# The Impact of ESG Ratings on Corporate Social Responsibility Across Regions and Industries

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Abstract: As climate change and escalating environmental challenges intensify globally, the responsibility for sustainable practices increasingly falls on business enterprises in addition to governments. This paper explores the multifaceted implications of Environmental, Social, and Governance (ESG) ratings, particularly focusing on their relevance across various industries. While sustainability is a key concern, it is essential to consider broader issues such as human rights in the workplace, workforce rights, and the social impact of corporate activities on local communities and nations. Effectively balancing these social responsibilities with sustainable business practices is critical for sound corporate governance. Despite a wealth of literature examining the significance of ESG ratings in diverse contexts, questions remain regarding their applicability and meaningfulness across all business activities. Utilizing a comprehensive literature review, this study aims to elucidate the role of ESG ratings in driving responsible corporate behavior and their implications for various sectors. Ultimately, this paper seeks to provide insights into how companies can better integrate ESG considerations into their operational strategies, thereby enhancing their contributions to sustainable development and societal well-being.

*Keywords:* ESG Ratings, Corporate Governance, Sustainable Development.

#### 1. Introduction

As climate change and escalating environmental challenges continue to affect the planet, the onus of responsibility extends beyond governments to encompass business enterprises, which must prioritize sustainable practices. However, the conversation around corporate responsibility must also address broader issues beyond just sustainability. As the significance of human rights in the workplace gains momentum, companies are compelled to evaluate workforce rights and the social impact of their operations on local communities and nations. Effectively managing both social responsibility and sustainable business practices becomes a cornerstone of corporate governance. While a substantial body of research explores the implications of ESG ratings across various industries, an important question remains: Are ESG ratings equally meaningful for all business activities? This paper primarily delves into this critical area through a thorough review of existing literature, aiming to shed light on the relevance and application of ESG ratings in diverse business contexts. This paper investigates the divergence of environmental, social, and governance (ESG) ratings based on data from six prominent ESG rating agencies: Kinder, Lydenberg, and Domini (KLD), Sustainalytics, Moody's ESG (Vigeo-Eiris), S&P Global (RobecoSAM), Refinitiv (Asset4), and MSCI. The

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divergence in ESG ratings is primarily driven by differences in the metrics and data used by these agencies, with measurement divergence being the key factor. This disagreement extends beyond definitions and reflects fundamental differences in how data are assessed. The categories most affected by measurement divergence include Climate Risk Management, Product Safety, Corporate Governance, Corruption, and Environmental Management Systems. Another contributing factor to ESG rating discrepancies is the structure of the rating process itself; ESG analysts typically evaluate entire firms rather than specializing in specific categories, potentially allowing their overall view of a company to influence assessments across multiple areas. Given this divergence, researchers and firms using ESG ratings must carefully consider the validity of the data and metrics employed. To mitigate the impact of rating divergence, companies should collaborate with rating agencies to establish appropriate metrics, ensure that the data they disclose are transparent and accessible, and strive for greater transparency in rating methods. Rating agencies, in turn, should work to understand the drivers of the rater effect and reduce potential biases [1].

## 2. Impact of ESG on Firm Performance

## 2.1. The Meaning of ESG Ratings

For a large number of companies which do not take the ESG ratings into account, they think that the disadvantages of the ESG ratings are much more than the advantages. The diverse range of ratings, rankings, and agencies make the ESG ratings more confusing and obscure. The fatigue of the report and the lack of transparency are the two biggest concerns of the ESG ratings [2]. However, ESG ratings are beneficial for responsible investment and attract investors to make the decision based on sustainable perspectives. In a well-functioning market, portfolios with high ESG ratings tend to have lower risk compared to non-ESG investments, though their reduced volatility often results in lower returns. ESG frameworks can contribute to improving a company's internal financial performance. By offering a more comprehensive assessment than traditional financial disclosures, ESG evaluations provide better guidance for investment institutions in making informed decisions [3]. Therefore, the solutions for finding the balance between the advantages and disadvantages of the ESG ratings can be essential for the further application of the enterprises. Increasing awareness among users about the flaws in ESG ratings and rankings, along with companies sharing data on how much time is consumed by this industry, could put greater pressure on ESG initiatives to be more transparent and credible, or even to collaborate on a standardized questionnaire. Efforts like the Global Initiative for Sustainable Ratings (GISR) play a role by establishing minimum standards and promoting best practices [4]. GISR has also previously organized ESG rater training for companies, and continuing such educational programs could be beneficial [2].

