despite their ubiquity, rating methodologies remain heterogeneous and opaque, producing inconsistent assessments that often fail to capture firms' true environmental and social impacts. Investors and regulators increasingly question whether these scores genuinely reflect stakeholder value or simply reward disclosure practices.

This paper interrogates three core flaws in prevailing ESG ratings:

- *Methodological divergence:* Agencies apply inconsistent weighting schemes and data-selection rules, leading to significant score disparities.
- *Disclosure-driven greenwashing:* Firms can attain high scores through robust reporting even when their environmental or labor practices remain deficient.
- *Misaligned investment signals:* Inter-agency correlations for ESG scores hover between 0.3 and 0.6, due to diverging methodologies and noisy data, confusing asset managers (Berger et al., 2022).

Drawing on institutional (DiMaggio, Powell, 1983), signaling (Spence, 1973), and valuation-sociology theories (Callon et al., 2002; Karpik, 2010; Muniesa et al., 2007), we first diagnose how regulatory gaps, signaling imperfections, and valuation devices co-produce unreliable ESG scores. We then propose three policy levers — standardization, independent verification, and outcome-based metrics — to realign ESG ratings with substantive sustainability goals.

The rise of ESG ratings functions as a dual signal to the market: they inform investors about a firm's risk profile and its commitment to sustainable practices. Firms with high ESG scores are often perceived as lower-risk investments, as they signal proactive management of environmental, social, and governance issues. Research indicates that improved ESG performance correlates positively with enhanced financial returns and market valuation (Kong et al., 2023; Narula et al., 2024). For instance, companies that adopt effective ESG policies not only mitigate compliance risks but also tend to outperform their peers in terms of profitability and stock market performance (Ting et al., 2019). Studies have established a positive correlation between ESG ratings and firm profitability across various markets, demonstrating that robust ESG practices are integral to sustainable business models (He, 2024). Moreover, the strategic implementation of ESG practices can influence external perceptions, thus affecting credit ratings and investment attractiveness (Bhattacharya, Sharma, 2019). For example, the mechanisms through which credit rating agencies evaluate firms increasingly incorporate ESG factors, reflecting a growing recognition that such practices enhance company credibility and trustworthiness (Li et al., 2024). Companies focusing on ESG metrics not only align with investor expectations but also benefit from improved access to capital, as sustainable investment strategies increasingly prioritize firms demonstrating strong ESG credentials (Juddoo et al., 2023).

Theoretical Background

Institutional Pressures on ESG Ratings

Institutional theory emphasizes how coercive, normative, and mimetic forces shape organizational behavior (DiMaggio, Powell, 1983). Regulatory interventions like the EU SFDR and IFRS standards aim to impose disclosure uniformity, yet enforcement remains inconsistent (Christensen et al., 2021). Normative pressures from investors and NGOs often yield symbolic compliance, while mimetic pressures foster methodological convergence without evaluative rigor. ESG ratings serve as an institutional tool that forces businesses to implement sustainability practices, not out of personal motivation, but to fulfill investor requirements and regulatory codes. The criteria set by rating agencies drive institutions to establish ESG strategies based on specific guidelines rather than genuine sustainability approaches. This situation results in symbolic compliance, where companies focus on improving their ESG scores instead of addressing fundamental sustainability issues (Burney, 2020; Pardy, 2020). A corporation may enhance disclosure transparency to achieve better ratings, even if it continues environmentally damaging operations (Flammer, 2021). This behavior raises concerns about genuine ESG integration within corporate strategies and the financial system.