## 2.2. ESG Ratings in the Financial Market

It is essential for analysts and fund managers to understand how ESG ratings are constructed and complement them with their assessments. This helps build a thorough understanding of a company and ensures that their investments align with the values of their clients [5]. Some people consider that ESG rating is an attraction for both investors and enterprises through not only showing the wan numbers of the ratings but also presenting the potential reputation of the operations. For the advantages for the investors, incorporating ESG ratings into investment strategies can improve risk-adjusted performance. Investors may find financially rewarding opportunities by investing in companies based on their ESG credentials, especially during periods when astute investors identify price-relevant factors not yet fully recognized by the market. However, these advantages are often short-lived due to competition from other investors and peers quickly catching up [5]. Some people think that the financial situation can be reflected in the ESG ratings. However, only the market values

have a positive relationship with the ESG ratings. The study by Egorova and other scholars uses financial indicators, such as ROA and Market Value, as dependent variables, while the E, S, and G components serve as independent variables. It is expected that the overall ESG score will positively correlate with financial performance across all sectors. However, the individual effects of E, S, and G may vary by industry. The findings revealed that while the relationship between the ESG components and Market Value is generally positive, the models for ROA were largely insignificant. Besides that, through the research by Rosella, described the relationships between future financial performances of ROE, ROI, and systematic risks and the ESG ratings. They found that there is an inconsistent relationship between ROE and ESG, causing the relevance of ESG ratings in reflecting ROE to diminish. At the same time, many studies in the scientific literature aim to evaluate whether the risk-return trade-off of sustainable financial products improves with higher ESG ratings. However, the lack of consensus in empirical findings leaves several questions unresolved, requiring further research [6]. The nonlinear relationship between sustainable practices and financial performance introduces the concept of a "too-little-of-a-good-thing" effect [7, 8]. As a result, the significance and influence of ESG ratings hinge on the "best-in-class" approach, particularly while ESG ratings remain the primary metric for assessing sustainable practices [6, 9].

## 2.3. Some Comparison in the ESG Ratings

The data collection and selection are important for the ESG ratings and the validity of ESG data is heavily influenced by the industry categories and the classification of countries. The questions for ESG ratings can be do it has to include the industry sector and region sector in the considerations to have a much fairer rating? For example, is it meaningful when comparing the ratings of companies from developed countries and developing countries? Do the ESG rating indicators need to be different when comparing the energy companies and the financial institutions? The comparisons also come from the yearly development. In 2008, the most commonly used criteria for analysis included environmental policy/management (100%), emissions (62.5%), and climate change (50%). By 2018, the key criteria shifted to environmental policy/management (87.5%), water use and management (87.5%), and biodiversity protection (87.5%). Additionally, in 2018, ESG rating agencies included new aspects in their assessments, such as climate change (75%), emissions (75%), and waste management/reduction (75%). These findings indicate an increased focus on environmental issues over the past decade. While the 2008 assessments primarily centered on environmental management policies, by 2018, the evaluation framework expanded to include new criteria related to companies' efforts to reduce emissions and consumption [2]. The data also gives insight into enterprises that putting more effort into environmental protection.

#### 3. High-Risky and Low-Risky Regions and Industries

ESG ratings are important for the enterprises to have a sustainable development. But that doesn't mean that all of the businesses in the world need to take ESG ratings seriously because some regions and industries that are not sensitive to environmental issues, may have a lower risk of the specific area of the ESG. Correspondence analysis, the nonparametric independent sample Kruskal-Wallis test, and the Mann-Whitney test were used for inference. The results show that Asia and America have high ESG risks, while European companies have low ESG risks. In terms of industries, transportation infrastructure, and media, which are considered low ESG risk, differ significantly from other sectors. Additionally, sector-specific reports reveal a clear and statistically significant difference between the financial and non-financial sectors in all regions, with the financial sector showing high ESG risk scores in Asia and North America [10]. From Rekha and other scholars' reports, the reasons behind the data distribution are also obvious. The European Union has led the way in implementing