Signaling Dynamics in ESG Disclosure

Firms use ESG ratings to signal sustainable practices, but inconsistent methodologies blur signal interpretation (Spence, 1973). This introduces adverse selection, where firms with superior disclosures — not necessarily superior performance — benefit most (Krueger et al., 2024). Investors may misallocate capital due to opaque scoring. Companies use ESG ratings as communication tools to demonstrate responsible conduct to investors and stakeholders, regardless of actual sustainability achievements. High ESG ratings lead to lower risk perception and attract more investments from ESG-focused investors, encouraging superficial ESG perception management rather than authentic sustainability practice advancement (Feng et al., 2022). A primary issue arises

[1] Global sustainable assets under management have surpassed $35.3 trillion (McKinsey & Company, 2022).

from the information mismatch between companies and their rating institutions. Firms exploiting self-reporting processes for ESG evaluations can present their sustainability initiatives favorably while omitting unfavorable information. This ability to manipulate rating scores misrepresents true sustainability practices through fabricated results, thereby decreasing the validity of these assessments as accurate proxies.

Valuation Sociology of ESG Scores

Valuation studies conceptualize ESG ratings as “market devices” that do not just measure but construct value perceptions (Callon et al., 2002; Karpik, 2010; Muniesa et al., 2007). ESG scores shape investor imaginaries but are themselves shaped by provider assumptions, industry contexts, and geopolitical biases (Peirce, 2020) . Social constructs, rather than objective measurements, are used to quantify sustainability performance in ESG scores. Unlike financial indicators based on standardized accounting principles, ESG scores rely on diverse qualitative assessments and inconsistent weighting methods and approaches. The lack of shared theoretical principles among ESG scores results in subjective assessments that cause ratings to diverge, leading to unclear sustainability evaluations (Gyönyörová et al., 2021). Berger et al. (2022) identify three primary drivers of ESG rating divergence: Scope divergence (differences in the ESG factors considered by agencies), Measurement divergence (variations in how ESG factors are assessed), and Weight divergence (discrepancies in how ESG components are weighted in overall scores). General metrics that produce conflicting ESG ratings therefore diminish both their reliability and their usefulness in investment selection. The absence of a shared ESG framework creates difficulties that limit ESG ratings effectiveness in sustainable corporate assessment (Abhayawansa, Tyagi, 2021).

Methodological and Conceptual Critiques

Key problems include reliance on firm self-disclosures, subjective gap-filling, lack of cross-provider harmonization, and non-comparable metrics (Berger et al., 2022). Conceptually, ESG scoring frameworks often reflect shareholder-centric and PR-focused logic rather than actual sustainability (Hong, Kacperczyk, 2009).

The Divergence Problem: Lack of Standardization in ESG Ratings

Different Weightings and Methodologies

Different ESG rating providers generate scores that display minimal matching points as stated in introduction section. ESG dimensions receive weighted evaluations from rating agencies, producing divergent assessment results because different scoring systems exist among agencies, leading to distinct evaluation outcomes. Different rating organizations apply divergent evaluation methods when measuring corporate sustainability performance. Environmental performance takes precedence as a primary assessment area in certain agencies, while others value corporate governance and social responsibility evaluations the most (Wong et al., 2022). Companies are rated through subjective interpretations of sustainability data by various rating agencies since there is no universally accepted methodology. Regional differences primarily drive discrepancies in ESG ratings. Preferences in cultural norms and market-specific factors present in regional regulatory frameworks cause obstacles for assessing rating uniformity across various jurisdictions (Leng et al., 2023). European firms typically receive superior ESG ratings compared to North American companies because they must provide detailed sustainability disclosures, although their environmental consequences remain equivalent (OECD, 2020).

The Subjectivity of Measurement

The assessment methods used in ESG ratings differ from financial ratings (from Moody’s and S&P) due to their qualitative nature, analyst-dependent voluntary reporting, and subjective evaluations (Mayer, Ducsai, 2023). Higher levels of ESG data release tend to produce more analytical discrepancies instead of clear insights because analysts process information in different ways (Berg et al., 2021). Subjectivity in this field stems mainly from the lack of standardization in data collection methods. Alongside being optional, firms submit their ESG information with ratings-beneficial content while leaving out unfavorable details. Analysts must use third-party sources, corporate sustainability statements, and media reports, which heightens the risk of biased interpretation. Furthermore, ESG rating agencies employ different weighting schemes for various ESG indicators. Each rating agency prioritizes different environmental parameters, such as carbon emissions, compared to focusing on supplier ethics or workforce diversity (Birindelli et al., 2018). The diverse ESG methodology used by rating agencies causes inconsistent ratings since different firms receive significantly different overall ESG scores based on the evaluating organization. The determination process of ESG scores remains completely non-transparent to outside observers. Different rating agencies maintain proprietary computational models to evaluate companies but do not publicly reveal their weighting criteria. This lack of transparency hinders investors from understanding the basis for diverse rating outcomes. The lack of transparent scoring practices influences investors’ decision-making processes and diminishes officials’ responsibility for ESG criterion application across various companies. The methodological divergences discussed earlier directly contribute to the misalignment between ESG scores and actual sustainability outcomes.