strict ESG regulations that influence investment activities, carbon markets, accountability, and disclosure, resulting in a sustainable global impact and paving the way for the "Brussels Effect". This effect refers to the European Union's capacity to establish global standards for industrial and financial rules and regulations through legislation such as restrictions on hazardous substances, the Waste of Electronic Equipment Directive, and the General Data Protection Regulation, among others [11]. Asia and South America are more exposed to energy-intensive industries, placing them in a high-risk category. These markets exhibit high carbon intensity scores, indicating a significant carbon footprint and increased CO2 emissions [12]. Additionally, the USA is believed to have minimal ESG disclosure requirements and limited demand from institutional investors, highlighting the absence of a strong stewardship code that would require institutional investors to incorporate ESG factors into their decision-making. This regulatory leniency may encourage companies to pursue unsustainable practices [13]. The sensitive industries to the ESG can be related to some of the environment-related topics, including sustainable supply chains and environmental risks, which are mainly linked to sectors such as Energy, Utilities, and Materials, which have a substantial environmental footprint. In contrast, environmental issues carry less importance in the financial sector, as financial institutions have a minimal direct impact on environmental factors [14]. Although it has strong support for the relations of the connections of ESG ratings and the regions and industries. However, some scholars claim that the study revealed that industry significantly influences a company's sustainability performance (SP) as reflected on the FTSE/JSE RI Index, consistent with previous research. Consequently, it is concluded that the ESG ratings of companies are not dictated by the industry to which they belong [15].

## 4. Analysis Across Industries

#### 4.1. Financial Industry

In low-risk industries such as the financial sector, ESG considerations are more influenced by indirect factors rather than the direct environmental or social impacts typically associated with sectors like energy or manufacturing. In this context, governance issues are the primary ESG risks in finance. Key elements, including transparency, risk management, ethical leadership, and corporate governance practices, play a crucial role in determining a company's ESG rating. This focus underscores the sector's responsibility in managing investments and lending, which indirectly affects social and environmental outcomes. Research by Marco and colleagues emphasizes that, unlike high-impact industries, financial institutions influence ESG primarily through their financing and investment choices rather than through direct operational activities. For example, banks and asset managers significantly shape corporate behavior by establishing sustainable investment criteria or encouraging clients to implement improved ESG practices. Consequently, analysts concentrate on how effectively companies handle ESG risks and incorporate sustainability into their strategic decision-making. This involves evaluating policies that promote long-term value creation while reducing exposure to ESG-related risks, thereby recognizing the financial sector's ability to impact the ESG performance of other industries.

#### 4.2. Mining Industry

In terms of high-risk industries such as the mining industry, ESG ratings play a completely different role in this industry. According to the study by Fu et al., the findings indicate that enhanced ESG performance helps reduce financial risks for mining companies [16]. Specifically, strong ESG performance eases financing constraints, improves risk management, mitigates agency issues with major shareholders, and lowers overall financial risk. This study concludes that ESG ratings play a crucial role in advancing green economic development. In high-risk industries like mining, ESG

ratings serve a distinct and critical function. Unlike sectors with lower direct environmental or social impacts, the mining industry faces significant risks related to environmental degradation, regulatory scrutiny, and social responsibility. According to the study by Fu et al., ESG ratings in this sector are instrumental in addressing these challenges [16]. The research highlights that improved ESG performance helps mining companies mitigate financial risks by addressing multiple key factors. Firstly, robust ESG practices can alleviate financing constraints. Companies with higher ESG ratings are often seen as more responsible and better managed, making them more attractive to investors and lenders. This increased access to capital allows mining companies to finance their operations more effectively, even in the face of regulatory or environmental pressures. Secondly, enhanced ESG performance leads to improved risk management. Mining companies face numerous operational risks, including environmental disasters, community conflicts, and resource depletion. By adopting strong ESG practices, companies can anticipate and manage these risks more effectively, protecting both their reputation and their bottom line. Additionally, ESG performance helps mitigate agency problems, particularly with large shareholders. In the mining sector, where capital-intensive projects often rely on significant investment from large shareholders, aligning the interests of management and shareholders is critical. Strong ESG governance frameworks ensure that management acts in the best interest of all stakeholders, thereby reducing conflicts and fostering long-term stability. Lastly, by lowering overall financial risks, improved ESG performance not only secures better financial outcomes for mining companies but also positions them as key players in promoting sustainable, green economic development. The study concludes that ESG ratings are not just a measure of social responsibility but a strategic tool for financial resilience and long-term growth in high-risk industries like mining.