ESG Ratings and the Illusion of Sustainability

ESG Scores vs. Actual Carbon Emissions

The primary complaint against the ESG ratings system is its inability to measure the actual environmental impact of firms. According to studies, businesses with high ESG ratings pollute at similar levels to businesses rated lower[2]. The evaluation system gives preference to companies that promote thorough disclosure practices instead of assessing their real sustainability achievements. ESG ratings typically increase when companies present detailed sustainability reports combined with documented policies, regardless of their substantial carbon footprint. ESG rating systems disproportionately favor large, publicly listed companies with adequate resources for ESG reporting more positively than smaller firms, despite their actual sustainability results (Hassan, 2024). The nature of ESG ratings pretends to measure environmental impact but functions principally as an indicator of corporate disclosure transparency. The energy sector demonstrates the significant gap in ESG ratings when oil and gas companies achieve good governance scores while continuing their involvement in fossil fuel operations. Many investors mistakenly believe that high ESG ratings mean they support environmentally responsible corporations, but these ratings may reveal substantial environmental liabilities.

Portfolio Construction and ESG Misalignment

Behavioral research on ESG fund performance indicates variable outcomes among recent academic studies. ESG funds prefer businesses that disclose high scores instead of organizations with real sustainability influence (Kräussl et al., 2023). The 2022 Morningstar report stated that some ESG funds achieved higher performance during the COVID-19 crisis by avoiding volatile fossil fuel stocks, yet their long-term performance became uncertain after considering sector biases (Raghunandan, Rajgopal, 2022). Research indicates that ESG fund design methods may not match actual sustainability performance. The subjective nature of ESG ratings analyzed in previous sections makes their use in fund optimization necessary for rigorous evaluation. The implementation of these ratings for sustainable investing frequently results in situations where they deviate from actual sustainable goals. Investors have adopted the practice of averaging ESG scores for portfolio construction, but this method increases estimation errors instead of decreasing risk levels. The inconsistent approach to ratings across different agencies, combined with their subjective methodology, leads to false perceptions of sustainability when ESG scores are combined into investment portfolios. The addition of social and governance factors in ESG funds creates a key drawback because it weakens the environmental performance goals within these funds. The ESG rating system allows companies with high governance scores to mask their inadequate environmental performance and present themselves as more sustainable than they really are (Keeley et al., 2022). Aspects of ESG funds permit the inclusion of companies with challenged environmental practices because these companies demonstrate exceptional performance in other areas of ESG, like diversity policies or corporate ethics. The vague criteria create problems for investors seeking climate-positive funding because it leads them to fund companies with major carbon emissions. As reliance on ESG scores grows, regulators and investors must develop more precise and transparent ESG assessment methods to ensure that portfolios truly align with sustainability goals rather than simply adhering to rating agency methodologies.

The Unintended Consequences of ESG Ratings

Greenwashing and Corporate Manipulation

ESG ratings have a major problem because many businesses deploy illusionary environmental programs known as greenwashing to boost their ESG results yet fail to execute substantial changes (Flammer, 2021). Several firms choose to use their financial resources on ESG reporting and public relations activities instead of deploying them toward actual sustainable measures that may have meaningful effects on carbon reduction programs and ethical labor standards. The present ESG rating model encourages organizations to devote their resources toward easy accessibility practices such as diversity initiatives and sustainability protocols rather than spending them on solving fundamental and expensive structural challenges that include renewable energy adoption and supply chain emission reduction. The current ESG rating system leads companies to enhance their scores through regulatory compliance but not actual impact achievement (Sun et al., 2023). Through their ability to select favorable ESG criteria while keeping unfavorable ones out of view, companies generate an erroneous impression of responsible behavior. A company achieving top ESG scores from ratings can do so through effective gender equality policies even with active environmental violations and exploitative labor practices. The altering of information in ESG ratings diminishes investor trust in this evaluation system and hinders possible sustainable business transformations.

[2] https://www.ft.com/content/b9582d62-cc6f-4b76-b0f9-5b37cf15dce4, accessed 06.07.2025.

Market Distortions and Mispricing Risks

Current stock market activity shows that ESG stock movements diverge from what investors predict regarding financial performance. The S&P 500 ESG Index shocked investors when Tesla was removed in 2022 while still delivering industry-leading electric vehicles, but ExxonMobil remained due to its large issue with carbon emissions. The Deutsche Bank subsidiary DWS Group experienced a 6% stock market decline because of regulatory investigations showing its excessive claims about ESG credentials[3]. This situation reveals how ESG scoring systems produce mispricing risks and unexpected market disturbances. Numerous studies have discovered that the relationship between ESG ratings and investment risk, along with performance returns, is not as straightforward as commonly thought (Qin, Wang, 2025). Investors who rely on ESG scores for their decisions may unintentionally receive false pricing information about their assets and market indications. Investors commonly misunderstand ESG scoring systems as risk measurement tools, which can result in mispriced stocks within highly rated ESG firms (Priyanto, Suhandi, 2023). Different ESG rating providers establish divergent perspectives on risk assessment because they assign distinct safety profiles to similar companies. Gibson et al. (2021) present research invalidating the common false notion that organizations with desirable ESG ratings will deliver superior market performance. ESG-aligned portfolios sometimes yield inferior results due to sector preferences, as investors tend to exclude oil and gas corporations from their portfolios during market periods. The reliance of investors on ESG scores can lead to purchasing assets at incorrect prices and suboptimal allocation of their investment funds. The absence of standardized approaches in ESG rating makes the connection between ESG achievements and financial outcomes problematic to prove. Some organizations achieve high ESG ratings even though they operate in risky conditions, leading investors to believe their investments are safe. ESG-based investment strategies lose credibility because various assessment standards create unreliable results that require more standardized evaluation procedures.

Policy Recommendations and Future Research Directions

Transparency and Standardization

A baseline ESG taxonomy must define key metrics, data quality standards, and scope boundaries. Agencies should publish methodologies and scoring rationales, enabling comparability and auditability. Policymakers, investors, and regulators should implement substantial actions to improve ESG rating credibility to achieve genuine sustainability results despite current limitations. The initial fundamental measure to advance ESG disclosure mandates must be standardized. The IFRS Sustainability Standards and other regulatory bodies need to develop a common ESG reporting framework to enhance sustainability assessment transparency and reduce rating variations (Zhang, Zhang, 2023). Standardization initiatives must be established to minimize rating inconsistencies between agencies because current performance rating differences weaken ESG score reliability for investment decision support.

Independent Verification

A ratings oversight body should certify ESG providers, audit compliance, and police conflicts of interest — similar to reforms in credit-rating markets. The verification process through independent entities must be implemented to ensure that sustainability information reported by companies corresponds to their actual sustainability achievements. Organizations need external audit procedures to prevent greenwashing, as such procedures would mitigate the practice of companies showing inflated ESG credentials through cherry-picked reports not backed by genuine environmental and social achievements. Sustainable reporting will gain investor trust and better corporate sustainability accountability through the implementation of independent evaluation systems for checking ESG statements.