## 4.3. Low-Carbon Investment (LCI)

For the low-carbon investment (LCI) industry, ESG ratings are crucial for evaluating a company's sustainability and potential to thrive in a carbon-constrained economy. Key areas assessed in ESG ratings for LCI include carbon emissions and energy efficiency, climate risk management, sustainable products and innovation, transparency in reporting, and regulatory compliance. These factors help investors gauge how well companies are aligned with low-carbon goals and their overall sustainability practices. In the case of energy companies, leveraging ESG ratings offers numerous advantages. By highlighting their commitment to environmental and social responsibility, these companies can improve their brand image, attract investors who prioritize sustainability, and secure favorable financing terms. Studies show that ESG ratings can lead to a 2.1% increase in LCI, underscoring the tangible financial benefits of focusing on ESG performance. Moreover, ESG rating improvements contribute to further boosts in LCI. This improvement positively impacts various types of LCI, including prospective, soft, terminal, and managed. The enhanced ESG performance also alleviates financing constraints, increases access to government subsidies, and reduces internal control risks. However, there are potential downsides to increased ESG ratings, as they may also raise management costs, increase information disclosure requirements, and elevate managerial confidence, which could inadvertently lower LCI in certain scenarios. Additionally, ESG ratings generate spillover effects, with a more pronounced influence within the same region compared to neighboring regions. This regional spillover effect highlights the importance of ESG ratings in fostering localized low-carbon initiatives and investments. By incorporating ESG ratings into their strategy, energy companies can navigate the transition to a low-carbon economy more effectively while positioning themselves as leaders in sustainable development [17]. There is a noticeable variation in the green innovation effect, especially among new energy firms that are state-owned, larger in scale, and more digitally advanced. The mechanistic insights indicate that ESG ratings promote green innovation by easing financial constraints, lowering agency risk, and increasing investment in research and development. This provides empirical support for fostering a green innovation ecosystem within the new energy sector [18].

#### 5. Conclusion

The paper primarily explores the influence of Environmental, Social, and Governance (ESG) ratings on risks across different regions and industries. ESG ratings are vital tools for assessing firm performance, shaping investment decisions, and ensuring that companies adhere to sustainable and socially responsible practices. However, the impact of these ratings is not uniform across industries or regions, and their effectiveness varies based on factors such as climate risk management, corporate governance, and environmental practices.

ESG ratings, while crucial in offering insights into corporate sustainability, reveal a divergence in how risks are assessed. This is particularly evident in the varying approaches used by ESG rating agencies, where differences in methodologies can lead to inconsistencies in rating outcomes. Companies must collaborate with rating agencies to improve transparency and harmonize metrics to ensure the credibility of ESG assessments. Moreover, the impact of ESG ratings is more pronounced in high-risk industries like mining, where environmental and social risks are significant, compared to low-risk industries such as finance, where governance takes precedence.

Additionally, the paper highlights that the regional context plays a crucial role in determining the significance of ESG ratings. Regions with stringent ESG regulations, such as Europe, demonstrate lower ESG risks, whereas regions like Asia and the Americas, with higher exposure to energy-intensive industries, show elevated risks. The divergence in ESG risks across industries and regions underscores the need for customized ESG frameworks that consider specific environmental, social, and governance factors relevant to each context.

In conclusion, while ESG ratings are essential for evaluating firm performance and guiding investment decisions, their application is complex and varies significantly across industries and regions. By addressing discrepancies in rating methodologies and considering regional and industry-specific risk profiles, ESG ratings can become more robust tools for promoting sustainable business practices globally.