Outcome-Based Metrics

Shift emphasis from disclosure breadth to outcome depth. Regulators should require firms to report on emission reductions, labor practices, and verified KPIs — penalizing non-performance. ESG scoring methodologies need to develop by placing measurable sustainability metrics at a higher level than subjective self-disclosures. The existing ESG ratings favor the assessment of corporate governance and social commitment more heavily than essential environmental indicators and metrics. The weight given to quantifiable indicators such as carbon intensity, energy usage, and waste reduction will make ESG ratings more interconnected with genuine sustainability outcomes beyond disclosing corporate information and practices. Rating agencies need to enhance their disclosure practices of their evaluation procedures. ESG assessments face an ongoing challenge because different rating agencies maintain unclear methods of scoring evaluation. The weighting techniques, assessment standards, and data retrieval mechanisms for ESG rating generation remain undisclosed to numerous organizations and investors.

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[3] https://www.reuters.com/business/finance/deutsche-banks-dws-allegations-greenwashing-2022-06-09/, accessed 05.07.2025.

A lack of proper methodological transparency about ESG ratings results in perceptions of arbitrariness that limit their ability to influence investment decisions and regulatory policies.

Future Research Directions

Future research should explore how advanced AI models (Zhang, 2023), blockchain technology, and data standardization can enhance the predictive power and reliability of ESG evaluations, making them truly effective tools for corporate governance and financial strategy. Researchers must also investigate the financial returns associated with high ESG evaluations. The long-term financial success of sustainable businesses remains debated among ESG integration supporters, who argue that these firms demonstrate stronger durability and profitability. Further studies are needed to determine if high ESG ratings correlate with better profitability, reduced operational risks, and improved business practices. Advanced understanding of this relationship will drive more effective ESG investment strategies and regulatory enhancements for ESG rating systems.

Conclusions

This paper analyzes ESG ratings to expose their major methodological problems, market disruptions, and the false sustainability effects they indicate. The problem with ESG scores being unreliable stems from rating agency differences and voluntary disclosure reliance, which reduces their trustworthiness. ESG scores face reliability issues due to different rating methods and selective disclosure practices, making them vulnerable to greenwashing. The undesirable results of ESG ratings demonstrate the necessity for significant improvement in existing ESG assessment systems because they cause market irregularities, financial insecurity, and superficial corporate sustainability statements. Empirical evidence and improved quantitative methods in scoring processes need to be implemented to preserve the value of ESG scores as authentic sustainability performance indicators. Achieving better ESG ratings depends on creating standardized disclosure protocols worldwide, along with independent assessment frameworks and measurable sustainability issues. Rating agencies and regulatory bodies need to provide detailed explanations of their methods while decreasing the reliance on data self-reporting to prevent corporate gaming of ratings. The evaluation process for sustainability requires investors to combine different impact-oriented evaluation standards alongside traditional ESG scoring systems. Dealing with the complexities of ESG ratings requires firms to adopt comprehensive strategies that encompass these criteria within their operational frameworks. By integrating ESG considerations into core business strategies, firms can enhance their value proposition, manage risks more effectively, and align with the evolving demands of socially responsible investors. This strategic focus on ESG not only aids in improving firm reputation and market valuation but also ensures resilient and competitive positioning in an increasingly conscientious market landscape.

Researchers maintain that ESG ratings contain beneficial concerns about risk mitigation even though their evaluation results are imperfect. According to Amel-Zadeh and Serafeim (2018), the data from ESG scoring can function as an assessment of company risk factors, especially when evaluating governance structure and social performance aspects. Organizations achieving high ESG scores tend to encounter reduced regulatory fines, fewer reputational damage incidents, and supply disruption occurrences. Firms integrating ESG measures demonstrate better market resilience because they possess robust governance and social systems. This can, in return, protect them during market upheavals. Standardization issues remain a limiting factor that reduces their capacity to provide forecast accuracy. ESG scores have limited capability to assess complete corporate risks because their effectiveness when used independently continues to be disputed. ESG ratings are useful for integrating sustainability factors into investments even with varying methodologies, according to Amel-Zadeh and Serafeim (2018). ESG rating systems induce firms to increase their transparency standards while implementing sustainability practices because investors actively monitor these criteria. The predictive reliability of such ratings faces substantial challenges due to their insufficient standardized evaluation system, according to critics (Yılmaz, Taşkın, 2025).

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