## References

- [1] Berg, F., Kölbel, J. F., & Rigobon, R. (2022). Aggregate confusion: the divergence of ESG ratings. Review of Finance, 26(6), 1315–1344. https://doi.org/10.1093/rof/rfac033
- [2] Escrig-Olmedo, E., Fernández-Izquierdo, M. Á., Ferrero-Ferrero, I., Rivera-Lirio, J. M., & Muñoz-Torres, M. J. (2019). Rating the Raters: Evaluating how ESG Rating Agencies Integrate Sustainability Principles. Sustainability, 11(3), 915. https://doi.org/10.3390/su11030915
- [3] Huang, J. (2023). Assessing the effectiveness and limitations of ESG in portfolio investment. Highlights in Business Economics and Management, 19, 177–182. https://doi.org/10.54097/hbem.v19i.11872
- [4] Makower, J. and Makower, J. (2024). GISR launches principles for rating the raters. https://trellis.net/article/gisr-launches-principles-rating-raters/.
- [5] Dimson, E., Marsh, P., & Staunton, M. (2020). Divergent ESG ratings. Divergent ESG Ratings. https://doi.org/10.17863/CAM.55949
- [6] Castellano, R., Cini, F., & Ferrari, A. (2024). Value creation and sustainable business model: are ESG ratings a matter of class? Annals of Operations Research. https://doi.org/10.1007/s10479-024-05859-z
- [7] Farah, T. et al. (2021) 'The non-linear effect of CSR on firms' systematic risk: International evidence, 'Journal of International Financial Markets Institutions and Money, 71, p. 101288. https://doi.org/10.1016/j.intfin.2021. 101288.
- [8] Trumpp, C. and Guenther, T. (2015) 'Too Little or too much? Exploring U-shaped Relationships between Corporate Environmental Performance and Corporate Financial Performance,' Business Strategy and the Environment, 26(1), pp. 49–68. https://doi.org/10.1002/bse.1900.

- [9] Gull, A.A. et al. (2022) 'Revisiting the association between environmental performance and financial performance: Does the level of environmental orientation matter?,' Corporate Social Responsibility and Environmental Management, 29(5), pp. 1647–1662. https://doi.org/10.1002/csr.2310.
- [10] Pillai, R., Islam, M. A., Sreejith, S., & Al-Malkawi, H. A. (2024). Comparative analysis of environmental, social and governance (ESG) ratings: do sectors and regions differ? Journal of Management & Governance. https://doi.org/10.1007/s10997-023-09692-7
- [11] Alamillos, R.R. and De Mariz, F. (2022) 'How can European regulation on ESG impact business globally?,' Journal of Risk and Financial Management, 15(7), p. 291. https://doi.org/10.3390/jrfm15070291.
- [12] Mahmood, H., Alkhateeb, T.T.Y. and Furqan, M. (2020) 'Industrialization, urbanization and CO2 emissions in Saudi Arabia: Asymmetry analysis,' Energy Reports, 6, pp. 1553–1560. https://doi.org/10.1016/j.egyr.2020.06.004.
- [13] Lopez-de-Silanes, F. and McCahery, J.A., &Pudschedl, P.C., ESG Performance and Disclosure: A Cross-Country Analysis (December 18, 2019). TILEC Discussion Paper No. DP2019-032, European Corporate Governance Institute Law Working Paper No. 481/2019.
- [14] Mandas, M., Lahmar, O., Piras, L., & De Lisa, R. (2023). ESG in the financial industry: What matters for rating analysts? Research in International Business and Finance, 66, 102045. https://doi.org/10.1016/j.ribaf.2023.102045
- [15] Matakanye, R. M., Van Der Poll, H. M., & Muchara, B. (2021). Do companies in different industries respond differently to stakeholders' pressures when prioritising environmental, social and governance sustainability performance? Sustainability, 13(21), 12022. https://doi.org/10.3390/su132112022
- [16] Fu, C., Yu, C., Guo, M., & Zhang, L. (2023). ESG rating and financial risk of mining industry companies. Resources Policy, 88, 104308. https://doi.org/10.1016/j.resourpol.2023.104308
- [17] Lu, J., & Li, H. (2024). The impact of ESG ratings on low carbon investment: Evidence from renewable energy companies. Renewable Energy, 223, 119984. https://doi.org/10.1016/j.renene.2024.119984
- [18] Liu, H., & Xu, Y. (2024). The impact of ESG ratings on the quality and quantity of green innovation of new energy enterprises. Frontiers in Energy Research, 12. https://doi.org/10.3389/fenrg.2024.1382139